

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LIGO  **PROJECT**

**FINAL DESIGN REVIEW
DATA PACKAGE
BEAM TUBE MODULE
DESIGN & QUALIFICATION TEST
CONTRACT C146**

**CDRL #15
DRD #9 ITEM I
MASTER DATA LISTING**

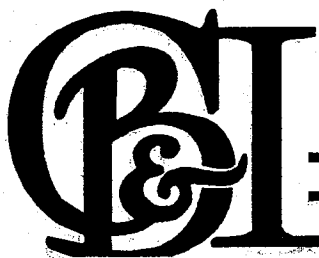
**CDRL #9
DRD #4
DRAFT DETAILED DESIGN**

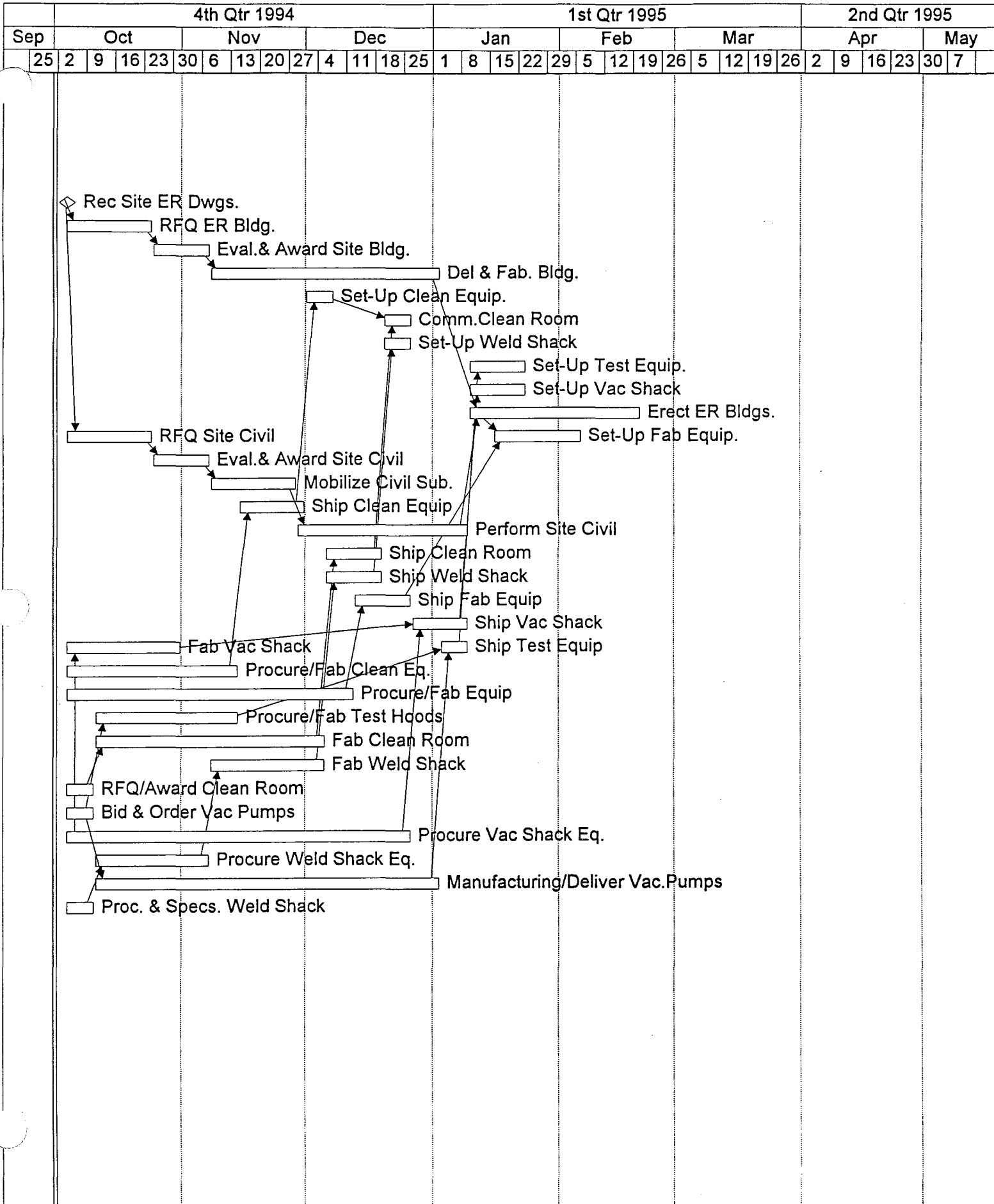
BOOK 2 OF 2

Prepared by

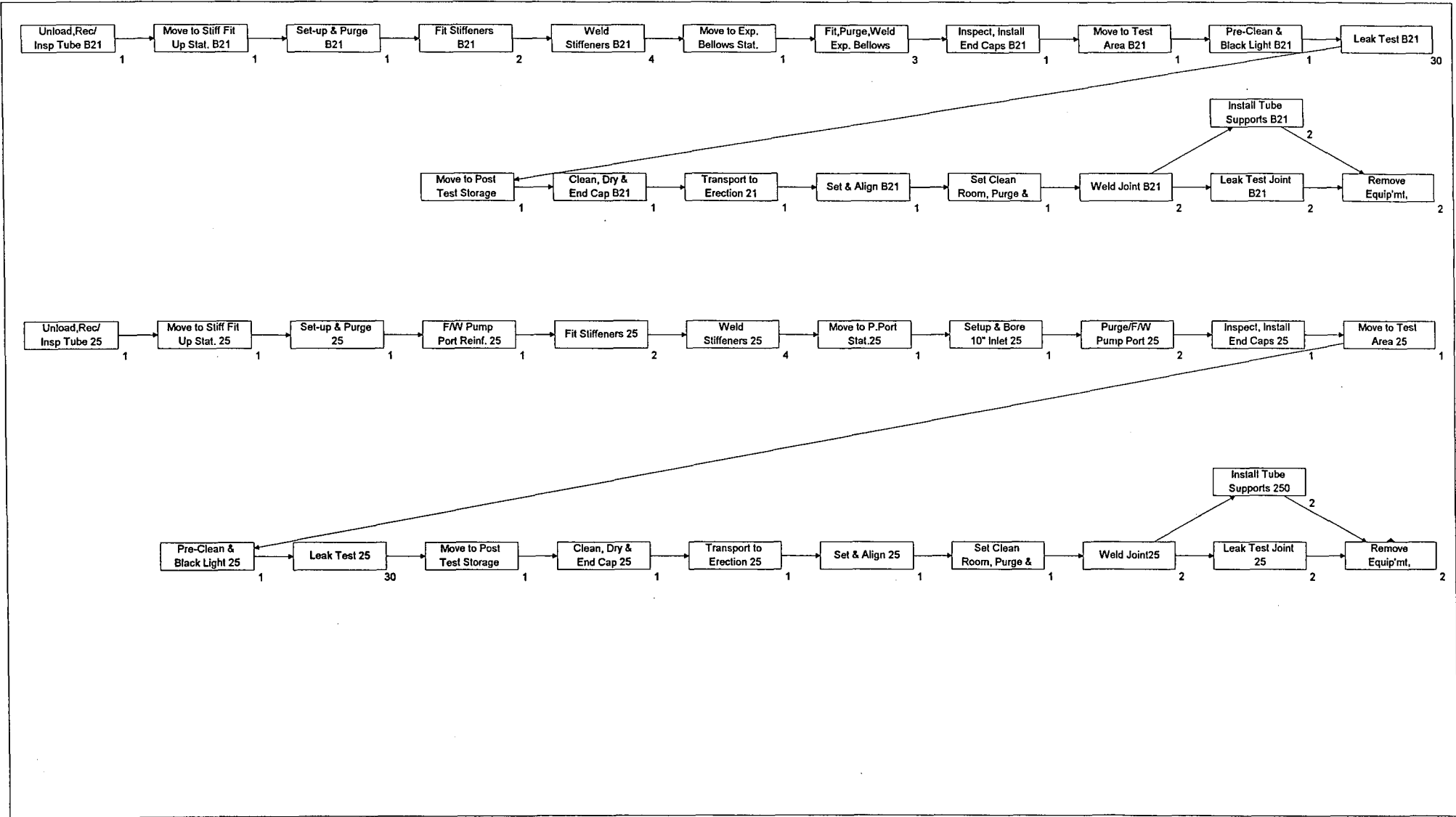
**CBI TECHNICAL SERVICES COMPANY
PLAINFIELD, ILLINOIS
APRIL 11, 1994**

CBI CONTRACT 930212

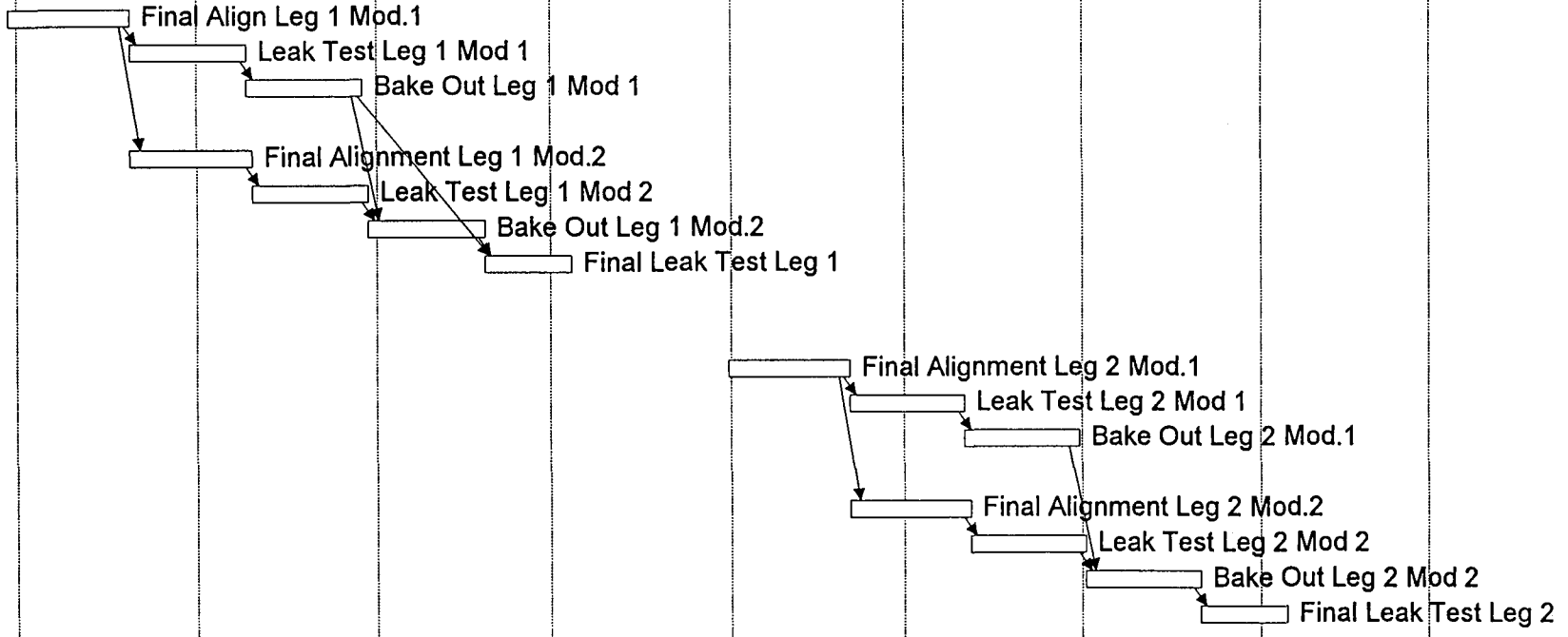




LIGO BEAM TUBE MODULE CONSTRUCTION



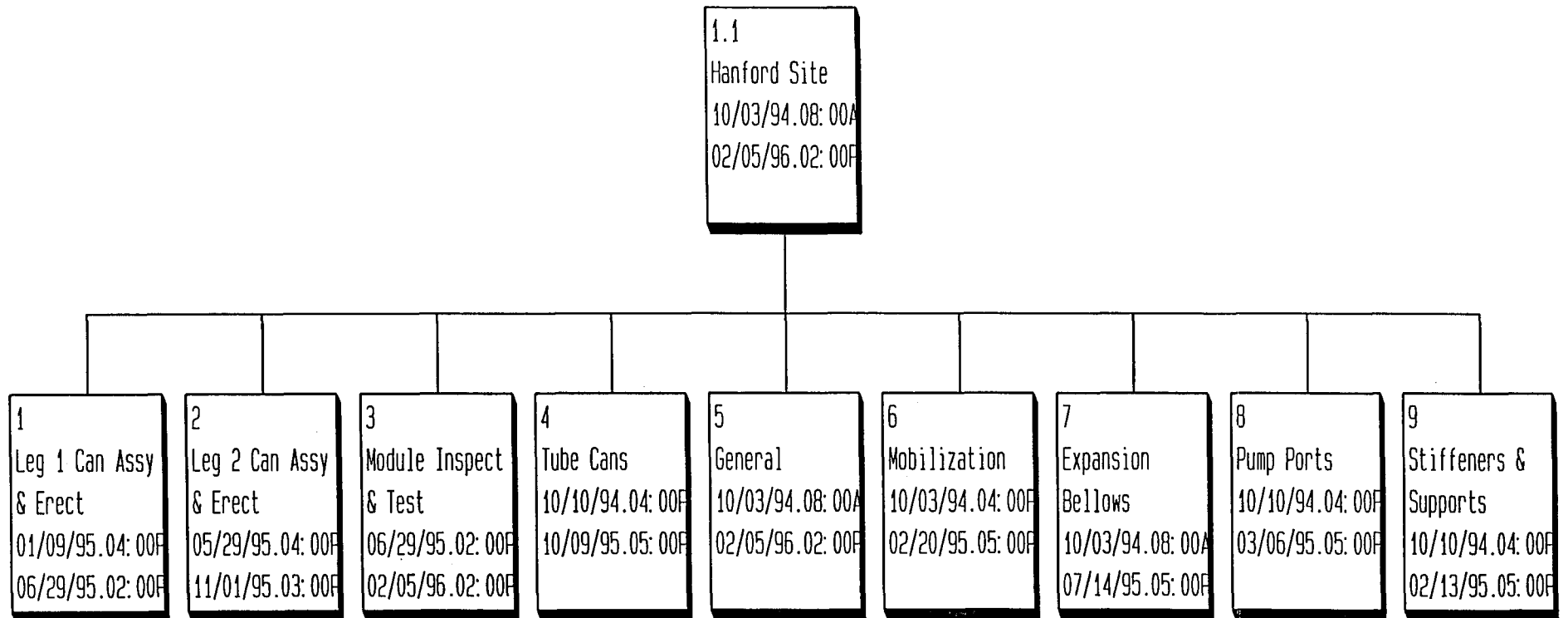
3rd Qtr 1995										4th Qtr 1995										1st Qtr 1996										2nd Qtr 1996																
Jun		Jul			Aug			Sep			Oct			Nov			Dec			Jan			Feb			Mar			Apr		May															
18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18	25	3	10	17	24	31	7	14	21	28	5



LIGO BEAM TUBE MODULE CONSTRUCTION

Chicago Bridge & Iron

March 15, 1994



Activity ID	Duration	Description	Early Start	Early Finish	Comments
1	2805	LIGO PROJECT	10/03/94.08:00A	02/05/96.02:00P	
1.1	2805	Hanford Site	10/03/94.08:00A	02/05/96.02:00P	
1.1.1	982	Leg 1 Can Assy & Erect	01/09/95.04:00P	06/29/95.02:00P	
1.1.1.01	348	Cans 1-5 & Make Up Pieces	01/09/95.04:00P	03/10/95.11:00A	
1.1.1.01.01	1	Recieve Inspect Make-Up Pieces	01/31/95.08:00A	01/31/95.09:00A	
1.1.1.01.02	8	Erect Leg 1 1st Make Up Piece	01/31/95.09:00A	02/01/95.09:00A	
1.1.1.01.03	8	Erect Leg 1 2nd Make Up Piece	02/01/95.09:00A	02/02/95.09:00A	
1.1.1.01.04	8	Erect Leg 2 1st Make Up Piece	02/02/95.09:00A	02/03/95.09:00A	
1.1.1.01.05	8	Erect Leg 2 2nd Make-up Piece	02/03/95.09:00A	02/06/95.09:00A	
1.1.1.01.1A	1	Unload,Rec/Insp Tube 1	01/10/95.08:00A	01/10/95.09:00A	
1.1.1.01.1B	1	Move to Stiff Fit Up Stat. 1	01/10/95.09:00A	01/10/95.10:00A	
1.1.1.01.1C	1	Set-up & Purge 1	01/10/95.10:00A	01/10/95.11:00A	
1.1.1.01.1D	2	Fit Stiffeners 1	02/14/95.08:00A	02/14/95.10:00A	
1.1.1.01.1E	4	Weld Stiffeners 1	02/14/95.10:00A	02/14/95.03:00P	
1.1.1.01.1F	1	Inspect, Install End Caps 1	02/14/95.03:00P	02/14/95.04:00P	
1.1.1.01.1H	1	Move to Test Area 1	02/14/95.04:00P	02/14/95.05:00P	
1.1.1.01.1I	1	Pre-Clean & Black Light 1	02/15/95.08:00A	02/15/95.09:00A	
1.1.1.01.1J	30	Leak Test 1	02/15/95.09:00A	02/16/95.03:00P	
1.1.1.01.1M	1	Move to Post Test Storage 1	02/16/95.03:00P	02/16/95.04:00P	
1.1.1.01.1N	1	Clean, Dry & End Cap 1	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.01.1P	1	Transport to Erection 1	02/20/95.10:00A	02/20/95.11:00A	
1.1.1.01.1Q	1	Set & Align 1	02/20/95.11:00A	02/20/95.12:00P	
1.1.1.01.1R	1	Set Clean Room, Purge & Fit 1	02/20/95.01:00P	02/20/95.02:00P	
1.1.1.01.1S	2	Weld Joint 1	02/20/95.02:00P	02/20/95.04:00P	
1.1.1.01.1T	2	Leak Test Joint 1	02/20/95.04:00P	02/21/95.09:00A	
1.1.1.01.1U	2	Install Tube Supports 1	02/20/95.04:00P	02/21/95.09:00A	
1.1.1.01.1V	2	Remove Equip'mt, Clean & Cap 1	02/21/95.09:00A	02/21/95.11:00A	
1.1.1.01.2A	1	Unload,Rec. & Inspect 2	01/10/95.09:00A	01/10/95.10:00A	
1.1.1.01.2B	1	Move to Stiff Fit Up Stat. 2	02/15/95.08:00A	02/15/95.09:00A	
1.1.1.01.2C	1	Set-up & Purge 2	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.01.2D	2	Fit Stiffeners 2	02/15/95.10:00A	02/15/95.12:00P	
1.1.1.01.2E	4	Weld Stiffeners 2	02/15/95.01:00P	02/15/95.05:00P	
1.1.1.01.2F	1	Inspect, Install End Caps 2	02/16/95.08:00A	02/16/95.09:00A	
1.1.1.01.2H	1	Move to Test Area 2	02/16/95.04:00P	02/16/95.05:00P	
1.1.1.01.2I	1	Pre-Clean & Black Light 2	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.01.2J	30	Leak Test 2	02/17/95.09:00A	02/18/95.03:00P	
1.1.1.01.2M	1	Move to Post Test Storage 2	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.01.2N	1	Clean, Dry & End Cap 2	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.01.2P	1	Transport to Erection 2	02/22/95.08:00A	02/22/95.09:00A	
1.1.1.01.2Q	1	Set & Align 2	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.01.2R	1	Set Clean Room, Purge & Fit 2	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.01.2S	2	Weld Joint 2	02/22/95.11:00A	02/22/95.02:00P	
1.1.1.01.2T	2	Leak Test Joint 2	02/22/95.02:00P	02/22/95.04:00P	
1.1.1.01.2U	2	Install Tube Supports 2	02/22/95.02:00P	02/22/95.04:00P	
1.1.1.01.2V	2	Remove Equip'mt, Clean & Cap 2	02/22/95.04:00P	02/23/95.09:00A	
1.1.1.01.3A	1	Unload,Rec/Insp Tube 3	01/10/95.10:00A	01/10/95.11:00A	
1.1.1.01.3B	1	Move to Stiff Fit Up Stat. 3	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.01.3C	1	Set-up & Purge 3	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.01.3D	2	Fit Stiffeners 3	02/17/95.10:00A	02/17/95.12:00P	
1.1.1.01.3E	4	Weld Stiffeners 3	02/17/95.01:00P	02/17/95.05:00P	
1.1.1.01.3F	1	Inspect, Install End Caps 3	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.01.3H	1	Move to Test Area 3	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.01.3I	1	Pre-Clean & Black Light 3	02/20/95.10:00A	02/20/95.11:00A	
1.1.1.01.3J	30	Leak Test 3	02/20/95.11:00A	02/21/95.05:00P	
1.1.1.01.3M	1	Move to Post Test Storage 3	02/22/95.08:00A	02/22/95.09:00A	
1.1.1.01.3N	1	Clean, Dry & End Cap 3	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.01.3P	1	Transport to Erection 3	02/23/95.03:00P	02/23/95.04:00P	
1.1.1.01.3Q	1	Set & Align 3	02/23/95.04:00P	02/23/95.05:00P	
1.1.1.01.3R	1	Set Clean Room, Purge & Fit 3	02/24/95.08:00A	02/24/95.09:00A	
1.1.1.01.3S	2	Weld Joint 3	02/24/95.09:00A	02/24/95.11:00A	
1.1.1.01.3T	2	Leak Test Joint 3	02/24/95.11:00A	02/24/95.02:00P	
1.1.1.01.3U	2	Install Tube Supports 3	02/24/95.11:00A	02/24/95.02:00P	
1.1.1.01.3V	2	Remove Equip'mt, Clean & Cap 3	02/24/95.02:00P	02/24/95.04:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

OBJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.01.4A	1	Unload,Rec/Insp Tube 4	01/10/95.11:00A	01/10/95.12:00P	
1.1.1.01.4B	1	Move to Stiff Fit Up Stat. 4	02/20/95.10:00A	02/20/95.11:00A	
1.1.1.01.4C	1	Set-up & Purge 4	02/20/95.11:00A	02/20/95.12:00P	
1.1.1.01.4D	2	Fit Stiffeners 4	02/20/95.01:00P	02/20/95.03:00P	
1.1.1.01.4E	4	Weld Stiffeners 4	02/20/95.03:00P	02/21/95.10:00A	
1.1.1.01.4F	1	Inspect, Install End Caps 4	02/21/95.10:00A	02/21/95.11:00A	
1.1.1.01.4H	1	Move to Test Area 4	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.01.4I	1	Pre-Clean & Black Light 4	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.01.4J	30	Leak Test 4	02/22/95.11:00A	02/23/95.05:00P	
1.1.1.01.4M	1	Move to Post Test Storage 4	02/24/95.08:00A	02/24/95.09:00A	
1.1.1.01.4N	1	Clean, Dry & End Cap 4	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.01.4P	1	Transport to Erection 4	02/27/95.01:00P	02/27/95.02:00P	
1.1.1.01.4Q	1	Set & Align 4	02/27/95.02:00P	02/27/95.03:00P	
1.1.1.01.4R	1	Set Clean Room, Purge & Fit 4	02/27/95.03:00P	02/27/95.04:00P	
1.1.1.01.4S	2	Weld Joint 4	02/27/95.04:00P	02/28/95.09:00A	
1.1.1.01.4T	2	Leak Test Joint 4	02/28/95.09:00A	02/28/95.11:00A	
1.1.1.01.4U	2	Install Tube Supports 4	02/28/95.09:00A	02/28/95.11:00A	
1.1.1.01.4V	2	Remove Equip'mt, Clean & Cap 4	02/28/95.11:00A	02/28/95.02:00P	
1.1.1.01.5A	1	Unload,Rec/Insp Tube 5	01/10/95.01:00P	01/10/95.02:00P	
1.1.1.01.5B	1	Move to Stiff Fit Up Stat. 5	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.01.5C	1	Set-up & Purge 5	02/22/95.11:00A	02/22/95.12:00P	
1.1.1.01.5D	1	F/W Pump Port Reinf. 5	02/22/95.01:00P	02/22/95.02:00P	
1.1.1.01.5E	2	Fit Stiffeners 5	02/22/95.02:00P	02/22/95.04:00P	
1.1.1.01.5F	4	Weld Stiffeners 5	02/22/95.04:00P	02/23/95.11:00A	
1.1.1.01.5G	1	Move to P.Port Stat.	02/23/95.11:00A	02/23/95.12:00P	
1.1.1.01.5H	1	Setup & Bore 10" Inlet 5	02/23/95.01:00P	02/23/95.02:00P	
1.1.1.01.5I	2	Purge/F/W Pump Port 5	03/07/95.08:00A	03/07/95.10:00A	
1.1.1.01.5J	1	Inspect, Install End Caps 5	03/07/95.10:00A	03/07/95.11:00A	
1.1.1.01.5L	1	Move to Test Area 5	03/07/95.11:00A	03/07/95.12:00P	
1.1.1.01.5M	1	Pre-Clean & Black Light 5	03/07/95.01:00P	03/07/95.02:00P	
1.1.1.01.5N	30	Leak Test 5	03/07/95.02:00P	03/08/95.08:00P	
1.1.1.01.5Q	1	Move to Post Test Storage 5	03/09/95.08:00A	03/09/95.09:00A	
1.1.1.01.5R	1	Clean, Dry & End Cap 5	03/09/95.09:00A	03/09/95.10:00A	
1.1.1.01.5T	1	Transport to Erection 5	03/09/95.10:00A	03/09/95.11:00A	
1.1.1.01.5U	1	Set & Align 5	03/09/95.11:00A	03/09/95.12:00P	
1.1.1.01.5V	1	Set Clean Room, Purge & Fit 5	03/09/95.01:00P	03/09/95.02:00P	
1.1.1.01.5W	2	Weld Joint 5	03/09/95.02:00P	03/09/95.04:00P	
1.1.1.01.5X	2	Leak Test Joint 5	03/09/95.04:00P	03/10/95.09:00A	
1.1.1.01.5Y	2	Install Tube Supports 5	03/09/95.04:00P	03/10/95.09:00A	
1.1.1.01.5Z	2	Remove Equip'mt, Clean & Cap 5	03/10/95.09:00A	03/10/95.11:00A	
1.1.1.01.B1A	1	Unload,Rec/Insp Tube B1	01/10/95.08:00A	01/10/95.09:00A	
1.1.1.01.B1B	1	Move to Stiff Fit Up Stat. B1	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.01.B1C	1	Set-up & Purge B1	02/06/95.10:00A	02/06/95.11:00A	
1.1.1.01.B1D	2	Fit Stiffeners B1	02/06/95.11:00A	02/06/95.02:00P	
1.1.1.01.B1E	4	Weld Stiffeners B1	02/06/95.02:00P	02/07/95.09:00A	
1.1.1.01.B1F	1	Move to Exp.Bellows Stat. B1	02/07/95.09:00A	02/07/95.10:00A	
1.1.1.01.B1G	3	Fit,Purge,Weld Exp. Bellows B1	02/07/95.10:00A	02/07/95.02:00P	
1.1.1.01.B1H	1	Inspect, Install End Caps B1	02/07/95.02:00P	02/07/95.03:00P	
1.1.1.01.B1J	1	Move to Test Area B1	02/07/95.03:00P	02/07/95.04:00P	
1.1.1.01.B1K	1	Pre-Clean & Black Light B1	02/07/95.04:00P	02/07/95.05:00P	
1.1.1.01.B1L	30	Leak Test B1	02/07/95.05:00P	02/08/95.11:00P	
1.1.1.01.B1O	1	Move to Post Test Storage B1	02/09/95.08:00A	02/09/95.09:00A	
1.1.1.01.B1P	1	Clean, Dry & End Cap B1	02/09/95.09:00A	02/09/95.10:00A	
1.1.1.01.B1R	1	Transport to Erection B1	02/09/95.10:00A	02/09/95.11:00A	
1.1.1.01.B1S	1	Set & Align B1	02/09/95.11:00A	02/09/95.12:00P	
1.1.1.01.B1T	1	Set Clean Room, Purge & Fit B1	02/09/95.01:00P	02/09/95.02:00P	
1.1.1.01.B1U	2	Weld Joint B1	02/09/95.02:00P	02/09/95.04:00P	
1.1.1.01.B1V	2	Leak Test Joint B1	02/09/95.04:00P	02/10/95.09:00A	
1.1.1.01.B1W	2	Install Tube Supports B1	02/09/95.04:00P	02/10/95.09:00A	
1.1.1.01.B1X	2	Remove Equip'mt, Clean & Cap B1	02/10/95.09:00A	02/10/95.11:00A	
1.1.1.01.B2A	1	Unload,Rec/Insp Tube B2	01/10/95.09:00A	01/10/95.10:00A	
1.1.1.01.B2B	1	Move to Stiff Fit Up Stat. B2	02/07/95.10:00A	02/07/95.11:00A	
1.1.1.01.B2C	1	Set-up & Purge B2	02/07/95.11:00A	02/07/95.12:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

OBJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.01.B2D	2	Fit Stiffeners B2	02/07/95.01:00P	02/07/95.03:00P	
1.1.1.01.B2E	4	Weld Stiffeners B2	02/07/95.03:00P	02/08/95.10:00A	
1.1.1.01.B2F	1	Move to Exp.Bellows Stat. B2	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.01.B2G	3	Fit,Purge,Weld Exp. Bellows B2	02/08/95.11:00A	02/08/95.03:00P	
1.1.1.01.B2H	1	Inspect, Install End Caps B2	02/08/95.03:00P	02/08/95.04:00P	
1.1.1.01.B2J	1	Move to Test Area B2	02/09/95.09:00A	02/09/95.10:00A	
1.1.1.01.B2K	1	Pre-Clean & Black Light B2	02/09/95.10:00A	02/09/95.11:00A	
1.1.1.01.B2L	30	Leak Test B2	02/09/95.11:00A	02/10/95.05:00P	
1.1.1.01.B2O	1	Move to Post Test Storage B2	02/13/95.08:00A	02/13/95.09:00A	
1.1.1.01.B2P	1	Clean, Dry & End Cap B2	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.01.B2R	1	Transport to Erection B2	02/21/95.09:00A	02/21/95.10:00A	
1.1.1.01.B2S	1	Set & Align B2	02/21/95.10:00A	02/21/95.11:00A	
1.1.1.01.B2T	1	Set Clean Room, Purge & Fit B2	02/21/95.11:00A	02/21/95.12:00P	
1.1.1.01.B2U	2	Weld Joint B2	02/21/95.01:00P	02/21/95.03:00P	
1.1.1.01.B2V	2	Leak Test Joint B2	02/21/95.03:00P	02/21/95.05:00P	
1.1.1.01.B2W	2	Install Tube Supports B2	02/21/95.03:00P	02/21/95.05:00P	
1.1.1.01.B2X	2	Remove Equip'mt, Clean & Cap B2	02/22/95.08:00A	02/22/95.10:00A	
1.1.1.01.B3A	1	Unload,Rec/Insp Tube B3	01/10/95.10:00A	01/10/95.11:00A	
1.1.1.01.B3B	1	Move to Stiff Fit Up Stat. B3	02/08/95.11:00A	02/08/95.12:00P	
1.1.1.01.B3C	1	Set-up & Purge B3	02/08/95.01:00P	02/08/95.02:00P	
1.1.1.01.B3D	2	Fit Stiffeners B3	02/08/95.02:00P	02/08/95.04:00P	
1.1.1.01.B3E	4	Weld Stiffeners B3	02/08/95.04:00P	02/09/95.11:00A	
1.1.1.01.B3F	1	Move to Exp.Bellows Stat. B3	02/09/95.11:00A	02/09/95.12:00P	
1.1.1.01.B3G	3	Fit,Purge,Weld Exp. Bellows B3	02/09/95.01:00P	02/09/95.04:00P	
1.1.1.01.B3H	1	Inspect, Install End Caps B3	02/09/95.04:00P	02/09/95.05:00P	
1.1.1.01.B3J	1	Move to Test Area B3	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.01.B3K	1	Pre-Clean & Black Light B3	02/13/95.10:00A	02/13/95.11:00A	
1.1.1.01.B3L	30	Leak Test B3	02/13/95.11:00A	02/14/95.05:00P	
1.1.1.01.B3O	1	Move to Post Test Storage B3	02/15/95.08:00A	02/15/95.09:00A	
1.1.1.01.B3P	1	Clean, Dry & End Cap B3	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.01.B3R	1	Transport to Erection B3	02/22/95.04:00P	02/22/95.05:00P	
1.1.1.01.B3S	1	Set & Align B3	02/23/95.08:00A	02/23/95.09:00A	
1.1.1.01.B3T	1	Set Clean Room, Purge & Fit B3	02/23/95.09:00A	02/23/95.10:00A	
1.1.1.01.B3U	2	Weld Joint B3	02/23/95.10:00A	02/23/95.12:00P	
1.1.1.01.B3V	2	Leak Test Joint B3	02/23/95.01:00P	02/23/95.03:00P	
1.1.1.01.B3W	2	Install Tube Supports B3	02/23/95.01:00P	02/23/95.03:00P	
1.1.1.01.B3X	2	Remove Equip'mt, Clean & Cap B3	02/23/95.03:00P	02/23/95.05:00P	
1.1.1.01.B4A	1	Unload,Rec/Insp Tube B4	01/10/95.11:00A	01/10/95.12:00P	
1.1.1.01.B4B	1	Move to Stiff Fit Up Stat. B4	02/09/95.01:00P	02/09/95.02:00P	
1.1.1.01.B4C	1	Set-up & Purge B4	02/09/95.02:00P	02/09/95.03:00P	
1.1.1.01.B4D	2	Fit Stiffeners B4	02/09/95.03:00P	02/09/95.05:00P	
1.1.1.01.B4E	4	Weld Stiffeners B4	02/10/95.08:00A	02/10/95.12:00P	
1.1.1.01.B4F	1	Move to Exp.Bellows Stat. B4	02/13/95.10:00A	02/13/95.11:00A	
1.1.1.01.B4G	3	Fit,Purge,Weld Exp. Bellows B4	02/13/95.11:00A	02/13/95.03:00P	
1.1.1.01.B4H	1	Inspect, Install End Caps B4	02/13/95.03:00P	02/13/95.04:00P	
1.1.1.01.B4J	1	Move to Test Area B4	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.01.B4K	1	Pre-Clean & Black Light B4	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.01.B4L	30	Leak Test B4	02/15/95.11:00A	02/16/95.05:00P	
1.1.1.01.B4O	1	Move to Post Test Storage B4	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.01.B4P	1	Clean, Dry & End Cap B4	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.01.B4R	1	Transport to Erection B4	02/24/95.02:00P	02/24/95.03:00P	
1.1.1.01.B4S	1	Set & Align B4	02/24/95.03:00P	02/24/95.04:00P	
1.1.1.01.B4T	1	Set Clean Room, Purge & Fit B4	02/24/95.04:00P	02/24/95.05:00P	
1.1.1.01.B4U	2	Weld Joint B4	02/27/95.08:00A	02/27/95.10:00A	
1.1.1.01.B4V	2	Leak Test Joint B4	02/27/95.10:00A	02/27/95.12:00P	
1.1.1.01.B4W	2	Install Tube Supports B4	02/27/95.10:00A	02/27/95.12:00P	
1.1.1.01.B4X	2	Remove Equip'mt, Clean & Cap B4	02/27/95.01:00P	02/27/95.03:00P	
1.1.1.01.B5A	1	Unload,Rec/Insp Tube B5	01/10/95.01:00P	01/10/95.02:00P	
1.1.1.01.B5B	1	Move to Stiff Fit Up Stat. B5	02/13/95.11:00A	02/13/95.12:00P	
1.1.1.01.B5C	1	Set-up & Purge B5	02/13/95.01:00P	02/13/95.02:00P	
1.1.1.01.B5D	2	Fit Stiffeners B5	02/13/95.02:00P	02/13/95.04:00P	
1.1.1.01.B5E	4	Weld Stiffeners B5	02/13/95.04:00P	02/14/95.11:00A	
1.1.1.01.B5F	1	Move to Exp.Bellows Stat. B5	02/15/95.10:00A	02/15/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.01.B5G	3	Fit,Purge,Weld Exp. Bellows B5	02/15/95.11:00A	02/15/95.03:00P	
1.1.1.01.B5H	1	Inspect, Install End Caps B5	02/15/95.03:00P	02/15/95.04:00P	
1.1.1.01.B5J	1	Move to Test Area B5	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.01.B5K	1	Pre-Clean & Black Light B5	02/17/95.10:00A	02/17/95.11:00A	
1.1.1.01.B5L	30	Leak Test B5	02/17/95.11:00A	02/18/95.05:00P	
1.1.1.01.B5O	1	Move to Post Test Storage B5	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.01.B5P	1	Clean, Dry & End Cap B5	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.01.B5R	1	Transport to Erection B5	02/28/95.11:00A	02/28/95.12:00P	
1.1.1.01.B5S	1	Set & Align B5	02/28/95.01:00P	02/28/95.02:00P	
1.1.1.01.B5T	1	Set Clean Room, Purge & Fit B5	02/28/95.02:00P	02/28/95.03:00P	
1.1.1.01.B5U	2	Weld Joint B5	02/28/95.03:00P	02/28/95.05:00P	
1.1.1.01.B5V	2	Leak Test Joint B5	03/01/95.08:00A	03/01/95.10:00A	
1.1.1.01.B5W	2	Install Tube Supports B5	03/01/95.08:00A	03/01/95.10:00A	
1.1.1.01.B5X	2	Remove Equip'mt, Clean & Cap B5	03/01/95.10:00A	03/01/95.12:00P	
1.1.1.06	340	Cans 6-10	01/23/95.04:00P	03/23/95.11:00A	
1.1.1.06.1A	1	Unload,Rec/Insp Tube 6	01/24/95.08:00A	01/24/95.09:00A	
1.1.1.06.1B	1	Move to Stiff Fit Up Stat. 6	01/24/95.09:00A	01/24/95.10:00A	
1.1.1.06.1C	1	Set-up & Purge 6	01/24/95.10:00A	01/24/95.11:00A	
1.1.1.06.1D	2	Fit Stiffeners 6	01/24/95.11:00A	01/24/95.02:00P	
1.1.1.06.1E	4	Weld Stiffeners 6	01/24/95.02:00P	01/25/95.09:00A	
1.1.1.06.1F	1	Inspect, Install End Caps 6	01/25/95.09:00A	01/25/95.10:00A	
1.1.1.06.1H	1	Move to Test Area 6	01/25/95.10:00A	01/25/95.11:00A	
1.1.1.06.1I	1	Pre-Clean & Black Light 6	01/25/95.11:00A	01/25/95.12:00P	
1.1.1.06.1J	30	Leak Test 6	01/25/95.12:00P	01/26/95.06:00P	
1.1.1.06.1M	1	Move to Post Test Storage 6	01/27/95.08:00A	01/27/95.09:00A	
1.1.1.06.1N	1	Clean, Dry & End Cap 6	01/27/95.09:00A	01/27/95.10:00A	
1.1.1.06.1P	1	Transport to Erection 6	03/13/95.10:00A	03/13/95.11:00A	
1.1.1.06.1Q	1	Set & Align 6	03/13/95.11:00A	03/13/95.12:00P	
1.1.06.1R	1	Set Clean Room, Purge & Fit 6	03/13/95.01:00P	03/13/95.02:00P	
1.1.06.1S	2	Weld Joint 6	03/13/95.02:00P	03/13/95.04:00P	
1.1.1.06.1T	2	Leak Test Joint 6	03/13/95.04:00P	03/14/95.09:00A	
1.1.1.06.1U	2	Install Tube Supports 6	03/13/95.04:00P	03/14/95.09:00A	
1.1.1.06.1V	2	Remove Equip'mt, Clean & Cap 6	03/14/95.09:00A	03/14/95.11:00A	
1.1.1.06.2A	1	Unload,Rec. & Inspect 7	01/24/95.09:00A	01/24/95.10:00A	
1.1.1.06.2B	1	Move to Stiff Fit Up Stat. 7	01/25/95.11:00A	01/25/95.12:00P	
1.1.1.06.2C	1	Set-up & Purge 7	01/25/95.01:00P	01/25/95.02:00P	
1.1.1.06.2D	2	Fit Stiffeners 7	01/25/95.02:00P	01/25/95.04:00P	
1.1.1.06.2E	4	Weld Stiffeners 7	01/25/95.04:00P	01/26/95.11:00A	
1.1.1.06.2F	1	Inspect, Install End Caps 7	01/26/95.11:00A	01/26/95.12:00P	
1.1.1.06.2H	1	Move to Test Area 7	01/27/95.09:00A	01/27/95.10:00A	
1.1.1.06.2I	1	Pre-Clean & Black Light 7	01/27/95.10:00A	01/27/95.11:00A	
1.1.1.06.2J	30	Leak Test 7	01/27/95.11:00A	01/28/95.05:00P	
1.1.1.06.2M	1	Move to Post Test Storage 7	01/30/95.08:00A	01/30/95.09:00A	
1.1.1.06.2N	1	Clean, Dry & End Cap 7	01/30/95.09:00A	01/30/95.10:00A	
1.1.1.06.2P	1	Transport to Erection 7	03/15/95.08:00A	03/15/95.09:00A	
1.1.1.06.2Q	1	Set & Align 7	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.06.2R	1	Set Clean Room, Purge & Fit 7	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.06.2S	2	Weld Joint 7	03/15/95.11:00A	03/15/95.02:00P	
1.1.1.06.2T	2	Leak Test Joint 7	03/15/95.02:00P	03/15/95.04:00P	
1.1.1.06.2U	2	Install Tube Supports 7	03/15/95.02:00P	03/15/95.04:00P	
1.1.1.06.2V	2	Remove Equip'mt, Clean & Cap 7	03/15/95.04:00P	03/16/95.09:00A	
1.1.1.06.3A	1	Unload,Rec/Insp Tube 8	01/24/95.10:00A	01/24/95.11:00A	
1.1.1.06.3B	1	Move to Stiff Fit Up Stat. 8	01/27/95.10:00A	01/27/95.11:00A	
1.1.1.06.3C	1	Set-up & Purge 8	01/27/95.11:00A	01/27/95.12:00P	
1.1.1.06.3D	2	Fit Stiffeners 8	01/27/95.01:00P	01/27/95.03:00P	
1.1.1.06.3E	4	Weld Stiffeners 8	01/27/95.03:00P	01/30/95.10:00A	
1.1.1.06.3F	1	Inspect, Install End Caps 8	01/30/95.10:00A	01/30/95.11:00A	
1.1.1.06.3H	1	Move to Test Area 8	01/30/95.11:00A	01/30/95.12:00P	
1.1.1.06.3I	1	Pre-Clean & Black Light 8	01/30/95.01:00P	01/30/95.02:00P	
1.1.1.06.3J	30	Leak Test 8	01/30/95.02:00P	01/31/95.08:00P	
1.1.1.06.3M	1	Move to Post Test Storage 8	02/01/95.08:00A	02/01/95.09:00A	
1.1.1.06.3N	1	Clean, Dry & End Cap 8	02/01/95.09:00A	02/01/95.10:00A	
1.1.06.3P	1	Transport to Erection 8	03/16/95.03:00P	03/16/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.06.3Q	1	Set & Align 8	03/16/95.04:00P	03/16/95.05:00P	
1.1.1.06.3R	1	Set Clean Room, Purge & Fit 8	03/17/95.08:00A	03/17/95.09:00A	
1.1.1.06.3S	2	Weld Joint 8	03/17/95.09:00A	03/17/95.11:00A	
1.1.1.06.3T	2	Leak Test Joint 8	03/17/95.11:00A	03/17/95.02:00P	
1.1.1.06.3U	2	Install Tube Supports 8	03/17/95.11:00A	03/17/95.02:00P	
1.1.1.06.3V	2	Remove Equip'mt, Clean & Cap 8	03/17/95.02:00P	03/17/95.04:00P	
1.1.1.06.4A	1	Unload,Rec/Insp Tube 10	01/24/95.11:00A	01/24/95.12:00P	
1.1.1.06.4B	1	Move to Stiff Fit Up Stat. 10	01/30/95.01:00P	01/30/95.02:00P	
1.1.1.06.4C	1	Set-up & Purge 10	01/30/95.02:00P	01/30/95.03:00P	
1.1.1.06.4D	2	Fit Stiffeners 10	01/30/95.03:00P	01/30/95.05:00P	
1.1.1.06.4E	4	Weld Stiffeners 10	01/31/95.08:00A	01/31/95.12:00P	
1.1.1.06.4F	1	Inspect, Install End Caps 10	01/31/95.01:00P	01/31/95.02:00P	
1.1.1.06.4H	1	Move to Test Area 10	02/01/95.09:00A	02/01/95.10:00A	
1.1.1.06.4I	1	Pre-Clean & Black Light 10	02/01/95.10:00A	02/01/95.11:00A	
1.1.1.06.4J	30	Leak Test 10	02/01/95.11:00A	02/02/95.05:00P	
1.1.1.06.4M	1	Move to Post Test Storage 10	02/03/95.08:00A	02/03/95.09:00A	
1.1.1.06.4N	1	Clean, Dry & End Cap 10	02/03/95.09:00A	02/03/95.10:00A	
1.1.1.06.4P	1	Transport to Erection 10	03/20/95.01:00P	03/20/95.02:00P	
1.1.1.06.4Q	1	Set & Align 10	03/20/95.02:00P	03/20/95.03:00P	
1.1.1.06.4R	1	Set Clean Room, Purge & Fit 10	03/20/95.03:00P	03/20/95.04:00P	
1.1.1.06.4S	2	Weld Joint 10	03/20/95.04:00P	03/21/95.09:00A	
1.1.1.06.4T	2	Leak Test Joint 10	03/21/95.09:00A	03/21/95.11:00A	
1.1.1.06.4U	2	Install Tube Supports 10	03/21/95.09:00A	03/21/95.11:00A	
1.1.1.06.4V	2	Remove Equip'mt, Clean & Cap 10	03/21/95.11:00A	03/21/95.02:00P	
1.1.1.06.5A	1	Unload,Rec/Insp Tube 10	01/24/95.01:00P	01/24/95.02:00P	
1.1.1.06.5B	1	Move to Stiff Fit Up Stat. 10	02/01/95.10:00A	02/01/95.11:00A	
1.1.1.06.5C	1	Set-up & Purge 10	02/01/95.11:00A	02/01/95.12:00P	
1.1.1.06.5D	1	F/W Pump Port Reinf. 10	02/01/95.01:00P	02/01/95.02:00P	
1.1.1.06.5E	2	Fit Stiffeners 10	02/01/95.02:00P	02/01/95.04:00P	
1.1.1.06.5F	4	Weld Stiffeners 10	02/01/95.04:00P	02/02/95.11:00A	
1.1.1.06.5G	1	Move to P.Port Stat.10	02/02/95.11:00A	02/02/95.12:00P	
1.1.1.06.5H	1	Setup & Bore 10" Inlet 10	02/02/95.01:00P	02/02/95.02:00P	
1.1.1.06.5I	2	Purge/F/W Pump Port 10	02/02/95.02:00P	02/02/95.04:00P	
1.1.1.06.5J	1	Inspect, Install End Caps 10	02/02/95.04:00P	02/02/95.05:00P	
1.1.1.06.5L	1	Move to Test Area 10	02/03/95.09:00A	02/03/95.10:00A	
1.1.1.06.5M	1	Pre-Clean & Black Light 10	02/03/95.10:00A	02/03/95.11:00A	
1.1.1.06.5N	30	Leak Test 10	02/03/95.11:00A	02/04/95.05:00P	
1.1.1.06.5Q	1	Move to Post Test Storage 10	02/06/95.08:00A	02/06/95.09:00A	
1.1.1.06.5R	1	Clean, Dry & End Cap 10	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.06.5T	1	Transport to Erection 10	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.06.5U	1	Set & Align 10	03/22/95.11:00A	03/22/95.12:00P	
1.1.1.06.5V	1	Set Clean Room, Purge & Fit 10	03/22/95.01:00P	03/22/95.02:00P	
1.1.1.06.5W	2	Weld Joint 10	03/22/95.02:00P	03/22/95.04:00P	
1.1.1.06.5X	2	Leak Test Joint 10	03/22/95.04:00P	03/23/95.09:00A	
1.1.1.06.5Y	2	Install Tube Supports 10	03/22/95.04:00P	03/23/95.09:00A	
1.1.1.06.5Z	2	Remove Equip'mt, Clean & Cap 10	03/23/95.09:00A	03/23/95.11:00A	
1.1.1.06.B1A	1	Unload,Rec/Insp Tube B6	01/24/95.09:00A	01/24/95.10:00A	
1.1.1.06.B1B	1	Move to Stiff Fit Up Stat. B6	01/24/95.10:00A	01/24/95.11:00A	
1.1.1.06.B1C	1	Set-up & Purge B6	01/24/95.11:00A	01/24/95.12:00P	
1.1.1.06.B1D	2	Fit Stiffeners B6	01/24/95.01:00P	01/24/95.03:00P	
1.1.1.06.B1E	4	Weld Stiffeners B6	01/24/95.03:00P	01/25/95.10:00A	
1.1.1.06.B1F	1	Move to Exp.Bellows Stat. B6	01/25/95.10:00A	01/25/95.11:00A	
1.1.1.06.B1G	3	Fit,Purge,Weld Exp. Bellows B6	01/25/95.11:00A	01/25/95.03:00P	
1.1.1.06.B1H	1	Inspect, Install End Caps B6	01/25/95.03:00P	01/25/95.04:00P	
1.1.1.06.B1J	1	Move to Test Area B6	01/25/95.04:00P	01/25/95.05:00P	
1.1.1.06.B1K	1	Pre-Clean & Black Light B6	01/26/95.08:00A	01/26/95.09:00A	
1.1.1.06.B1L	30	Leak Test B6	01/26/95.09:00A	01/27/95.03:00P	
1.1.1.06.B1O	1	Move to Post Test Storage B6	01/27/95.03:00P	01/27/95.04:00P	
1.1.1.06.B1P	1	Clean, Dry & End Cap B6	01/27/95.04:00P	01/27/95.05:00P	
1.1.1.06.B1R	1	Transport to Erection B6	03/10/95.11:00A	03/10/95.12:00P	
1.1.1.06.B1S	1	Set & Align B6	03/10/95.01:00P	03/10/95.02:00P	
1.1.1.06.B1T	1	Set Clean Room, Purge & Fit B6	03/10/95.02:00P	03/10/95.03:00P	
1.1.1.06.B1U	2	Weld Joint B6	03/10/95.03:00P	03/10/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.06.B1V	2	Leak Test Joint B6	03/13/95.08:00A	03/13/95.10:00A	
1.1.1.06.B1W	2	Install Tube Supports B6	03/13/95.08:00A	03/13/95.10:00A	
1.1.1.06.B1X	2	Remove Equip'mt, Clean & Cap B6	03/13/95.10:00A	03/13/95.12:00P	
1.1.1.06.B2A	1	Unload,Rec/Insp Tube B7	01/24/95.10:00A	01/24/95.11:00A	
1.1.1.06.B2B	1	Move to Stiff Fit Up Stat. B7	01/25/95.11:00A	01/25/95.12:00P	
1.1.1.06.B2C	1	Set-up & Purge B7	01/25/95.01:00P	01/25/95.02:00P	
1.1.1.06.B2D	2	Fit Stiffeners B7	01/25/95.02:00P	01/25/95.04:00P	
1.1.1.06.B2E	4	Weld Stiffeners B7	01/25/95.04:00P	01/26/95.11:00A	
1.1.1.06.B2F	1	Move to Exp.Bellows Stat. B7	01/26/95.11:00A	01/26/95.12:00P	
1.1.1.06.B2G	3	Fit,Purge,Weld Exp. Bellows B7	01/26/95.01:00P	01/26/95.04:00P	
1.1.1.06.B2H	1	Inspect, Install End Caps B7	01/26/95.04:00P	01/26/95.05:00P	
1.1.1.06.B2J	1	Move to Test Area B7	01/27/95.04:00P	01/27/95.05:00P	
1.1.1.06.B2K	1	Pre-Clean & Black Light B7	01/30/95.08:00A	01/30/95.09:00A	
1.1.1.06.B2L	30	Leak Test B7	01/30/95.09:00A	01/31/95.03:00P	
1.1.1.06.B2O	1	Move to Post Test Storage B7	01/31/95.03:00P	01/31/95.04:00P	
1.1.1.06.B2P	1	Clean, Dry & End Cap B7	01/31/95.04:00P	01/31/95.05:00P	
1.1.1.06.B2R	1	Transport to Erection B7	03/14/95.09:00A	03/14/95.10:00A	
1.1.1.06.B2S	1	Set & Align B7	03/14/95.10:00A	03/14/95.11:00A	
1.1.1.06.B2T	1	Set Clean Room, Purge & Fit B7	03/14/95.11:00A	03/14/95.12:00P	
1.1.1.06.B2U	2	Weld Joint B7	03/14/95.01:00P	03/14/95.03:00P	
1.1.1.06.B2V	2	Leak Test Joint B7	03/14/95.03:00P	03/14/95.05:00P	
1.1.1.06.B2W	2	Install Tube Supports B7	03/14/95.03:00P	03/14/95.05:00P	
1.1.1.06.B2X	2	Remove Equip'mt, Clean & Cap B7	03/15/95.08:00A	03/15/95.10:00A	
1.1.1.06.B3A	1	Unload,Rec/Insp Tube B8	01/24/95.11:00A	01/24/95.12:00P	
1.1.1.06.B3B	1	Move to Stiff Fit Up Stat. B8	01/26/95.01:00P	01/26/95.02:00P	
1.1.1.06.B3C	1	Set-up & Purge B8	01/26/95.02:00P	01/26/95.03:00P	
1.1.1.06.B3D	2	Fit Stiffeners B8	01/26/95.03:00P	01/26/95.05:00P	
1.1.1.06.B3E	4	Weld Stiffeners B8	01/27/95.08:00A	01/27/95.12:00P	
1.1.1.06.B3F	1	Move to Exp.Bellows Stat. B8	01/30/95.08:00A	01/30/95.09:00A	
1.1.1.06.B3G	3	Fit,Purge,Weld Exp. Bellows B8	01/30/95.09:00A	01/30/95.12:00P	
1.1.1.06.B3H	1	Inspect, Install End Caps B8	01/30/95.01:00P	01/30/95.02:00P	
1.1.1.06.B3J	1	Move to Test Area B8	01/31/95.04:00P	01/31/95.05:00P	
1.1.1.06.B3K	1	Pre-Clean & Black Light B8	02/01/95.08:00A	02/01/95.09:00A	
1.1.1.06.B3L	30	Leak Test B8	02/01/95.09:00A	02/02/95.03:00P	
1.1.1.06.B3O	1	Move to Post Test Storage B8	02/02/95.03:00P	02/02/95.04:00P	
1.1.1.06.B3P	1	Clean, Dry & End Cap B8	02/02/95.04:00P	02/02/95.05:00P	
1.1.1.06.B3R	1	Transport to Erection B8	03/15/95.04:00P	03/15/95.05:00P	
1.1.1.06.B3S	1	Set & Align B8	03/16/95.08:00A	03/16/95.09:00A	
1.1.1.06.B3T	1	Set Clean Room, Purge & Fit B8	03/16/95.09:00A	03/16/95.10:00A	
1.1.1.06.B3U	2	Weld Joint B8	03/16/95.10:00A	03/16/95.12:00P	
1.1.1.06.B3V	2	Leak Test Joint B8	03/16/95.01:00P	03/16/95.03:00P	
1.1.1.06.B3W	2	Install Tube Supports B8	03/16/95.01:00P	03/16/95.03:00P	
1.1.1.06.B3X	2	Remove Equip'mt, Clean & Cap B8	03/16/95.03:00P	03/16/95.05:00P	
1.1.1.06.B4A	1	Unload,Rec/Insp Tube B9	01/24/95.01:00P	01/24/95.02:00P	
1.1.1.06.B4B	1	Move to Stiff Fit Up Stat. B9	01/30/95.09:00A	01/30/95.10:00A	
1.1.1.06.B4C	1	Set-up & Purge B9	01/30/95.10:00A	01/30/95.11:00A	
1.1.1.06.B4D	2	Fit Stiffeners B9	01/30/95.11:00A	01/30/95.02:00P	
1.1.1.06.B4E	4	Weld Stiffeners B9	01/30/95.02:00P	01/31/95.09:00A	
1.1.1.06.B4F	1	Move to Exp.Bellows Stat. B9	02/01/95.08:00A	02/01/95.09:00A	
1.1.1.06.B4G	3	Fit,Purge,Weld Exp. Bellows B9	02/01/95.09:00A	02/01/95.12:00P	
1.1.1.06.B4H	1	Inspect, Install End Caps B9	02/01/95.01:00P	02/01/95.02:00P	
1.1.1.06.B4J	1	Move to Test Area B9	02/02/95.04:00P	02/02/95.05:00P	
1.1.1.06.B4K	1	Pre-Clean & Black Light B9	02/03/95.08:00A	02/03/95.09:00A	
1.1.1.06.B4L	30	Leak Test B9	02/03/95.09:00A	02/04/95.03:00P	
1.1.1.06.B4O	1	Move to Post Test Storage B9	02/06/95.08:00A	02/06/95.09:00A	
1.1.1.06.B4P	1	Clean, Dry & End Cap B9	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.06.B4R	1	Transport to Erection B9	03/17/95.02:00P	03/17/95.03:00P	
1.1.1.06.B4S	1	Set & Align B9	03/17/95.03:00P	03/17/95.04:00P	
1.1.1.06.B4T	1	Set Clean Room, Purge & Fit B9	03/17/95.04:00P	03/17/95.05:00P	
1.1.1.06.B4U	2	Weld Joint B9	03/20/95.08:00A	03/20/95.10:00A	
1.1.1.06.B4V	2	Leak Test Joint B9	03/20/95.10:00A	03/20/95.12:00P	
1.1.1.06.B4W	2	Install Tube Supports B9	03/20/95.10:00A	03/20/95.12:00P	
1.1.1.06.B4X	2	Remove Equip'mt, Clean & Cap B9	03/20/95.01:00P	03/20/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.06.B5A	1	Unload,Rec/Insp Tube B10	01/24/95.02:00P	01/24/95.03:00P	
1.1.1.06.B5B	1	Move to Stiff Fit Up Stat. B10	02/01/95.09:00A	02/01/95.10:00A	
1.1.1.06.B5C	1	Set-up & Purge B10	02/01/95.10:00A	02/01/95.11:00A	
1.1.1.06.B5D	2	Fit Stiffeners B10	02/01/95.11:00A	02/01/95.02:00P	
1.1.1.06.B5E	4	Weld Stiffeners B10	02/01/95.02:00P	02/02/95.09:00A	
1.1.1.06.B5F	1	Move to Exp.Bellows Stat. B10	02/03/95.08:00A	02/03/95.09:00A	
1.1.1.06.B5G	3	Fit,Purge,Weld Exp. Bellows B10	02/03/95.09:00A	02/03/95.12:00P	
1.1.1.06.B5H	1	Inspect, Install End Caps B10	02/03/95.01:00P	02/03/95.02:00P	
1.1.1.06.B5J	1	Move to Test Area B10	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.06.B5K	1	Pre-Clean & Black Light B10	02/06/95.10:00A	02/06/95.11:00A	
1.1.1.06.B5L	30	Leak Test B10	02/06/95.11:00A	02/07/95.05:00P	
1.1.1.06.B5O	1	Move to Post Test Storage B10	02/08/95.08:00A	02/08/95.09:00A	
1.1.1.06.B5P	1	Clean, Dry & End Cap B10	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.06.B5R	1	Transport to Erection B10	03/21/95.11:00A	03/21/95.12:00P	
1.1.1.06.B5S	1	Set & Align B10	03/21/95.01:00P	03/21/95.02:00P	
1.1.1.06.B5T	1	Set Clean Room, Purge & Fit B10	03/21/95.02:00P	03/21/95.03:00P	
1.1.1.06.B5U	2	Weld Joint B10	03/21/95.03:00P	03/21/95.05:00P	
1.1.1.06.B5V	2	Leak Test Joint B10	03/22/95.08:00A	03/22/95.10:00A	
1.1.1.06.B5W	2	Install Tube Supports B10	03/22/95.08:00A	03/22/95.10:00A	
1.1.1.06.B5X	2	Remove Equip'mt, Clean & Cap B10	03/22/95.10:00A	03/22/95.12:00P	
1.1.1.11	332	Cans 11-15	02/06/95.04:00P	04/05/95.11:00A	
1.1.1.11.1A	1	Unload,Rec/Insp Tube 11	02/07/95.08:00A	02/07/95.09:00A	
1.1.1.11.1B	1	Move to Stiff Fit Up Stat. 11	02/07/95.09:00A	02/07/95.10:00A	
1.1.1.11.1C	1	Set-up & Purge 11	02/07/95.10:00A	02/07/95.11:00A	
1.1.1.11.1D	2	Fit Stiffeners 11	02/07/95.11:00A	02/07/95.02:00P	
1.1.1.11.1E	4	Weld Stiffeners 11	02/07/95.02:00P	02/08/95.09:00A	
1.1.1.11.1F	1	Inspect, Install End Caps 11	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.11.1H	1	Move to Test Area 1 1	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.11.1I	1	Pre-Clean & Black Light 11	02/08/95.11:00A	02/08/95.12:00P	
1.1.1.11.1J	30	Leak Test 11	02/08/95.12:00P	02/09/95.06:00P	
1.1.1.11.1M	1	Move to Post Test Storage 1 1	02/10/95.08:00A	02/10/95.09:00A	
1.1.1.11.1N	1	Clean, Dry & End Cap 11	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.11.1P	1	Transport to Erection 11	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.11.1Q	1	Set & Align 11	03/24/95.11:00A	03/24/95.12:00P	
1.1.1.11.1R	1	Set Clean Room, Purge & Fit 11	03/24/95.01:00P	03/24/95.02:00P	
1.1.1.11.1S	2	Weld Joint 11	03/24/95.02:00P	03/24/95.04:00P	
1.1.1.11.1T	2	Leak Test Joint 11	03/24/95.04:00P	03/27/95.09:00A	
1.1.1.11.1U	2	Install Tube Supports 11	03/24/95.04:00P	03/27/95.09:00A	
1.1.1.11.1V	2	Remove Equip'mt, Clean & Cap 11	03/27/95.09:00A	03/27/95.11:00A	
1.1.1.11.2A	1	Unload,Rec. & Insp 12	02/07/95.09:00A	02/07/95.10:00A	
1.1.1.11.2B	1	Move to Stiff Fit Up Stat. 12	02/08/95.11:00A	02/08/95.12:00P	
1.1.1.11.2C	1	Set-up & Purge 12	02/08/95.01:00P	02/08/95.02:00P	
1.1.1.11.2D	2	Fit Stiffeners 12	02/08/95.02:00P	02/08/95.04:00P	
1.1.1.11.2E	4	Weld Stiffeners 12	02/08/95.04:00P	02/09/95.11:00A	
1.1.1.11.2F	1	Inspect, Install End Caps 12	02/09/95.11:00A	02/09/95.12:00P	
1.1.1.11.2H	1	Move to Test Area 12	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.11.2I	1	Pre-Clean & Black Light 12	02/10/95.10:00A	02/10/95.11:00A	
1.1.1.11.2J	30	Leak Test 12	02/10/95.11:00A	02/11/95.05:00P	
1.1.1.11.2M	1	Move to Post Test Storage 12	02/13/95.08:00A	02/13/95.09:00A	
1.1.1.11.2N	1	Clean, Dry & End Cap 12	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.11.2P	1	Transport to Erection 12	03/28/95.08:00A	03/28/95.09:00A	
1.1.1.11.2Q	1	Set & Align 12	03/28/95.09:00A	03/28/95.10:00A	
1.1.1.11.2R	1	Set Clean Room, Purge & Fit 12	03/28/95.10:00A	03/28/95.11:00A	
1.1.1.11.2S	2	Weld Joint 12	03/28/95.11:00A	03/28/95.02:00P	
1.1.1.11.2T	2	Leak Test Joint 12	03/28/95.02:00P	03/28/95.04:00P	
1.1.1.11.2U	2	Install Tube Supports 12	03/28/95.02:00P	03/28/95.04:00P	
1.1.1.11.2V	2	Remove Equip'mt, Clean & Cap 12	03/28/95.04:00P	03/29/95.09:00A	
1.1.1.11.3A	1	Unload,Rec/Insp Tube 13	02/07/95.10:00A	02/07/95.11:00A	
1.1.1.11.3B	1	Move to Stiff Fit Up Stat. 13	02/10/95.10:00A	02/10/95.11:00A	
1.1.1.11.3C	1	Set-up & Purge 13	02/10/95.11:00A	02/10/95.12:00P	
1.1.1.11.3D	2	Fit Stiffeners 13	02/10/95.01:00P	02/10/95.03:00P	
1.1.1.11.3E	4	Weld Stiffeners 13	02/10/95.03:00P	02/13/95.10:00A	
1.1.1.11.3F	1	Inspect, Install End Caps 13	02/13/95.10:00A	02/13/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.11.3H	1	Move to Test Area 13	02/13/95.11:00A	02/13/95.12:00P	
1.1.1.11.3I	1	Pre-Clean & Black Light 13	02/13/95.01:00P	02/13/95.02:00P	
1.1.1.11.3J	30	Leak Test 13	02/13/95.02:00P	02/14/95.08:00P	
1.1.1.11.3M	1	Move to Post Test Storage 13	02/15/95.08:00A	02/15/95.09:00A	
1.1.1.11.3N	1	Clean, Dry & End Cap 13	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.11.3P	1	Transport to Erection 13	03/29/95.03:00P	03/29/95.04:00P	
1.1.1.11.3Q	1	Set & Align 13	03/29/95.04:00P	03/29/95.05:00P	
1.1.1.11.3R	1	Set Clean Room, Purge & Fit 13	03/30/95.08:00A	03/30/95.09:00A	
1.1.1.11.3S	2	Weld Joint 13	03/30/95.09:00A	03/30/95.11:00A	
1.1.1.11.3T	2	Leak Test Joint 13	03/30/95.11:00A	03/30/95.02:00P	
1.1.1.11.3U	2	Install Tube Supports 13	03/30/95.11:00A	03/30/95.02:00P	
1.1.1.11.3V	2	Remove Equip'mt, Clean & Cap 13	03/30/95.02:00P	03/30/95.04:00P	
1.1.1.11.4A	1	Unload,Rec/Insp Tube 14	02/07/95.11:00A	02/07/95.12:00P	
1.1.1.11.4B	1	Move to Stiff Fit Up Stat.14	02/13/95.01:00P	02/13/95.02:00P	
1.1.1.11.4C	1	Set-up & Purge 14	02/13/95.02:00P	02/13/95.03:00P	
1.1.1.11.4D	2	Fit Stiffeners 14	02/13/95.03:00P	02/13/95.05:00P	
1.1.1.11.4E	4	Weld Stiffeners 14	02/14/95.08:00A	02/14/95.12:00P	
1.1.1.11.4F	1	Inspect, Install End Caps 14	02/14/95.01:00P	02/14/95.02:00P	
1.1.1.11.4H	1	Move to Test Area 14	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.11.4I	1	Pre-Clean & Black Light 14	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.11.4J	30	Leak Test 14	02/15/95.11:00A	02/16/95.05:00P	
1.1.1.11.4M	1	Move to Post Test Storage 14	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.11.4N	1	Clean, Dry & End Cap 14	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.11.4P	1	Transport to Erection 14	03/31/95.01:00P	03/31/95.02:00P	
1.1.1.11.4Q	1	Set & Align 14	03/31/95.02:00P	03/31/95.03:00P	
1.1.1.11.4R	1	Set Clean Room, Purge & Fit 14	03/31/95.03:00P	03/31/95.04:00P	
1.1.1.11.4S	2	Weld Joint14	03/31/95.04:00P	04/03/95.09:00A	
1.1.1.11.4T	2	Leak Test Joint 4	04/03/95.09:00A	04/03/95.11:00A	
1.1.1.11.4U	2	Install Tube Supports 14	04/03/95.09:00A	04/03/95.11:00A	
1.1.1.11.4V	2	Remove Equip'mt, Clean & Cap 14	04/03/95.11:00A	04/03/95.02:00P	
1.1.1.11.5A	1	Unload,Rec/Insp Tube 1	02/07/95.01:00P	02/07/95.02:00P	
1.1.1.11.5B	1	Move to Stiff Fit Up Stat. 15	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.11.5C	1	Set-up & Purge 15	02/15/95.11:00A	02/15/95.12:00P	
1.1.1.11.5D	1	F/W Pump Port Reinf. 15	02/15/95.01:00P	02/15/95.02:00P	
1.1.1.11.5E	2	Fit Stiffeners 15	02/15/95.02:00P	02/15/95.04:00P	
1.1.1.11.5F	4	Weld Stiffeners15	02/15/95.04:00P	02/16/95.11:00A	
1.1.1.11.5G	1	Move to P.Port Stat. 15	02/16/95.11:00A	02/16/95.12:00P	
1.1.1.11.5H	1	Setup & Bore 10" Inlet15	02/16/95.01:00P	02/16/95.02:00P	
1.1.1.11.5I	2	Purge/F/W Pump Port 15	02/16/95.02:00P	02/16/95.04:00P	
1.1.1.11.5J	1	Inspect, Install End Caps 15	02/16/95.04:00P	02/16/95.05:00P	
1.1.1.11.5L	1	Move to Test Area 115	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.11.5M	1	Pre-Clean & Black Light 15	02/17/95.10:00A	02/17/95.11:00A	
1.1.1.11.5N	30	Leak Test 15	02/17/95.11:00A	02/18/95.05:00P	
1.1.1.11.5Q	1	Move to Post Test Storage 15	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.11.5R	1	Clean, Dry & End Cap 15	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.11.5T	1	Transport to Erection 15	04/04/95.10:00A	04/04/95.11:00A	
1.1.1.11.5U	1	Set & Align 15	04/04/95.11:00A	04/04/95.12:00P	
1.1.1.11.5V	1	Set Clean Room, Purge & Fit 15	04/04/95.01:00P	04/04/95.02:00P	
1.1.1.11.5W	2	Weld Joint 15	04/04/95.02:00P	04/04/95.04:00P	
1.1.1.11.5X	2	Leak Test Joint 15	04/04/95.04:00P	04/05/95.09:00A	
1.1.1.11.5Y	2	Install Tube Supports 15	04/04/95.04:00P	04/05/95.09:00A	
1.1.1.11.5Z	2	Remove Equip'mt, Clean & Cap 15	04/05/95.09:00A	04/05/95.11:00A	
1.1.1.11.B1A	1	Unload,Rec/Insp Tube B11	02/07/95.08:00A	02/07/95.09:00A	
1.1.1.11.B1B	1	Move to Stiff Fit Up Stat. B11	02/07/95.09:00A	02/07/95.10:00A	
1.1.1.11.B1C	1	Set-up & Purge B11	02/07/95.10:00A	02/07/95.11:00A	
1.1.1.11.B1D	2	Fit Stiffeners B11	02/07/95.11:00A	02/07/95.02:00P	
1.1.1.11.B1E	4	Weld Stiffeners B11	02/07/95.02:00P	02/08/95.09:00A	
1.1.1.11.B1F	1	Move to Exp.Bellows Stat. B11	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.11.B1G	3	Fit,Purge,Weld Exp. Bellows B11	02/08/95.10:00A	02/08/95.02:00P	
1.1.1.11.B1H	1	Inspect, Install End Caps B11	02/08/95.02:00P	02/08/95.03:00P	
1.1.1.11.B1J	1	Move to Test Area B11	02/08/95.03:00P	02/08/95.04:00P	
1.1.1.11.B1K	1	Pre-Clean & Black Light B11	02/08/95.04:00P	02/08/95.05:00P	
1.1.1.11.B1L	30	Leak Test B11	02/08/95.05:00P	02/09/95.11:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.11.B10	1	Move to Post Test Storage B11	02/10/95.08:00A	02/10/95.09:00A	
1.1.1.11.B1P	1	Clean, Dry & End Cap B11	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.11.B1R	1	Transport to Erection B11	03/23/95.11:00A	03/23/95.12:00P	
1.1.1.11.B1S	1	Set & Align B11	03/23/95.01:00P	03/23/95.02:00P	
1.1.1.11.B1T	1	Set Clean Room, Purge & Fit B11	03/23/95.02:00P	03/23/95.03:00P	
1.1.1.11.B1U	2	Weld Joint B11	03/23/95.03:00P	03/23/95.05:00P	
1.1.1.11.B1V	2	Leak Test Joint B11	03/24/95.08:00A	03/24/95.10:00A	
1.1.1.11.B1W	2	Install Tube Supports B11	03/24/95.08:00A	03/24/95.10:00A	
1.1.1.11.B1X	2	Remove Equip'mt, Clean & Cap B11	03/24/95.10:00A	03/24/95.12:00P	
1.1.1.11.B2A	1	Unload,Rec/Insp Tube B12	02/07/95.09:00A	02/07/95.10:00A	
1.1.1.11.B2B	1	Move to Stiff Fit Up Stat. B12	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.11.B2C	1	Set-up & Purge B12	02/08/95.11:00A	02/08/95.12:00P	
1.1.1.11.B2D	2	Fit Stiffeners B12	02/08/95.01:00P	02/08/95.03:00P	
1.1.1.11.B2E	4	Weld Stiffeners B12	02/08/95.03:00P	02/09/95.10:00A	
1.1.1.11.B2F	1	Move to Exp.Bellows Stat. B12	02/09/95.10:00A	02/09/95.11:00A	
1.1.1.11.B2G	3	Fit,Purge,Weld Exp. Bellows B12	02/09/95.11:00A	02/09/95.03:00P	
1.1.1.11.B2H	1	Inspect, Install End Caps B12	02/09/95.03:00P	02/09/95.04:00P	
1.1.1.11.B2J	1	Move to Test Area B12	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.11.B2K	1	Pre-Clean & Black Light B12	02/10/95.10:00A	02/10/95.11:00A	
1.1.1.11.B2L	30	Leak Test B12	02/10/95.11:00A	02/11/95.05:00P	
1.1.1.11.B2O	1	Move to Post Test Storage B12	02/13/95.08:00A	02/13/95.09:00A	
1.1.1.11.B2P	1	Clean, Dry & End Cap B12	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.11.B2R	1	Transport to Erection B12	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.11.B2S	1	Set & Align B12	03/27/95.10:00A	03/27/95.11:00A	
1.1.1.11.B2T	1	Set Clean Room, Purge & Fit B12	03/27/95.11:00A	03/27/95.12:00P	
1.1.1.11.B2U	2	Weld Joint B12	03/27/95.01:00P	03/27/95.03:00P	
1.1.1.11.B2V	2	Leak Test Joint B12	03/27/95.03:00P	03/27/95.05:00P	
1.1.1.11.B2W	2	Install Tube SupportsB12	03/27/95.03:00P	03/27/95.05:00P	
1.1.1.11.B2X	2	Remove Equip'mt, Clean & Cap B12	03/28/95.08:00A	03/28/95.10:00A	
1.1.1.11.B3A	1	Unload,Rec/Insp Tube B13	02/07/95.10:00A	02/07/95.11:00A	
1.1.1.11.B3B	1	Move to Stiff Fit Up Stat. B13	02/09/95.11:00A	02/09/95.12:00P	
1.1.1.11.B3C	1	Set-up & Purge B13	02/09/95.01:00P	02/09/95.02:00P	
1.1.1.11.B3D	2	Fit Stiffeners B3	02/09/95.02:00P	02/09/95.04:00P	
1.1.1.11.B3E	4	Weld Stiffeners B3	02/09/95.04:00P	02/10/95.11:00A	
1.1.1.11.B3F	1	Move to Exp.Bellows Stat. B13	02/10/95.11:00A	02/10/95.12:00P	
1.1.1.11.B3G	3	Fit,Purge,Weld Exp. Bellows B13	02/10/95.01:00P	02/10/95.04:00P	
1.1.1.11.B3H	1	Inspect, Install End Caps B13	02/10/95.04:00P	02/10/95.05:00P	
1.1.1.11.B3J	1	Move to Test Area B13	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.11.B3K	1	Pre-Clean & Black Light B13	02/13/95.10:00A	02/13/95.11:00A	
1.1.1.11.B3L	30	Leak Test B13	02/13/95.11:00A	02/14/95.05:00P	
1.1.1.11.B3O	1	Move to Post Test Storage B13	02/15/95.08:00A	02/15/95.09:00A	
1.1.1.11.B3P	1	Clean, Dry & End Cap B13	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.11.B3R	1	Transport to Erection B13	03/28/95.04:00P	03/28/95.05:00P	
1.1.1.11.B3S	1	Set & Align B13	03/29/95.08:00A	03/29/95.09:00A	
1.1.1.11.B3T	1	Set Clean Room, Purge & Fit B13	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.11.B3U	2	Weld Joint B13	03/29/95.10:00A	03/29/95.12:00P	
1.1.1.11.B3V	2	Leak Test Joint B13	03/29/95.01:00P	03/29/95.03:00P	
1.1.1.11.B3W	2	Install Tube Supports B13	03/29/95.01:00P	03/29/95.03:00P	
1.1.1.11.B3X	2	Remove Equip'mt, Clean & Cap B13	03/29/95.03:00P	03/29/95.05:00P	
1.1.1.11.B4A	1	Unload,Rec/Insp Tube B14	02/07/95.11:00A	02/07/95.12:00P	
1.1.1.11.B4B	1	Move to Stiff Fit Up Stat. B14	02/10/95.01:00P	02/10/95.02:00P	
1.1.1.11.B4C	1	Set-up & Purge B14	02/10/95.02:00P	02/10/95.03:00P	
1.1.1.11.B4D	2	Fit Stiffeners B14	02/10/95.03:00P	02/10/95.05:00P	
1.1.1.11.B4E	4	Weld Stiffeners B14	02/13/95.08:00A	02/13/95.12:00P	
1.1.1.11.B4F	1	Move to Exp.Bellows Stat. B14	02/13/95.01:00P	02/13/95.02:00P	
1.1.1.11.B4G	3	Fit,Purge,Weld Exp. Bellows B14	02/13/95.02:00P	02/13/95.05:00P	
1.1.1.11.B4H	1	Inspect, Install End Caps B14	02/14/95.08:00A	02/14/95.09:00A	
1.1.1.11.B4J	1	Move to Test Area B14	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.11.B4K	1	Pre-Clean & Black Light B14	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.11.B4L	30	Leak Test B14	02/15/95.11:00A	02/16/95.05:00P	
1.1.1.11.B4O	1	Move to Post Test Storage B14	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.11.B4P	1	Clean, Dry & End Cap B14	02/17/95.09:00A	02/17/95.10:00A	
1.1.11.B4R	1	Transport to Erection B14	03/30/95.02:00P	03/30/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.11.B4S	1	Set & Align B14	03/30/95.03:00P	03/30/95.04:00P	
1.1.1.11.B4T	1	Set Clean Room, Purge & Fit B14	03/30/95.04:00P	03/30/95.05:00P	
1.1.1.11.B4U	2	Weld Joint B14	03/31/95.08:00A	03/31/95.10:00A	
1.1.1.11.B4V	2	Leak Test Joint B14	03/31/95.10:00A	03/31/95.12:00P	
1.1.1.11.B4W	2	Install Tube Supports B14	03/31/95.10:00A	03/31/95.12:00P	
1.1.1.11.B4X	2	Remove Equip'mt, Clean & Cap B14	03/31/95.01:00P	03/31/95.03:00P	
1.1.1.11.B5A	1	Unload,Rec/Insp Tube B15	02/07/95.01:00P	02/07/95.02:00P	
1.1.1.11.B5B	1	Move to Stiff Fit Up Stat. B15	02/13/95.02:00P	02/13/95.03:00P	
1.1.1.11.B5C	1	Set-up & Purge B15	02/13/95.03:00P	02/13/95.04:00P	
1.1.1.11.B5D	2	Fit Stiffeners B15	02/13/95.04:00P	02/14/95.09:00A	
1.1.1.11.B5E	4	Weld Stiffeners B15	02/14/95.09:00A	02/14/95.02:00P	
1.1.1.11.B5F	1	Move to Exp.Bellows Stat. B15	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.11.B5G	3	Fit,Purge,Weld Exp. Bellows B15	02/15/95.11:00A	02/15/95.03:00P	
1.1.1.11.B5H	1	Inspect, Install End Caps B15	02/15/95.03:00P	02/15/95.04:00P	
1.1.1.11.B5J	1	Move to Test Area B15	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.11.B5K	1	Pre-Clean & Black Light B15	02/17/95.10:00A	02/17/95.11:00A	
1.1.1.11.B5L	30	Leak Test B15	02/17/95.11:00A	02/18/95.05:00P	
1.1.1.11.B5O	1	Move to Post Test Storage B15	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.11.B5P	1	Clean, Dry & End Cap B15	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.11.B5R	1	Transport to Erection B15	04/03/95.11:00A	04/03/95.12:00P	
1.1.1.11.B5S	1	Set & Align B15	04/03/95.01:00P	04/03/95.02:00P	
1.1.1.11.B5T	1	Set Clean Room, Purge & Fit B15	04/03/95.02:00P	04/03/95.03:00P	
1.1.1.11.B5U	2	Weld Joint B15	04/03/95.03:00P	04/03/95.05:00P	
1.1.1.11.B5V	2	Leak Test Joint B15	04/04/95.08:00A	04/04/95.10:00A	
1.1.1.11.B5W	2	Install Tube Supports B15	04/04/95.08:00A	04/04/95.10:00A	
1.1.1.11.B5X	2	Remove Equip'mt, Clean & Cap B15	04/04/95.10:00A	04/04/95.12:00P	
1.1.1.16	324	Cans 16-20	02/20/95.04:00P	04/18/95.11:00A	
1.1.1.16.1A	1	Unload,Rec/Insp Tube 16	02/21/95.08:00A	02/21/95.09:00A	
1.1.1.16.1B	1	Move to Stiff Fit Up Stat. 16	02/21/95.09:00A	02/21/95.10:00A	
1.1.1.16.1C	1	Set-up & Purge 16	02/21/95.10:00A	02/21/95.11:00A	
1.1.1.16.1D	2	Fit Stiffeners 16	02/21/95.11:00A	02/21/95.02:00P	
1.1.1.16.1E	4	Weld Stiffeners 16	02/21/95.02:00P	02/22/95.09:00A	
1.1.1.16.1F	1	Inspect, Install End Caps 16	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.16.1H	1	Move to Test Area 16	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.16.1I	1	Pre-Clean & Black Light 16	02/22/95.11:00A	02/22/95.12:00P	
1.1.1.16.1J	30	Leak Test 16	02/22/95.12:00P	02/23/95.06:00P	
1.1.1.16.1M	1	Move to Post Test Storage 16	02/24/95.08:00A	02/24/95.09:00A	
1.1.1.16.1N	1	Clean, Dry & End Cap 16	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.16.1P	1	Transport to Erection 16	04/06/95.10:00A	04/06/95.11:00A	
1.1.1.16.1Q	1	Set & Align 16	04/06/95.11:00A	04/06/95.12:00P	
1.1.1.16.1R	1	Set Clean Room, Purge & Fit 16	04/06/95.01:00P	04/06/95.02:00P	
1.1.1.16.1S	2	Weld Joint 16	04/06/95.02:00P	04/06/95.04:00P	
1.1.1.16.1T	2	Leak Test Joint 16	04/06/95.04:00P	04/07/95.09:00A	
1.1.1.16.1U	2	Install Tube Supports 16	04/06/95.04:00P	04/07/95.09:00A	
1.1.1.16.1V	2	Remove Equip'mt, Clean & Cap 16	04/07/95.09:00A	04/07/95.11:00A	
1.1.1.16.2A	1	Unload,Rec. & Insp 17	02/21/95.09:00A	02/21/95.10:00A	
1.1.1.16.2B	1	Move to Stiff Fit Up Stat. 17	02/22/95.11:00A	02/22/95.12:00P	
1.1.1.16.2C	1	Set-up & Purge 17	02/22/95.01:00P	02/22/95.02:00P	
1.1.1.16.2D	2	Fit Stiffeners 17	02/22/95.02:00P	02/22/95.04:00P	
1.1.1.16.2E	4	Weld Stiffeners 17	02/22/95.04:00P	02/23/95.11:00A	
1.1.1.16.2F	1	Inspect, Install End Caps 17	02/23/95.11:00A	02/23/95.12:00P	
1.1.1.16.2H	1	Move to Test Area 17	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.16.2I	1	Pre-Clean & Black Light 17	02/24/95.10:00A	02/24/95.11:00A	
1.1.1.16.2J	30	Leak Test 17	02/24/95.11:00A	02/25/95.05:00P	
1.1.1.16.2M	1	Move to Post Test Storage 17	02/27/95.08:00A	02/27/95.09:00A	
1.1.1.16.2N	1	Clean, Dry & End Cap 17	02/27/95.09:00A	02/27/95.10:00A	
1.1.1.16.2P	1	Transport to Erection 17	04/10/95.08:00A	04/10/95.09:00A	
1.1.1.16.2Q	1	Set & Align 17	04/10/95.09:00A	04/10/95.10:00A	
1.1.1.16.2R	1	Set Clean Room, Purge & Fit 17	04/10/95.10:00A	04/10/95.11:00A	
1.1.1.16.2S	2	Weld Joint 17	04/10/95.11:00A	04/10/95.02:00P	
1.1.1.16.2T	2	Leak Test Joint 17	04/10/95.02:00P	04/10/95.04:00P	
1.1.1.16.2U	2	Install Tube Supports 17	04/10/95.02:00P	04/10/95.04:00P	
1.1.1.16.2V	2	Remove Equip'mt, Clean & Cap 17	04/10/95.04:00P	04/11/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.16.3A	1	Unload,Rec/Insp Tube 18	02/21/95.10:00A	02/21/95.11:00A	
1.1.1.16.3B	1	Move to Stiff Fit Up Stat. 18	02/24/95.10:00A	02/24/95.11:00A	
1.1.1.16.3C	1	Set-up & Purge 18	02/24/95.11:00A	02/24/95.12:00P	
1.1.1.16.3D	2	Fit Stiffeners 18	02/24/95.01:00P	02/24/95.03:00P	
1.1.1.16.3E	4	Weld Stiffeners 18	02/24/95.03:00P	02/27/95.10:00A	
1.1.1.16.3F	1	Inspect, Install End Caps 18	02/27/95.10:00A	02/27/95.11:00A	
1.1.1.16.3H	1	Move to Test Area 18	02/27/95.11:00A	02/27/95.12:00P	
1.1.1.16.3I	1	Pre-Clean & Black Light 18	02/27/95.01:00P	02/27/95.02:00P	
1.1.1.16.3J	30	Leak Test 18	02/27/95.02:00P	02/28/95.08:00P	
1.1.1.16.3M	1	Move to Post Test Storage 18	03/01/95.08:00A	03/01/95.09:00A	
1.1.1.16.3N	1	Clean, Dry & End Cap 18	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.16.3P	1	Transport to Erection 18	04/11/95.03:00P	04/11/95.04:00P	
1.1.1.16.3Q	1	Set & Align 18	04/11/95.04:00P	04/11/95.05:00P	
1.1.1.16.3R	1	Set Clean Room, Purge & Fit 18	04/12/95.08:00A	04/12/95.09:00A	
1.1.1.16.3S	2	Weld Joint 18	04/12/95.09:00A	04/12/95.11:00A	
1.1.1.16.3T	2	Leak Test Joint 18	04/12/95.11:00A	04/12/95.02:00P	
1.1.1.16.3U	2	Install Tube Supports 18	04/12/95.11:00A	04/12/95.02:00P	
1.1.1.16.3V	2	Remove Equip'mt, Clean & Cap 18	04/12/95.02:00P	04/12/95.04:00P	
1.1.1.16.4A	1	Unload,Rec/Insp Tube 19	02/21/95.11:00A	02/21/95.12:00P	
1.1.1.16.4B	1	Move to Stiff Fit Up Stat. 19	02/27/95.01:00P	02/27/95.02:00P	
1.1.1.16.4C	1	Set-up & Purge 19	02/27/95.02:00P	02/27/95.03:00P	
1.1.1.16.4D	2	Fit Stiffeners 19	02/27/95.03:00P	02/27/95.05:00P	
1.1.1.16.4E	4	Weld Stiffeners 19	02/28/95.08:00A	02/28/95.12:00P	
1.1.1.16.4F	1	Inspect, Install End Caps 19	02/28/95.01:00P	02/28/95.02:00P	
1.1.1.16.4H	1	Move to Test Area 19	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.16.4I	1	Pre-Clean & Black Light 19	03/01/95.10:00A	03/01/95.11:00A	
1.1.1.16.4J	30	Leak Test 19	03/01/95.11:00A	03/02/95.05:00P	
1.1.1.16.4M	1	Move to Post Test Storage 19	03/03/95.08:00A	03/03/95.09:00A	
1.1.1.16.4N	1	Clean, Dry & End Cap 19	03/03/95.09:00A	03/03/95.10:00A	
1.1.1.16.4P	1	Transport to Erection 19	04/13/95.01:00P	04/13/95.02:00P	
1.1.1.16.4Q	1	Set & Align 19	04/13/95.02:00P	04/13/95.03:00P	
1.1.1.16.4R	1	Set Clean Room, Purge & Fit 19	04/13/95.03:00P	04/13/95.04:00P	
1.1.1.16.4S	2	Weld Joint 19	04/13/95.04:00P	04/14/95.09:00A	
1.1.1.16.4T	2	Leak Test Joint 19	04/14/95.09:00A	04/14/95.11:00A	
1.1.1.16.4U	2	Install Tube Supports 19	04/14/95.09:00A	04/14/95.11:00A	
1.1.1.16.4V	2	Remove Equip'mt, Clean & Cap 19	04/14/95.11:00A	04/14/95.02:00P	
1.1.1.16.5A	1	Unload,Rec/Insp Tube 20	02/21/95.01:00P	02/21/95.02:00P	
1.1.1.16.5B	1	Move to Stiff Fit Up Stat. 20	03/01/95.10:00A	03/01/95.11:00A	
1.1.1.16.5C	1	Set-up & Purge 20	03/01/95.11:00A	03/01/95.12:00P	
1.1.1.16.5D	1	F/W Pump Port Reinf. 20	03/01/95.01:00P	03/01/95.02:00P	
1.1.1.16.5E	2	Fit Stiffeners 20	03/01/95.02:00P	03/01/95.04:00P	
1.1.1.16.5F	4	Weld Stiffeners 20	03/01/95.04:00P	03/02/95.11:00A	
1.1.1.16.5G	1	Move to P.Port Stat. 20	03/02/95.11:00A	03/02/95.12:00P	
1.1.1.16.5H	1	Setup & Bore 10" Inlet 20	03/02/95.01:00P	03/02/95.02:00P	
1.1.1.16.5I	2	Purge/F/W Pump Port 20	03/02/95.02:00P	03/02/95.04:00P	
1.1.1.16.5J	1	Inspect, Install End Caps 20	03/02/95.04:00P	03/02/95.05:00P	
1.1.1.16.5L	1	Move to Test Area 20	03/03/95.09:00A	03/03/95.10:00A	
1.1.1.16.5M	1	Pre-Clean & Black Light 20	03/03/95.10:00A	03/03/95.11:00A	
1.1.1.16.5N	30	Leak Test 20	03/03/95.11:00A	03/04/95.05:00P	
1.1.1.16.5Q	1	Move to Post Test Storage 20	03/06/95.08:00A	03/06/95.09:00A	
1.1.1.16.5R	1	Clean, Dry & End Cap 20	03/06/95.09:00A	03/06/95.10:00A	
1.1.1.16.5T	1	Transport to Erection 20	04/17/95.10:00A	04/17/95.11:00A	
1.1.1.16.5U	1	Set & Align 20	04/17/95.11:00A	04/17/95.12:00P	
1.1.1.16.5V	1	Set Clean Room, Purge & Fit 20	04/17/95.01:00P	04/17/95.02:00P	
1.1.1.16.5W	2	Weld Joint 20	04/17/95.02:00P	04/17/95.04:00P	
1.1.1.16.5X	2	Leak Test Joint 20	04/17/95.04:00P	04/18/95.09:00A	
1.1.1.16.5Y	2	Install Tube Supports 20	04/17/95.04:00P	04/18/95.09:00A	
1.1.1.16.5Z	2	Remove Equip'mt, Clean & Cap 20	04/18/95.09:00A	04/18/95.11:00A	
1.1.1.16.B1A	1	Unload,Rec/Insp Tube B15	02/21/95.08:00A	02/21/95.09:00A	
1.1.1.16.B1B	1	Move to Stiff Fit Up Stat. B16	02/21/95.09:00A	02/21/95.10:00A	
1.1.1.16.B1C	1	Set-up & Purge B16	02/21/95.10:00A	02/21/95.11:00A	
1.1.1.16.B1D	2	Fit Stiffeners B6	02/21/95.11:00A	02/21/95.02:00P	
1.1.1.16.B1E	4	Weld Stiffeners B16	02/21/95.02:00P	02/22/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.16.B1F	1	Move to Exp.Bellows Stat. B16	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.16.B1G	3	Fit,Purge,Weld Exp. Bellows B16	02/22/95.10:00A	02/22/95.02:00P	
1.1.1.16.B1H	1	Inspect, Install End Caps B16	02/22/95.02:00P	02/22/95.03:00P	
1.1.1.16.B1J	1	Move to Test Area B16	02/22/95.03:00P	02/22/95.04:00P	
1.1.1.16.B1K	1	Pre-Clean & Black Light B16	02/22/95.04:00P	02/22/95.05:00P	
1.1.1.16.B1L	30	Leak Test B16	02/22/95.05:00P	02/23/95.11:00P	
1.1.1.16.B1O	1	Move to Post Test Storage B16	02/24/95.08:00A	02/24/95.09:00A	
1.1.1.16.B1P	1	Clean, Dry & End Cap B16	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.16.B1R	1	Transport to Erection B16	04/05/95.11:00A	04/05/95.12:00P	
1.1.1.16.B1S	1	Set & Align B16	04/05/95.01:00P	04/05/95.02:00P	
1.1.1.16.B1T	1	Set Clean Room, Purge & Fit B16	04/05/95.02:00P	04/05/95.03:00P	
1.1.1.16.B1U	2	Weld Joint B16	04/05/95.03:00P	04/05/95.05:00P	
1.1.1.16.B1V	2	Leak Test Joint B16	04/06/95.08:00A	04/06/95.10:00A	
1.1.1.16.B1W	2	Install Tube Supports B16	04/06/95.08:00A	04/06/95.10:00A	
1.1.1.16.B1X	2	Remove Equip'mt, Clean & Cap B16	04/06/95.10:00A	04/06/95.12:00P	
1.1.1.16.B2A	1	Unload,Rec/Insp Tube B17	02/21/95.09:00A	02/21/95.10:00A	
1.1.1.16.B2B	1	Move to Stiff Fit Up Stat. B17	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.16.B2C	1	Set-up & Purge B17	02/22/95.11:00A	02/22/95.12:00P	
1.1.1.16.B2D	2	Fit Stiffeners B17	02/22/95.01:00P	02/22/95.03:00P	
1.1.1.16.B2E	4	Weld Stiffeners B17	02/22/95.03:00P	02/23/95.10:00A	
1.1.1.16.B2F	1	Move to Exp.Bellows Stat. B17	02/23/95.10:00A	02/23/95.11:00A	
1.1.1.16.B2G	3	Fit,Purge,Weld Exp. Bellows B17	02/23/95.11:00A	02/23/95.03:00P	
1.1.1.16.B2H	1	Inspect, Install End Caps B17	02/23/95.03:00P	02/23/95.04:00P	
1.1.1.16.B2J	1	Move to Test Area B17	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.16.B2K	1	Pre-Clean & Black Light B17	02/24/95.10:00A	02/24/95.11:00A	
1.1.1.16.B2L	30	Leak Test B17	02/24/95.11:00A	02/25/95.05:00P	
1.1.1.16.B2O	1	Move to Post Test Storage B17	02/27/95.08:00A	02/27/95.09:00A	
1.1.1.16.B2P	1	Clean, Dry & End Cap B17	02/27/95.09:00A	02/27/95.10:00A	
1.1.1.16.B2R	1	Transport to Erection B17	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.16.B2S	1	Set & Align B17	04/07/95.10:00A	04/07/95.11:00A	
1.1.1.16.B2T	1	Set Clean Room, Purge & Fit B17	04/07/95.11:00A	04/07/95.12:00P	
1.1.1.16.B2U	2	Weld Joint B17	04/07/95.01:00P	04/07/95.03:00P	
1.1.1.16.B2V	2	Leak Test Joint B17	04/07/95.03:00P	04/07/95.05:00P	
1.1.1.16.B2W	2	Install Tube Supports B17	04/07/95.03:00P	04/07/95.05:00P	
1.1.1.16.B2X	2	Remove Equip'mt, Clean & Cap B17	04/10/95.08:00A	04/10/95.10:00A	
1.1.1.16.B3A	1	Unload,Rec/Insp Tube B18	02/21/95.10:00A	02/21/95.11:00A	
1.1.1.16.B3B	1	Move to Stiff Fit Up Stat. B18	02/23/95.11:00A	02/23/95.12:00P	
1.1.1.16.B3C	1	Set-up & Purge B18	02/23/95.01:00P	02/23/95.02:00P	
1.1.1.16.B3D	2	Fit Stiffeners B18	02/23/95.02:00P	02/23/95.04:00P	
1.1.1.16.B3E	4	Weld Stiffeners B18	02/23/95.04:00P	02/24/95.11:00A	
1.1.1.16.B3F	1	Move to Exp.Bellows Stat. B18	02/24/95.11:00A	02/24/95.12:00P	
1.1.1.16.B3G	3	Fit,Purge,Weld Exp. Bellows B18	02/24/95.01:00P	02/24/95.04:00P	
1.1.1.16.B3H	1	Inspect, Install End Caps B18	02/24/95.04:00P	02/24/95.05:00P	
1.1.1.16.B3J	1	Move to Test Area B18	02/27/95.09:00A	02/27/95.10:00A	
1.1.1.16.B3K	1	Pre-Clean & Black Light B18	02/27/95.10:00A	02/27/95.11:00A	
1.1.1.16.B3L	30	Leak Test B18	02/27/95.11:00A	02/28/95.05:00P	
1.1.1.16.B3O	1	Move to Post Test Storage B18	03/01/95.08:00A	03/01/95.09:00A	
1.1.1.16.B3P	1	Clean, Dry & End Cap B18	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.16.B3R	1	Transport to Erection B18	04/10/95.04:00P	04/10/95.05:00P	
1.1.1.16.B3S	1	Set & Align B18	04/11/95.08:00A	04/11/95.09:00A	
1.1.1.16.B3T	1	Set Clean Room, Purge & Fit B18	04/11/95.09:00A	04/11/95.10:00A	
1.1.1.16.B3U	2	Weld Joint B18	04/11/95.10:00A	04/11/95.12:00P	
1.1.1.16.B3V	2	Leak Test Joint B18	04/11/95.01:00P	04/11/95.03:00P	
1.1.1.16.B3W	2	Install Tube Supports B18	04/11/95.01:00P	04/11/95.03:00P	
1.1.1.16.B3X	2	Remove Equip'mt, Clean & Cap B18	04/11/95.03:00P	04/11/95.05:00P	
1.1.1.16.B4A	1	Unload,Rec/Insp Tube B19	02/21/95.11:00A	02/21/95.12:00P	
1.1.1.16.B4B	1	Move to Stiff Fit Up Stat. B19	02/24/95.01:00P	02/24/95.02:00P	
1.1.1.16.B4C	1	Set-up & Purge B19	02/24/95.02:00P	02/24/95.03:00P	
1.1.1.16.B4D	2	Fit Stiffeners B19	02/24/95.03:00P	02/24/95.05:00P	
1.1.1.16.B4E	4	Weld Stiffeners B19	02/27/95.08:00A	02/27/95.12:00P	
1.1.1.16.B4F	1	Move to Exp.Bellows Stat. B19	02/27/95.01:00P	02/27/95.02:00P	
1.1.1.16.B4G	3	Fit,Purge,Weld Exp. Bellows B19	02/27/95.02:00P	02/27/95.05:00P	
1.1.1.16.B4H	1	Inspect, Install End Caps B19	02/28/95.08:00A	02/28/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.16.B4J	1	Move to Test Area B19	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.16.B4K	1	Pre-Clean & Black Light B19	03/01/95.10:00A	03/01/95.11:00A	
1.1.1.16.B4L	30	Leak Test B19	03/01/95.11:00A	03/02/95.05:00P	
1.1.1.16.B4O	1	Move to Post Test Storage B19	03/03/95.08:00A	03/03/95.09:00A	
1.1.1.16.B4P	1	Clean, Dry & End Cap B19	03/03/95.09:00A	03/03/95.10:00A	
1.1.1.16.B4R	1	Transport to Erection B19	04/12/95.02:00P	04/12/95.03:00P	
1.1.1.16.B4S	1	Set & Align B19	04/12/95.03:00P	04/12/95.04:00P	
1.1.1.16.B4T	1	Set Clean Room, Purge & Fit B19	04/12/95.04:00P	04/12/95.05:00P	
1.1.1.16.B4U	2	Weld Joint B19	04/13/95.08:00A	04/13/95.10:00A	
1.1.1.16.B4V	2	Leak Test Joint B19	04/13/95.10:00A	04/13/95.12:00P	
1.1.1.16.B4W	2	Install Tube Supports B19	04/13/95.10:00A	04/13/95.12:00P	
1.1.1.16.B4X	2	Remove Equip'mt, Clean & Cap B19	04/13/95.01:00P	04/13/95.03:00P	
1.1.1.16.B5A	1	Unload,Rec/Insp Tube B19	02/21/95.01:00P	02/21/95.02:00P	
1.1.1.16.B5B	1	Move to Stiff Fit Up Stat. B19	02/27/95.02:00P	02/27/95.03:00P	
1.1.1.16.B5C	1	Set-up & Purge B20	02/27/95.03:00P	02/27/95.04:00P	
1.1.1.16.B5D	2	Fit Stiffeners B20	02/27/95.04:00P	02/28/95.09:00A	
1.1.1.16.B5E	4	Weld Stiffeners B20	02/28/95.09:00A	02/28/95.02:00P	
1.1.1.16.B5F	1	Move to Exp.Bellows Stat. B20	03/01/95.10:00A	03/01/95.11:00A	
1.1.1.16.B5G	3	Fit,Purge,Weld Exp. Bellows B20	03/01/95.11:00A	03/01/95.03:00P	
1.1.1.16.B5H	1	Inspect, Install End Caps B20	03/01/95.03:00P	03/01/95.04:00P	
1.1.1.16.B5J	1	Move to Test Area B20	03/03/95.09:00A	03/03/95.10:00A	
1.1.1.16.B5K	1	Pre-Clean & Black Light B20	03/03/95.10:00A	03/03/95.11:00A	
1.1.1.16.B5L	30	Leak Test B20	03/03/95.11:00A	03/04/95.05:00P	
1.1.1.16.B5O	1	Move to Post Test Storage B20	03/06/95.08:00A	03/06/95.09:00A	
1.1.1.16.B5P	1	Clean, Dry & End Cap B20	03/06/95.09:00A	03/06/95.10:00A	
1.1.1.16.B5R	1	Transport to Erection B20	04/14/95.11:00A	04/14/95.12:00P	
1.1.1.16.B5S	1	Set & Align B20	04/14/95.01:00P	04/14/95.02:00P	
1.1.1.16.B5T	1	Set Clean Room, Purge & Fit B20	04/14/95.02:00P	04/14/95.03:00P	
1.1.1.16.B5U	2	Weld Joint B20	04/14/95.03:00P	04/14/95.05:00P	
1.1.1.16.B5V	2	Leak Test Joint B20	04/17/95.08:00A	04/17/95.10:00A	
1.1.1.16.B5W	2	Install Tube Supports B20	04/17/95.08:00A	04/17/95.10:00A	
1.1.1.16.B5X	2	Remove Equip'mt, Clean & Cap B20	04/17/95.10:00A	04/17/95.12:00P	
1.1.1.21	316	Cans 21-25	03/06/95.04:00P	05/01/95.11:00A	
1.1.1.21.1A	1	Unload,Rec/Insp Tube 21	03/07/95.08:00A	03/07/95.09:00A	
1.1.1.21.1B	1	Move to Stiff Fit Up Stat. 21	03/07/95.09:00A	03/07/95.10:00A	
1.1.1.21.1C	1	Set-up & Purge 21	03/07/95.10:00A	03/07/95.11:00A	
1.1.1.21.1D	2	Fit Stiffeners 21	03/07/95.11:00A	03/07/95.02:00P	
1.1.1.21.1E	4	Weld Stiffeners 21	03/07/95.02:00P	03/08/95.09:00A	
1.1.1.21.1F	1	Inspect, Install End Caps 21	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.21.1H	1	Move to Test Area 21	03/08/95.10:00A	03/08/95.11:00A	
1.1.1.21.1I	1	Pre-Clean & Black Light 21	03/08/95.11:00A	03/08/95.12:00P	
1.1.1.21.1J	30	Leak Test 21	03/08/95.12:00P	03/09/95.06:00P	
1.1.1.21.1M	1	Move to Post Test Storage 21	03/10/95.08:00A	03/10/95.09:00A	
1.1.1.21.1N	1	Clean, Dry & End Cap 21	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.21.1P	1	Transport to Erection 21	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.21.1Q	1	Set & Align 21	04/19/95.11:00A	04/19/95.12:00P	
1.1.1.21.1R	1	Set Clean Room, Purge & Fit 21	04/19/95.01:00P	04/19/95.02:00P	
1.1.1.21.1S	2	Weld Joint 21	04/19/95.02:00P	04/19/95.04:00P	
1.1.1.21.1T	2	Leak Test Joint 21	04/19/95.04:00P	04/20/95.09:00A	
1.1.1.21.1U	2	Install Tube Supports 21	04/19/95.04:00P	04/20/95.09:00A	
1.1.1.21.1V	2	Remove Equip'mt, Clean & Cap 21	04/20/95.09:00A	04/20/95.11:00A	
1.1.1.21.2A	1	Unload,Rec. & Inspect 22	03/07/95.09:00A	03/07/95.10:00A	
1.1.1.21.2B	1	Move to Stiff Fit Up Stat. 22	03/08/95.11:00A	03/08/95.12:00P	
1.1.1.21.2C	1	Set-up & Purge 22	03/08/95.01:00P	03/08/95.02:00P	
1.1.1.21.2D	2	Fit Stiffeners 22	03/08/95.02:00P	03/08/95.04:00P	
1.1.1.21.2E	4	Weld Stiffeners 22	03/08/95.04:00P	03/09/95.11:00A	
1.1.1.21.2F	1	Inspect, Install End Caps 22	03/09/95.11:00A	03/09/95.12:00P	
1.1.1.21.2H	1	Move to Test Area 22	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.21.2I	1	Pre-Clean & Black Light 22	03/10/95.10:00A	03/10/95.11:00A	
1.1.1.21.2J	30	Leak Test 22	03/10/95.11:00A	03/11/95.05:00P	
1.1.1.21.2M	1	Move to Post Test Storage 22	03/13/95.08:00A	03/13/95.09:00A	
1.1.1.21.2N	1	Clean, Dry & End Cap 22	03/13/95.09:00A	03/13/95.10:00A	
1.1.1.21.2P	1	Transport to Erection 22	04/21/95.08:00A	04/21/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.21.2Q	1	Set & Align 22	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.21.2R	1	Set Clean Room, Purge & Fit 22	04/21/95.10:00A	04/21/95.11:00A	
1.1.1.21.2S	2	Weld Joint 22	04/21/95.11:00A	04/21/95.02:00P	
1.1.1.21.2T	2	Leak Test Joint 22	04/21/95.02:00P	04/21/95.04:00P	
1.1.1.21.2U	2	Install Tube Supports 22	04/21/95.02:00P	04/21/95.04:00P	
1.1.1.21.2V	2	Remove Equip'mt, Clean & Cap 22	04/21/95.04:00P	04/24/95.09:00A	
1.1.1.21.3A	1	Unload,Rec/Insp Tube 23	03/07/95.10:00A	03/07/95.11:00A	
1.1.1.21.3B	1	Move to Stiff Fit Up Stat. 23	03/10/95.10:00A	03/10/95.11:00A	
1.1.1.21.3C	1	Set-up & Purge 23	03/10/95.11:00A	03/10/95.12:00P	
1.1.1.21.3D	2	Fit Stiffeners 23	03/10/95.01:00P	03/10/95.03:00P	
1.1.1.21.3E	4	Weld Stiffeners 23	03/10/95.03:00P	03/13/95.10:00A	
1.1.1.21.3F	1	Inspect, Install End Caps 23	03/13/95.10:00A	03/13/95.11:00A	
1.1.1.21.3H	1	Move to Test Area 23	03/13/95.11:00A	03/13/95.12:00P	
1.1.1.21.3I	1	Pre-Clean & Black Light 23	03/13/95.01:00P	03/13/95.02:00P	
1.1.1.21.3J	30	Leak Test 23	03/13/95.02:00P	03/14/95.08:00P	
1.1.1.21.3M	1	Move to Post Test Storage 23	03/15/95.08:00A	03/15/95.09:00A	
1.1.1.21.3N	1	Clean, Dry & End Cap 23	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.21.3P	1	Transport to Erection 23	04/24/95.03:00P	04/24/95.04:00P	
1.1.1.21.3Q	1	Set & Align 23	04/24/95.04:00P	04/24/95.05:00P	
1.1.1.21.3R	1	Set Clean Room, Purge & Fit 23	04/25/95.08:00A	04/25/95.09:00A	
1.1.1.21.3S	2	Weld Joint 23	04/25/95.09:00A	04/25/95.11:00A	
1.1.1.21.3T	2	Leak Test Joint 23	04/25/95.11:00A	04/25/95.02:00P	
1.1.1.21.3U	2	Install Tube Supports 23	04/25/95.11:00A	04/25/95.02:00P	
1.1.1.21.3V	2	Remove Equip'mt, Clean & Cap 23	04/25/95.02:00P	04/25/95.04:00P	
1.1.1.21.4A	1	Unload,Rec/Insp Tube 24	03/07/95.11:00A	03/07/95.12:00P	
1.1.1.21.4B	1	Move to Stiff Fit Up Stat. 24	03/13/95.01:00P	03/13/95.02:00P	
1.1.1.21.4C	1	Set-up & Purge 24	03/13/95.02:00P	03/13/95.03:00P	
1.1.1.21.4D	2	Fit Stiffeners 24	03/13/95.03:00P	03/13/95.05:00P	
1.1.1.21.4E	4	Weld Stiffeners 24	03/14/95.08:00A	03/14/95.12:00P	
1.1.1.21.4F	1	Inspect, Install End Caps 24	03/14/95.01:00P	03/14/95.02:00P	
1.1.1.21.4H	1	Move to Test Area2 4	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.21.4I	1	Pre-Clean & Black Light 24	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.21.4J	30	Leak Test 24	03/15/95.11:00A	03/16/95.05:00P	
1.1.1.21.4M	1	Move to Post Test Storage 24	03/17/95.08:00A	03/17/95.09:00A	
1.1.1.21.4N	1	Clean, Dry & End Cap 24	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.21.4P	1	Transport to Erection 24	04/26/95.01:00P	04/26/95.02:00P	
1.1.1.21.4Q	1	Set & Align 24	04/26/95.02:00P	04/26/95.03:00P	
1.1.1.21.4R	1	Set Clean Room, Purge & Fit 24	04/26/95.03:00P	04/26/95.04:00P	
1.1.1.21.4S	2	Weld Joint 24	04/26/95.04:00P	04/27/95.09:00A	
1.1.1.21.4T	2	Leak Test Joint 24	04/27/95.09:00A	04/27/95.11:00A	
1.1.1.21.4U	2	Install Tube Supports 24	04/27/95.09:00A	04/27/95.11:00A	
1.1.1.21.4V	2	Remove Equip'mt, Clean & Cap 24	04/27/95.11:00A	04/27/95.02:00P	
1.1.1.21.5A	1	Unload,Rec/Insp Tube 25	03/07/95.01:00P	03/07/95.02:00P	
1.1.1.21.5B	1	Move to Stiff Fit Up Stat. 25	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.21.5C	1	Set-up & Purge 25	03/15/95.11:00A	03/15/95.12:00P	
1.1.1.21.5D	1	F/W Pump Port Reinf. 25	03/15/95.01:00P	03/15/95.02:00P	
1.1.1.21.5E	2	Fit Stiffeners 25	03/15/95.02:00P	03/15/95.04:00P	
1.1.1.21.5F	4	Weld Stiffeners 25	03/15/95.04:00P	03/16/95.11:00A	
1.1.1.21.5G	1	Move to P.Port Stat.25	03/16/95.11:00A	03/16/95.12:00P	
1.1.1.21.5H	1	Setup & Bore 10" Inlet 25	03/16/95.01:00P	03/16/95.02:00P	
1.1.1.21.5I	2	Purge/F/W Pump Port 25	03/16/95.02:00P	03/16/95.04:00P	
1.1.1.21.5J	1	Inspect, Install End Caps 25	03/16/95.04:00P	03/16/95.05:00P	
1.1.1.21.5L	1	Move to Test Area 25	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.21.5M	1	Pre-Clean & Black Light 25	03/17/95.10:00A	03/17/95.11:00A	
1.1.1.21.5N	30	Leak Test 25	03/17/95.11:00A	03/18/95.05:00P	
1.1.1.21.5Q	1	Move to Post Test Storage 25	03/20/95.08:00A	03/20/95.09:00A	
1.1.1.21.5R	1	Clean, Dry & End Cap 25	03/20/95.09:00A	03/20/95.10:00A	
1.1.1.21.5T	1	Transport to Erection 25	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.21.5U	1	Set & Align 25	04/28/95.11:00A	04/28/95.12:00P	
1.1.1.21.5V	1	Set Clean Room, Purge & Fit 25	04/28/95.01:00P	04/28/95.02:00P	
1.1.1.21.5W	2	Weld Joint25	04/28/95.02:00P	04/28/95.04:00P	
1.1.1.21.5X	2	Leak Test Joint 25	04/28/95.04:00P	05/01/95.09:00A	
1.1.1.21.5Y	2	Install Tube Supports 25	04/28/95.04:00P	05/01/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.21.5Z	2	Remove Equip'mt, Clean & Cap 25	05/01/95.09:00A	05/01/95.11:00A	
1.1.1.21.B1A	1	Unload,Rec/Insp Tube B21	03/07/95.08:00A	03/07/95.09:00A	
1.1.1.21.B1B	1	Move to Stiff Fit Up Stat. B21	03/07/95.09:00A	03/07/95.10:00A	
1.1.1.21.B1C	1	Set-up & Purge B21	03/07/95.10:00A	03/07/95.11:00A	
1.1.1.21.B1D	2	Fit Stiffeners B21	03/07/95.11:00A	03/07/95.02:00P	
1.1.1.21.B1E	4	Weld Stiffeners B21	03/07/95.02:00P	03/08/95.09:00A	
1.1.1.21.B1F	1	Move to Exp.Bellows Stat. B21	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.21.B1G	3	Fit,Purge,Weld Exp. Bellows B21	03/08/95.10:00A	03/08/95.02:00P	
1.1.1.21.B1H	1	Inspect, Install End Caps B21	03/08/95.02:00P	03/08/95.03:00P	
1.1.1.21.B1J	1	Move to Test Area B21	03/08/95.03:00P	03/08/95.04:00P	
1.1.1.21.B1K	1	Pre-Clean & Black Light B21	03/08/95.04:00P	03/08/95.05:00P	
1.1.1.21.B1L	30	Leak Test B21	03/08/95.05:00P	03/09/95.11:00P	
1.1.1.21.B1O	1	Move to Post Test Storage B21	03/10/95.08:00A	03/10/95.09:00A	
1.1.1.21.B1P	1	Clean, Dry & End Cap B21	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.21.B1R	1	Transport to Erection 21	04/18/95.11:00A	04/18/95.12:00P	
1.1.1.21.B1S	1	Set & Align B21	04/18/95.01:00P	04/18/95.02:00P	
1.1.1.21.B1T	1	Set Clean Room, Purge & Fit B21	04/18/95.02:00P	04/18/95.03:00P	
1.1.1.21.B1U	2	Weld Joint B21	04/18/95.03:00P	04/18/95.05:00P	
1.1.1.21.B1V	2	Leak Test Joint B21	04/19/95.08:00A	04/19/95.10:00A	
1.1.1.21.B1W	2	Install Tube Supports B21	04/19/95.08:00A	04/19/95.10:00A	
1.1.1.21.B1X	2	Remove Equip'mt, Clean & Cap B21	04/19/95.10:00A	04/19/95.12:00P	
1.1.1.21.B2A	1	Unload,Rec/Insp Tube B22	03/07/95.09:00A	03/07/95.10:00A	
1.1.1.21.B2B	1	Move to Stiff Fit Up Stat. B22	03/08/95.10:00A	03/08/95.11:00A	
1.1.1.21.B2C	1	Set-up & Purge B22	03/08/95.11:00A	03/08/95.12:00P	
1.1.1.21.B2D	2	Fit Stiffeners B22	03/08/95.01:00P	03/08/95.03:00P	
1.1.1.21.B2E	4	Weld Stiffeners B22	03/08/95.03:00P	03/09/95.10:00A	
1.1.1.21.B2F	1	Move to Exp.Bellows Stat. B22	03/09/95.10:00A	03/09/95.11:00A	
1.1.1.21.B2G	3	Fit,Purge,Weld Exp. Bellows B22	03/09/95.11:00A	03/09/95.03:00P	
1.1.1.21.B2H	1	Inspect, Install End Caps B22	03/09/95.03:00P	03/09/95.04:00P	
1.1.1.21.B2J	1	Move to Test Area B2	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.21.B2K	1	Pre-Clean & Black Light B22	03/10/95.10:00A	03/10/95.11:00A	
1.1.1.21.B2L	30	Leak Test B22	03/10/95.11:00A	03/11/95.05:00P	
1.1.1.21.B2O	1	Move to Post Test Storage B22	03/13/95.08:00A	03/13/95.09:00A	
1.1.1.21.B2P	1	Clean, Dry & End Cap B22	03/13/95.09:00A	03/13/95.10:00A	
1.1.1.21.B2R	1	Transport to Erection B22	04/20/95.09:00A	04/20/95.10:00A	
1.1.1.21.B2S	1	Set & Align B22	04/20/95.10:00A	04/20/95.11:00A	
1.1.1.21.B2T	1	Set Clean Room, Purge & Fit B22	04/20/95.11:00A	04/20/95.12:00P	
1.1.1.21.B2U	2	Weld Joint B22	04/20/95.01:00P	04/20/95.03:00P	
1.1.1.21.B2V	2	Leak Test Joint B22	04/20/95.03:00P	04/20/95.05:00P	
1.1.1.21.B2W	2	Install Tube SupportsB22	04/20/95.03:00P	04/20/95.05:00P	
1.1.1.21.B2X	2	Remove Equip'mt, Clean & Cap B22	04/21/95.08:00A	04/21/95.10:00A	
1.1.1.21.B3A	1	Unload,Rec/Insp Tube B23	03/07/95.10:00A	03/07/95.11:00A	
1.1.1.21.B3B	1	Move to Stiff Fit Up Stat. B23	03/09/95.11:00A	03/09/95.12:00P	
1.1.1.21.B3C	1	Set-up & Purge B23	03/09/95.01:00P	03/09/95.02:00P	
1.1.1.21.B3D	2	Fit Stiffeners B23	03/09/95.02:00P	03/09/95.04:00P	
1.1.1.21.B3E	4	Weld Stiffeners B223	03/09/95.04:00P	03/10/95.11:00A	
1.1.1.21.B3F	1	Move to Exp.Bellows Stat. 23	03/10/95.11:00A	03/10/95.12:00P	
1.1.1.21.B3G	3	Fit,Purge,Weld Exp. Bellows B23	03/10/95.01:00P	03/10/95.04:00P	
1.1.1.21.B3H	1	Inspect, Install End Caps B23	03/10/95.04:00P	03/10/95.05:00P	
1.1.1.21.B3J	1	Move to Test Area B23	03/13/95.09:00A	03/13/95.10:00A	
1.1.1.21.B3K	1	Pre-Clean & Black Light B23	03/13/95.10:00A	03/13/95.11:00A	
1.1.1.21.B3L	30	Leak Test B23	03/13/95.11:00A	03/14/95.05:00P	
1.1.1.21.B3O	1	Move to Post Test Storage B23	03/15/95.08:00A	03/15/95.09:00A	
1.1.1.21.B3P	1	Clean, Dry & End Cap B23	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.21.B3R	1	Transport to Erection B23	04/21/95.04:00P	04/21/95.05:00P	
1.1.1.21.B3S	1	Set & Align B23	04/24/95.08:00A	04/24/95.09:00A	
1.1.1.21.B3T	1	Set Clean Room, Purge & Fit B23	04/24/95.09:00A	04/24/95.10:00A	
1.1.1.21.B3U	2	Weld Joint B23	04/24/95.10:00A	04/24/95.12:00P	
1.1.1.21.B3V	2	Leak Test Joint B23	04/24/95.01:00P	04/24/95.03:00P	
1.1.1.21.B3W	2	Install Tube Supports B23	04/24/95.01:00P	04/24/95.03:00P	
1.1.1.21.B3X	2	Remove Equip'mt, Clean & Cap B23	04/24/95.03:00P	04/24/95.05:00P	
1.1.1.21.B4A	1	Unload,Rec/Insp Tube B2	03/07/95.11:00A	03/07/95.12:00P	
1.1.1.21.B4B	1	Move to Stiff Fit Up Stat. B24	03/10/95.01:00P	03/10/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.21.B4C	1	Set-up & Purge B24	03/10/95.02:00P	03/10/95.03:00P	
1.1.1.21.B4D	2	Fit Stiffeners B2	03/10/95.03:00P	03/10/95.05:00P	
1.1.1.21.B4E	4	Weld Stiffeners B24	03/13/95.08:00A	03/13/95.12:00P	
1.1.1.21.B4F	1	Move to Exp.Bellows Stat. B24	03/13/95.01:00P	03/13/95.02:00P	
1.1.1.21.B4G	3	Fit,Purge,Weld Exp. Bellows B24	03/13/95.02:00P	03/13/95.05:00P	
1.1.1.21.B4H	1	Inspect, Install End Caps B24	03/14/95.08:00A	03/14/95.09:00A	
1.1.1.21.B4J	1	Move to Test Area B224	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.21.B4K	1	Pre-Clean & Black Light B24	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.21.B4L	30	Leak Test B24	03/15/95.11:00A	03/16/95.05:00P	
1.1.1.21.B4O	1	Move to Post Test Storage B24	03/17/95.08:00A	03/17/95.09:00A	
1.1.1.21.B4P	1	Clean, Dry & End Cap B24	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.21.B4R	1	Transport to Erection B24	04/25/95.02:00P	04/25/95.03:00P	
1.1.1.21.B4S	1	Set & Align B24	04/25/95.03:00P	04/25/95.04:00P	
1.1.1.21.B4T	1	Set Clean Room, Purge & Fit B24	04/25/95.04:00P	04/25/95.05:00P	
1.1.1.21.B4U	2	Weld Joint B24	04/26/95.08:00A	04/26/95.10:00A	
1.1.1.21.B4V	2	Leak Test Joint B24	04/26/95.10:00A	04/26/95.12:00P	
1.1.1.21.B4W	2	Install Tube Supports B24	04/26/95.10:00A	04/26/95.12:00P	
1.1.1.21.B4X	2	Remove Equip'mt, Clean & Cap B24	04/26/95.01:00P	04/26/95.03:00P	
1.1.1.21.B5A	1	Unload,Rec/Insp Tube B2	03/07/95.01:00P	03/07/95.02:00P	
1.1.1.21.B5B	1	Move to Stiff Fit Up Stat. B25	03/13/95.02:00P	03/13/95.03:00P	
1.1.1.21.B5C	1	Set-up & Purge B25	03/13/95.03:00P	03/13/95.04:00P	
1.1.1.21.B5D	2	Fit Stiffeners B25	03/13/95.04:00P	03/14/95.09:00A	
1.1.1.21.B5E	4	Weld Stiffeners B25	03/14/95.09:00A	03/14/95.02:00P	
1.1.1.21.B5F	1	Move to Exp.Bellows Stat. B25	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.21.B5G	3	Fit,Purge,Weld Exp. Bellows B25	03/15/95.11:00A	03/15/95.03:00P	
1.1.1.21.B5H	1	Inspect, Install End Caps B25	03/15/95.03:00P	03/15/95.04:00P	
1.1.1.21.B5J	1	Move to Test Area B25	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.21.B5K	1	Pre-Clean & Black Light B25	03/17/95.10:00A	03/17/95.11:00A	
1.1.1.21.B5L	30	Leak Test B25	03/17/95.11:00A	03/18/95.05:00P	
1.1.1.21.B5O	1	Move to Post Test Storage B25	03/20/95.08:00A	03/20/95.09:00A	
1.1.1.21.B5P	1	Clean, Dry & End Cap B25	03/20/95.09:00A	03/20/95.10:00A	
1.1.1.21.B5R	1	Transport to Erection B25	04/27/95.11:00A	04/27/95.12:00P	
1.1.1.21.B5S	1	Set & Align B25	04/27/95.01:00P	04/27/95.02:00P	
1.1.1.21.B5T	1	Set Clean Room, Purge & Fit B25	04/27/95.02:00P	04/27/95.03:00P	
1.1.1.21.B5U	2	Weld Joint B25	04/27/95.03:00P	04/27/95.05:00P	
1.1.1.21.B5V	2	Leak Test Joint B25	04/28/95.08:00A	04/28/95.10:00A	
1.1.1.21.B5W	2	Install Tube Supports 25	04/28/95.08:00A	04/28/95.10:00A	
1.1.1.21.B5X	2	Remove Equip'mt, Clean & Cap B25	04/28/95.10:00A	04/28/95.12:00P	
1.1.1.26	308	Cans 26-30	03/20/95.04:00P	05/12/95.11:00A	
1.1.1.26.1A	1	Unload,Rec/Insp Tube 26	03/21/95.08:00A	03/21/95.09:00A	
1.1.1.26.1B	1	Move to Stiff Fit Up Stat. 26	03/21/95.09:00A	03/21/95.10:00A	
1.1.1.26.1C	1	Set-up & Purge 26	03/21/95.10:00A	03/21/95.11:00A	
1.1.1.26.1D	2	Fit Stiffeners 26	03/21/95.11:00A	03/21/95.02:00P	
1.1.1.26.1E	4	Weld Stiffeners 26	03/21/95.02:00P	03/22/95.09:00A	
1.1.1.26.1F	1	Inspect, Install End Caps 26	03/22/95.09:00A	03/22/95.10:00A	
1.1.1.26.1H	1	Move to Test Area 26	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.26.1I	1	Pre-Clean & Black Light 26	03/22/95.11:00A	03/22/95.12:00P	
1.1.1.26.1J	30	Leak Test 26	03/22/95.12:00P	03/23/95.06:00P	
1.1.1.26.1M	1	Move to Post Test Storage 26	03/24/95.08:00A	03/24/95.09:00A	
1.1.1.26.1N	1	Clean, Dry & End Cap 26	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.26.1P	1	Transport to Erection 26	05/02/95.10:00A	05/02/95.11:00A	
1.1.1.26.1Q	1	Set & Align 26	05/02/95.11:00A	05/02/95.12:00P	
1.1.1.26.1R	1	Set Clean Room, Purge & Fit 26	05/02/95.01:00P	05/02/95.02:00P	
1.1.1.26.1S	2	Weld Joint 26	05/02/95.02:00P	05/02/95.04:00P	
1.1.1.26.1T	2	Leak Test Joint 26	05/02/95.04:00P	05/03/95.09:00A	
1.1.1.26.1U	2	Install Tube Supports 26	05/02/95.04:00P	05/03/95.09:00A	
1.1.1.26.1V	2	Remove Equip'mt, Clean & Cap 26	05/03/95.09:00A	05/03/95.11:00A	
1.1.1.26.2A	1	Unload,Rec. & Inspct 27	03/21/95.09:00A	03/21/95.10:00A	
1.1.1.26.2B	1	Move to Stiff Fit Up Stat. 27	03/22/95.11:00A	03/22/95.12:00P	
1.1.1.26.2C	1	Set-up & Purge 27	03/22/95.01:00P	03/22/95.02:00P	
1.1.1.26.2D	2	Fit Stiffeners 27	03/22/95.02:00P	03/22/95.04:00P	
1.1.1.26.2E	4	Weld Stiffeners 27	03/22/95.04:00P	03/23/95.11:00A	
1.1.1.26.2F	1	Inspect, Install End Caps 27	03/23/95.11:00A	03/23/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.26.2H	1	Move to Test Area 27	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.26.2I	1	Pre-Clean & Black Light 27	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.26.2J	30	Leak Test 27	03/24/95.11:00A	03/25/95.05:00P	
1.1.1.26.2M	1	Move to Post Test Storage 27	03/27/95.08:00A	03/27/95.09:00A	
1.1.1.26.2N	1	Clean, Dry & End Cap 27	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.26.2P	1	Transport to Erection 27	05/04/95.08:00A	05/04/95.09:00A	
1.1.1.26.2Q	1	Set & Align 27	05/04/95.09:00A	05/04/95.10:00A	
1.1.1.26.2R	1	Set Clean Room, Purge & Fit 27	05/04/95.10:00A	05/04/95.11:00A	
1.1.1.26.2S	2	Weld Joint 27	05/04/95.11:00A	05/04/95.02:00P	
1.1.1.26.2T	2	Leak Test Joint 27	05/04/95.02:00P	05/04/95.04:00P	
1.1.1.26.2U	2	Install Tube Supports 27	05/04/95.02:00P	05/04/95.04:00P	
1.1.1.26.2V	2	Remove Equip'mt, Clean & Cap 27	05/04/95.04:00P	05/05/95.09:00A	
1.1.1.26.3A	1	Unload,Rec/Insp Tube 28	03/21/95.10:00A	03/21/95.11:00A	
1.1.1.26.3B	1	Move to Stiff Fit Up Stat. 28	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.26.3C	1	Set-up & Purge 28	03/24/95.11:00A	03/24/95.12:00P	
1.1.1.26.3D	2	Fit Stiffeners 28	03/24/95.01:00P	03/24/95.03:00P	
1.1.1.26.3E	4	Weld Stiffeners 28	03/24/95.03:00P	03/27/95.10:00A	
1.1.1.26.3F	1	Inspect, Install End Caps 28	03/27/95.10:00A	03/27/95.11:00A	
1.1.1.26.3H	1	Move to Test Area 28	03/27/95.11:00A	03/27/95.12:00P	
1.1.1.26.3I	1	Pre-Clean & Black Light 28	03/27/95.01:00P	03/27/95.02:00P	
1.1.1.26.3J	30	Leak Test 28	03/27/95.02:00P	03/28/95.08:00P	
1.1.1.26.3M	1	Move to Post Test Storage 28	03/29/95.08:00A	03/29/95.09:00A	
1.1.1.26.3N	1	Clean, Dry & End Cap 28	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.26.3P	1	Transport to Erection 28	05/05/95.03:00P	05/05/95.04:00P	
1.1.1.26.3Q	1	Set & Align 28	05/05/95.04:00P	05/05/95.05:00P	
1.1.1.26.3R	1	Set Clean Room, Purge & Fit 28	05/08/95.08:00A	05/08/95.09:00A	
1.1.1.26.3S	2	Weld Joint 28	05/08/95.09:00A	05/08/95.11:00A	
1.1.1.26.3T	2	Leak Test Joint 28	05/08/95.11:00A	05/08/95.02:00P	
1.1.1.26.3U	2	Install Tube Supports 28	05/08/95.11:00A	05/08/95.02:00P	
1.1.1.26.3V	2	Remove Equip'mt, Clean & Cap 28	05/08/95.02:00P	05/08/95.04:00P	
1.1.1.26.4A	1	Unload,Rec/Insp Tube 29	03/21/95.11:00A	03/21/95.12:00P	
1.1.1.26.4B	1	Move to Stiff Fit Up Stat. 29	03/27/95.01:00P	03/27/95.02:00P	
1.1.1.26.4C	1	Set-up & Purge 29	03/27/95.02:00P	03/27/95.03:00P	
1.1.1.26.4D	2	Fit Stiffeners 29	03/27/95.03:00P	03/27/95.05:00P	
1.1.1.26.4E	4	Weld Stiffeners 29	03/28/95.08:00A	03/28/95.12:00P	
1.1.1.26.4F	1	Inspect, Install End Caps 29	03/28/95.01:00P	03/28/95.02:00P	
1.1.1.26.4H	1	Move to Test Area 29	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.26.4I	1	Pre-Clean & Black Light 29	03/29/95.10:00A	03/29/95.11:00A	
1.1.1.26.4J	30	Leak Test 29	03/29/95.11:00A	03/30/95.05:00P	
1.1.1.26.4M	1	Move to Post Test Storage 29	03/31/95.08:00A	03/31/95.09:00A	
1.1.1.26.4N	1	Clean, Dry & End Cap 29	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.26.4P	1	Transport to Erection 29	05/09/95.01:00P	05/09/95.02:00P	
1.1.1.26.4Q	1	Set & Align 29	05/09/95.02:00P	05/09/95.03:00P	
1.1.1.26.4R	1	Set Clean Room, Purge & Fit 29	05/09/95.03:00P	05/09/95.04:00P	
1.1.1.26.4S	2	Weld Joint 29	05/09/95.04:00P	05/10/95.09:00A	
1.1.1.26.4T	2	Leak Test Joint 29	05/10/95.09:00A	05/10/95.11:00A	
1.1.1.26.4U	2	Install Tube Supports 29	05/10/95.09:00A	05/10/95.11:00A	
1.1.1.26.4V	2	Remove Equip'mt, Clean & Cap 29	05/10/95.11:00A	05/10/95.02:00P	
1.1.1.26.5A	1	Unload,Rec/Insp Tube 30	03/21/95.01:00P	03/21/95.02:00P	
1.1.1.26.5B	1	Move to Stiff Fit Up Stat. 30	03/29/95.10:00A	03/29/95.11:00A	
1.1.1.26.5C	1	Set-up & Purge 30	03/29/95.11:00A	03/29/95.12:00P	
1.1.1.26.5D	1	F/W Pump Port Reinf. 30	03/29/95.01:00P	03/29/95.02:00P	
1.1.1.26.5E	2	Fit Stiffeners 30	03/29/95.02:00P	03/29/95.04:00P	
1.1.1.26.5F	4	Weld Stiffeners 30	03/29/95.04:00P	03/30/95.11:00A	
1.1.1.26.5G	1	Move to P.Port Stat.30	03/30/95.11:00A	03/30/95.12:00P	
1.1.1.26.5H	1	Setup & Bore 10" Inlet 30	03/30/95.01:00P	03/30/95.02:00P	
1.1.1.26.5I	2	Purge/F/W Pump Port 30	03/30/95.02:00P	03/30/95.04:00P	
1.1.1.26.5J	1	Inspect, Install End Caps 30	03/30/95.04:00P	03/30/95.05:00P	
1.1.1.26.5L	1	Move to Test Area 30	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.26.5M	1	Pre-Clean & Black Light 30	03/31/95.10:00A	03/31/95.11:00A	
1.1.1.26.5N	30	Leak Test 30	03/31/95.11:00A	04/01/95.05:00P	
1.1.1.26.5Q	1	Move to Post Test Storage 30	04/03/95.08:00A	04/03/95.09:00A	
1.1.1.26.5R	1	Clean, Dry & End Cap 30	04/03/95.09:00A	04/03/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.26.5T	1	Transport to Erection 30	05/11/95.10:00A	05/11/95.11:00A	
1.1.1.26.5U	1	Set & Align 30	05/11/95.11:00A	05/11/95.12:00P	
1.1.1.26.5V	1	Set Clean Room, Purge & Fit 30	05/11/95.01:00P	05/11/95.02:00P	
1.1.1.26.5W	2	Weld Joint 30	05/11/95.02:00P	05/11/95.04:00P	
1.1.1.26.5X	2	Leak Test Joint 30	05/11/95.04:00P	05/12/95.09:00A	
1.1.1.26.5Y	2	Install Tube Supports 30	05/11/95.04:00P	05/12/95.09:00A	
1.1.1.26.5Z	2	Remove Equip'mt, Clean & Cap 30	05/12/95.09:00A	05/12/95.11:00A	
1.1.1.26.B1A	1	Unload,Rec/Insp Tube B26	03/21/95.08:00A	03/21/95.09:00A	
1.1.1.26.B1B	1	Move to Stiff Fit Up Stat. B26	03/21/95.09:00A	03/21/95.10:00A	
1.1.1.26.B1C	1	Set-up & Purge B26	03/21/95.10:00A	03/21/95.11:00A	
1.1.1.26.B1D	2	Fit Stiffeners B26	03/21/95.11:00A	03/21/95.02:00P	
1.1.1.26.B1E	4	Weld Stiffeners B26	03/21/95.02:00P	03/22/95.09:00A	
1.1.1.26.B1F	1	Move to Exp.Bellows Stat. B26	03/22/95.09:00A	03/22/95.10:00A	
1.1.1.26.B1G	3	Fit,Purge,Weld Exp. Bellows B26	03/22/95.10:00A	03/22/95.02:00P	
1.1.1.26.B1H	1	Inspect, Install End Caps B26	03/22/95.02:00P	03/22/95.03:00P	
1.1.1.26.B1J	1	Move to Test Area B26	03/22/95.03:00P	03/22/95.04:00P	
1.1.1.26.B1K	1	Pre-Clean & Black Light B26	03/22/95.04:00P	03/22/95.05:00P	
1.1.1.26.B1L	30	Leak Test B26	03/22/95.05:00P	03/23/95.11:00P	
1.1.1.26.B1O	1	Move to Post Test Storage B26	03/24/95.08:00A	03/24/95.09:00A	
1.1.1.26.B1P	1	Clean, Dry & End Cap B26	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.26.B1R	1	Transport to Erection B26	05/01/95.11:00A	05/01/95.12:00P	
1.1.1.26.B1S	1	Set & Align B26	05/01/95.01:00P	05/01/95.02:00P	
1.1.1.26.B1T	1	Set Clean Room, Purge & Fit B26	05/01/95.02:00P	05/01/95.03:00P	
1.1.1.26.B1U	2	Weld Joint B26	05/01/95.03:00P	05/01/95.05:00P	
1.1.1.26.B1V	2	Leak Test Joint B26	05/02/95.08:00A	05/02/95.10:00A	
1.1.1.26.B1W	2	Install Tube Supports B26	05/02/95.08:00A	05/02/95.10:00A	
1.1.1.26.B1X	2	Remove Equip'mt, Clean & Cap B26	05/02/95.10:00A	05/02/95.12:00P	
1.1.1.26.B2A	1	Unload,Rec/Insp Tube B27	03/21/95.09:00A	03/21/95.10:00A	
1.1.1.26.B2B	1	Move to Stiff Fit Up Stat. B27	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.26.B2C	1	Set-up & Purge B27	03/22/95.11:00A	03/22/95.12:00P	
1.1.1.26.B2D	2	Fit Stiffeners B27	03/22/95.01:00P	03/22/95.03:00P	
1.1.1.26.B2E	4	Weld Stiffeners B27	03/22/95.03:00P	03/23/95.10:00A	
1.1.1.26.B2F	1	Move to Exp.Bellows Stat. B27	03/23/95.10:00A	03/23/95.11:00A	
1.1.1.26.B2G	3	Fit,Purge,Weld Exp. Bellows B27	03/23/95.11:00A	03/23/95.03:00P	
1.1.1.26.B2H	1	Inspect, Install End Caps B27	03/23/95.03:00P	03/23/95.04:00P	
1.1.1.26.B2J	1	Move to Test Area B27	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.26.B2K	1	Pre-Clean & Black Light B27	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.26.B2L	30	Leak Test B27	03/24/95.11:00A	03/25/95.05:00P	
1.1.1.26.B2O	1	Move to Post Test Storage B27	03/27/95.08:00A	03/27/95.09:00A	
1.1.1.26.B2P	1	Clean, Dry & End Cap B27	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.26.B2R	1	Transport to Erection B27	05/03/95.09:00A	05/03/95.10:00A	
1.1.1.26.B2S	1	Set & Align B27	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.26.B2T	1	Set Clean Room, Purge & Fit B27	05/03/95.11:00A	05/03/95.12:00P	
1.1.1.26.B2U	2	Weld Joint B27	05/03/95.01:00P	05/03/95.03:00P	
1.1.1.26.B2V	2	Leak Test Joint B27	05/03/95.03:00P	05/03/95.05:00P	
1.1.1.26.B2W	2	Install Tube SupportsB27	05/03/95.03:00P	05/03/95.05:00P	
1.1.1.26.B2X	2	Remove Equip'mt, Clean & Cap B27	05/04/95.08:00A	05/04/95.10:00A	
1.1.1.26.B3A	1	Unload,Rec/Insp Tube B28	03/21/95.10:00A	03/21/95.11:00A	
1.1.1.26.B3B	1	Move to Stiff Fit Up Stat. B28	03/23/95.11:00A	03/23/95.12:00P	
1.1.1.26.B3C	1	Set-up & Purge B28	03/23/95.01:00P	03/23/95.02:00P	
1.1.1.26.B3D	2	Fit Stiffeners B28	03/23/95.02:00P	03/23/95.04:00P	
1.1.1.26.B3E	4	Weld Stiffeners B28	03/23/95.04:00P	03/24/95.11:00A	
1.1.1.26.B3F	1	Move to Exp.Bellows Stat. B28	03/24/95.11:00A	03/24/95.12:00P	
1.1.1.26.B3G	3	Fit,Purge,Weld Exp. Bellows B28	03/24/95.01:00P	03/24/95.04:00P	
1.1.1.26.B3H	1	Inspect, Install End Caps B28	03/24/95.04:00P	03/24/95.05:00P	
1.1.1.26.B3J	1	Move to Test Area B28	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.26.B3K	1	Pre-Clean & Black Light B28	03/27/95.10:00A	03/27/95.11:00A	
1.1.1.26.B3L	30	Leak Test B28	03/27/95.11:00A	03/28/95.05:00P	
1.1.1.26.B3O	1	Move to Post Test Storage B28	03/29/95.08:00A	03/29/95.09:00A	
1.1.1.26.B3P	1	Clean, Dry & End Cap B28	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.26.B3R	1	Transport to Erection B28	05/04/95.04:00P	05/04/95.05:00P	
1.1.1.26.B3S	1	Set & Align B28	05/05/95.08:00A	05/05/95.09:00A	
1.1.1.26.B3T	1	Set Clean Room, Purge & Fit B28	05/05/95.09:00A	05/05/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.26.B3U	2	Weld Joint B28	05/05/95.10:00A	05/05/95.12:00P	
1.1.1.26.B3V	2	Leak Test Joint B28	05/05/95.01:00P	05/05/95.03:00P	
1.1.1.26.B3W	2	Install Tube Supports B28	05/05/95.01:00P	05/05/95.03:00P	
1.1.1.26.B3X	2	Remove Equip'mt, Clean & Cap B28	05/05/95.03:00P	05/05/95.05:00P	
1.1.1.26.B4A	1	Unload,Rec/Insp Tube B28	03/21/95.11:00A	03/21/95.12:00P	
1.1.1.26.B4B	1	Move to Stiff Fit Up Stat. B29	03/24/95.01:00P	03/24/95.02:00P	
1.1.1.26.B4C	1	Set-up & Purge B29	03/24/95.02:00P	03/24/95.03:00P	
1.1.1.26.B4D	2	Fit Stiffeners B29	03/24/95.03:00P	03/24/95.05:00P	
1.1.1.26.B4E	4	Weld Stiffeners B29	03/27/95.08:00A	03/27/95.12:00P	
1.1.1.26.B4F	1	Move to Exp.Bellows Stat. B29	03/27/95.01:00P	03/27/95.02:00P	
1.1.1.26.B4G	3	Fit,Purge,Weld Exp. Bellows B29	03/27/95.02:00P	03/27/95.05:00P	
1.1.1.26.B4H	1	Inspect, Install End Caps B29	03/28/95.08:00A	03/28/95.09:00A	
1.1.1.26.B4J	1	Move to Test Area B29	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.26.B4K	1	Pre-Clean & Black Light B29	03/29/95.10:00A	03/29/95.11:00A	
1.1.1.26.B4L	30	Leak Test B29	03/29/95.11:00A	03/30/95.05:00P	
1.1.1.26.B4O	1	Move to Post Test Storage B29	03/31/95.08:00A	03/31/95.09:00A	
1.1.1.26.B4P	1	Clean, Dry & End Cap B29	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.26.B4R	1	Transport to Erection B29	05/08/95.02:00P	05/08/95.03:00P	
1.1.1.26.B4S	1	Set & Align B29	05/08/95.03:00P	05/08/95.04:00P	
1.1.1.26.B4T	1	Set Clean Room, Purge & Fit B29	05/08/95.04:00P	05/08/95.05:00P	
1.1.1.26.B4U	2	Weld Joint B29	05/09/95.08:00A	05/09/95.10:00A	
1.1.1.26.B4V	2	Leak Test Joint B29	05/09/95.10:00A	05/09/95.12:00P	
1.1.1.26.B4W	2	Install Tube Supports B29	05/09/95.10:00A	05/09/95.12:00P	
1.1.1.26.B4X	2	Remove Equip'mt, Clean & Cap B29	05/09/95.01:00P	05/09/95.03:00P	
1.1.1.26.B5A	1	Unload,Rec/Insp Tube B30	03/21/95.01:00P	03/21/95.02:00P	
1.1.1.26.B5B	1	Move to Stiff Fit Up Stat. B30	03/27/95.02:00P	03/27/95.03:00P	
1.1.1.26.B5C	1	Set-up & Purge B30	03/27/95.03:00P	03/27/95.04:00P	
1.1.1.26.B5D	2	Fit Stiffeners B30	03/27/95.04:00P	03/28/95.09:00A	
1.1.26.B5E	4	Weld Stiffeners B30	03/28/95.09:00A	03/28/95.02:00P	
1.1.26.B5F	1	Move to Exp.Bellows Stat. B30	03/29/95.10:00A	03/29/95.11:00A	
1.1.1.26.B5G	3	Fit,Purge,Weld Exp. Bellows B30	03/29/95.11:00A	03/29/95.03:00P	
1.1.1.26.B5H	1	Inspect, Install End Caps B30	03/29/95.03:00P	03/29/95.04:00P	
1.1.1.26.B5J	1	Move to Test Area B30	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.26.B5K	1	Pre-Clean & Black Light B30	03/31/95.10:00A	03/31/95.11:00A	
1.1.1.26.B5L	30	Leak Test B30	03/31/95.11:00A	04/01/95.05:00P	
1.1.1.26.B5O	1	Move to Post Test Storage B30	04/03/95.08:00A	04/03/95.09:00A	
1.1.1.26.B5P	1	Clean, Dry & End Cap B30	04/03/95.09:00A	04/03/95.10:00A	
1.1.1.26.B5R	1	Transport to Erection B30	05/10/95.11:00A	05/10/95.12:00P	
1.1.1.26.B5S	1	Set & Align B30	05/10/95.01:00P	05/10/95.02:00P	
1.1.1.26.B5T	1	Set Clean Room, Purge & Fit B30	05/10/95.02:00P	05/10/95.03:00P	
1.1.1.26.B5U	2	Weld Joint B30	05/10/95.03:00P	05/10/95.05:00P	
1.1.1.26.B5V	2	Leak Test Joint B30	05/11/95.08:00A	05/11/95.10:00A	
1.1.1.26.B5W	2	Install Tube Supports B30	05/11/95.08:00A	05/11/95.10:00A	
1.1.1.26.B5X	2	Remove Equip'mt, Clean & Cap B30	05/11/95.10:00A	05/11/95.12:00P	
1.1.1.31	300	Cans 31-35	04/03/95.04:00P	05/25/95.11:00A	
1.1.1.31.1A	1	Unload,Rec/Insp Tube 31	04/04/95.08:00A	04/04/95.09:00A	
1.1.1.31.1B	1	Move to Stiff Fit Up Stat. 31	04/04/95.09:00A	04/04/95.10:00A	
1.1.1.31.1C	1	Set-up & Purge 31	04/04/95.10:00A	04/04/95.11:00A	
1.1.1.31.1D	2	Fit Stiffeners 31	04/04/95.11:00A	04/04/95.02:00P	
1.1.1.31.1E	4	Weld Stiffeners 31	04/04/95.02:00P	04/05/95.09:00A	
1.1.1.31.1F	1	Inspect, Install End Caps 31	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.31.1H	1	Move to Test Area 31	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.31.1I	1	Pre-Clean & Black Light 31	04/05/95.11:00A	04/05/95.12:00P	
1.1.1.31.1J	30	Leak Test 31	04/05/95.12:00P	04/06/95.06:00P	
1.1.1.31.1M	1	Move to Post Test Storage 31	04/07/95.08:00A	04/07/95.09:00A	
1.1.1.31.1N	1	Clean, Dry & End Cap 31	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.31.1P	1	Transport to Erection 31	05/15/95.10:00A	05/15/95.11:00A	
1.1.1.31.1Q	1	Set & Align 31	05/15/95.11:00A	05/15/95.12:00P	
1.1.1.31.1R	1	Set Clean Room, Purge & Fit 31	05/15/95.01:00P	05/15/95.02:00P	
1.1.1.31.1S	2	Weld Joint 31	05/15/95.02:00P	05/15/95.04:00P	
1.1.1.31.1T	2	Leak Test Joint 31	05/15/95.04:00P	05/16/95.09:00A	
1.1.1.31.1U	2	Install Tube Supports 31	05/15/95.04:00P	05/16/95.09:00A	
1.1.1.31.1V	2	Remove Equip'mt, Clean & Cap 31	05/16/95.09:00A	05/16/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.31.2A	1	Unload,Rec. & Inspect 32	04/04/95.09:00A	04/04/95.10:00A	
1.1.1.31.2B	1	Move to Stiff Fit Up Stat. 32	04/05/95.11:00A	04/05/95.12:00P	
1.1.1.31.2C	1	Set-up & Purge 32	04/05/95.01:00P	04/05/95.02:00P	
1.1.1.31.2D	2	Fit Stiffeners 32	04/05/95.02:00P	04/05/95.04:00P	
1.1.1.31.2E	4	Weld Stiffeners 32	04/05/95.04:00P	04/06/95.11:00A	
1.1.1.31.2F	1	Inspect, Install End Caps 32	04/06/95.11:00A	04/06/95.12:00P	
1.1.1.31.2H	1	Move to Test Area 32	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.31.2I	1	Pre-Clean & Black Light 32	04/07/95.10:00A	04/07/95.11:00A	
1.1.1.31.2J	30	Leak Test 32	04/07/95.11:00A	04/08/95.05:00P	
1.1.1.31.2M	1	Move to Post Test Storage 3 2	04/10/95.08:00A	04/10/95.09:00A	
1.1.1.31.2N	1	Clean, Dry & End Cap 32	04/10/95.09:00A	04/10/95.10:00A	
1.1.1.31.2P	1	Transport to Erection 32	05/17/95.08:00A	05/17/95.09:00A	
1.1.1.31.2Q	1	Set & Align 32	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.31.2R	1	Set Clean Room, Purge & Fit 32	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.31.2S	2	Weld Joint 32	05/17/95.11:00A	05/17/95.02:00P	
1.1.1.31.2T	2	Leak Test Joint 32	05/17/95.02:00P	05/17/95.04:00P	
1.1.1.31.2U	2	Install Tube Supports 32	05/17/95.02:00P	05/17/95.04:00P	
1.1.1.31.2V	2	Remove Equip'mt, Clean & Cap 32	05/17/95.04:00P	05/18/95.09:00A	
1.1.1.31.3A	1	Unload,Rec/Insp Tube 33	04/04/95.10:00A	04/04/95.11:00A	
1.1.1.31.3B	1	Move to Stiff Fit Up Stat. 33	04/07/95.10:00A	04/07/95.11:00A	
1.1.1.31.3C	1	Set-up & Purge 33	04/07/95.11:00A	04/07/95.12:00P	
1.1.1.31.3D	2	Fit Stiffeners 33	04/07/95.01:00P	04/07/95.03:00P	
1.1.1.31.3E	4	Weld Stiffeners 33	04/07/95.03:00P	04/10/95.10:00A	
1.1.1.31.3F	1	Inspect, Install End Caps 33	04/10/95.10:00A	04/10/95.11:00A	
1.1.1.31.3H	1	Move to Test Area 33	04/10/95.11:00A	04/10/95.12:00P	
1.1.1.31.3I	1	Pre-Clean & Black Light 33	04/10/95.01:00P	04/10/95.02:00P	
1.1.1.31.3J	30	Leak Test 33	04/10/95.02:00P	04/11/95.08:00P	
1.1.1.31.3M	1	Move to Post Test Storage 3	04/12/95.08:00A	04/12/95.09:00A	
1.1.1.31.3N	1	Clean, Dry & End Cap 33 3	04/12/95.09:00A	04/12/95.10:00A	
1.1.1.31.3P	1	Transport to Erection 33	05/18/95.03:00P	05/18/95.04:00P	
1.1.1.31.3Q	1	Set & Align 33	05/18/95.04:00P	05/18/95.05:00P	
1.1.1.31.3R	1	Set Clean Room, Purge & Fit 33	05/19/95.08:00A	05/19/95.09:00A	
1.1.1.31.3S	2	Weld Joint 33	05/19/95.09:00A	05/19/95.11:00A	
1.1.1.31.3T	2	Leak Test Joint 33	05/19/95.11:00A	05/19/95.02:00P	
1.1.1.31.3U	2	Install Tube Supports 33	05/19/95.11:00A	05/19/95.02:00P	
1.1.1.31.3V	2	Remove Equip'mt, Clean & Cap 33	05/19/95.02:00P	05/19/95.04:00P	
1.1.1.31.4A	1	Unload,Rec/Insp Tube 34	04/04/95.11:00A	04/04/95.12:00P	
1.1.1.31.4B	1	Move to Stiff Fit Up Stat.34	04/10/95.01:00P	04/10/95.02:00P	
1.1.1.31.4C	1	Set-up & Purge 34	04/10/95.02:00P	04/10/95.03:00P	
1.1.1.31.4D	2	Fit Stiffeners 34	04/10/95.03:00P	04/10/95.05:00P	
1.1.1.31.4E	4	Weld Stiffeners 34	04/11/95.08:00A	04/11/95.12:00P	
1.1.1.31.4F	1	Inspect, Install End Caps 334	04/11/95.01:00P	04/11/95.02:00P	
1.1.1.31.4H	1	Move to Test Area 34	04/12/95.09:00A	04/12/95.10:00A	
1.1.1.31.4I	1	Pre-Clean & Black Light 34	04/12/95.10:00A	04/12/95.11:00A	
1.1.1.31.4J	30	Leak Test 34	04/12/95.11:00A	04/13/95.05:00P	
1.1.1.31.4M	1	Move to Post Test Storage 34	04/14/95.08:00A	04/14/95.09:00A	
1.1.1.31.4N	1	Clean, Dry & End Cap 34	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.31.4P	1	Transport to Erection 34	05/22/95.01:00P	05/22/95.02:00P	
1.1.1.31.4Q	1	Set & Align 34	05/22/95.02:00P	05/22/95.03:00P	
1.1.1.31.4R	1	Set Clean Room, Purge & Fit 34	05/22/95.03:00P	05/22/95.04:00P	
1.1.1.31.4S	2	Weld Joint 34	05/22/95.04:00P	05/23/95.09:00A	
1.1.1.31.4T	2	Leak Test Joint 34	05/23/95.09:00A	05/23/95.11:00A	
1.1.1.31.4U	2	Install Tube Supports 34	05/23/95.09:00A	05/23/95.11:00A	
1.1.1.31.4V	2	Remove Equip'mt, Clean & Cap 34	05/23/95.11:00A	05/23/95.02:00P	
1.1.1.31.5A	1	Unload,Rec/Insp Tube 35	04/04/95.01:00P	04/04/95.02:00P	
1.1.1.31.5B	1	Move to Stiff Fit Up Stat. 35	04/12/95.10:00A	04/12/95.11:00A	
1.1.1.31.5C	1	Set-up & Purge 35	04/12/95.11:00A	04/12/95.12:00P	
1.1.1.31.5D	1	F/W Pump Port Reinf. 35	04/12/95.01:00P	04/12/95.02:00P	
1.1.1.31.5E	2	Fit Stiffeners 35	04/12/95.02:00P	04/12/95.04:00P	
1.1.1.31.5F	4	Weld Stiffeners 35	04/12/95.04:00P	04/13/95.11:00A	
1.1.1.31.5G	1	Move to P.Port Stat. 35	04/13/95.11:00A	04/13/95.12:00P	
1.1.1.31.5H	1	Setup & Bore 10" Inlet 35	04/13/95.01:00P	04/13/95.02:00P	
1.1.1.31.5I	2	Purge/F/W Pump Port 35	04/13/95.02:00P	04/13/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.31.5J	1	Inspect, Install End Caps 35	04/13/95.04:00P	04/13/95.05:00P	
1.1.1.31.5L	1	Move to Test Area 35	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.31.5M	1	Pre-Clean & Black Light 35	04/14/95.10:00A	04/14/95.11:00A	
1.1.1.31.5N	30	Leak Test 35	04/14/95.11:00A	04/15/95.05:00P	
1.1.1.31.5Q	1	Move to Post Test Storage 35	04/17/95.08:00A	04/17/95.09:00A	
1.1.1.31.5R	1	Clean, Dry & End Cap 35	04/17/95.09:00A	04/17/95.10:00A	
1.1.1.31.5T	1	Transport to Erection 35	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.31.5U	1	Set & Align 35	05/24/95.11:00A	05/24/95.12:00P	
1.1.1.31.5V	1	Set Clean Room, Purge & Fit 35	05/24/95.01:00P	05/24/95.02:00P	
1.1.1.31.5W	2	Weld Joint 35	05/24/95.02:00P	05/24/95.04:00P	
1.1.1.31.5X	2	Leak Test Joint 35	05/24/95.04:00P	05/25/95.09:00A	
1.1.1.31.5Y	2	Install Tube Supports 35	05/24/95.04:00P	05/25/95.09:00A	
1.1.1.31.5Z	2	Remove Equip'mt, Clean & Cap 35	05/25/95.09:00A	05/25/95.11:00A	
1.1.1.31.B1A	1	Unload,Rec/Insp Tube B31	04/04/95.08:00A	04/04/95.09:00A	
1.1.1.31.B1B	1	Move to Stiff Fit Up Stat. B31	04/04/95.09:00A	04/04/95.10:00A	
1.1.1.31.B1C	1	Set-up & Purge B31	04/04/95.10:00A	04/04/95.11:00A	
1.1.1.31.B1D	2	Fit Stiffeners B31	04/04/95.11:00A	04/04/95.02:00P	
1.1.1.31.B1E	4	Weld Stiffeners B31	04/04/95.02:00P	04/05/95.09:00A	
1.1.1.31.B1F	1	Move to Exp.Bellows Stat. B31	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.31.B1G	3	Fit,Purge,Weld Exp. Bellows B31	04/05/95.10:00A	04/05/95.02:00P	
1.1.1.31.B1H	1	Inspect, Install End Caps B31	04/05/95.02:00P	04/05/95.03:00P	
1.1.1.31.B1J	1	Move to Test Area B31	04/05/95.03:00P	04/05/95.04:00P	
1.1.1.31.B1K	1	Pre-Clean & Black Light B31	04/05/95.04:00P	04/05/95.05:00P	
1.1.1.31.B1L	30	Leak Test B31	04/05/95.05:00P	04/06/95.11:00P	
1.1.1.31.B1O	1	Move to Post Test Storage B31	04/07/95.08:00A	04/07/95.09:00A	
1.1.1.31.B1P	1	Clean, Dry & End Cap B31	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.31.B1R	1	Transport to Erection B31	05/12/95.11:00A	05/12/95.12:00P	
1.1.1.31.B1S	1	Set & Align B31	05/12/95.01:00P	05/12/95.02:00P	
1.1.1.31.B1T	1	Set Clean Room, Purge & Fit B31	05/12/95.02:00P	05/12/95.03:00P	
1.1.1.31.B1U	2	Weld Joint B31	05/12/95.03:00P	05/12/95.05:00P	
1.1.1.31.B1V	2	Leak Test Joint B31	05/15/95.08:00A	05/15/95.10:00A	
1.1.1.31.B1W	2	Install Tube Supports B31	05/15/95.08:00A	05/15/95.10:00A	
1.1.1.31.B1X	2	Remove Equip'mt, Clean & Cap B31	05/15/95.10:00A	05/15/95.12:00P	
1.1.1.31.B2A	1	Unload,Rec/Insp Tube B32	04/04/95.09:00A	04/04/95.10:00A	
1.1.1.31.B2B	1	Move to Stiff Fit Up Stat. B32	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.31.B2C	1	Set-up & Purge B32	04/05/95.11:00A	04/05/95.12:00P	
1.1.1.31.B2D	2	Fit Stiffeners B32	04/05/95.01:00P	04/05/95.03:00P	
1.1.1.31.B2E	4	Weld Stiffeners B32	04/05/95.03:00P	04/06/95.10:00A	
1.1.1.31.B2F	1	Move to Exp.Bellows Stat. B32	04/06/95.10:00A	04/06/95.11:00A	
1.1.1.31.B2G	3	Fit,Purge,Weld Exp. Bellows B32	04/06/95.11:00A	04/06/95.03:00P	
1.1.1.31.B2H	1	Inspect, Install End Caps B32	04/06/95.03:00P	04/06/95.04:00P	
1.1.1.31.B2J	1	Move to Test Area B32	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.31.B2K	1	Pre-Clean & Black Light B32	04/07/95.10:00A	04/07/95.11:00A	
1.1.1.31.B2L	30	Leak Test B32	04/07/95.11:00A	04/08/95.05:00P	
1.1.1.31.B2O	1	Move to Post Test Storage B32	04/10/95.08:00A	04/10/95.09:00A	
1.1.1.31.B2P	1	Clean, Dry & End Cap B32	04/10/95.09:00A	04/10/95.10:00A	
1.1.1.31.B2R	1	Transport to Erection B32	05/16/95.09:00A	05/16/95.10:00A	
1.1.1.31.B2S	1	Set & Align B32	05/16/95.10:00A	05/16/95.11:00A	
1.1.1.31.B2T	1	Set Clean Room, Purge & Fit B32	05/16/95.11:00A	05/16/95.12:00P	
1.1.1.31.B2U	2	Weld Joint B32	05/16/95.01:00P	05/16/95.03:00P	
1.1.1.31.B2V	2	Leak Test Joint B32	05/16/95.03:00P	05/16/95.05:00P	
1.1.1.31.B2W	2	Install Tube SupportsB32	05/16/95.03:00P	05/16/95.05:00P	
1.1.1.31.B2X	2	Remove Equip'mt, Clean & Cap B32	05/17/95.08:00A	05/17/95.10:00A	
1.1.1.31.B3A	1	Unload,Rec/Insp Tube B33	04/04/95.10:00A	04/04/95.11:00A	
1.1.1.31.B3B	1	Move to Stiff Fit Up Stat. B33	04/06/95.11:00A	04/06/95.12:00P	
1.1.1.31.B3C	1	Set-up & Purge B33	04/06/95.01:00P	04/06/95.02:00P	
1.1.1.31.B3D	2	Fit Stiffeners B33	04/06/95.02:00P	04/06/95.04:00P	
1.1.1.31.B3E	4	Weld Stiffeners B33	04/06/95.04:00P	04/07/95.11:00A	
1.1.1.31.B3F	1	Move to Exp.Bellows Stat. B33	04/07/95.11:00A	04/07/95.12:00P	
1.1.1.31.B3G	3	Fit,Purge,Weld Exp. Bellows B33	04/07/95.01:00P	04/07/95.04:00P	
1.1.1.31.B3H	1	Inspect, Install End Caps B33	04/07/95.04:00P	04/07/95.05:00P	
1.1.1.31.B3J	1	Move to Test Area B33	04/10/95.09:00A	04/10/95.10:00A	
1.1.1.31.B3K	1	Pre-Clean & Black Light B33	04/10/95.10:00A	04/10/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.31.B3L	30	Leak Test B33	04/10/95.11:00A	04/11/95.05:00P	
1.1.1.31.B3O	1	Move to Post Test Storage B33	04/12/95.08:00A	04/12/95.09:00A	
1.1.1.31.B3P	1	Clean, Dry & End Cap B33	04/12/95.09:00A	04/12/95.10:00A	
1.1.1.31.B3R	1	Transport to Erection B33	05/17/95.04:00P	05/17/95.05:00P	
1.1.1.31.B3S	1	Set & Align B33	05/18/95.08:00A	05/18/95.09:00A	
1.1.1.31.B3T	1	Set Clean Room, Purge & Fit B33	05/18/95.09:00A	05/18/95.10:00A	
1.1.1.31.B3U	2	Weld Joint B33	05/18/95.10:00A	05/18/95.12:00P	
1.1.1.31.B3V	2	Leak Test Joint B33	05/18/95.01:00P	05/18/95.03:00P	
1.1.1.31.B3W	2	Install Tube Supports B33	05/18/95.01:00P	05/18/95.03:00P	
1.1.1.31.B3X	2	Remove Equip'mt, Clean & Cap B33	05/18/95.03:00P	05/18/95.05:00P	
1.1.1.31.B4A	1	Unload,Rec/Insp Tube B34	04/04/95.11:00A	04/04/95.12:00P	
1.1.1.31.B4B	1	Move to Stiff Fit Up Stat. B34	04/07/95.01:00P	04/07/95.02:00P	
1.1.1.31.B4C	1	Set-up & Purge B34	04/07/95.02:00P	04/07/95.03:00P	
1.1.1.31.B4D	2	Fit Stiffeners B34	04/07/95.03:00P	04/07/95.05:00P	
1.1.1.31.B4E	4	Weld Stiffeners B34	04/10/95.08:00A	04/10/95.12:00P	
1.1.1.31.B4F	1	Move to Exp.Bellows Stat. B34	04/10/95.01:00P	04/10/95.02:00P	
1.1.1.31.B4G	3	Fit,Purge,Weld Exp. Bellows B34	04/10/95.02:00P	04/10/95.05:00P	
1.1.1.31.B4H	1	Inspect, Install End Caps B34	04/11/95.08:00A	04/11/95.09:00A	
1.1.1.31.B4J	1	Move to Test Area B34	04/12/95.09:00A	04/12/95.10:00A	
1.1.1.31.B4K	1	Pre-Clean & Black Light B34	04/12/95.10:00A	04/12/95.11:00A	
1.1.1.31.B4L	30	Leak Test B34	04/12/95.11:00A	04/13/95.05:00P	
1.1.1.31.B4O	1	Move to Post Test Storage B34	04/14/95.08:00A	04/14/95.09:00A	
1.1.1.31.B4P	1	Clean, Dry & End Cap B3	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.31.B4R	1	Transport to Erection B34	05/19/95.02:00P	05/19/95.03:00P	
1.1.1.31.B4S	1	Set & Align B34	05/19/95.03:00P	05/19/95.04:00P	
1.1.1.31.B4T	1	Set Clean Room, Purge & Fit B34	05/19/95.04:00P	05/19/95.05:00P	
1.1.1.31.B4U	2	Weld Joint B34	05/22/95.08:00A	05/22/95.10:00A	
1.1.1.31.B4V	2	Leak Test Joint B34	05/22/95.10:00A	05/22/95.12:00P	
1.1.1.31.B4W	2	Install Tube Supports B34	05/22/95.10:00A	05/22/95.12:00P	
1.1.1.31.B4X	2	Remove Equip'mt, Clean & Cap B34	05/22/95.01:00P	05/22/95.03:00P	
1.1.1.31.B5A	1	Unload,Rec/Insp Tube B35	04/04/95.01:00P	04/04/95.02:00P	
1.1.1.31.B5B	1	Move to Stiff Fit Up Stat. B35	04/10/95.02:00P	04/10/95.03:00P	
1.1.1.31.B5C	1	Set-up & Purge B35	04/10/95.03:00P	04/10/95.04:00P	
1.1.1.31.B5D	2	Fit Stiffeners B35	04/10/95.04:00P	04/11/95.09:00A	
1.1.1.31.B5E	4	Weld Stiffeners B35	04/11/95.09:00A	04/11/95.02:00P	
1.1.1.31.B5F	1	Move to Exp.Bellows Stat. B35	04/12/95.10:00A	04/12/95.11:00A	
1.1.1.31.B5G	3	Fit,Purge,Weld Exp. Bellows B35	04/12/95.11:00A	04/12/95.03:00P	
1.1.1.31.B5H	1	Inspect, Install End Caps B35	04/12/95.03:00P	04/12/95.04:00P	
1.1.1.31.B5J	1	Move to Test Area B35	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.31.B5K	1	Pre-Clean & Black Light B35	04/14/95.10:00A	04/14/95.11:00A	
1.1.1.31.B5L	30	Leak Test B35	04/14/95.11:00A	04/15/95.05:00P	
1.1.1.31.B5O	1	Move to Post Test Storage B35	04/17/95.08:00A	04/17/95.09:00A	
1.1.1.31.B5P	1	Clean, Dry & End Cap B35	04/17/95.09:00A	04/17/95.10:00A	
1.1.1.31.B5R	1	Transport to Erection B35	05/23/95.11:00A	05/23/95.12:00P	
1.1.1.31.B5S	1	Set & Align B35	05/23/95.01:00P	05/23/95.02:00P	
1.1.1.31.B5T	1	Set Clean Room, Purge & Fit B35	05/23/95.02:00P	05/23/95.03:00P	
1.1.1.31.B5U	2	Weld Joint B35	05/23/95.03:00P	05/23/95.05:00P	
1.1.1.31.B5V	2	Leak Test Joint B35	05/24/95.08:00A	05/24/95.10:00A	
1.1.1.31.B5W	2	Install Tube Supports B35	05/24/95.08:00A	05/24/95.10:00A	
1.1.1.31.B5X	2	Remove Equip'mt, Clean & Cap B35	05/24/95.10:00A	05/24/95.12:00P	
1.1.1.36	292	Cans 36-40	04/17/95.04:00P	06/07/95.11:00A	
1.1.1.36.1A	1	Unload,Rec/Insp Tube 36	04/18/95.08:00A	04/18/95.09:00A	
1.1.1.36.1B	1	Move to Stiff Fit Up Stat. 36	04/18/95.09:00A	04/18/95.10:00A	
1.1.1.36.1C	1	Set-up & Purge 36	04/18/95.10:00A	04/18/95.11:00A	
1.1.1.36.1D	2	Fit Stiffeners 36	04/18/95.11:00A	04/18/95.02:00P	
1.1.1.36.1E	4	Weld Stiffeners 36	04/18/95.02:00P	04/19/95.09:00A	
1.1.1.36.1F	1	Inspect, Install End Caps 36	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.36.1H	1	Move to Test Area 36	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.36.1I	1	Pre-Clean & Black Light 36	04/19/95.11:00A	04/19/95.12:00P	
1.1.1.36.1J	30	Leak Test 36	04/19/95.12:00P	04/20/95.06:00P	
1.1.1.36.1M	1	Move to Post Test Storage 36	04/21/95.08:00A	04/21/95.09:00A	
1.1.1.36.1N	1	Clean, Dry & End Cap 36	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.36.1P	1	Transport to Erection 36	05/26/95.10:00A	05/26/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.36.1Q	1	Set & Align 36	05/26/95.11:00A	05/26/95.12:00P	
1.1.1.36.1R	1	Set Clean Room, Purge & Fit 36	05/26/95.01:00P	05/26/95.02:00P	
1.1.1.36.1S	2	Weld Joint 36	05/26/95.02:00P	05/26/95.04:00P	
1.1.1.36.1T	2	Leak Test Joint 36	05/26/95.04:00P	05/29/95.09:00A	
1.1.1.36.1U	2	Install Tube Supports 36	05/26/95.04:00P	05/29/95.09:00A	
1.1.1.36.1V	2	Remove Equip'mt, Clean & Cap 36	05/29/95.09:00A	05/29/95.11:00A	
1.1.1.36.2A	1	Unload,Rec. & Inspect 37	04/18/95.09:00A	04/18/95.10:00A	
1.1.1.36.2B	1	Move to Stiff Fit Up Stat. 37	04/19/95.11:00A	04/19/95.12:00P	
1.1.1.36.2C	1	Set-up & Purge 37	04/19/95.01:00P	04/19/95.02:00P	
1.1.1.36.2D	2	Fit Stiffeners 37	04/19/95.02:00P	04/19/95.04:00P	
1.1.1.36.2E	4	Weld Stiffeners 37	04/19/95.04:00P	04/20/95.11:00A	
1.1.1.36.2F	1	Inspect, Install End Caps 37	04/20/95.11:00A	04/20/95.12:00P	
1.1.1.36.2H	1	Move to Test Area 37	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.36.2I	1	Pre-Clean & Black Light 37	04/21/95.10:00A	04/21/95.11:00A	
1.1.1.36.2J	30	Leak Test 37	04/21/95.11:00A	04/22/95.05:00P	
1.1.1.36.2M	1	Move to Post Test Storage 37	04/24/95.08:00A	04/24/95.09:00A	
1.1.1.36.2N	1	Clean, Dry & End Cap 37	04/24/95.09:00A	04/24/95.10:00A	
1.1.1.36.2P	1	Transport to Erection 37	05/30/95.08:00A	05/30/95.09:00A	
1.1.1.36.2Q	1	Set & Align 37	05/30/95.09:00A	05/30/95.10:00A	
1.1.1.36.2R	1	Set Clean Room, Purge & Fit 37	05/30/95.10:00A	05/30/95.11:00A	
1.1.1.36.2S	2	Weld Joint 37	05/30/95.11:00A	05/30/95.02:00P	
1.1.1.36.2T	2	Leak Test Joint 37	05/30/95.02:00P	05/30/95.04:00P	
1.1.1.36.2U	2	Install Tube Supports 37	05/30/95.02:00P	05/30/95.04:00P	
1.1.1.36.2V	2	Remove Equip'mt, Clean & Cap 37	05/30/95.04:00P	05/31/95.09:00A	
1.1.1.36.3A	1	Unload,Rec/Insp Tube 38	04/18/95.10:00A	04/18/95.11:00A	
1.1.1.36.3B	1	Move to Stiff Fit Up Stat. 38	04/21/95.10:00A	04/21/95.11:00A	
1.1.1.36.3C	1	Set-up & Purge 38	04/21/95.11:00A	04/21/95.12:00P	
1.1.1.36.3D	2	Fit Stiffeners 38	04/21/95.01:00P	04/21/95.03:00P	
1.1.1.36.3E	4	Weld Stiffeners 38	04/21/95.03:00P	04/24/95.10:00A	
1.1.1.36.3F	1	Inspect, Install End Caps 38	04/24/95.10:00A	04/24/95.11:00A	
1.1.1.36.3H	1	Move to Test Area 38	04/24/95.11:00A	04/24/95.12:00P	
1.1.1.36.3I	1	Pre-Clean & Black Light 8	04/24/95.01:00P	04/24/95.02:00P	
1.1.1.36.3J	30	Leak Test 38	04/24/95.02:00P	04/25/95.08:00P	
1.1.1.36.3M	1	Move to Post Test Storage 38	04/26/95.08:00A	04/26/95.09:00A	
1.1.1.36.3N	1	Clean, Dry & End Cap 38	04/26/95.09:00A	04/26/95.10:00A	
1.1.1.36.3P	1	Transport to Erection 38	05/31/95.03:00P	05/31/95.04:00P	
1.1.1.36.3Q	1	Set & Align 38	05/31/95.04:00P	05/31/95.05:00P	
1.1.1.36.3R	1	Set Clean Room, Purge & Fit 38	06/01/95.08:00A	06/01/95.09:00A	
1.1.1.36.3S	2	Weld Joint 38	06/01/95.09:00A	06/01/95.11:00A	
1.1.1.36.3T	2	Leak Test Joint 38	06/01/95.11:00A	06/01/95.02:00P	
1.1.1.36.3U	2	Install Tube Supports 38	06/01/95.11:00A	06/01/95.02:00P	
1.1.1.36.3V	2	Remove Equip'mt, Clean & Cap 38	06/01/95.02:00P	06/01/95.04:00P	
1.1.1.36.4A	1	Unload,Rec/Insp Tube 39	04/18/95.11:00A	04/18/95.12:00P	
1.1.1.36.4B	1	Move to Stiff Fit Up Stat. 39	04/24/95.01:00P	04/24/95.02:00P	
1.1.1.36.4C	1	Set-up & Purge 39	04/24/95.02:00P	04/24/95.03:00P	
1.1.1.36.4D	2	Fit Stiffeners 39	04/24/95.03:00P	04/24/95.05:00P	
1.1.1.36.4E	4	Weld Stiffeners 39	04/25/95.08:00A	04/25/95.12:00P	
1.1.1.36.4F	1	Inspect, Install End Caps 39	04/25/95.01:00P	04/25/95.02:00P	
1.1.1.36.4H	1	Move to Test Area 39	04/26/95.09:00A	04/26/95.10:00A	
1.1.1.36.4I	1	Pre-Clean & Black Light 39	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.36.4J	30	Leak Test 39	04/26/95.11:00A	04/27/95.05:00P	
1.1.1.36.4M	1	Move to Post Test Storage 39	04/28/95.08:00A	04/28/95.09:00A	
1.1.1.36.4N	1	Clean, Dry & End Cap 39	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.36.4P	1	Transport to Erection 39	06/02/95.01:00P	06/02/95.02:00P	
1.1.1.36.4Q	1	Set & Align 39	06/02/95.02:00P	06/02/95.03:00P	
1.1.1.36.4R	1	Set Clean Room, Purge & Fit 39	06/02/95.03:00P	06/02/95.04:00P	
1.1.1.36.4S	2	Weld Joint 39	06/02/95.04:00P	06/05/95.09:00A	
1.1.1.36.4T	2	Leak Test Joint 39	06/05/95.09:00A	06/05/95.11:00A	
1.1.1.36.4U	2	Install Tube Supports 39	06/05/95.09:00A	06/05/95.11:00A	
1.1.1.36.4V	2	Remove Equip'mt, Clean & Cap 39	06/05/95.11:00A	06/05/95.02:00P	
1.1.1.36.5A	1	Unload,Rec/Insp Tube 40	04/18/95.01:00P	04/18/95.02:00P	
1.1.1.36.5B	1	Move to Stiff Fit Up Stat. 40	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.36.5C	1	Set-up & Purge 40	04/26/95.11:00A	04/26/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.36.5D	1	F/W Pump Port Reinf. 40	04/26/95.01:00P	04/26/95.02:00P	
1.1.1.36.5E	2	Fit Stiffeners 40	04/26/95.02:00P	04/26/95.04:00P	
1.1.1.36.5F	4	Weld Stiffeners 40	04/26/95.04:00P	04/27/95.11:00A	
1.1.1.36.5G	1	Move to P.Port Stat.	04/27/95.11:00A	04/27/95.12:00P	
1.1.1.36.5H	1	Setup & Bore 10" Inlet 40	04/27/95.01:00P	04/27/95.02:00P	
1.1.1.36.5I	2	Purge/F/W Pump Port 40	04/27/95.02:00P	04/27/95.04:00P	
1.1.1.36.5J	1	Inspect, Install End Caps 40	04/27/95.04:00P	04/27/95.05:00P	
1.1.1.36.5L	1	Move to Test Area 40	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.36.5M	1	Pre-Clean & Black Light 40	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.36.5N	30	Leak Test 40	04/28/95.11:00A	04/29/95.05:00P	
1.1.1.36.5Q	1	Move to Post Test Storage 40	05/01/95.08:00A	05/01/95.09:00A	
1.1.1.36.5R	1	Clean, Dry & End Cap 40	05/01/95.09:00A	05/01/95.10:00A	
1.1.1.36.5T	1	Transport to Erection 40	06/06/95.10:00A	06/06/95.11:00A	
1.1.1.36.5U	1	Set & Align 40	06/06/95.11:00A	06/06/95.12:00P	
1.1.1.36.5V	1	Set Clean Room, Purge & Fit 40	06/06/95.01:00P	06/06/95.02:00P	
1.1.1.36.5W	2	Weld Joint 40	06/06/95.02:00P	06/06/95.04:00P	
1.1.1.36.5X	2	Leak Test Joint 40	06/06/95.04:00P	06/07/95.09:00A	
1.1.1.36.5Y	2	Install Tube Supports 40	06/06/95.04:00P	06/07/95.09:00A	
1.1.1.36.5Z	2	Remove Equip'mt, Clean & Cap 40	06/07/95.09:00A	06/07/95.11:00A	
1.1.1.36.B1A	1	Unload,Rec/Insp Tube B36	04/18/95.08:00A	04/18/95.09:00A	
1.1.1.36.B1B	1	Move to Stiff Fit Up Stat. B36	04/18/95.09:00A	04/18/95.10:00A	
1.1.1.36.B1C	1	Set-up & Purge B36	04/18/95.10:00A	04/18/95.11:00A	
1.1.1.36.B1D	2	Fit Stiffeners B36	04/18/95.11:00A	04/18/95.02:00P	
1.1.1.36.B1E	4	Weld Stiffeners B36	04/18/95.02:00P	04/19/95.09:00A	
1.1.1.36.B1F	1	Move to Exp.Bellows Stat. B36	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.36.B1G	3	Fit,Purge,Weld Exp. Bellows B36	04/19/95.10:00A	04/19/95.02:00P	
1.1.1.36.B1H	1	Inspect, Install End Caps B36	04/19/95.02:00P	04/19/95.03:00P	
1.1.1.36.B1J	1	Move to Test Area B36	04/19/95.03:00P	04/19/95.04:00P	
1.1.1.36.B1K	1	Pre-Clean & Black Light B36	04/19/95.04:00P	04/19/95.05:00P	
1.1.1.36.B1L	30	Leak Test B36	04/19/95.05:00P	04/20/95.11:00P	
1.1.1.36.B1O	1	Move to Post Test Storage B36	04/21/95.08:00A	04/21/95.09:00A	
1.1.1.36.B1P	1	Clean, Dry & End Cap B36	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.36.B1R	1	Transport to Erection B363	05/25/95.11:00A	05/25/95.12:00P	
1.1.1.36.B1S	1	Set & Align B36	05/25/95.01:00P	05/25/95.02:00P	
1.1.1.36.B1T	1	Set Clean Room, Purge & Fit B36	05/25/95.02:00P	05/25/95.03:00P	
1.1.1.36.B1U	2	Weld Joint B36	05/25/95.03:00P	05/25/95.05:00P	
1.1.1.36.B1V	2	Leak Test Joint B36	05/26/95.08:00A	05/26/95.10:00A	
1.1.1.36.B1W	2	Install Tube Supports B36	05/26/95.08:00A	05/26/95.10:00A	
1.1.1.36.B1X	2	Remove Equip'mt, Clean & Cap B36	05/26/95.10:00A	05/26/95.12:00P	
1.1.1.36.B2A	1	Unload,Rec/Insp Tube B37	04/18/95.09:00A	04/18/95.10:00A	
1.1.1.36.B2B	1	Move to Stiff Fit Up Stat. B373	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.36.B2C	1	Set-up & Purge B37	04/19/95.11:00A	04/19/95.12:00P	
1.1.1.36.B2D	2	Fit Stiffeners B37	04/19/95.01:00P	04/19/95.03:00P	
1.1.1.36.B2E	4	Weld Stiffeners B373	04/19/95.03:00P	04/20/95.10:00A	
1.1.1.36.B2F	1	Move to Exp.Bellows Stat. 37	04/20/95.10:00A	04/20/95.11:00A	
1.1.1.36.B2G	3	Fit,Purge,Weld Exp. Bellows B37	04/20/95.11:00A	04/20/95.03:00P	
1.1.1.36.B2H	1	Inspect, Install End Caps B37	04/20/95.03:00P	04/20/95.04:00P	
1.1.1.36.B2J	1	Move to Test Area B37	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.36.B2K	1	Pre-Clean & Black Light B37	04/21/95.10:00A	04/21/95.11:00A	
1.1.1.36.B2L	30	Leak Test B37	04/21/95.11:00A	04/22/95.05:00P	
1.1.1.36.B2O	1	Move to Post Test Storage B37	04/24/95.08:00A	04/24/95.09:00A	
1.1.1.36.B2P	1	Clean, Dry & End Cap B37	04/24/95.09:00A	04/24/95.10:00A	
1.1.1.36.B2R	1	Transport to Erection B37	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.36.B2S	1	Set & Align B37	05/29/95.10:00A	05/29/95.11:00A	
1.1.1.36.B2T	1	Set Clean Room, Purge & Fit B37	05/29/95.11:00A	05/29/95.12:00P	
1.1.1.36.B2U	2	Weld Joint B37	05/29/95.01:00P	05/29/95.03:00P	
1.1.1.36.B2V	2	Leak Test Joint B37	05/29/95.03:00P	05/29/95.05:00P	
1.1.1.36.B2W	2	Install Tube SupportsB37	05/29/95.03:00P	05/29/95.05:00P	
1.1.1.36.B2X	2	Remove Equip'mt, Clean & Cap B37	05/30/95.08:00A	05/30/95.10:00A	
1.1.1.36.B3A	1	Unload,Rec/Insp Tube B38	04/18/95.10:00A	04/18/95.11:00A	
1.1.1.36.B3B	1	Move to Stiff Fit Up Stat. B38	04/20/95.11:00A	04/20/95.12:00P	
1.1.1.36.B3C	1	Set-up & Purge B38	04/20/95.01:00P	04/20/95.02:00P	
1.1.1.36.B3D	2	Fit Stiffeners B38	04/20/95.02:00P	04/20/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.36.B3E	4	Weld Stiffeners B38	04/20/95.04:00P	04/21/95.11:00A	
1.1.1.36.B3F	1	Move to Exp.Bellows Stat. B38	04/21/95.11:00A	04/21/95.12:00P	
1.1.1.36.B3G	3	Fit,Purge,Weld Exp. Bellows B38	04/21/95.01:00P	04/21/95.04:00P	
1.1.1.36.B3H	1	Inspect, Install End Caps B38	04/21/95.04:00P	04/21/95.05:00P	
1.1.1.36.B3J	1	Move to Test Area B38	04/24/95.09:00A	04/24/95.10:00A	
1.1.1.36.B3K	1	Pre-Clean & Black Light B38	04/24/95.10:00A	04/24/95.11:00A	
1.1.1.36.B3L	30	Leak Test B38	04/24/95.11:00A	04/25/95.05:00P	
1.1.1.36.B3O	1	Move to Post Test Storage B38	04/26/95.08:00A	04/26/95.09:00A	
1.1.1.36.B3P	1	Clean, Dry & End Cap B38	04/26/95.09:00A	04/26/95.10:00A	
1.1.1.36.B3R	1	Transport to Erection B38	05/30/95.04:00P	05/30/95.05:00P	
1.1.1.36.B3S	1	Set & Align B38	05/31/95.08:00A	05/31/95.09:00A	
1.1.1.36.B3T	1	Set Clean Room, Purge & Fit B38	05/31/95.09:00A	05/31/95.10:00A	
1.1.1.36.B3U	2	Weld Joint B38	05/31/95.10:00A	05/31/95.12:00P	
1.1.1.36.B3V	2	Leak Test Joint B38	05/31/95.01:00P	05/31/95.03:00P	
1.1.1.36.B3W	2	Install Tube Supports B38	05/31/95.01:00P	05/31/95.03:00P	
1.1.1.36.B3X	2	Remove Equip'mt, Clean & Cap B38	05/31/95.03:00P	05/31/95.05:00P	
1.1.1.36.B4A	1	Unload,Rec/Insp Tube B39	04/18/95.11:00A	04/18/95.12:00P	
1.1.1.36.B4B	1	Move to Stiff Fit Up Stat. B39	04/21/95.01:00P	04/21/95.02:00P	
1.1.1.36.B4C	1	Set-up & Purge B39	04/21/95.02:00P	04/21/95.03:00P	
1.1.1.36.B4D	2	Fit Stiffeners B39	04/21/95.03:00P	04/21/95.05:00P	
1.1.1.36.B4E	4	Weld Stiffeners B39	04/24/95.08:00A	04/24/95.12:00P	
1.1.1.36.B4F	1	Move to Exp.Bellows Stat. B39	04/24/95.01:00P	04/24/95.02:00P	
1.1.1.36.B4G	3	Fit,Purge,Weld Exp. Bellows B39	04/24/95.02:00P	04/24/95.05:00P	
1.1.1.36.B4H	1	Inspect, Install End Caps B39	04/25/95.08:00A	04/25/95.09:00A	
1.1.1.36.B4J	1	Move to Test Area B39	04/26/95.09:00A	04/26/95.10:00A	
1.1.1.36.B4K	1	Pre-Clean & Black Light B39	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.36.B4L	30	Leak Test B39	04/26/95.11:00A	04/27/95.05:00P	
1.1.1.36.B4O	1	Move to Post Test Storage B39	04/28/95.08:00A	04/28/95.09:00A	
1.1.1.36.B4P	1	Clean, Dry & End Cap B39	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.36.B4R	1	Transport to Erection B39	06/01/95.02:00P	06/01/95.03:00P	
1.1.1.36.B4S	1	Set & Align B39	06/01/95.03:00P	06/01/95.04:00P	
1.1.1.36.B4T	1	Set Clean Room, Purge & Fit B39	06/01/95.04:00P	06/01/95.05:00P	
1.1.1.36.B4U	2	Weld Joint B39	06/02/95.08:00A	06/02/95.10:00A	
1.1.1.36.B4V	2	Leak Test Joint B39	06/02/95.10:00A	06/02/95.12:00P	
1.1.1.36.B4W	2	Install Tube Supports B39	06/02/95.10:00A	06/02/95.12:00P	
1.1.1.36.B4X	2	Remove Equip'mt, Clean & Cap B39	06/02/95.01:00P	06/02/95.03:00P	
1.1.1.36.B5A	1	Unload,Rec/Insp Tube B40	04/18/95.01:00P	04/18/95.02:00P	
1.1.1.36.B5B	1	Move to Stiff Fit Up Stat. B40	04/24/95.02:00P	04/24/95.03:00P	
1.1.1.36.B5C	1	Set-up & Purge B40	04/24/95.03:00P	04/24/95.04:00P	
1.1.1.36.B5D	2	Fit Stiffeners B40	04/24/95.04:00P	04/25/95.09:00A	
1.1.1.36.B5E	4	Weld Stiffeners B40	04/25/95.09:00A	04/25/95.02:00P	
1.1.1.36.B5F	1	Move to Exp.Bellows Stat. B40	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.36.B5G	3	Fit,Purge,Weld Exp. Bellows B40	04/26/95.11:00A	04/26/95.03:00P	
1.1.1.36.B5H	1	Inspect, Install End Caps B40	04/26/95.03:00P	04/26/95.04:00P	
1.1.1.36.B5J	1	Move to Test Area B40	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.36.B5K	1	Pre-Clean & Black Light B40	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.36.B5L	30	Leak Test B40	04/28/95.11:00A	04/29/95.05:00P	
1.1.1.36.B5O	1	Move to Post Test Storage B40	05/01/95.08:00A	05/01/95.09:00A	
1.1.1.36.B5P	1	Clean, Dry & End Cap B40	05/01/95.09:00A	05/01/95.10:00A	
1.1.1.36.B5R	1	Transport to Erection B40	06/05/95.11:00A	06/05/95.12:00P	
1.1.1.36.B5S	1	Set & Align B40	06/05/95.01:00P	06/05/95.02:00P	
1.1.1.36.B5T	1	Set Clean Room, Purge & Fit B40	06/05/95.02:00P	06/05/95.03:00P	
1.1.1.36.B5U	2	Weld Joint B40	06/05/95.03:00P	06/05/95.05:00P	
1.1.1.36.B5V	2	Leak Test Joint B40	06/06/95.08:00A	06/06/95.10:00A	
1.1.1.36.B5W	2	Install Tube Supports B40	06/06/95.08:00A	06/06/95.10:00A	
1.1.1.36.B5X	2	Remove Equip'mt, Clean & Cap B40	06/06/95.10:00A	06/06/95.12:00P	
1.1.1.41	284	Cans 41-45	05/01/95.04:00P	06/20/95.11:00A	
1.1.1.41.1A	1	Unload,Rec/Insp Tube 41	05/02/95.08:00A	05/02/95.09:00A	
1.1.1.41.1B	1	Move to Stiff Fit Up Stat. 41	05/02/95.09:00A	05/02/95.10:00A	
1.1.1.41.1C	1	Set-up & Purge41	05/02/95.10:00A	05/02/95.11:00A	
1.1.1.41.1D	2	Fit Stiffeners 41	05/02/95.11:00A	05/02/95.02:00P	
1.1.1.41.1E	4	Weld Stiffeners 41	05/02/95.02:00P	05/03/95.09:00A	
1.1.1.41.1F	1	Inspect, Install End Caps 41	05/03/95.09:00A	05/03/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.41.1H	1	Move to Test Area 41	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.41.1I	1	Pre-Clean & Black Light 41	05/03/95.11:00A	05/03/95.12:00P	
1.1.1.41.1J	30	Leak Test 41	05/03/95.12:00P	05/04/95.06:00P	
1.1.1.41.1M	1	Move to Post Test Storage 41	05/05/95.08:00A	05/05/95.09:00A	
1.1.1.41.1N	1	Clean, Dry & End Cap 41	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.41.1P	1	Transport to Erection 41	06/08/95.10:00A	06/08/95.11:00A	
1.1.1.41.1Q	1	Set & Align 41	06/08/95.11:00A	06/08/95.12:00P	
1.1.1.41.1R	1	Set Clean Room, Purge & Fit 41	06/08/95.01:00P	06/08/95.02:00P	
1.1.1.41.1S	2	Weld Joint 41	06/08/95.02:00P	06/08/95.04:00P	
1.1.1.41.1T	2	Leak Test Joint 41	06/08/95.04:00P	06/09/95.09:00A	
1.1.1.41.1U	2	Install Tube Supports 41	06/08/95.04:00P	06/09/95.09:00A	
1.1.1.41.1V	2	Remove Equip'mt, Clean & Cap 41	06/09/95.09:00A	06/09/95.11:00A	
1.1.1.41.2A	1	Unload,Rec. & Inspct 42	05/02/95.09:00A	05/02/95.10:00A	
1.1.1.41.2B	1	Move to Stiff Fit Up Stat. 42	05/03/95.11:00A	05/03/95.12:00P	
1.1.1.41.2C	1	Set-up & Purge 42	05/03/95.01:00P	05/03/95.02:00P	
1.1.1.41.2D	2	Fit Stiffeners 42	05/03/95.02:00P	05/03/95.04:00P	
1.1.1.41.2E	4	Weld Stiffeners 42	05/03/95.04:00P	05/04/95.11:00A	
1.1.1.41.2F	1	Inspect, Install End Caps 42	05/04/95.11:00A	05/04/95.12:00P	
1.1.1.41.2H	1	Move to Test Area 42	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.41.2I	1	Pre-Clean & Black Light 42	05/05/95.10:00A	05/05/95.11:00A	
1.1.1.41.2J	30	Leak Testt 42	05/05/95.11:00A	05/06/95.05:00P	
1.1.1.41.2M	1	Move to Post Test Storage 42	05/08/95.08:00A	05/08/95.09:00A	
1.1.1.41.2N	1	Clean, Dry & End Cap 42	05/08/95.09:00A	05/08/95.10:00A	
1.1.1.41.2P	1	Transport to Erection42	06/12/95.08:00A	06/12/95.09:00A	
1.1.1.41.2Q	1	Set & Align 42	06/12/95.09:00A	06/12/95.10:00A	
1.1.1.41.2R	1	Set Clean Room, Purge & Fit 42	06/12/95.10:00A	06/12/95.11:00A	
1.1.1.41.2S	2	Weld Joint 42	06/12/95.11:00A	06/12/95.02:00P	
1.1.1.41.2T	2	Leak Test Joint 42	06/12/95.02:00P	06/12/95.04:00P	
1.1.1.41.2U	2	Install Tube Supports 42	06/12/95.02:00P	06/12/95.04:00P	
1.1.1.41.2V	2	Remove Equip'mt, Clean & Cap 42	06/12/95.04:00P	06/13/95.09:00A	
1.1.1.41.3A	1	Unload,Rec/Insp Tube 43	05/02/95.10:00A	05/02/95.11:00A	
1.1.1.41.3B	1	Move to Stiff Fit Up Stat. 43	05/05/95.10:00A	05/05/95.11:00A	
1.1.1.41.3C	1	Set-up & Purge 43	05/05/95.11:00A	05/05/95.12:00P	
1.1.1.41.3D	2	Fit Stiffeners 43	05/05/95.01:00P	05/05/95.03:00P	
1.1.1.41.3E	4	Weld Stiffeners 43	05/05/95.03:00P	05/08/95.10:00A	
1.1.1.41.3F	1	Inspect, Install End Caps 43	05/08/95.10:00A	05/08/95.11:00A	
1.1.1.41.3H	1	Move to Test Area 43	05/08/95.11:00A	05/08/95.12:00P	
1.1.1.41.3I	1	Pre-Clean & Black Light 43	05/08/95.01:00P	05/08/95.02:00P	
1.1.1.41.3J	30	Leak Test 43	05/08/95.02:00P	05/09/95.08:00P	
1.1.1.41.3M	1	Move to Post Test Storage 43	05/10/95.08:00A	05/10/95.09:00A	
1.1.1.41.3N	1	Clean, Dry & End Cap 43	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.41.3P	1	Transport to Erection 43	06/13/95.03:00P	06/13/95.04:00P	
1.1.1.41.3Q	1	Set & Align 43	06/13/95.04:00P	06/13/95.05:00P	
1.1.1.41.3R	1	Set Clean Room, Purge & Fit43	06/14/95.08:00A	06/14/95.09:00A	
1.1.1.41.3S	2	Weld Joint 43	06/14/95.09:00A	06/14/95.11:00A	
1.1.1.41.3T	2	Leak Test Joint 43	06/14/95.11:00A	06/14/95.02:00P	
1.1.1.41.3U	2	Install Tube Supports43	06/14/95.11:00A	06/14/95.02:00P	
1.1.1.41.3V	2	Remove Equip'mt, Clean & Cap 43	06/14/95.02:00P	06/14/95.04:00P	
1.1.1.41.4A	1	Unload,Rec/Insp Tube 44	05/02/95.11:00A	05/02/95.12:00P	
1.1.1.41.4B	1	Move to Stiff Fit Up Stat. 44	05/08/95.01:00P	05/08/95.02:00P	
1.1.1.41.4C	1	Set-up & Purge 44	05/08/95.02:00P	05/08/95.03:00P	
1.1.1.41.4D	2	Fit Stiffeners 44	05/08/95.03:00P	05/08/95.05:00P	
1.1.1.41.4E	4	Weld Stiffeners 44	05/09/95.08:00A	05/09/95.12:00P	
1.1.1.41.4F	1	Inspect, Install End Caps 44	05/09/95.01:00P	05/09/95.02:00P	
1.1.1.41.4H	1	Move to Test Area 44	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.41.4I	1	Pre-Clean & Black Light 44	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.41.4J	30	Leak Test 44	05/10/95.11:00A	05/11/95.05:00P	
1.1.1.41.4M	1	Move to Post Test Storage 44	05/12/95.08:00A	05/12/95.09:00A	
1.1.1.41.4N	1	Clean, Dry & End Cap 44	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.41.4P	1	Transport to Erection 44	06/15/95.01:00P	06/15/95.02:00P	
1.1.1.41.4Q	1	Set & Align 44	06/15/95.02:00P	06/15/95.03:00P	
1.1.1.41.4R	1	Set Clean Room, Purge & Fit 44	06/15/95.03:00P	06/15/95.04:00P	
1.1.1.41.4S	2	Weld Joint 4 4	06/15/95.04:00P	06/16/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.41.4T	2	Leak Test Joint 44	06/16/95.09:00A	06/16/95.11:00A	
1.1.1.41.4U	2	Install Tube Supports 44	06/16/95.09:00A	06/16/95.11:00A	
1.1.1.41.4V	2	Remove Equip'mt, Clean & Cap 44	06/16/95.11:00A	06/16/95.02:00P	
1.1.1.41.5A	1	Unload,Rec/Insp Tube 4	05/02/95.01:00P	05/02/95.02:00P	
1.1.1.41.5B	1	Move to Stiff Fit Up Stat. 45	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.41.5C	1	Set-up & Purge 45	05/10/95.11:00A	05/10/95.12:00P	
1.1.1.41.5D	1	F/W Pump Port Reinf. 45	05/10/95.01:00P	05/10/95.02:00P	
1.1.1.41.5E	2	Fit Stiffeners 45	05/10/95.02:00P	05/10/95.04:00P	
1.1.1.41.5F	4	Weld Stiffeners 45	05/10/95.04:00P	05/11/95.11:00A	
1.1.1.41.5G	1	Move to P.Port Stat.45	05/11/95.11:00A	05/11/95.12:00P	
1.1.1.41.5H	1	Setup & Bore 10" Inlet 45	05/11/95.01:00P	05/11/95.02:00P	
1.1.1.41.5I	2	Purge/F/W Pump Port 45	05/11/95.02:00P	05/11/95.04:00P	
1.1.1.41.5J	1	Inspect, Install End Caps 45	05/11/95.04:00P	05/11/95.05:00P	
1.1.1.41.5L	1	Move to Test Area 45	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.41.5M	1	Pre-Clean & Black Light 55	05/12/95.10:00A	05/12/95.11:00A	
1.1.1.41.5N	30	Leak Test 45	05/12/95.11:00A	05/13/95.05:00P	
1.1.1.41.5Q	1	Move to Post Test Storage 45	05/15/95.08:00A	05/15/95.09:00A	
1.1.1.41.5R	1	Clean, Dry & End Cap 45	05/15/95.09:00A	05/15/95.10:00A	
1.1.1.41.5T	1	Transport to Erection 45	06/19/95.10:00A	06/19/95.11:00A	
1.1.1.41.5U	1	Set & Align 45	06/19/95.11:00A	06/19/95.12:00P	
1.1.1.41.5V	1	Set Clean Room, Purge & Fit 45	06/19/95.01:00P	06/19/95.02:00P	
1.1.1.41.5W	2	Weld Joint 45	06/19/95.02:00P	06/19/95.04:00P	
1.1.1.41.5X	2	Leak Test Joint 45	06/19/95.04:00P	06/20/95.09:00A	
1.1.1.41.5Y	2	Install Tube Supports 45	06/19/95.04:00P	06/20/95.09:00A	
1.1.1.41.5Z	2	Remove Equip'mt, Clean & Cap 45	06/20/95.09:00A	06/20/95.11:00A	
1.1.1.41.B1A	1	Unload,Rec/Insp Tube B41	05/02/95.08:00A	05/02/95.09:00A	
1.1.1.41.B1B	1	Move to Stiff Fit Up Stat. B41	05/02/95.09:00A	05/02/95.10:00A	
1.1.1.41.B1C	1	Set-up & Purge B41	05/02/95.10:00A	05/02/95.11:00A	
1.1.1.41.B1D	2	Fit Stiffeners B41	05/02/95.11:00A	05/02/95.02:00P	
1.1.1.41.B1E	4	Weld Stiffeners B41	05/02/95.02:00P	05/03/95.09:00A	
1.1.1.41.B1F	1	Move to Exp.Bellows Stat. B41	05/03/95.09:00A	05/03/95.10:00A	
1.1.1.41.B1G	3	Fit,Purge,Weld Exp. Bellows B41	05/03/95.10:00A	05/03/95.02:00P	
1.1.1.41.B1H	1	Inspect, Install End Caps B41	05/03/95.02:00P	05/03/95.03:00P	
1.1.1.41.B1J	1	Move to Test Area B41	05/03/95.03:00P	05/03/95.04:00P	
1.1.1.41.B1K	1	Pre-Clean & Black Light B41	05/03/95.04:00P	05/03/95.05:00P	
1.1.1.41.B1L	30	Leak Test B41	05/03/95.05:00P	05/04/95.11:00P	
1.1.1.41.B1O	1	Move to Post Test Storage B41	05/05/95.08:00A	05/05/95.09:00A	
1.1.1.41.B1P	1	Clean, Dry & End Cap B41	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.41.B1R	1	Transport to Erection B41	06/07/95.11:00A	06/07/95.12:00P	
1.1.1.41.B1S	1	Set & Align B41	06/07/95.01:00P	06/07/95.02:00P	
1.1.1.41.B1T	1	Set Clean Room, Purge & Fit B41	06/07/95.02:00P	06/07/95.03:00P	
1.1.1.41.B1U	2	Weld Joint B41	06/07/95.03:00P	06/07/95.05:00P	
1.1.1.41.B1V	2	Leak Test Joint B41	06/08/95.08:00A	06/08/95.10:00A	
1.1.1.41.B1W	2	Install Tube Supports B41	06/08/95.08:00A	06/08/95.10:00A	
1.1.1.41.B1X	2	Remove Equip'mt, Clean & Cap B41	06/08/95.10:00A	06/08/95.12:00P	
1.1.1.41.B2A	1	Unload,Rec/Insp Tube B42	05/02/95.09:00A	05/02/95.10:00A	
1.1.1.41.B2B	1	Move to Stiff Fit Up Stat. B42	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.41.B2C	1	Set-up & Purge B42	05/03/95.11:00A	05/03/95.12:00P	
1.1.1.41.B2D	2	Fit Stiffeners B42	05/03/95.01:00P	05/03/95.03:00P	
1.1.1.41.B2E	4	Weld Stiffeners B42	05/03/95.03:00P	05/04/95.10:00A	
1.1.1.41.B2F	1	Move to Exp.Bellows Stat. B42	05/04/95.10:00A	05/04/95.11:00A	
1.1.1.41.B2G	3	Fit,Purge,Weld Exp. Bellows B42	05/04/95.11:00A	05/04/95.03:00P	
1.1.1.41.B2H	1	Inspect, Install End Caps B42	05/04/95.03:00P	05/04/95.04:00P	
1.1.1.41.B2J	1	Move to Test Area B42	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.41.B2K	1	Pre-Clean & Black Light B42	05/05/95.10:00A	05/05/95.11:00A	
1.1.1.41.B2L	30	Leak Test B42	05/05/95.11:00A	05/06/95.05:00P	
1.1.1.41.B2O	1	Move to Post Test Storage B42	05/08/95.08:00A	05/08/95.09:00A	
1.1.1.41.B2P	1	Clean, Dry & End Cap B42	05/08/95.09:00A	05/08/95.10:00A	
1.1.1.41.B2R	1	Transport to Erection B42	06/09/95.09:00A	06/09/95.10:00A	
1.1.1.41.B2S	1	Set & Align B42	06/09/95.10:00A	06/09/95.11:00A	
1.1.1.41.B2T	1	Set Clean Room, Purge & Fit B42	06/09/95.11:00A	06/09/95.12:00P	
1.1.1.41.B2U	2	Weld Joint B42	06/09/95.01:00P	06/09/95.03:00P	
1.1.1.41.B2V	2	Leak Test Joint B42	06/09/95.03:00P	06/09/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.41.B2W	2	Install Tube Supports B42	06/09/95.03:00P	06/09/95.05:00P	
1.1.1.41.B2X	2	Remove Equip'mt, Clean & Cap B42	06/12/95.08:00A	06/12/95.10:00A	
1.1.1.41.B3A	1	Unload,Rec/Insp Tube B43	05/02/95.10:00A	05/02/95.11:00A	
1.1.1.41.B3B	1	Move to Stiff Fit Up Stat. B43	05/04/95.11:00A	05/04/95.12:00P	
1.1.1.41.B3C	1	Set-up & Purge B43	05/04/95.01:00P	05/04/95.02:00P	
1.1.1.41.B3D	2	Fit Stiffeners B43	05/04/95.02:00P	05/04/95.04:00P	
1.1.1.41.B3E	4	Weld Stiffeners B43	05/04/95.04:00P	05/05/95.11:00A	
1.1.1.41.B3F	1	Move to Exp.Bellows Stat. B43	05/05/95.11:00A	05/05/95.12:00P	
1.1.1.41.B3G	3	Fit,Purge,Weld Exp. Bellows B43	05/05/95.01:00P	05/05/95.04:00P	
1.1.1.41.B3H	1	Inspect, Install End Caps B43	05/05/95.04:00P	05/05/95.05:00P	
1.1.1.41.B3J	1	Move to Test Area B43	05/08/95.09:00A	05/08/95.10:00A	
1.1.1.41.B3K	1	Pre-Clean & Black Light B43	05/08/95.10:00A	05/08/95.11:00A	
1.1.1.41.B3L	30	Leak Test B43	05/08/95.11:00A	05/09/95.05:00P	
1.1.1.41.B3O	1	Move to Post Test Storage B43	05/10/95.08:00A	05/10/95.09:00A	
1.1.1.41.B3P	1	Clean, Dry & End Cap B43	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.41.B3R	1	Transport to Erection B43	06/12/95.04:00P	06/12/95.05:00P	
1.1.1.41.B3S	1	Set & Align B43	06/13/95.08:00A	06/13/95.09:00A	
1.1.1.41.B3T	1	Set Clean Room, Purge & Fit B43	06/13/95.09:00A	06/13/95.10:00A	
1.1.1.41.B3U	2	Weld Joint B43	06/13/95.10:00A	06/13/95.12:00P	
1.1.1.41.B3V	2	Leak Test Joint B43	06/13/95.01:00P	06/13/95.03:00P	
1.1.1.41.B3W	2	Install Tube Supports B43	06/13/95.01:00P	06/13/95.03:00P	
1.1.1.41.B3X	2	Remove Equip'mt, Clean & Cap B43	06/13/95.03:00P	06/13/95.05:00P	
1.1.1.41.B4A	1	Unload,Rec/Insp Tube B44	05/02/95.11:00A	05/02/95.12:00P	
1.1.1.41.B4B	1	Move to Stiff Fit Up Stat. B44	05/05/95.01:00P	05/05/95.02:00P	
1.1.1.41.B4C	1	Set-up & Purge B44	05/05/95.02:00P	05/05/95.03:00P	
1.1.1.41.B4D	2	Fit Stiffeners B44	05/05/95.03:00P	05/05/95.05:00P	
1.1.1.41.B4E	4	Weld Stiffeners B44	05/08/95.08:00A	05/08/95.12:00P	
1.1.1.41.B4F	1	Move to Exp.Bellows Stat. B44	05/08/95.01:00P	05/08/95.02:00P	
1.1.1.41.B4G	3	Fit,Purge,Weld Exp. Bellows B44	05/08/95.02:00P	05/08/95.05:00P	
1.1.1.41.B4H	1	Inspect, Install End Caps B44	05/09/95.08:00A	05/09/95.09:00A	
1.1.1.41.B4J	1	Move to Test Area B44	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.41.B4K	1	Pre-Clean & Black Light B44	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.41.B4L	30	Leak Test B44	05/10/95.11:00A	05/11/95.05:00P	
1.1.1.41.B4O	1	Move to Post Test Storage B44	05/12/95.08:00A	05/12/95.09:00A	
1.1.1.41.B4P	1	Clean, Dry & End Cap B44	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.41.B4R	1	Transport to Erection B44	06/14/95.02:00P	06/14/95.03:00P	
1.1.1.41.B4S	1	Set & Align B44	06/14/95.03:00P	06/14/95.04:00P	
1.1.1.41.B4T	1	Set Clean Room, Purge & Fit B44	06/14/95.04:00P	06/14/95.05:00P	
1.1.1.41.B4U	2	Weld Joint B44	06/15/95.08:00A	06/15/95.10:00A	
1.1.1.41.B4V	2	Leak Test Joint B44	06/15/95.10:00A	06/15/95.12:00P	
1.1.1.41.B4W	2	Install Tube Supports B44	06/15/95.10:00A	06/15/95.12:00P	
1.1.1.41.B4X	2	Remove Equip'mt, Clean & Cap B44	06/15/95.01:00P	06/15/95.03:00P	
1.1.1.41.B5A	1	Unload,Rec/Insp Tube B45	05/02/95.01:00P	05/02/95.02:00P	
1.1.1.41.B5B	1	Move to Stiff Fit Up Stat. B45	05/08/95.02:00P	05/08/95.03:00P	
1.1.1.41.B5C	1	Set-up & Purge B45	05/08/95.03:00P	05/08/95.04:00P	
1.1.1.41.B5D	2	Fit Stiffeners B45	05/08/95.04:00P	05/09/95.09:00A	
1.1.1.41.B5E	4	Weld Stiffeners B45	05/09/95.09:00A	05/09/95.02:00P	
1.1.1.41.B5F	1	Move to Exp.Bellows Stat. B45	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.41.B5G	3	Fit,Purge,Weld Exp. Bellows B45	05/10/95.11:00A	05/10/95.03:00P	
1.1.1.41.B5H	1	Inspect, Install End Caps B45	05/10/95.03:00P	05/10/95.04:00P	
1.1.1.41.B5J	1	Move to Test Area B45	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.41.B5K	1	Pre-Clean & Black Light B45	05/12/95.10:00A	05/12/95.11:00A	
1.1.1.41.B5L	30	Leak Test B45	05/12/95.11:00A	05/13/95.05:00P	
1.1.1.41.B5O	1	Move to Post Test Storage B45	05/15/95.08:00A	05/15/95.09:00A	
1.1.1.41.B5P	1	Clean, Dry & End Cap B45	05/15/95.09:00A	05/15/95.10:00A	
1.1.1.41.B5R	1	Transport to Erection B45	06/16/95.11:00A	06/16/95.12:00P	
1.1.1.41.B5S	1	Set & Align B45	06/16/95.01:00P	06/16/95.02:00P	
1.1.1.41.B5T	1	Set Clean Room, Purge & Fit B45	06/16/95.02:00P	06/16/95.03:00P	
1.1.1.41.B5U	2	Weld Joint B45	06/16/95.03:00P	06/16/95.05:00P	
1.1.1.41.B5V	2	Leak Test Joint B45	06/19/95.08:00A	06/19/95.10:00A	
1.1.1.41.B5W	2	Install Tube Supports B45	06/19/95.08:00A	06/19/95.10:00A	
1.1.1.41.B5X	2	Remove Equip'mt, Clean & Cap B45	06/19/95.10:00A	06/19/95.12:00P	
1.1.1.46	942	Cans 46-50	01/16/95.04:00P	06/29/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.46.1A	1	Unload,Rec/Insp Tube 46	01/17/95.08:00A	01/17/95.09:00A	
1.1.1.46.1B	1	Move to Stiff Fit Up Stat. 46	01/17/95.09:00A	01/17/95.10:00A	
1.1.1.46.1C	1	Set-up & Purge 46	01/17/95.10:00A	01/17/95.11:00A	
1.1.1.46.1D	2	Fit Stiffeners 46	01/17/95.11:00A	01/17/95.02:00P	
1.1.1.46.1E	4	Weld Stiffeners 46	01/17/95.02:00P	01/18/95.09:00A	
1.1.1.46.1F	1	Inspect, Install End Caps 46	01/18/95.09:00A	01/18/95.10:00A	
1.1.1.46.1H	1	Move to Test Area 46	01/18/95.10:00A	01/18/95.11:00A	
1.1.1.46.1I	1	Pre-Clean & Black Light 46	01/18/95.11:00A	01/18/95.12:00P	
1.1.1.46.1J	30	Leak Test 46	01/18/95.12:00P	01/19/95.06:00P	
1.1.1.46.1M	1	Move to Post Test Storage 46	01/20/95.08:00A	01/20/95.09:00A	
1.1.1.46.1N	1	Clean, Dry & End Cap 46	01/20/95.09:00A	01/20/95.10:00A	
1.1.1.46.1P	1	Transport to Erection 46	06/21/95.10:00A	06/21/95.11:00A	
1.1.1.46.1Q	1	Set & Align 46	06/21/95.11:00A	06/21/95.12:00P	
1.1.1.46.1R	1	Set Clean Room, Purge & Fit 46	06/21/95.01:00P	06/21/95.02:00P	
1.1.1.46.1S	2	Weld Joint 46	06/21/95.02:00P	06/21/95.04:00P	
1.1.1.46.1T	2	Leak Test Joint 46	06/21/95.04:00P	06/22/95.09:00A	
1.1.1.46.1U	2	Install Tube Supports 46	06/21/95.04:00P	06/22/95.09:00A	
1.1.1.46.1V	2	Remove Equip'mt, Clean & Cap 46	06/22/95.09:00A	06/22/95.11:00A	
1.1.1.46.2A	1	Unload,Rec. & Inspect 47	01/17/95.09:00A	01/17/95.10:00A	
1.1.1.46.2B	1	Move to Stiff Fit Up Stat. 47	01/18/95.11:00A	01/18/95.12:00P	
1.1.1.46.2C	1	Set-up & Purge 47	01/18/95.01:00P	01/18/95.02:00P	
1.1.1.46.2D	2	Fit Stiffeners 47	01/18/95.02:00P	01/18/95.04:00P	
1.1.1.46.2E	4	Weld Stiffeners 47	01/18/95.04:00P	01/19/95.11:00A	
1.1.1.46.2F	1	Inspect, Install End Caps 47	01/19/95.11:00A	01/19/95.12:00P	
1.1.1.46.2H	1	Move to Test Area 47	01/20/95.09:00A	01/20/95.10:00A	
1.1.1.46.2I	1	Pre-Clean & Black Light 47	01/20/95.10:00A	01/20/95.11:00A	
1.1.1.46.2J	30	Leak Test 47	01/20/95.11:00A	01/21/95.05:00P	
1.1.1.46.2M	1	Move to Post Test Storage 47	01/23/95.08:00A	01/23/95.09:00A	
1.1.1.46.2N	1	Clean, Dry & End Cap 47	01/23/95.09:00A	01/23/95.10:00A	
1.1.1.46.2P	1	Transport to Erection 47	06/23/95.08:00A	06/23/95.09:00A	
1.1.1.46.2Q	1	Set & Align 47	06/23/95.09:00A	06/23/95.10:00A	
1.1.1.46.2R	1	Set Clean Room, Purge & Fit 47	06/23/95.10:00A	06/23/95.11:00A	
1.1.1.46.2S	2	Weld Joint 47	06/23/95.11:00A	06/23/95.02:00P	
1.1.1.46.2T	2	Leak Test Joint 47	06/23/95.02:00P	06/23/95.04:00P	
1.1.1.46.2U	2	Install Tube Supports 47	06/23/95.02:00P	06/23/95.04:00P	
1.1.1.46.2V	2	Remove Equip'mt, Clean & Cap 47	06/23/95.04:00P	06/26/95.09:00A	
1.1.1.46.3A	1	Unload,Rec/Insp Tube 48	01/17/95.10:00A	01/17/95.11:00A	
1.1.1.46.3B	1	Move to Stiff Fit Up Stat. 48	01/20/95.10:00A	01/20/95.11:00A	
1.1.1.46.3C	1	Set-up & Purge 48	01/20/95.11:00A	01/20/95.12:00P	
1.1.1.46.3D	2	Fit Stiffeners 48	01/20/95.01:00P	01/20/95.03:00P	
1.1.1.46.3E	4	Weld Stiffeners 48	01/20/95.03:00P	01/23/95.10:00A	
1.1.1.46.3F	1	Inspect, Install End Caps 48	01/23/95.10:00A	01/23/95.11:00A	
1.1.1.46.3H	1	Move to Test Area 48	01/23/95.11:00A	01/23/95.12:00P	
1.1.1.46.3I	1	Pre-Clean & Black Light 48	01/23/95.01:00P	01/23/95.02:00P	
1.1.1.46.3J	30	Leak Test 48	01/23/95.02:00P	01/24/95.08:00P	
1.1.1.46.3M	1	Move to Post Test Storage 48	01/25/95.08:00A	01/25/95.09:00A	
1.1.1.46.3N	1	Clean, Dry & End Cap 48	01/25/95.09:00A	01/25/95.10:00A	
1.1.1.46.3P	1	Transport to Erection 48	06/26/95.03:00P	06/26/95.04:00P	
1.1.1.46.3Q	1	Set & Align 48	06/26/95.04:00P	06/26/95.05:00P	
1.1.1.46.3R	1	Set Clean Room, Purge & Fit 48	06/27/95.08:00A	06/27/95.09:00A	
1.1.1.46.3S	2	Weld Joint 48	06/27/95.09:00A	06/27/95.11:00A	
1.1.1.46.3T	2	Leak Test Joint 48	06/27/95.11:00A	06/27/95.02:00P	
1.1.1.46.3U	2	Install Tube Supports 48	06/27/95.11:00A	06/27/95.02:00P	
1.1.1.46.3V	2	Remove Equip'mt, Clean & Cap 48	06/27/95.02:00P	06/27/95.04:00P	
1.1.1.46.4A	1	Unload,Rec/Insp Tube 49	01/17/95.11:00A	01/17/95.12:00P	
1.1.1.46.4B	1	Move to Stiff Fit Up Stat. 49	01/23/95.01:00P	01/23/95.02:00P	
1.1.1.46.4C	1	Set-up & Purge 49	01/23/95.02:00P	01/23/95.03:00P	
1.1.1.46.4D	2	Fit Stiffeners 49	01/23/95.03:00P	01/23/95.05:00P	
1.1.1.46.4E	4	Weld Stiffeners 49	01/24/95.08:00A	01/24/95.12:00P	
1.1.1.46.4F	1	Inspect, Install End Caps 49	01/24/95.01:00P	01/24/95.02:00P	
1.1.1.46.4H	1	Move to Test Area 49	01/25/95.09:00A	01/25/95.10:00A	
1.1.1.46.4I	1	Pre-Clean & Black Light 49	01/25/95.10:00A	01/25/95.11:00A	
1.1.1.46.4J	30	Leak Test 49	01/25/95.11:00A	01/26/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.46.4M	1	Move to Post Test Storage 49	01/27/95.08:00A	01/27/95.09:00A	
1.1.1.46.4N	1	Clean, Dry & End Cap 49	01/27/95.09:00A	01/27/95.10:00A	
1.1.1.46.4P	1	Transport to Erection 49	06/28/95.01:00P	06/28/95.02:00P	
1.1.1.46.4Q	1	Set & Align 49	06/28/95.02:00P	06/28/95.03:00P	
1.1.1.46.4R	1	Set Clean Room, Purge & Fit 49	06/28/95.03:00P	06/28/95.04:00P	
1.1.1.46.4S	2	Weld Joint 49	06/28/95.04:00P	06/29/95.09:00A	
1.1.1.46.4T	2	Leak Test Joint 49	06/29/95.09:00A	06/29/95.11:00A	
1.1.1.46.4U	2	Install Tube Supports 49	06/29/95.09:00A	06/29/95.11:00A	
1.1.1.46.4V	2	Remove Equip'mt, Clean & Cap 49	06/29/95.11:00A	06/29/95.02:00P	
1.1.1.46.5A	1	Unload,Rec/Insp Tube 50	01/17/95.01:00P	01/17/95.02:00P	
1.1.1.46.5B	1	Move to Stiff Fit Up Stat. 50	01/25/95.10:00A	01/25/95.11:00A	
1.1.1.46.5C	1	Set-up & Purge 50	01/25/95.11:00A	01/25/95.12:00P	
1.1.1.46.5D	1	F/W Pump Port Reinf. 50	01/25/95.01:00P	01/25/95.02:00P	
1.1.1.46.5E	2	Fit Stiffeners 50	01/25/95.02:00P	01/25/95.04:00P	
1.1.1.46.5F	4	Weld Stiffeners 50	01/25/95.04:00P	01/26/95.11:00A	
1.1.1.46.5G	1	Move to P.Port Stat.50	01/26/95.11:00A	01/26/95.12:00P	
1.1.1.46.5H	1	Setup & Bore 10" Inlet 50	01/26/95.01:00P	01/26/95.02:00P	
1.1.1.46.5I	2	Purge/F/W Pump Port 50	01/26/95.02:00P	01/26/95.04:00P	
1.1.1.46.5J	1	Inspect, Install End Caps 50	01/26/95.04:00P	01/26/95.05:00P	
1.1.1.46.5L	1	Move to Test Area 50	01/27/95.09:00A	01/27/95.10:00A	
1.1.1.46.5M	1	Pre-Clean & Black Light 50	01/27/95.10:00A	01/27/95.11:00A	
1.1.1.46.5N	30	Leak Test 50	01/27/95.11:00A	01/28/95.05:00P	
1.1.1.46.5Q	1	Move to Post Test Storage 50	01/30/95.08:00A	01/30/95.09:00A	
1.1.1.46.5R	1	Clean, Dry & End Cap 50	01/30/95.09:00A	01/30/95.10:00A	
1.1.1.46.5T	1	Transport to Erection 50	02/23/95.09:00A	02/23/95.10:00A	
1.1.1.46.5U	1	Set & Align 50	02/23/95.10:00A	02/23/95.11:00A	
1.1.1.46.5V	1	Set Clean Room, Purge & Fit 50	02/23/95.11:00A	02/23/95.12:00P	
1.1.1.46.5W	2	Weld Joint 50	02/23/95.01:00P	02/23/95.03:00P	
1.1.1.46.5X	2	Leak Test Joint 50	02/23/95.03:00P	02/23/95.05:00P	
1.1.1.46.5Y	2	Install Tube Supports 50	02/23/95.03:00P	02/23/95.05:00P	
1.1.1.46.5Z	2	Remove Equip'mt, Clean & Cap 50	02/24/95.08:00A	02/24/95.10:00A	
1.1.1.46.B1A	1	Unload,Rec/Insp Tube B46	01/17/95.08:00A	01/17/95.09:00A	
1.1.1.46.B1B	1	Move to Stiff Fit Up Stat. B46	01/17/95.09:00A	01/17/95.10:00A	
1.1.1.46.B1C	1	Set-up & Purge B46	01/17/95.10:00A	01/17/95.11:00A	
1.1.1.46.B1D	2	Fit Stiffeners B46	01/17/95.11:00A	01/17/95.02:00P	
1.1.1.46.B1E	4	Weld Stiffeners B46	01/17/95.02:00P	01/18/95.09:00A	
1.1.1.46.B1F	1	Move to Exp.Bellows Stat. B46	01/18/95.09:00A	01/18/95.10:00A	
1.1.1.46.B1G	3	Fit,Purge,Weld Exp. Bellows B46	01/18/95.10:00A	01/18/95.02:00P	
1.1.1.46.B1H	1	Inspect, Install End Caps B46	01/18/95.02:00P	01/18/95.03:00P	
1.1.1.46.B1J	1	Move to Test Area B46	01/18/95.03:00P	01/18/95.04:00P	
1.1.1.46.B1K	1	Pre-Clean & Black Light B46	01/18/95.04:00P	01/18/95.05:00P	
1.1.1.46.B1L	30	Leak Test B46	01/18/95.05:00P	01/19/95.11:00P	
1.1.1.46.B1O	1	Move to Post Test Storage B46	01/20/95.08:00A	01/20/95.09:00A	
1.1.1.46.B1P	1	Clean, Dry & End Cap B46	01/20/95.09:00A	01/20/95.10:00A	
1.1.1.46.B1R	1	Transport to Erection B46	06/20/95.11:00A	06/20/95.12:00P	
1.1.1.46.B1S	1	Set & Align B46	06/20/95.01:00P	06/20/95.02:00P	
1.1.1.46.B1T	1	Set Clean Room, Purge & Fit B46	06/20/95.02:00P	06/20/95.03:00P	
1.1.1.46.B1U	2	Weld Joint B46	06/20/95.03:00P	06/20/95.05:00P	
1.1.1.46.B1V	2	Leak Test Joint B46	06/21/95.08:00A	06/21/95.10:00A	
1.1.1.46.B1W	2	Install Tube Supports B46	06/21/95.08:00A	06/21/95.10:00A	
1.1.1.46.B1X	2	Remove Equip'mt, Clean & Cap B46	06/21/95.10:00A	06/21/95.12:00P	
1.1.1.46.B2A	1	Unload,Rec/Insp Tube B47	01/17/95.09:00A	01/17/95.10:00A	
1.1.1.46.B2B	1	Move to Stiff Fit Up Stat. B47	01/18/95.10:00A	01/18/95.11:00A	
1.1.1.46.B2C	1	Set-up & Purge B47	01/18/95.11:00A	01/18/95.12:00P	
1.1.1.46.B2D	2	Fit Stiffeners B47	01/18/95.01:00P	01/18/95.03:00P	
1.1.1.46.B2E	4	Weld Stiffeners B47	01/18/95.03:00P	01/19/95.10:00A	
1.1.1.46.B2F	1	Move to Exp.Bellows Stat. B47	01/19/95.10:00A	01/19/95.11:00A	
1.1.1.46.B2G	3	Fit,Purge,Weld Exp. Bellows B47	01/19/95.11:00A	01/19/95.03:00P	
1.1.1.46.B2H	1	Inspect, Install End Caps B47	01/19/95.03:00P	01/19/95.04:00P	
1.1.1.46.B2J	1	Move to Test Area B47	01/20/95.09:00A	01/20/95.10:00A	
1.1.1.46.B2K	1	Pre-Clean & Black Light B47	01/20/95.10:00A	01/20/95.11:00A	
1.1.1.46.B2L	30	Leak Test B47	01/20/95.11:00A	01/21/95.05:00P	
1.1.1.46.B2O	1	Move to Post Test Storage B47	01/23/95.08:00A	01/23/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.46.B2P	1	Clean, Dry & End Cap B47	01/23/95.09:00A	01/23/95.10:00A	
1.1.1.46.B2R	1	Transport to Erection B47	06/22/95.09:00A	06/22/95.10:00A	
1.1.1.46.B2S	1	Set & Align B47	06/22/95.10:00A	06/22/95.11:00A	
1.1.1.46.B2T	1	Set Clean Room, Purge & Fit B47	06/22/95.11:00A	06/22/95.12:00P	
1.1.1.46.B2U	2	Weld Joint B47	06/22/95.01:00P	06/22/95.03:00P	
1.1.1.46.B2V	2	Leak Test Joint B47	06/22/95.03:00P	06/22/95.05:00P	
1.1.1.46.B2W	2	Install Tube Supports B47	06/22/95.03:00P	06/22/95.05:00P	
1.1.1.46.B2X	2	Remove Equip'mt, Clean & Cap B47	06/23/95.08:00A	06/23/95.10:00A	
1.1.1.46.B3A	1	Unload,Rec/Insp Tube B48	01/17/95.10:00A	01/17/95.11:00A	
1.1.1.46.B3B	1	Move to Stiff Fit Up Stat. B48	01/19/95.11:00A	01/19/95.12:00P	
1.1.1.46.B3C	1	Set-up & Purge B48	01/19/95.01:00P	01/19/95.02:00P	
1.1.1.46.B3D	2	Fit Stiffeners B48	01/19/95.02:00P	01/19/95.04:00P	
1.1.1.46.B3E	4	Weld Stiffeners B48	01/19/95.04:00P	01/20/95.11:00A	
1.1.1.46.B3F	1	Move to Exp.Bellows Stat. B48	01/20/95.11:00A	01/20/95.12:00P	
1.1.1.46.B3G	3	Fit,Purge,Weld Exp. Bellows B48	01/20/95.01:00P	01/20/95.04:00P	
1.1.1.46.B3H	1	Inspect, Install End Caps B48	01/20/95.04:00P	01/20/95.05:00P	
1.1.1.46.B3J	1	Move to Test Area B48	01/23/95.09:00A	01/23/95.10:00A	
1.1.1.46.B3K	1	Pre-Clean & Black Light B48	01/23/95.10:00A	01/23/95.11:00A	
1.1.1.46.B3L	30	Leak Testt B48	01/23/95.11:00A	01/24/95.05:00P	
1.1.1.46.B3O	1	Move to Post Test Storage B48	01/25/95.08:00A	01/25/95.09:00A	
1.1.1.46.B3P	1	Clean, Dry & End Cap B48	01/25/95.09:00A	01/25/95.10:00A	
1.1.1.46.B3R	1	Transport to Erection B48	06/23/95.04:00P	06/23/95.05:00P	
1.1.1.46.B3S	1	Set & Align B48	06/26/95.08:00A	06/26/95.09:00A	
1.1.1.46.B3T	1	Set Clean Room, Purge & Fit B48	06/26/95.09:00A	06/26/95.10:00A	
1.1.1.46.B3U	2	Weld Joint B48	06/26/95.10:00A	06/26/95.12:00P	
1.1.1.46.B3V	2	Leak Test Joint B48	06/26/95.01:00P	06/26/95.03:00P	
1.1.1.46.B3W	2	Install Tube Supports B48	06/26/95.01:00P	06/26/95.03:00P	
1.1.1.46.B3X	2	Remove Equip'mt, Clean & Cap B48	06/26/95.03:00P	06/26/95.05:00P	
1.1.1.46.B4A	1	Unload,Rec/Insp Tube B49	01/17/95.11:00A	01/17/95.12:00P	
1.1.1.46.B4B	1	Move to Stiff Fit Up Stat. B49	01/20/95.01:00P	01/20/95.02:00P	
1.1.1.46.B4C	1	Set-up & Purge B49	01/20/95.02:00P	01/20/95.03:00P	
1.1.1.46.B4D	2	Fit Stiffeners B49	01/20/95.03:00P	01/20/95.05:00P	
1.1.1.46.B4E	4	Weld Stiffeners B49	01/23/95.08:00A	01/23/95.12:00P	
1.1.1.46.B4F	1	Move to Exp.Bellows Stat. B49	01/23/95.01:00P	01/23/95.02:00P	
1.1.1.46.B4G	3	Fit,Purge,Weld Exp. Bellows B49	01/23/95.02:00P	01/23/95.05:00P	
1.1.1.46.B4H	1	Inspect, Install End Caps B49	01/24/95.08:00A	01/24/95.09:00A	
1.1.1.46.B4J	1	Move to Test Area B49	01/25/95.09:00A	01/25/95.10:00A	
1.1.1.46.B4K	1	Pre-Clean & Black Light B49	01/25/95.10:00A	01/25/95.11:00A	
1.1.1.46.B4L	30	Leak Test B49	01/25/95.11:00A	01/26/95.05:00P	
1.1.1.46.B4O	1	Move to Post Test Storage B49	01/27/95.08:00A	01/27/95.09:00A	
1.1.1.46.B4P	1	Clean, Dry & End Cap B49	01/27/95.09:00A	01/27/95.10:00A	
1.1.1.46.B4R	1	Transport to Erection B49	06/27/95.02:00P	06/27/95.03:00P	
1.1.1.46.B4S	1	Set & Align B49	06/27/95.03:00P	06/27/95.04:00P	
1.1.1.46.B4T	1	Set Clean Room, Purge & Fit B49	06/27/95.04:00P	06/27/95.05:00P	
1.1.1.46.B4U	2	Weld Joint B49	06/28/95.08:00A	06/28/95.10:00A	
1.1.1.46.B4V	2	Leak Test Joint B49	06/28/95.10:00A	06/28/95.12:00P	
1.1.1.46.B4W	2	Install Tube Supports B49	06/28/95.10:00A	06/28/95.12:00P	
1.1.1.46.B4X	2	Remove Equip'mt, Clean & Cap B49	06/28/95.01:00P	06/28/95.03:00P	
1.1.1.46.B5A	1	Unload,Rec/Insp Tube B50	01/17/95.01:00P	01/17/95.02:00P	
1.1.1.46.B5B	1	Move to Stiff Fit Up Stat. B50	01/23/95.02:00P	01/23/95.03:00P	
1.1.1.46.B5C	1	Set-up & Purge B50	01/23/95.03:00P	01/23/95.04:00P	
1.1.1.46.B5D	2	Fit Stiffeners B50	01/23/95.04:00P	01/24/95.09:00A	
1.1.1.46.B5E	4	Weld Stiffeners B50	01/24/95.09:00A	01/24/95.02:00P	
1.1.1.46.B5F	1	Move to Exp.Bellows Stat. B50	01/25/95.10:00A	01/25/95.11:00A	
1.1.1.46.B5G	3	Fit,Purge,Weld Exp. Bellows B50	01/25/95.11:00A	01/25/95.03:00P	
1.1.1.46.B5H	1	Inspect, Install End Caps B50	01/25/95.03:00P	01/25/95.04:00P	
1.1.1.46.B5J	1	Move to Test Area B50	01/27/95.09:00A	01/27/95.10:00A	
1.1.1.46.B5K	1	Pre-Clean & Black Light B50	01/27/95.10:00A	01/27/95.11:00A	
1.1.1.46.B5L	30	Leak Test B50	01/27/95.11:00A	01/28/95.05:00P	
1.1.1.46.B5O	1	Move to Post Test Storage B50	01/30/95.08:00A	01/30/95.09:00A	
1.1.1.46.B5P	1	Clean, Dry & End Cap B50	01/30/95.09:00A	01/30/95.10:00A	
1.1.1.46.B5R	1	Transport to Erection B50	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.46.B5S	1	Set & Align B50	02/22/95.11:00A	02/22/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.46.B5T	1	Set Clean Room, Purge & Fit B50	02/22/95.01:00P	02/22/95.02:00P	
1.1.1.46.B5U	2	Weld Joint B50	02/22/95.02:00P	02/22/95.04:00P	
1.1.1.46.B5V	2	Leak Test Joint B50	02/22/95.04:00P	02/23/95.09:00A	
1.1.1.46.B5W	2	Install Tube Supports B50	02/22/95.04:00P	02/23/95.09:00A	
1.1.1.46.B5X	2	Remove Equip'mt, Clean & Cap B50	02/23/95.09:00A	02/23/95.11:00A	
1.1.1.51	219	Cans 51-55	01/30/95.04:00P	03/09/95.10:00A	
1.1.1.51.1A	1	Unload,Rec/Insp Tube 52	01/31/95.08:00A	01/31/95.09:00A	
1.1.1.51.1B	1	Move to Stiff Fit Up Stat. 51	01/31/95.09:00A	01/31/95.10:00A	
1.1.1.51.1C	1	Set-up & Purge 51	01/31/95.10:00A	01/31/95.11:00A	
1.1.1.51.1D	2	Fit Stiffeners 51	01/31/95.11:00A	01/31/95.02:00P	
1.1.1.51.1E	4	Weld Stiffeners 51	01/31/95.02:00P	02/01/95.09:00A	
1.1.1.51.1F	1	Inspect, Install End Caps 51	02/01/95.09:00A	02/01/95.10:00A	
1.1.1.51.1H	1	Move to Test Area 51	02/01/95.10:00A	02/01/95.11:00A	
1.1.1.51.1I	1	Pre-Clean & Black Light 51	02/01/95.11:00A	02/01/95.12:00P	
1.1.1.51.1J	30	Leak Test 51	02/01/95.12:00P	02/02/95.06:00P	
1.1.1.51.1M	1	Move to Post Test Storage 51	02/03/95.08:00A	02/03/95.09:00A	
1.1.1.51.1N	1	Clean, Dry & End Cap 51	02/03/95.09:00A	02/03/95.10:00A	
1.1.1.51.1P	1	Transport to Erection 51	02/27/95.09:00A	02/27/95.10:00A	
1.1.1.51.1Q	1	Set & Align 51	02/27/95.10:00A	02/27/95.11:00A	
1.1.1.51.1R	1	Set Clean Room, Purge & Fit 51	02/27/95.11:00A	02/27/95.12:00P	
1.1.1.51.1S	2	Weld Joint 51	02/27/95.01:00P	02/27/95.03:00P	
1.1.1.51.1T	2	Leak Test Joint 51	02/27/95.03:00P	02/27/95.05:00P	
1.1.1.51.1U	2	Install Tube Supports 51	02/27/95.03:00P	02/27/95.05:00P	
1.1.1.51.1V	2	Remove Equip'mt, Clean & Cap 51	02/28/95.08:00A	02/28/95.10:00A	
1.1.1.51.2A	1	Unload,Rec. & Inspect 52	01/31/95.09:00A	01/31/95.10:00A	
1.1.1.51.2B	1	Move to Stiff Fit Up Stat. 52	02/01/95.11:00A	02/01/95.12:00P	
1.1.1.51.2C	1	Set-up & Purge 52	02/01/95.01:00P	02/01/95.02:00P	
1.1.1.51.2D	2	Fit Stiffeners 52	02/01/95.02:00P	02/01/95.04:00P	
1.1.1.51.2E	4	Weld Stiffeners 52	02/01/95.04:00P	02/02/95.11:00A	
1.1.1.51.2F	1	Inspect, Install End Caps 52	02/02/95.11:00A	02/02/95.12:00P	
1.1.1.51.2H	1	Move to Test Area 52	02/03/95.09:00A	02/03/95.10:00A	
1.1.1.51.2I	1	Pre-Clean & Black Light 52	02/03/95.10:00A	02/03/95.11:00A	
1.1.1.51.2J	30	Leak Test 52	02/03/95.11:00A	02/04/95.05:00P	
1.1.1.51.2M	1	Move to Post Test Storage 52	02/06/95.08:00A	02/06/95.09:00A	
1.1.1.51.2N	1	Clean, Dry & End Cap 52	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.51.2P	1	Transport to Erection 52	02/28/95.04:00P	02/28/95.05:00P	
1.1.1.51.2Q	1	Set & Align 52	03/01/95.08:00A	03/01/95.09:00A	
1.1.1.51.2R	1	Set Clean Room, Purge & Fit 52	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.51.2S	2	Weld Joint 52	03/01/95.10:00A	03/01/95.12:00P	
1.1.1.51.2T	2	Leak Test Joint 52	03/01/95.01:00P	03/01/95.03:00P	
1.1.1.51.2U	2	Install Tube Supports 52	03/01/95.01:00P	03/01/95.03:00P	
1.1.1.51.2V	2	Remove Equip'mt, Clean & Cap 52	03/01/95.03:00P	03/01/95.05:00P	
1.1.1.51.3A	1	Unload,Rec/Insp Tube 53	01/31/95.10:00A	01/31/95.11:00A	
1.1.1.51.3B	1	Move to Stiff Fit Up Stat. 53	02/03/95.10:00A	02/03/95.11:00A	
1.1.1.51.3C	1	Set-up & Purge 53	02/03/95.11:00A	02/03/95.12:00P	
1.1.1.51.3D	2	Fit Stiffeners 53	02/03/95.01:00P	02/03/95.03:00P	
1.1.1.51.3E	4	Weld Stiffeners 53	02/03/95.03:00P	02/06/95.10:00A	
1.1.1.51.3F	1	Inspect, Install End Caps 53	02/06/95.10:00A	02/06/95.11:00A	
1.1.1.51.3H	1	Move to Test Area 53	02/06/95.11:00A	02/06/95.12:00P	
1.1.1.51.3I	1	Pre-Clean & Black Light 53	02/06/95.01:00P	02/06/95.02:00P	
1.1.1.51.3J	30	Leak Test 53	02/06/95.02:00P	02/07/95.08:00P	
1.1.1.51.3M	1	Move to Post Test Storage 53	02/08/95.08:00A	02/08/95.09:00A	
1.1.1.51.3N	1	Clean, Dry & End Cap 53	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.51.3P	1	Transport to Erection 53	03/02/95.02:00P	03/02/95.03:00P	
1.1.1.51.3Q	1	Set & Align 53	03/02/95.03:00P	03/02/95.04:00P	
1.1.1.51.3R	1	Set Clean Room, Purge & Fit 53	03/02/95.04:00P	03/02/95.05:00P	
1.1.1.51.3S	2	Weld Joint 53	03/03/95.08:00A	03/03/95.10:00A	
1.1.1.51.3T	2	Leak Test Joint 53	03/03/95.10:00A	03/03/95.12:00P	
1.1.1.51.3U	2	Install Tube Supports 53	03/03/95.10:00A	03/03/95.12:00P	
1.1.1.51.3V	2	Remove Equip'mt, Clean & Cap 53	03/03/95.01:00P	03/03/95.03:00P	
1.1.1.51.4A	1	Unload,Rec/Insp Tube 54	01/31/95.11:00A	01/31/95.12:00P	
1.1.1.51.4B	1	Move to Stiff Fit Up Stat. 54	02/06/95.01:00P	02/06/95.02:00P	
1.1.1.51.4C	1	Set-up & Purge 54	02/06/95.02:00P	02/06/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.51.4D	2	Fit Stiffeners 54	02/06/95.03:00P	02/06/95.05:00P	
1.1.1.51.4E	4	Weld Stiffeners 54	02/07/95.08:00A	02/07/95.12:00P	
1.1.1.51.4F	1	Inspect, Install End Caps 54	02/07/95.01:00P	02/07/95.02:00P	
1.1.1.51.4H	1	Move to Test Area 54	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.51.4I	1	Pre-Clean & Black Light 54	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.51.4J	30	Leak Test 54	02/08/95.11:00A	02/09/95.05:00P	
1.1.1.51.4M	1	Move to Post Test Storage 54	02/10/95.08:00A	02/10/95.09:00A	
1.1.1.51.4N	1	Clean, Dry & End Cap 54	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.51.4P	1	Transport to Erection 54	03/06/95.11:00A	03/06/95.12:00P	
1.1.1.51.4Q	1	Set & Align 54	03/06/95.01:00P	03/06/95.02:00P	
1.1.1.51.4R	1	Set Clean Room, Purge & Fit 54	03/06/95.02:00P	03/06/95.03:00P	
1.1.1.51.4S	2	Weld Joint 54	03/06/95.03:00P	03/06/95.05:00P	
1.1.1.51.4T	2	Leak Test Joint 54	03/07/95.08:00A	03/07/95.10:00A	
1.1.1.51.4U	2	Install Tube Supports 54	03/07/95.08:00A	03/07/95.10:00A	
1.1.1.51.4V	2	Remove Equip'mt, Clean & Cap 54	03/07/95.10:00A	03/07/95.12:00P	
1.1.1.51.5A	1	Unload,Rec/Insp Tube 55	01/31/95.01:00P	01/31/95.02:00P	
1.1.1.51.5B	1	Move to Stiff Fit Up Stat. 55	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.51.5C	1	Set-up & Purge 55	02/08/95.11:00A	02/08/95.12:00P	
1.1.1.51.5D	1	F/W Pump Port Reinf. 55	02/08/95.01:00P	02/08/95.02:00P	
1.1.1.51.5E	2	Fit Stiffeners 55	02/08/95.02:00P	02/08/95.04:00P	
1.1.1.51.5F	4	Weld Stiffeners 55	02/08/95.04:00P	02/09/95.11:00A	
1.1.1.51.5G	1	Move to P.Port Stat. 55	02/09/95.11:00A	02/09/95.12:00P	
1.1.1.51.5H	1	Setup & Bore 10" Inlet 55	02/09/95.01:00P	02/09/95.02:00P	
1.1.1.51.5I	2	Purge/F/W Pump Port 55	02/09/95.02:00P	02/09/95.04:00P	
1.1.1.51.5J	1	Inspect, Install End Caps 55	02/09/95.04:00P	02/09/95.05:00P	
1.1.1.51.5L	1	Move to Test Area 55	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.51.5M	1	Pre-Clean & Black Light 55	02/10/95.10:00A	02/10/95.11:00A	
1.1.1.51.5N	30	Leak Test 55	02/10/95.11:00A	02/11/95.05:00P	
1.1.1.51.5Q	1	Move to Post Test Storage 55	02/13/95.08:00A	02/13/95.09:00A	
1.1.1.51.5R	1	Clean, Dry & End Cap 55	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.51.5T	1	Transport to Erection 55	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.51.5U	1	Set & Align 55	03/08/95.10:00A	03/08/95.11:00A	
1.1.1.51.5V	1	Set Clean Room, Purge & Fit 55	03/08/95.11:00A	03/08/95.12:00P	
1.1.1.51.5W	2	Weld Joint 55	03/08/95.01:00P	03/08/95.03:00P	
1.1.1.51.5X	2	Leak Test Joint 55	03/08/95.03:00P	03/08/95.05:00P	
1.1.1.51.5Y	2	Install Tube Supports 55	03/08/95.03:00P	03/08/95.05:00P	
1.1.1.51.5Z	2	Remove Equip'mt, Clean & Cap 55	03/09/95.08:00A	03/09/95.10:00A	
1.1.1.51.B1A	1	Unload,Rec/Insp Tube B51	01/31/95.08:00A	01/31/95.09:00A	
1.1.1.51.B1B	1	Move to Stiff Fit Up Stat. B51	01/31/95.09:00A	01/31/95.10:00A	
1.1.1.51.B1C	1	Set-up & Purge B51	01/31/95.10:00A	01/31/95.11:00A	
1.1.1.51.B1D	2	Fit Stiffeners B51	01/31/95.11:00A	01/31/95.02:00P	
1.1.1.51.B1E	4	Weld Stiffeners B51	01/31/95.02:00P	02/01/95.09:00A	
1.1.1.51.B1F	1	Move to Exp.Bellows Stat. B51	02/01/95.09:00A	02/01/95.10:00A	
1.1.1.51.B1G	3	Fit,Purge,Weld Exp. Bellows B51	02/01/95.10:00A	02/01/95.02:00P	
1.1.1.51.B1H	1	Inspect, Install End Caps B51	02/01/95.02:00P	02/01/95.03:00P	
1.1.1.51.B1J	1	Move to Test Area B51	02/01/95.03:00P	02/01/95.04:00P	
1.1.1.51.B1K	1	Pre-Clean & Black Light B51	02/01/95.04:00P	02/01/95.05:00P	
1.1.1.51.B1L	30	Leak Test B51	02/01/95.05:00P	02/02/95.11:00P	
1.1.1.51.B1O	1	Move to Post Test Storage B51	02/03/95.08:00A	02/03/95.09:00A	
1.1.1.51.B1P	1	Clean, Dry & End Cap B51	02/03/95.09:00A	02/03/95.10:00A	
1.1.1.51.B1R	1	Transport to Erection B51	02/24/95.10:00A	02/24/95.11:00A	
1.1.1.51.B1S	1	Set & Align B51	02/24/95.11:00A	02/24/95.12:00P	
1.1.1.51.B1T	1	Set Clean Room, Purge & Fit B51	02/24/95.01:00P	02/24/95.02:00P	
1.1.1.51.B1U	2	Weld Joint B51	02/24/95.02:00P	02/24/95.04:00P	
1.1.1.51.B1V	2	Leak Test Joint B51	02/24/95.04:00P	02/27/95.09:00A	
1.1.1.51.B1W	2	Install Tube Supports B51	02/24/95.04:00P	02/27/95.09:00A	
1.1.1.51.B1X	2	Remove Equip'mt, Clean & Cap B51	02/27/95.09:00A	02/27/95.11:00A	
1.1.1.51.B2A	1	Unload,Rec/Insp Tube B52	01/31/95.09:00A	01/31/95.10:00A	
1.1.1.51.B2B	1	Move to Stiff Fit Up Stat. B52	02/01/95.10:00A	02/01/95.11:00A	
1.1.1.51.B2C	1	Set-up & Purge B52	02/01/95.11:00A	02/01/95.12:00P	
1.1.1.51.B2D	2	Fit Stiffeners B52	02/01/95.01:00P	02/01/95.03:00P	
1.1.1.51.B2E	4	Weld Stiffeners B52	02/01/95.03:00P	02/02/95.10:00A	
1.1.1.51.B2F	1	Move to Exp.Bellows Stat. B52	02/02/95.10:00A	02/02/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.51.B2G	3	Fit,Purge,Weld Exp. Bellows B52	02/02/95.11:00A	02/02/95.03:00P	
1.1.1.51.B2H	1	Inspect, Install End Caps B52	02/02/95.03:00P	02/02/95.04:00P	
1.1.1.51.B2J	1	Move to Test Area B52	02/03/95.09:00A	02/03/95.10:00A	
1.1.1.51.B2K	1	Pre-Clean & Black Light B52	02/03/95.10:00A	02/03/95.11:00A	
1.1.1.51.B2L	30	Leak Test B52	02/03/95.11:00A	02/04/95.05:00P	
1.1.1.51.B2O	1	Move to Post Test Storage B52	02/06/95.08:00A	02/06/95.09:00A	
1.1.1.51.B2P	1	Clean, Dry & End Cap B52	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.51.B2R	1	Transport to Erection B52	02/28/95.08:00A	02/28/95.09:00A	
1.1.1.51.B2S	1	Set & Align B52	02/28/95.09:00A	02/28/95.10:00A	
1.1.1.51.B2T	1	Set Clean Room, Purge & Fit B52	02/28/95.10:00A	02/28/95.11:00A	
1.1.1.51.B2U	2	Weld Joint B52	02/28/95.11:00A	02/28/95.02:00P	
1.1.1.51.B2V	2	Leak Test Joint B52	02/28/95.02:00P	02/28/95.04:00P	
1.1.1.51.B2W	2	Install Tube Supports B52	02/28/95.02:00P	02/28/95.04:00P	
1.1.1.51.B2X	2	Remove Equip'mt, Clean & Cap B52	02/28/95.04:00P	03/01/95.09:00A	
1.1.1.51.B3A	1	Unload,Rec/Insp Tube B53	01/31/95.10:00A	01/31/95.11:00A	
1.1.1.51.B3B	1	Move to Stiff Fit Up Stat. B53	02/02/95.11:00A	02/02/95.12:00P	
1.1.1.51.B3C	1	Set-up & Purge B53	02/02/95.01:00P	02/02/95.02:00P	
1.1.1.51.B3D	2	Fit Stiffeners B53	02/02/95.02:00P	02/02/95.04:00P	
1.1.1.51.B3E	4	Weld Stiffeners B53	02/02/95.04:00P	02/03/95.11:00A	
1.1.1.51.B3F	1	Move to Exp.Bellows Stat. B53	02/03/95.11:00A	02/03/95.12:00P	
1.1.1.51.B3G	3	Fit,Purge,Weld Exp. Bellows B53	02/03/95.01:00P	02/03/95.04:00P	
1.1.1.51.B3H	1	Inspect, Install End Caps B53	02/03/95.04:00P	02/03/95.05:00P	
1.1.1.51.B3J	1	Move to Test Area B53	02/06/95.09:00A	02/06/95.10:00A	
1.1.1.51.B3K	1	Pre-Clean & Black Light B53	02/06/95.10:00A	02/06/95.11:00A	
1.1.1.51.B3L	30	Leak Test B53	02/06/95.11:00A	02/07/95.05:00P	
1.1.1.51.B3O	1	Move to Post Test Storage B53	02/08/95.08:00A	02/08/95.09:00A	
1.1.1.51.B3P	1	Clean, Dry & End Cap B53	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.51.B3R	1	Transport to Erection B53	03/01/95.03:00P	03/01/95.04:00P	
1.1.1.51.B3S	1	Set & Align B53	03/01/95.04:00P	03/01/95.05:00P	
1.1.1.51.B3T	1	Set Clean Room, Purge & Fit B53	03/02/95.08:00A	03/02/95.09:00A	
1.1.1.51.B3U	2	Weld Joint B53	03/02/95.09:00A	03/02/95.11:00A	
1.1.1.51.B3V	2	Leak Test Joint B53	03/02/95.11:00A	03/02/95.02:00P	
1.1.1.51.B3W	2	Install Tube Supports B53	03/02/95.11:00A	03/02/95.02:00P	
1.1.1.51.B3X	2	Remove Equip'mt, Clean & Cap B53	03/02/95.02:00P	03/02/95.04:00P	
1.1.1.51.B4A	1	Unload,Rec/Insp Tube B54	01/31/95.11:00A	01/31/95.12:00P	
1.1.1.51.B4B	1	Move to Stiff Fit Up Stat. B54	02/03/95.01:00P	02/03/95.02:00P	
1.1.1.51.B4C	1	Set-up & Purge B54	02/03/95.02:00P	02/03/95.03:00P	
1.1.1.51.B4D	2	Fit Stiffeners B54	02/03/95.03:00P	02/03/95.05:00P	
1.1.1.51.B4E	4	Weld Stiffeners B54	02/06/95.08:00A	02/06/95.12:00P	
1.1.1.51.B4F	1	Move to Exp.Bellows Stat. B54	02/06/95.01:00P	02/06/95.02:00P	
1.1.1.51.B4G	3	Fit,Purge,Weld Exp. Bellows B54	02/06/95.02:00P	02/06/95.05:00P	
1.1.1.51.B4H	1	Inspect, Install End Caps B54	02/07/95.08:00A	02/07/95.09:00A	
1.1.1.51.B4J	1	Move to Test Area B54	02/08/95.09:00A	02/08/95.10:00A	
1.1.1.51.B4K	1	Pre-Clean & Black Light B54	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.51.B4L	30	Leak Test B54	02/08/95.11:00A	02/09/95.05:00P	
1.1.1.51.B4O	1	Move to Post Test Storage B54	02/10/95.08:00A	02/10/95.09:00A	
1.1.1.51.B4P	1	Clean, Dry & End Cap B54	02/10/95.09:00A	02/10/95.10:00A	
1.1.1.51.B4R	1	Transport to Erection B54	03/03/95.01:00P	03/03/95.02:00P	
1.1.1.51.B4S	1	Set & Align B54	03/03/95.02:00P	03/03/95.03:00P	
1.1.1.51.B4T	1	Set Clean Room, Purge & Fit B54	03/03/95.03:00P	03/03/95.04:00P	
1.1.1.51.B4U	2	Weld Joint B54	03/03/95.04:00P	03/06/95.09:00A	
1.1.1.51.B4V	2	Leak Test Joint B54	03/06/95.09:00A	03/06/95.11:00A	
1.1.1.51.B4W	2	Install Tube Supports 54	03/06/95.09:00A	03/06/95.11:00A	
1.1.1.51.B4X	2	Remove Equip'mt, Clean & Cap B54	03/06/95.11:00A	03/06/95.02:00P	
1.1.1.51.B5A	1	Unload,Rec/Insp Tube B55	01/31/95.01:00P	01/31/95.02:00P	
1.1.1.51.B5B	1	Move to Stiff Fit Up Stat. B55	02/06/95.02:00P	02/06/95.03:00P	
1.1.1.51.B5C	1	Set-up & Purge B55	02/06/95.03:00P	02/06/95.04:00P	
1.1.1.51.B5D	2	Fit Stiffeners B55	02/06/95.04:00P	02/07/95.09:00A	
1.1.1.51.B5E	4	Weld Stiffeners B55	02/07/95.09:00A	02/07/95.02:00P	
1.1.1.51.B5F	1	Move to Exp.Bellows Stat. B55	02/08/95.10:00A	02/08/95.11:00A	
1.1.1.51.B5G	3	Fit,Purge,Weld Exp. Bellows B55	02/08/95.11:00A	02/08/95.03:00P	
1.1.1.51.B5H	1	Inspect, Install End Caps B55	02/08/95.03:00P	02/08/95.04:00P	
1.1.1.51.B5J	1	Move to Test Area B55	02/10/95.09:00A	02/10/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.51.B5K	1	Pre-Clean & Black Light B55	02/10/95.10:00A	02/10/95.11:00A	
1.1.1.51.B5L	30	Leak Test B55	02/10/95.11:00A	02/11/95.05:00P	
1.1.1.51.B5O	1	Move to Post Test Storage B55	02/13/95.08:00A	02/13/95.09:00A	
1.1.1.51.B5P	1	Clean, Dry & End Cap B55	02/13/95.09:00A	02/13/95.10:00A	
1.1.1.51.B5R	1	Transport to Erection B55	03/07/95.10:00A	03/07/95.11:00A	
1.1.1.51.B5S	1	Set & Align B55	03/07/95.11:00A	03/07/95.12:00P	
1.1.1.51.B5T	1	Set Clean Room, Purge & Fit B55	03/07/95.01:00P	03/07/95.02:00P	
1.1.1.51.B5U	2	Weld Joint B55	03/07/95.02:00P	03/07/95.04:00P	
1.1.1.51.B5V	2	Leak Test Joint B55	03/07/95.04:00P	03/08/95.09:00A	
1.1.1.51.B5W	2	Install Tube Supports B55	03/07/95.04:00P	03/08/95.09:00A	
1.1.1.51.B5X	2	Remove Equip'mt, Clean & Cap B55	03/08/95.09:00A	03/08/95.11:00A	
1.1.1.56	211	Cans 56-60	02/13/95.04:00P	03/22/95.10:00A	
1.1.1.56.1A	1	Unload,Rec/Insp Tube 56	02/14/95.08:00A	02/14/95.09:00A	
1.1.1.56.1B	1	Move to Stiff Fit Up Stat. 65	02/14/95.09:00A	02/14/95.10:00A	
1.1.1.56.1C	1	Set-up & Purge 56	02/14/95.10:00A	02/14/95.11:00A	
1.1.1.56.1D	2	Fit Stiffeners 56	02/14/95.11:00A	02/14/95.02:00P	
1.1.1.56.1E	4	Weld Stiffeners 56	02/14/95.02:00P	02/15/95.09:00A	
1.1.1.56.1F	1	Inspect, Install End Caps 56	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.56.1H	1	Move to Test Area 56	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.56.1I	1	Pre-Clean & Black Light 56	02/15/95.11:00A	02/15/95.12:00P	
1.1.1.56.1J	30	Leak Test 56	02/15/95.12:00P	02/16/95.06:00P	
1.1.1.56.1M	1	Move to Post Test Storage56	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.56.1N	1	Clean, Dry & End Cap 56	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.56.1P	1	Transport to Erection 56	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.56.1Q	1	Set & Align 56	03/10/95.10:00A	03/10/95.11:00A	
1.1.1.56.1R	1	Set Clean Room, Purge & Fit 56	03/10/95.11:00A	03/10/95.12:00P	
1.1.1.56.1S	2	Weld Joint 56	03/10/95.01:00P	03/10/95.03:00P	
1.1.1.56.1T	2	Leak Test Joint 56	03/10/95.03:00P	03/10/95.05:00P	
1.1.56.1U	2	Install Tube Supports 56	03/10/95.03:00P	03/10/95.05:00P	
1.1.56.1V	2	Remove Equip'mt, Clean & Cap 56	03/13/95.08:00A	03/13/95.10:00A	
1.1.1.56.2A	1	Unload,Rec. & Inspect 57	02/14/95.09:00A	02/14/95.10:00A	
1.1.1.56.2B	1	Move to Stiff Fit Up Stat. 57	02/15/95.11:00A	02/15/95.12:00P	
1.1.1.56.2C	1	Set-up & Purge 57	02/15/95.01:00P	02/15/95.02:00P	
1.1.1.56.2D	2	Fit Stiffeners 57	02/15/95.02:00P	02/15/95.04:00P	
1.1.1.56.2E	4	Weld Stiffeners 57	02/15/95.04:00P	02/16/95.11:00A	
1.1.1.56.2F	1	Inspect, Install End Caps 57	02/16/95.11:00A	02/16/95.12:00P	
1.1.1.56.2H	1	Move to Test Area 57	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.56.2I	1	Pre-Clean & Black Light 57	02/17/95.10:00A	02/17/95.11:00A	
1.1.1.56.2J	30	Leak Test 57	02/17/95.11:00A	02/18/95.05:00P	
1.1.1.56.2M	1	Move to Post Test Storage 57	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.56.2N	1	Clean, Dry & End Cap 57	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.56.2P	1	Transport to Erection 57	03/13/95.04:00P	03/13/95.05:00P	
1.1.1.56.2Q	1	Set & Align 57	03/14/95.08:00A	03/14/95.09:00A	
1.1.1.56.2R	1	Set Clean Room, Purge & Fit 57	03/14/95.09:00A	03/14/95.10:00A	
1.1.1.56.2S	2	Weld Joint 57	03/14/95.10:00A	03/14/95.12:00P	
1.1.1.56.2T	2	Leak Test Joint 57	03/14/95.01:00P	03/14/95.03:00P	
1.1.1.56.2U	2	Install Tube Supports 57	03/14/95.01:00P	03/14/95.03:00P	
1.1.1.56.2V	2	Remove Equip'mt, Clean & Cap 57	03/14/95.03:00P	03/14/95.05:00P	
1.1.1.56.3A	1	Unload,Rec/Insp Tube 58	02/14/95.10:00A	02/14/95.11:00A	
1.1.1.56.3B	1	Move to Stiff Fit Up Stat. 58	02/17/95.10:00A	02/17/95.11:00A	
1.1.1.56.3C	1	Set-up & Purge 58	02/17/95.11:00A	02/17/95.12:00P	
1.1.1.56.3D	2	Fit Stiffeners 58	02/17/95.01:00P	02/17/95.03:00P	
1.1.1.56.3E	4	Weld Stiffeners 58	02/17/95.03:00P	02/20/95.10:00A	
1.1.1.56.3F	1	Inspect, Install End Caps 58	02/20/95.10:00A	02/20/95.11:00A	
1.1.1.56.3H	1	Move to Test Area 58	02/20/95.11:00A	02/20/95.12:00P	
1.1.1.56.3I	1	Pre-Clean & Black Light 58	02/20/95.01:00P	02/20/95.02:00P	
1.1.1.56.3J	30	Leak Test 58	02/20/95.02:00P	02/21/95.08:00P	
1.1.1.56.3M	1	Move to Post Test Storage 58	02/22/95.08:00A	02/22/95.09:00A	
1.1.1.56.3N	1	Clean, Dry & End Cap 58	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.56.3P	1	Transport to Erection 58	03/15/95.02:00P	03/15/95.03:00P	
1.1.1.56.3Q	1	Set & Align 58	03/15/95.03:00P	03/15/95.04:00P	
1.1.1.56.3R	1	Set Clean Room, Purge & Fit 58	03/15/95.04:00P	03/15/95.05:00P	
1.1.56.3S	2	Weld Joint 58	03/16/95.08:00A	03/16/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.56.3T	2	Leak Test Joint 58	03/16/95.10:00A	03/16/95.12:00P	
1.1.1.56.3U	2	Install Tube Supports 58	03/16/95.10:00A	03/16/95.12:00P	
1.1.1.56.3V	2	Remove Equip'mt, Clean & Cap 58	03/16/95.01:00P	03/16/95.03:00P	
1.1.1.56.4A	1	Unload,Rec/Insp Tube 59	02/14/95.11:00A	02/14/95.12:00P	
1.1.1.56.4B	1	Move to Stiff Fit Up Stat. 59	02/20/95.01:00P	02/20/95.02:00P	
1.1.1.56.4C	1	Set-up & Purge 59	02/20/95.02:00P	02/20/95.03:00P	
1.1.1.56.4D	2	Fit Stiffeners 59	02/20/95.03:00P	02/20/95.05:00P	
1.1.1.56.4E	4	Weld Stiffeners 59	02/21/95.08:00A	02/21/95.12:00P	
1.1.1.56.4F	1	Inspect, Install End Caps 59	02/21/95.01:00P	02/21/95.02:00P	
1.1.1.56.4H	1	Move to Test Area 59	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.56.4I	1	Pre-Clean & Black Light 59	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.56.4J	30	Leak Test 59	02/22/95.11:00A	02/23/95.05:00P	
1.1.1.56.4M	1	Move to Post Test Storage 59	02/24/95.08:00A	02/24/95.09:00A	
1.1.1.56.4N	1	Clean, Dry & End Cap 59	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.56.4P	1	Transport to Erection 59	03/17/95.11:00A	03/17/95.12:00P	
1.1.1.56.4Q	1	Set & Align 59	03/17/95.01:00P	03/17/95.02:00P	
1.1.1.56.4R	1	Set Clean Room, Purge & Fit 59	03/17/95.02:00P	03/17/95.03:00P	
1.1.1.56.4S	2	Weld Joint 59	03/17/95.03:00P	03/17/95.05:00P	
1.1.1.56.4T	2	Leak Test Joint 59	03/20/95.08:00A	03/20/95.10:00A	
1.1.1.56.4U	2	Install Tube Supports 59	03/20/95.08:00A	03/20/95.10:00A	
1.1.1.56.4V	2	Remove Equip'mt, Clean & Cap 59	03/20/95.10:00A	03/20/95.12:00P	
1.1.1.56.5A	1	Unload,Rec/Insp Tube 62	02/14/95.01:00P	02/14/95.02:00P	
1.1.1.56.5B	1	Move to Stiff Fit Up Stat. 60	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.56.5C	1	Set-up & Purge 60	02/22/95.11:00A	02/22/95.12:00P	
1.1.1.56.5D	1	F/W Pump Port Reinf. 60	02/22/95.01:00P	02/22/95.02:00P	
1.1.1.56.5E	2	Fit Stiffeners 60	02/22/95.02:00P	02/22/95.04:00P	
1.1.1.56.5F	4	Weld Stiffeners 60	02/22/95.04:00P	02/23/95.11:00A	
1.1.1.56.5G	1	Move to P.Port Stat. 60	02/23/95.11:00A	02/23/95.12:00P	
1.1.1.56.5H	1	Setup & Bore 10" Inlet 60	02/23/95.01:00P	02/23/95.02:00P	
1.1.1.56.5I	2	Purge/F/W Pump Port 60	02/23/95.02:00P	02/23/95.04:00P	
1.1.1.56.5J	1	Inspect, Install End Caps 60	02/23/95.04:00P	02/23/95.05:00P	
1.1.1.56.5L	1	Move to Test Area 60	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.56.5M	1	Pre-Clean & Black Light 60	02/24/95.10:00A	02/24/95.11:00A	
1.1.1.56.5N	30	Leak Test 60	02/24/95.11:00A	02/25/95.05:00P	
1.1.1.56.5Q	1	Move to Post Test Storage 60	02/27/95.08:00A	02/27/95.09:00A	
1.1.1.56.5R	1	Clean, Dry & End Cap 60	02/27/95.09:00A	02/27/95.10:00A	
1.1.1.56.5T	1	Transport to Erection 60	03/21/95.09:00A	03/21/95.10:00A	
1.1.1.56.5U	1	Set & Align 60	03/21/95.10:00A	03/21/95.11:00A	
1.1.1.56.5V	1	Set Clean Room, Purge & Fit 60	03/21/95.11:00A	03/21/95.12:00P	
1.1.1.56.5W	2	Weld Joint 60	03/21/95.01:00P	03/21/95.03:00P	
1.1.1.56.5X	2	Leak Test Joint 60	03/21/95.03:00P	03/21/95.05:00P	
1.1.1.56.5Y	2	Install Tube Supports 60	03/21/95.03:00P	03/21/95.05:00P	
1.1.1.56.5Z	2	Remove Equip'mt, Clean & Cap 60	03/22/95.08:00A	03/22/95.10:00A	
1.1.1.56.B1A	1	Unload,Rec/Insp Tube B56	02/14/95.08:00A	02/14/95.09:00A	
1.1.1.56.B1B	1	Move to Stiff Fit Up Stat. B56	02/14/95.09:00A	02/14/95.10:00A	
1.1.1.56.B1C	1	Set-up & Purge B56	02/14/95.10:00A	02/14/95.11:00A	
1.1.1.56.B1D	2	Fit Stiffeners B56	02/14/95.11:00A	02/14/95.02:00P	
1.1.1.56.B1E	4	Weld Stiffeners B56	02/14/95.02:00P	02/15/95.09:00A	
1.1.1.56.B1F	1	Move to Exp.Bellows Stat. B56	02/15/95.09:00A	02/15/95.10:00A	
1.1.1.56.B1G	3	Fit,Purge,Weld Exp. Bellows B56	02/15/95.10:00A	02/15/95.02:00P	
1.1.1.56.B1H	1	Inspect, Install End Caps B56	02/15/95.02:00P	02/15/95.03:00P	
1.1.1.56.B1J	1	Move to Test Area B56	02/15/95.03:00P	02/15/95.04:00P	
1.1.1.56.B1K	1	Pre-Clean & Black Light B56	02/15/95.04:00P	02/15/95.05:00P	
1.1.1.56.B1L	30	Leak Test B56	02/15/95.05:00P	02/16/95.11:00P	
1.1.1.56.B1O	1	Move to Post Test Storage B56	02/17/95.08:00A	02/17/95.09:00A	
1.1.1.56.B1P	1	Clean, Dry & End Cap B56	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.56.B1R	1	Transport to Erection B56	03/09/95.10:00A	03/09/95.11:00A	
1.1.1.56.B1S	1	Set & Align B56	03/09/95.11:00A	03/09/95.12:00P	
1.1.1.56.B1T	1	Set Clean Room, Purge & Fit B56	03/09/95.01:00P	03/09/95.02:00P	
1.1.1.56.B1U	2	Weld Joint B56	03/09/95.02:00P	03/09/95.04:00P	
1.1.1.56.B1V	2	Leak Test Joint B56	03/09/95.04:00P	03/10/95.09:00A	
1.1.1.56.B1W	2	Install Tube Supports B56	03/09/95.04:00P	03/10/95.09:00A	
1.1.1.56.B1X	2	Remove Equip'mt, Clean & Cap B56	03/10/95.09:00A	03/10/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.56.B2A	1	Unload,Rec/Insp Tube B57	02/14/95.09:00A	02/14/95.10:00A	
1.1.1.56.B2B	1	Move to Stiff Fit Up Stat. B57	02/15/95.10:00A	02/15/95.11:00A	
1.1.1.56.B2C	1	Set-up & Purge B57	02/15/95.11:00A	02/15/95.12:00P	
1.1.1.56.B2D	2	Fit Stiffeners B57	02/15/95.01:00P	02/15/95.03:00P	
1.1.1.56.B2E	4	Weld Stiffeners B57	02/15/95.03:00P	02/16/95.10:00A	
1.1.1.56.B2F	1	Move to Exp.Bellows Stat. B57	02/16/95.10:00A	02/16/95.11:00A	
1.1.1.56.B2G	3	Fit,Purge,Weld Exp. Bellows B57	02/16/95.11:00A	02/16/95.03:00P	
1.1.1.56.B2H	1	Inspect, Install End Caps B57	02/16/95.03:00P	02/16/95.04:00P	
1.1.1.56.B2J	1	Move to Test Area B57	02/17/95.09:00A	02/17/95.10:00A	
1.1.1.56.B2K	1	Pre-Clean & Black Light B57	02/17/95.10:00A	02/17/95.11:00A	
1.1.1.56.B2L	30	Leak Test B57	02/17/95.11:00A	02/18/95.05:00P	
1.1.1.56.B2O	1	Move to Post Test Storage B57	02/20/95.08:00A	02/20/95.09:00A	
1.1.1.56.B2P	1	Clean, Dry & End Cap B57	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.56.B2R	1	Transport to Erection B57	03/13/95.08:00A	03/13/95.09:00A	
1.1.1.56.B2S	1	Set & Align B57	03/13/95.09:00A	03/13/95.10:00A	
1.1.1.56.B2T	1	Set Clean Room, Purge & Fit B57	03/13/95.10:00A	03/13/95.11:00A	
1.1.1.56.B2U	2	Weld Joint B57	03/13/95.11:00A	03/13/95.02:00P	
1.1.1.56.B2V	2	Leak Test Joint B57	03/13/95.02:00P	03/13/95.04:00P	
1.1.1.56.B2W	2	Install Tube Supports B57	03/13/95.02:00P	03/13/95.04:00P	
1.1.1.56.B2X	2	Remove Equip'mt, Clean & Cap B58	03/13/95.04:00P	03/14/95.09:00A	
1.1.1.56.B3A	1	Unload,Rec/Insp Tube B58	02/14/95.10:00A	02/14/95.11:00A	
1.1.1.56.B3B	1	Move to Stiff Fit Up Stat. B58	02/16/95.11:00A	02/16/95.12:00P	
1.1.1.56.B3C	1	Set-up & Purge B58	02/16/95.01:00P	02/16/95.02:00P	
1.1.1.56.B3D	2	Fit Stiffeners B58	02/16/95.02:00P	02/16/95.04:00P	
1.1.1.56.B3E	4	Weld Stiffeners B58	02/16/95.04:00P	02/17/95.11:00A	
1.1.1.56.B3F	1	Move to Exp.Bellows Stat. B58	02/17/95.11:00A	02/17/95.12:00P	
1.1.1.56.B3G	3	Fit,Purge,Weld Exp. Bellows B58	02/17/95.01:00P	02/17/95.04:00P	
1.1.1.56.B3H	1	Inspect, Install End Caps B58	02/17/95.04:00P	02/17/95.05:00P	
1.1.1.56.B3J	1	Move to Test Area B58	02/20/95.09:00A	02/20/95.10:00A	
1.1.1.56.B3K	1	Pre-Clean & Black Light B58	02/20/95.10:00A	02/20/95.11:00A	
1.1.1.56.B3L	30	Leak Test B58	02/20/95.11:00A	02/21/95.05:00P	
1.1.1.56.B3O	1	Move to Post Test Storage B58	02/22/95.08:00A	02/22/95.09:00A	
1.1.1.56.B3P	1	Clean, Dry & End Cap B58	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.56.B3R	1	Transport to Erection B58	03/14/95.03:00P	03/14/95.04:00P	
1.1.1.56.B3S	1	Set & Align B58	03/14/95.04:00P	03/14/95.05:00P	
1.1.1.56.B3T	1	Set Clean Room, Purge & Fit B58	03/15/95.08:00A	03/15/95.09:00A	
1.1.1.56.B3U	2	Weld Joint B58	03/15/95.09:00A	03/15/95.11:00A	
1.1.1.56.B3V	2	Leak Test Joint B58	03/15/95.11:00A	03/15/95.02:00P	
1.1.1.56.B3W	2	Install Tube Supports 58	03/15/95.11:00A	03/15/95.02:00P	
1.1.1.56.B3X	2	Remove Equip'mt, Clean & Cap B58	03/15/95.02:00P	03/15/95.04:00P	
1.1.1.56.B4A	1	Unload,Rec/Insp Tube B59	02/14/95.11:00A	02/14/95.12:00P	
1.1.1.56.B4B	1	Move to Stiff Fit Up Stat. B59	02/17/95.01:00P	02/17/95.02:00P	
1.1.1.56.B4C	1	Set-up & Purge B59	02/17/95.02:00P	02/17/95.03:00P	
1.1.1.56.B4D	2	Fit Stiffeners B59	02/17/95.03:00P	02/17/95.05:00P	
1.1.1.56.B4E	4	Weld Stiffeners B59	02/20/95.08:00A	02/20/95.12:00P	
1.1.1.56.B4F	1	Move to Exp.Bellows Stat. B59	02/20/95.01:00P	02/20/95.02:00P	
1.1.1.56.B4G	3	Fit,Purge,Weld Exp. Bellows B59	02/20/95.02:00P	02/20/95.05:00P	
1.1.1.56.B4H	1	Inspect, Install End Caps B59	02/21/95.08:00A	02/21/95.09:00A	
1.1.1.56.B4J	1	Move to Test Area B59	02/22/95.09:00A	02/22/95.10:00A	
1.1.1.56.B4K	1	Pre-Clean & Black Light B59	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.56.B4L	30	Leak Test B59	02/22/95.11:00A	02/23/95.05:00P	
1.1.1.56.B4O	1	Move to Post Test Storage B59	02/24/95.08:00A	02/24/95.09:00A	
1.1.1.56.B4P	1	Clean, Dry & End Cap B59	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.56.B4R	1	Transport to Erection B59	03/16/95.01:00P	03/16/95.02:00P	
1.1.1.56.B4S	1	Set & Align B59	03/16/95.02:00P	03/16/95.03:00P	
1.1.1.56.B4T	1	Set Clean Room, Purge & Fit B59	03/16/95.03:00P	03/16/95.04:00P	
1.1.1.56.B4U	2	Weld Joint B59	03/16/95.04:00P	03/17/95.09:00A	
1.1.1.56.B4V	2	Leak Test Joint B59	03/17/95.09:00A	03/17/95.11:00A	
1.1.1.56.B4W	2	Install Tube Supports B59	03/17/95.09:00A	03/17/95.11:00A	
1.1.1.56.B4X	2	Remove Equip'mt, Clean & Cap B59	03/17/95.11:00A	03/17/95.02:00P	
1.1.1.56.B5A	1	Unload,Rec/Insp Tube B60	02/14/95.01:00P	02/14/95.02:00P	
1.1.1.56.B5B	1	Move to Stiff Fit Up Stat. B60	02/20/95.02:00P	02/20/95.03:00P	
1.1.1.56.B5C	1	Set-up & Purge B60	02/20/95.03:00P	02/20/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.56.B5D	2	Fit Stiffeners B60	02/20/95.04:00P	02/21/95.09:00A	
1.1.1.56.B5E	4	Weld Stiffeners B60	02/21/95.09:00A	02/21/95.02:00P	
1.1.1.56.B5F	1	Move to Exp.Bellows Stat. B60	02/22/95.10:00A	02/22/95.11:00A	
1.1.1.56.B5G	3	Fit,Purge,Weld Exp. Bellows B60	02/22/95.11:00A	02/22/95.03:00P	
1.1.1.56.B5H	1	Inspect, Install End Caps B60	02/22/95.03:00P	02/22/95.04:00P	
1.1.1.56.B5J	1	Move to Test Area B60	02/24/95.09:00A	02/24/95.10:00A	
1.1.1.56.B5K	1	Pre-Clean & Black Light B60	02/24/95.10:00A	02/24/95.11:00A	
1.1.1.56.B5L	30	Leak Test B60	02/24/95.11:00A	02/25/95.05:00P	
1.1.1.56.B5O	1	Move to Post Test Storage B60	02/27/95.08:00A	02/27/95.09:00A	
1.1.1.56.B5P	1	Clean, Dry & End Cap B60	02/27/95.09:00A	02/27/95.10:00A	
1.1.1.56.B5R	1	Transport to Erection B60	03/20/95.10:00A	03/20/95.11:00A	
1.1.1.56.B5S	1	Set & Align B60	03/20/95.11:00A	03/20/95.12:00P	
1.1.1.56.B5T	1	Set Clean Room, Purge & Fit B60	03/20/95.01:00P	03/20/95.02:00P	
1.1.1.56.B5U	2	Weld Joint B60	03/20/95.02:00P	03/20/95.04:00P	
1.1.1.56.B5V	2	Leak Test Joint B60	03/20/95.04:00P	03/21/95.09:00A	
1.1.1.56.B5W	2	Install Tube Supports B60	03/20/95.04:00P	03/21/95.09:00A	
1.1.1.56.B5X	2	Remove Equip'mt, Clean & Cap B60	03/21/95.09:00A	03/21/95.11:00A	
1.1.1.61	203	Cans 61-65	02/27/95.04:00P	04/04/95.10:00A	
1.1.1.61.1A	1	Unload,Rec/Insp Tube 61	02/28/95.08:00A	02/28/95.09:00A	
1.1.1.61.1B	1	Move to Stiff Fit Up Stat. 61	02/28/95.09:00A	02/28/95.10:00A	
1.1.1.61.1C	1	Set-up & Purge 61	02/28/95.10:00A	02/28/95.11:00A	
1.1.1.61.1D	2	Fit Stiffeners 61	02/28/95.11:00A	02/28/95.02:00P	
1.1.1.61.1E	4	Weld Stiffeners 61	02/28/95.02:00P	03/01/95.09:00A	
1.1.1.61.1F	1	Inspect, Install End Caps 61	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.61.1H	1	Move to Test Area 61	03/01/95.10:00A	03/01/95.11:00A	
1.1.1.61.1I	1	Pre-Clean & Black Light 61	03/01/95.11:00A	03/01/95.12:00P	
1.1.1.61.1J	30	Leak Test 61	03/01/95.12:00P	03/02/95.06:00P	
1.1.1.61.1M	1	Move to Post Test Storage 61	03/03/95.08:00A	03/03/95.09:00A	
1.1.61.1N	1	Clean, Dry & End Cap 61	03/03/95.09:00A	03/03/95.10:00A	
1.1.61.1P	1	Transport to Erection 61	03/23/95.09:00A	03/23/95.10:00A	
1.1.1.61.1Q	1	Set & Align 61	03/23/95.10:00A	03/23/95.11:00A	
1.1.1.61.1R	1	Set Clean Room, Purge & Fit 61	03/23/95.11:00A	03/23/95.12:00P	
1.1.1.61.1S	2	Weld Joint 61	03/23/95.01:00P	03/23/95.03:00P	
1.1.1.61.1T	2	Leak Test Joint 61	03/23/95.03:00P	03/23/95.05:00P	
1.1.1.61.1U	2	Install Tube Supports 61	03/23/95.03:00P	03/23/95.05:00P	
1.1.1.61.1V	2	Remove Equip'mt, Clean & Cap 61	03/24/95.08:00A	03/24/95.10:00A	
1.1.1.61.2A	1	Unload,Rec. & Insp 62	02/28/95.09:00A	02/28/95.10:00A	
1.1.1.61.2B	1	Move to Stiff Fit Up Stat. 62	03/01/95.11:00A	03/01/95.12:00P	
1.1.1.61.2C	1	Set-up & Purge 62	03/01/95.01:00P	03/01/95.02:00P	
1.1.1.61.2D	2	Fit Stiffeners 62	03/01/95.02:00P	03/01/95.04:00P	
1.1.1.61.2E	4	Weld Stiffeners 62	03/01/95.04:00P	03/02/95.11:00A	
1.1.1.61.2F	1	Inspect, Install End Caps 62	03/02/95.11:00A	03/02/95.12:00P	
1.1.1.61.2H	1	Move to Test Area 62	03/03/95.09:00A	03/03/95.10:00A	
1.1.1.61.2I	1	Pre-Clean & Black Light 62	03/03/95.10:00A	03/03/95.11:00A	
1.1.1.61.2J	30	Leak Test 62	03/03/95.11:00A	03/04/95.05:00P	
1.1.1.61.2M	1	Move to Post Test Storage 62	03/06/95.08:00A	03/06/95.09:00A	
1.1.1.61.2N	1	Clean, Dry & End Cap 62	03/06/95.09:00A	03/06/95.10:00A	
1.1.1.61.2P	1	Transport to Erection 62	03/24/95.04:00P	03/24/95.05:00P	
1.1.1.61.2Q	1	Set & Align 62	03/27/95.08:00A	03/27/95.09:00A	
1.1.1.61.2R	1	Set Clean Room, Purge & Fit 62	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.61.2S	2	Weld Joint 62	03/27/95.10:00A	03/27/95.12:00P	
1.1.1.61.2T	2	Leak Test Joint62	03/27/95.01:00P	03/27/95.03:00P	
1.1.1.61.2U	2	Install Tube Supports 62	03/27/95.01:00P	03/27/95.03:00P	
1.1.1.61.2V	2	Remove Equip'mt, Clean & Cap 62	03/27/95.03:00P	03/27/95.05:00P	
1.1.1.61.3A	1	Unload,Rec/Insp Tube 63	02/28/95.10:00A	02/28/95.11:00A	
1.1.1.61.3B	1	Move to Stiff Fit Up Stat. 63	03/03/95.10:00A	03/03/95.11:00A	
1.1.1.61.3C	1	Set-up & Purge 63	03/03/95.11:00A	03/03/95.12:00P	
1.1.1.61.3D	2	Fit Stiffeners 63	03/03/95.01:00P	03/03/95.03:00P	
1.1.1.61.3E	4	Weld Stiffeners 63	03/03/95.03:00P	03/06/95.10:00A	
1.1.1.61.3F	1	Inspect, Install End Caps 63	03/06/95.10:00A	03/06/95.11:00A	
1.1.1.61.3H	1	Move to Test Area 63	03/06/95.11:00A	03/06/95.12:00P	
1.1.1.61.3I	1	Pre-Clean & Black Light 63	03/06/95.01:00P	03/06/95.02:00P	
1.1.61.3J	30	Leak Test 63	03/06/95.02:00P	03/07/95.08:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.61.3M	1	Move to Post Test Storage 63	03/08/95.08:00A	03/08/95.09:00A	
1.1.1.61.3N	1	Clean, Dry & End Cap 63	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.61.3P	1	Transport to Erection 63	03/28/95.02:00P	03/28/95.03:00P	
1.1.1.61.3Q	1	Set & Align 63	03/28/95.03:00P	03/28/95.04:00P	
1.1.1.61.3R	1	Set Clean Room, Purge & Fit 63	03/28/95.04:00P	03/28/95.05:00P	
1.1.1.61.3S	2	Weld Joint 63	03/29/95.08:00A	03/29/95.10:00A	
1.1.1.61.3T	2	Leak Test Joint 63	03/29/95.10:00A	03/29/95.12:00P	
1.1.1.61.3U	2	Install Tube Supports 63	03/29/95.10:00A	03/29/95.12:00P	
1.1.1.61.3V	2	Remove Equip'mt, Clean & Cap 63	03/29/95.01:00P	03/29/95.03:00P	
1.1.1.61.4A	1	Unload,Rec/Insp Tube 64	02/28/95.11:00A	02/28/95.12:00P	
1.1.1.61.4B	1	Move to Stiff Fit Up Stat. 64	03/06/95.01:00P	03/06/95.02:00P	
1.1.1.61.4C	1	Set-up & Purge 64	03/06/95.02:00P	03/06/95.03:00P	
1.1.1.61.4D	2	Fit Stiffeners 64	03/06/95.03:00P	03/06/95.05:00P	
1.1.1.61.4E	4	Weld Stiffeners 64	03/07/95.08:00A	03/07/95.12:00P	
1.1.1.61.4F	1	Inspect, Install End Caps 64	03/07/95.01:00P	03/07/95.02:00P	
1.1.1.61.4H	1	Move to Test Area 64	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.61.4I	1	Pre-Clean & Black Light 64	03/08/95.10:00A	03/08/95.11:00A	
1.1.1.61.4J	30	Leak Test 64	03/08/95.11:00A	03/09/95.05:00P	
1.1.1.61.4M	1	Move to Post Test Storage 64	03/10/95.08:00A	03/10/95.09:00A	
1.1.1.61.4N	1	Clean, Dry & End Cap 64	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.61.4P	1	Transport to Erection 64	03/30/95.11:00A	03/30/95.12:00P	
1.1.1.61.4Q	1	Set & Align 64	03/30/95.01:00P	03/30/95.02:00P	
1.1.1.61.4R	1	Set Clean Room, Purge & Fit 64	03/30/95.02:00P	03/30/95.03:00P	
1.1.1.61.4S	2	Weld Joint 64	03/30/95.03:00P	03/30/95.05:00P	
1.1.1.61.4T	2	Leak Test Joint 64	03/31/95.08:00A	03/31/95.10:00A	
1.1.1.61.4U	2	Install Tube Supports 64	03/31/95.08:00A	03/31/95.10:00A	
1.1.1.61.4V	2	Remove Equip'mt, Clean & Cap 64	03/31/95.10:00A	03/31/95.12:00P	
1.1.1.61.5A	1	Unload,Rec/Insp Tube 6	02/28/95.01:00P	02/28/95.02:00P	
1.1.61.5B	1	Move to Stiff Fit Up Stat. 65	03/08/95.10:00A	03/08/95.11:00A	
1.1.61.5C	1	Set-up & Purge 65	03/08/95.11:00A	03/08/95.12:00P	
1.1.1.61.5D	1	F/W Pump Port Reinf. 65	03/08/95.01:00P	03/08/95.02:00P	
1.1.1.61.5E	2	Fit Stiffeners 65	03/08/95.02:00P	03/08/95.04:00P	
1.1.1.61.5F	4	Weld Stiffeners 65	03/08/95.04:00P	03/09/95.11:00A	
1.1.1.61.5G	1	Move to P.Port Stat.65	03/09/95.11:00A	03/09/95.12:00P	
1.1.1.61.5H	1	Setup & Bore 10" Inlet 65	03/09/95.01:00P	03/09/95.02:00P	
1.1.1.61.5I	2	Purge/F/W Pump Port 65	03/09/95.02:00P	03/09/95.04:00P	
1.1.1.61.5J	1	Inspect, Install End Caps 65	03/09/95.04:00P	03/09/95.05:00P	
1.1.1.61.5L	1	Move to Test Area 65	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.61.5M	1	Pre-Clean & Black Light 65	03/10/95.10:00A	03/10/95.11:00A	
1.1.1.61.5N	30	Leak Test 65	03/10/95.11:00A	03/11/95.05:00P	
1.1.1.61.5Q	1	Move to Post Test Storage 65	03/13/95.08:00A	03/13/95.09:00A	
1.1.1.61.5R	1	Clean, Dry & End Cap 65	03/13/95.09:00A	03/13/95.10:00A	
1.1.1.61.5T	1	Transport to Erection 65	04/03/95.09:00A	04/03/95.10:00A	
1.1.1.61.5U	1	Set & Align 65	04/03/95.10:00A	04/03/95.11:00A	
1.1.1.61.5V	1	Set Clean Room, Purge & Fit 65	04/03/95.11:00A	04/03/95.12:00P	
1.1.1.61.5W	2	Weld Joint 65	04/03/95.01:00P	04/03/95.03:00P	
1.1.1.61.5X	2	Leak Test Joint 65	04/03/95.03:00P	04/03/95.05:00P	
1.1.1.61.5Y	2	Install Tube Supports 65	04/03/95.03:00P	04/03/95.05:00P	
1.1.1.61.5Z	2	Remove Equip'mt, Clean & Cap 65	04/04/95.08:00A	04/04/95.10:00A	
1.1.1.61.B1A	1	Unload,Rec/Insp Tube B61	02/28/95.08:00A	02/28/95.09:00A	
1.1.1.61.B1B	1	Move to Stiff Fit Up Stat. B61	02/28/95.09:00A	02/28/95.10:00A	
1.1.1.61.B1C	1	Set-up & Purge B61	02/28/95.10:00A	02/28/95.11:00A	
1.1.1.61.B1D	2	Fit Stiffeners B61	02/28/95.11:00A	02/28/95.02:00P	
1.1.1.61.B1E	4	Weld Stiffeners B61	02/28/95.02:00P	03/01/95.09:00A	
1.1.1.61.B1F	1	Move to Exp.Bellows Stat. B61	03/01/95.09:00A	03/01/95.10:00A	
1.1.1.61.B1G	3	Fit,Purge,Weld Exp. Bellows B61	03/01/95.10:00A	03/01/95.02:00P	
1.1.1.61.B1H	1	Inspect, Install End Caps B61	03/01/95.02:00P	03/01/95.03:00P	
1.1.1.61.B1J	1	Move to Test Area B61	03/01/95.03:00P	03/01/95.04:00P	
1.1.1.61.B1K	1	Pre-Clean & Black Light B61	03/01/95.04:00P	03/01/95.05:00P	
1.1.1.61.B1L	30	Leak Test B61	03/01/95.05:00P	03/02/95.11:00P	
1.1.1.61.B1O	1	Move to Post Test Storage B61	03/03/95.08:00A	03/03/95.09:00A	
1.1.1.61.B1P	1	Clean, Dry & End Cap B61	03/03/95.09:00A	03/03/95.10:00A	
1.1.61.B1R	1	Transport to Erection B61	03/22/95.10:00A	03/22/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.61.B1S	1	Set & Align B61	03/22/95.11:00A	03/22/95.12:00P	
1.1.1.61.B1T	1	Set Clean Room, Purge & Fit B61	03/22/95.01:00P	03/22/95.02:00P	
1.1.1.61.B1U	2	Weld Joint B61	03/22/95.02:00P	03/22/95.04:00P	
1.1.1.61.B1V	2	Leak Test Joint B61	03/22/95.04:00P	03/23/95.09:00A	
1.1.1.61.B1W	2	Install Tube Supports B6	03/22/95.04:00P	03/23/95.09:00A	
1.1.1.61.B1X	2	Remove Equip'mt, Clean & Cap B61	03/23/95.09:00A	03/23/95.11:00A	
1.1.1.61.B2A	1	Unload,Rec/Insp Tube B62	02/28/95.09:00A	02/28/95.10:00A	
1.1.1.61.B2B	1	Move to Stiff Fit Up Stat. B62	03/01/95.10:00A	03/01/95.11:00A	
1.1.1.61.B2C	1	Set-up & Purge B62	03/01/95.11:00A	03/01/95.12:00P	
1.1.1.61.B2D	2	Fit Stiffeners B62	03/01/95.01:00P	03/01/95.03:00P	
1.1.1.61.B2E	4	Weld Stiffeners B62	03/01/95.03:00P	03/02/95.10:00A	
1.1.1.61.B2F	1	Move to Exp.Bellows Stat. B62	03/02/95.10:00A	03/02/95.11:00A	
1.1.1.61.B2G	3	Fit,Purge,Weld Exp. Bellows B62	03/02/95.11:00A	03/02/95.03:00P	
1.1.1.61.B2H	1	Inspect, Install End Caps B62	03/02/95.03:00P	03/02/95.04:00P	
1.1.1.61.B2J	1	Move to Test Area B62	03/03/95.09:00A	03/03/95.10:00A	
1.1.1.61.B2K	1	Pre-Clean & Black Light B62	03/03/95.10:00A	03/03/95.11:00A	
1.1.1.61.B2L	30	Leak Test B62	03/03/95.11:00A	03/04/95.05:00P	
1.1.1.61.B2O	1	Move to Post Test Storage B62	03/06/95.08:00A	03/06/95.09:00A	
1.1.1.61.B2P	1	Clean, Dry & End Cap B62	03/06/95.09:00A	03/06/95.10:00A	
1.1.1.61.B2R	1	Transport to Erection B62	03/24/95.08:00A	03/24/95.09:00A	
1.1.1.61.B2S	1	Set & Align B62	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.61.B2T	1	Set Clean Room, Purge & Fit B62	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.61.B2U	2	Weld Joint B62	03/24/95.11:00A	03/24/95.02:00P	
1.1.1.61.B2V	2	Leak Test Joint B62	03/24/95.02:00P	03/24/95.04:00P	
1.1.1.61.B2W	2	Install Tube SupportsB62	03/24/95.02:00P	03/24/95.04:00P	
1.1.1.61.B2X	2	Remove Equip'mt, Clean & Cap B62	03/24/95.04:00P	03/27/95.09:00A	
1.1.1.61.B3A	1	Unload,Rec/Insp Tube B63	02/28/95.10:00A	02/28/95.11:00A	
1.1.1.61.B3B	1	Move to Stiff Fit Up Stat. B63	03/02/95.11:00A	03/02/95.12:00P	
1.1.1.61.B3C	1	Set-up & Purge B63	03/02/95.01:00P	03/02/95.02:00P	
1.1.1.61.B3D	2	Fit Stiffeners B63	03/02/95.02:00P	03/02/95.04:00P	
1.1.1.61.B3E	4	Weld Stiffeners B63	03/02/95.04:00P	03/03/95.11:00A	
1.1.1.61.B3F	1	Move to Exp.Bellows Stat. B63	03/03/95.11:00A	03/03/95.12:00P	
1.1.1.61.B3G	3	Fit,Purge,Weld Exp. Bellows B63	03/03/95.01:00P	03/03/95.04:00P	
1.1.1.61.B3H	1	Inspect, Install End Caps B63	03/03/95.04:00P	03/03/95.05:00P	
1.1.1.61.B3J	1	Move to Test Area B63	03/06/95.09:00A	03/06/95.10:00A	
1.1.1.61.B3K	1	Pre-Clean & Black Light B63	03/06/95.10:00A	03/06/95.11:00A	
1.1.1.61.B3L	30	Leak Test B63	03/06/95.11:00A	03/07/95.05:00P	
1.1.1.61.B3O	1	Move to Post Test Storage B63	03/08/95.08:00A	03/08/95.09:00A	
1.1.1.61.B3P	1	Clean, Dry & End Cap B63	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.61.B3R	1	Transport to Erection B63	03/27/95.03:00P	03/27/95.04:00P	
1.1.1.61.B3S	1	Set & Align B63	03/27/95.04:00P	03/27/95.05:00P	
1.1.1.61.B3T	1	Set Clean Room, Purge & Fit B63	03/28/95.08:00A	03/28/95.09:00A	
1.1.1.61.B3U	2	Weld Joint B63	03/28/95.09:00A	03/28/95.11:00A	
1.1.1.61.B3V	2	Leak Test Joint B63	03/28/95.11:00A	03/28/95.02:00P	
1.1.1.61.B3W	2	Install Tube Supports B63	03/28/95.11:00A	03/28/95.02:00P	
1.1.1.61.B3X	2	Remove Equip'mt, Clean & Cap B63	03/28/95.02:00P	03/28/95.04:00P	
1.1.1.61.B4A	1	Unload,Rec/Insp Tube B64	02/28/95.11:00A	02/28/95.12:00P	
1.1.1.61.B4B	1	Move to Stiff Fit Up Stat. B64	03/03/95.01:00P	03/03/95.02:00P	
1.1.1.61.B4C	1	Set-up & Purge B64	03/03/95.02:00P	03/03/95.03:00P	
1.1.1.61.B4D	2	Fit Stiffeners B64	03/03/95.03:00P	03/03/95.05:00P	
1.1.1.61.B4E	4	Weld Stiffeners B64	03/06/95.08:00A	03/06/95.12:00P	
1.1.1.61.B4F	1	Move to Exp.Bellows Stat. B64	03/06/95.01:00P	03/06/95.02:00P	
1.1.1.61.B4G	3	Fit,Purge,Weld Exp. Bellows B64	03/06/95.02:00P	03/06/95.05:00P	
1.1.1.61.B4H	1	Inspect, Install End Caps B64	03/07/95.08:00A	03/07/95.09:00A	
1.1.1.61.B4J	1	Move to Test Area B64	03/08/95.09:00A	03/08/95.10:00A	
1.1.1.61.B4K	1	Pre-Clean & Black Light B64	03/08/95.10:00A	03/08/95.11:00A	
1.1.1.61.B4L	30	Leak Test B64	03/08/95.11:00A	03/09/95.05:00P	
1.1.1.61.B4O	1	Move to Post Test Storage B64	03/10/95.08:00A	03/10/95.09:00A	
1.1.1.61.B4P	1	Clean, Dry & End Cap B64	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.61.B4R	1	Transport to Erection B64	03/29/95.01:00P	03/29/95.02:00P	
1.1.1.61.B4S	1	Set & Align B64	03/29/95.02:00P	03/29/95.03:00P	
1.1.1.61.B4T	1	Set Clean Room, Purge & Fit B64	03/29/95.03:00P	03/29/95.04:00P	
1.1.1.61.B4U	2	Weld Joint B64	03/29/95.04:00P	03/30/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.61.B4V	2	Leak Test Joint B64	03/30/95.09:00A	03/30/95.11:00A	
1.1.1.61.B4W	2	Install Tube Supports B64	03/30/95.09:00A	03/30/95.11:00A	
1.1.1.61.B4X	2	Remove Equip'mt, Clean & Cap B64	03/30/95.11:00A	03/30/95.02:00P	
1.1.1.61.B5A	1	Unload,Rec/Insp Tube B65	02/28/95.01:00P	02/28/95.02:00P	
1.1.1.61.B5B	1	Move to Stiff Fit Up Stat. B65	03/06/95.02:00P	03/06/95.03:00P	
1.1.1.61.B5C	1	Set-up & Purge B65	03/06/95.03:00P	03/06/95.04:00P	
1.1.1.61.B5D	2	Fit Stiffeners B65	03/06/95.04:00P	03/07/95.09:00A	
1.1.1.61.B5E	4	Weld Stiffeners B65	03/07/95.09:00A	03/07/95.02:00P	
1.1.1.61.B5F	1	Move to Exp.Bellows Stat. B65	03/08/95.10:00A	03/08/95.11:00A	
1.1.1.61.B5G	3	Fit,Purge,Weld Exp. Bellows B65	03/08/95.11:00A	03/08/95.03:00P	
1.1.1.61.B5H	1	Inspect, Install End Caps B65	03/08/95.03:00P	03/08/95.04:00P	
1.1.1.61.B5J	1	Move to Test Area B65	03/10/95.09:00A	03/10/95.10:00A	
1.1.1.61.B5K	1	Pre-Clean & Black Light B65	03/10/95.10:00A	03/10/95.11:00A	
1.1.1.61.B5L	30	Leak Test B65	03/10/95.11:00A	03/11/95.05:00P	
1.1.1.61.B5O	1	Move to Post Test Storage B65	03/13/95.08:00A	03/13/95.09:00A	
1.1.1.61.B5P	1	Clean, Dry & End Cap B65	03/13/95.09:00A	03/13/95.10:00A	
1.1.1.61.B5R	1	Transport to Erection B65	03/31/95.10:00A	03/31/95.11:00A	
1.1.1.61.B5S	1	Set & Align B65	03/31/95.11:00A	03/31/95.12:00P	
1.1.1.61.B5T	1	Set Clean Room, Purge & Fit B65	03/31/95.01:00P	03/31/95.02:00P	
1.1.1.61.B5U	2	Weld Joint B65	03/31/95.02:00P	03/31/95.04:00P	
1.1.1.61.B5V	2	Leak Test Joint B65	03/31/95.04:00P	04/03/95.09:00A	
1.1.1.61.B5W	2	Install Tube Supports B65	03/31/95.04:00P	04/03/95.09:00A	
1.1.1.61.B5X	2	Remove Equip'mt, Clean & Cap B65	04/03/95.09:00A	04/03/95.11:00A	
1.1.1.66	195	Cans 66-70	03/13/95.04:00P	04/17/95.10:00A	
1.1.1.66.1A	1	Unload,Rec/Insp Tube 66	03/14/95.08:00A	03/14/95.09:00A	
1.1.1.66.1B	1	Move to Stiff Fit Up Stat. 666	03/14/95.09:00A	03/14/95.10:00A	
1.1.1.66.1C	1	Set-up & Purge 66	03/14/95.10:00A	03/14/95.11:00A	
1.1.1.66.1D	2	Fit Stiffeners 66	03/14/95.11:00A	03/14/95.02:00P	
1.1.1.66.1E	4	Weld Stiffeners 66	03/14/95.02:00P	03/15/95.09:00A	
1.1.1.66.1F	1	Inspect, Install End Caps 66	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.66.1H	1	Move to Test Area 66	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.66.1I	1	Pre-Clean & Black Light 66	03/15/95.11:00A	03/15/95.12:00P	
1.1.1.66.1J	30	Leak Test 66	03/15/95.12:00P	03/16/95.06:00P	
1.1.1.66.1M	1	Move to Post Test Storage 66	03/17/95.08:00A	03/17/95.09:00A	
1.1.1.66.1N	1	Clean, Dry & End Cap 66	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.66.1P	1	Transport to Erection 66	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.66.1Q	1	Set & Align 66	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.66.1R	1	Set Clean Room, Purge & Fit 66	04/05/95.11:00A	04/05/95.12:00P	
1.1.1.66.1S	2	Weld Joint 66	04/05/95.01:00P	04/05/95.03:00P	
1.1.1.66.1T	2	Leak Test Joint 66	04/05/95.03:00P	04/05/95.05:00P	
1.1.1.66.1U	2	Install Tube Supports 66	04/05/95.03:00P	04/05/95.05:00P	
1.1.1.66.1V	2	Remove Equip'mt, Clean & Cap 66	04/06/95.08:00A	04/06/95.10:00A	
1.1.1.66.2A	1	Unload,Rec. & Inspect 67	03/14/95.09:00A	03/14/95.10:00A	
1.1.1.66.2B	1	Move to Stiff Fit Up Stat. 67	03/15/95.11:00A	03/15/95.12:00P	
1.1.1.66.2C	1	Set-up & Purge 676	03/15/95.01:00P	03/15/95.02:00P	
1.1.1.66.2D	2	Fit Stiffeners 67	03/15/95.02:00P	03/15/95.04:00P	
1.1.1.66.2E	4	Weld Stiffeners 67	03/15/95.04:00P	03/16/95.11:00A	
1.1.1.66.2F	1	Inspect, Install End Caps 67	03/16/95.11:00A	03/16/95.12:00P	
1.1.1.66.2H	1	Move to Test Area 67	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.66.2I	1	Pre-Clean & Black Light 67	03/17/95.10:00A	03/17/95.11:00A	
1.1.1.66.2J	30	Leak Test 67	03/17/95.11:00A	03/18/95.05:00P	
1.1.1.66.2M	1	Move to Post Test Storage 67	03/20/95.08:00A	03/20/95.09:00A	
1.1.1.66.2N	1	Clean, Dry & End Cap 67	03/20/95.09:00A	03/20/95.10:00A	
1.1.1.66.2P	1	Transport to Erection 67	04/06/95.04:00P	04/06/95.05:00P	
1.1.1.66.2Q	1	Set & Align 67	04/07/95.08:00A	04/07/95.09:00A	
1.1.1.66.2R	1	Set Clean Room, Purge & Fit 67	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.66.2S	2	Weld Joint 67	04/07/95.10:00A	04/07/95.12:00P	
1.1.1.66.2T	2	Leak Test Joint 67	04/07/95.01:00P	04/07/95.03:00P	
1.1.1.66.2U	2	Install Tube Supports 67	04/07/95.01:00P	04/07/95.03:00P	
1.1.1.66.2V	2	Remove Equip'mt, Clean & Cap 67	04/07/95.03:00P	04/07/95.05:00P	
1.1.1.66.3A	1	Unload,Rec/Insp Tube 68	03/14/95.10:00A	03/14/95.11:00A	
1.1.1.66.3B	1	Move to Stiff Fit Up Stat. 68	03/17/95.10:00A	03/17/95.11:00A	
1.1.1.66.3C	1	Set-up & Purge 68	03/17/95.11:00A	03/17/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.66.3D	2	Fit Stiffeners 68	03/17/95.01:00P	03/17/95.03:00P	
1.1.1.66.3E	4	Weld Stiffeners 68	03/17/95.03:00P	03/20/95.10:00A	
1.1.1.66.3F	1	Inspect, Install End Caps 68	03/20/95.10:00A	03/20/95.11:00A	
1.1.1.66.3H	1	Move to Test Area 68	03/20/95.11:00A	03/20/95.12:00P	
1.1.1.66.3I	1	Pre-Clean & Black Light 68	03/20/95.01:00P	03/20/95.02:00P	
1.1.1.66.3J	30	Leak Test 68	03/20/95.02:00P	03/21/95.08:00P	
1.1.1.66.3M	1	Move to Post Test Storage 68	03/22/95.08:00A	03/22/95.09:00A	
1.1.1.66.3N	1	Clean, Dry & End Cap 68	03/22/95.09:00A	03/22/95.10:00A	
1.1.1.66.3P	1	Transport to Erection 68	04/10/95.02:00P	04/10/95.03:00P	
1.1.1.66.3Q	1	Set & Align 68	04/10/95.03:00P	04/10/95.04:00P	
1.1.1.66.3R	1	Set Clean Room, Purge & Fit 68	04/10/95.04:00P	04/10/95.05:00P	
1.1.1.66.3S	2	Weld Joint 68	04/11/95.08:00A	04/11/95.10:00A	
1.1.1.66.3T	2	Leak Test Joint 68	04/11/95.10:00A	04/11/95.12:00P	
1.1.1.66.3U	2	Install Tube Supports 68	04/11/95.10:00A	04/11/95.12:00P	
1.1.1.66.3V	2	Remove Equip'mt, Clean & Cap 68	04/11/95.01:00P	04/11/95.03:00P	
1.1.1.66.4A	1	Unload,Rec/Insp Tube 69	03/14/95.11:00A	03/14/95.12:00P	
1.1.1.66.4B	1	Move to Stiff Fit Up Stat. 688	03/20/95.01:00P	03/20/95.02:00P	
1.1.1.66.4C	1	Set-up & Purge 69	03/20/95.02:00P	03/20/95.03:00P	
1.1.1.66.4D	2	Fit Stiffeners 69	03/20/95.03:00P	03/20/95.05:00P	
1.1.1.66.4E	4	Weld Stiffeners 69	03/21/95.08:00A	03/21/95.12:00P	
1.1.1.66.4F	1	Inspect, Install End Caps 69	03/21/95.01:00P	03/21/95.02:00P	
1.1.1.66.4H	1	Move to Test Area 69	03/22/95.09:00A	03/22/95.10:00A	
1.1.1.66.4I	1	Pre-Clean & Black Light 69	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.66.4J	30	Leak Test 69	03/22/95.11:00A	03/23/95.05:00P	
1.1.1.66.4M	1	Move to Post Test Storage 69	03/24/95.08:00A	03/24/95.09:00A	
1.1.1.66.4N	1	Clean, Dry & End Cap 69	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.66.4P	1	Transport to Erection 69	04/12/95.11:00A	04/12/95.12:00P	
1.1.1.66.4Q	1	Set & Align 69	04/12/95.01:00P	04/12/95.02:00P	
1.1.1.66.4R	1	Set Clean Room, Purge & Fit 69	04/12/95.02:00P	04/12/95.03:00P	
1.1.1.66.4S	2	Weld Joint 69	04/12/95.03:00P	04/12/95.05:00P	
1.1.1.66.4T	2	Leak Test Joint 69	04/13/95.08:00A	04/13/95.10:00A	
1.1.1.66.4U	2	Install Tube Supports 69	04/13/95.08:00A	04/13/95.10:00A	
1.1.1.66.4V	2	Remove Equip'mt, Clean & Cap 69	04/13/95.10:00A	04/13/95.12:00P	
1.1.1.66.5A	1	Unload,Rec/Insp Tube 70	03/14/95.01:00P	03/14/95.02:00P	
1.1.1.66.5B	1	Move to Stiff Fit Up Stat. 70	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.66.5C	1	Set-up & Purge 70	03/22/95.11:00A	03/22/95.12:00P	
1.1.1.66.5D	1	F/W Pump Port Reinf. 70	03/22/95.01:00P	03/22/95.02:00P	
1.1.1.66.5E	2	Fit Stiffeners 70	03/22/95.02:00P	03/22/95.04:00P	
1.1.1.66.5F	4	Weld Stiffeners 70	03/22/95.04:00P	03/23/95.11:00A	
1.1.1.66.5G	1	Move to P.Port Stat.70	03/23/95.11:00A	03/23/95.12:00P	
1.1.1.66.5H	1	Setup & Bore 10" Inlet 70	03/23/95.01:00P	03/23/95.02:00P	
1.1.1.66.5I	2	Purge/F/W Pump Port 70	03/23/95.02:00P	03/23/95.04:00P	
1.1.1.66.5J	1	Inspect, Install End Caps 70	03/23/95.04:00P	03/23/95.05:00P	
1.1.1.66.5L	1	Move to Test Area 70	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.66.5M	1	Pre-Clean & Black Light 70	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.66.5N	30	Leak Test 70	03/24/95.11:00A	03/25/95.05:00P	
1.1.1.66.5Q	1	Move to Post Test Storage 70	03/27/95.08:00A	03/27/95.09:00A	
1.1.1.66.5R	1	Clean, Dry & End Cap 70	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.66.5T	1	Transport to Erection 70	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.66.5U	1	Set & Align 70	04/14/95.10:00A	04/14/95.11:00A	
1.1.1.66.5V	1	Set Clean Room, Purge & Fit 70	04/14/95.11:00A	04/14/95.12:00P	
1.1.1.66.5W	2	Weld Joint 70	04/14/95.01:00P	04/14/95.03:00P	
1.1.1.66.5X	2	Leak Test Joint 70	04/14/95.03:00P	04/14/95.05:00P	
1.1.1.66.5Y	2	Install Tube Supports 70	04/14/95.03:00P	04/14/95.05:00P	
1.1.1.66.5Z	2	Remove Equip'mt, Clean & Cap 70	04/17/95.08:00A	04/17/95.10:00A	
1.1.1.66.B1A	1	Unload,Rec/Insp Tube B66	03/14/95.08:00A	03/14/95.09:00A	
1.1.1.66.B1B	1	Move to Stiff Fit Up Stat. B66	03/14/95.09:00A	03/14/95.10:00A	
1.1.1.66.B1C	1	Set-up & Purge B66	03/14/95.10:00A	03/14/95.11:00A	
1.1.1.66.B1D	2	Fit Stiffeners B66	03/14/95.11:00A	03/14/95.02:00P	
1.1.1.66.B1E	4	Weld Stiffeners B66	03/14/95.02:00P	03/15/95.09:00A	
1.1.1.66.B1F	1	Move to Exp.Bellows Stat. B66	03/15/95.09:00A	03/15/95.10:00A	
1.1.1.66.B1G	3	Fit,Purge,Weld Exp. Bellows B66	03/15/95.10:00A	03/15/95.02:00P	
1.1.1.66.B1H	1	Inspect, Install End Caps B66	03/15/95.02:00P	03/15/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.66.B1J	1	Move to Test Area B66	03/15/95.03:00P	03/15/95.04:00P	
1.1.1.66.B1K	1	Pre-Clean & Black Light B66	03/15/95.04:00P	03/15/95.05:00P	
1.1.1.66.B1L	30	Leak Test B66	03/15/95.05:00P	03/16/95.11:00P	
1.1.1.66.B10	1	Move to Post Test Storage B66	03/17/95.08:00A	03/17/95.09:00A	
1.1.1.66.B1P	1	Clean, Dry & End Cap B66	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.66.B1R	1	Transport to Erection B66	04/04/95.10:00A	04/04/95.11:00A	
1.1.1.66.B1S	1	Set & Align B66	04/04/95.11:00A	04/04/95.12:00P	
1.1.1.66.B1T	1	Set Clean Room, Purge & Fit B66	04/04/95.01:00P	04/04/95.02:00P	
1.1.1.66.B1U	2	Weld Joint B66	04/04/95.02:00P	04/04/95.04:00P	
1.1.1.66.B1V	2	Leak Test Joint B66	04/04/95.04:00P	04/05/95.09:00A	
1.1.1.66.B1W	2	Install Tube Supports B66	04/04/95.04:00P	04/05/95.09:00A	
1.1.1.66.B1X	2	Remove Equip'mt, Clean & Cap B66	04/05/95.09:00A	04/05/95.11:00A	
1.1.1.66.B2A	1	Unload,Rec/Insp Tube B67	03/14/95.09:00A	03/14/95.10:00A	
1.1.1.66.B2B	1	Move to Stiff Fit Up Stat. B67	03/15/95.10:00A	03/15/95.11:00A	
1.1.1.66.B2C	1	Set-up & Purge B67	03/15/95.11:00A	03/15/95.12:00P	
1.1.1.66.B2D	2	Fit Stiffeners B67	03/15/95.01:00P	03/15/95.03:00P	
1.1.1.66.B2E	4	Weld Stiffeners B67	03/15/95.03:00P	03/16/95.10:00A	
1.1.1.66.B2F	1	Move to Exp.Bellows Stat. B67	03/16/95.10:00A	03/16/95.11:00A	
1.1.1.66.B2G	3	Fit,Purge,Weld Exp. Bellows B67	03/16/95.11:00A	03/16/95.03:00P	
1.1.1.66.B2H	1	Inspect, Install End Caps B67	03/16/95.03:00P	03/16/95.04:00P	
1.1.1.66.B2J	1	Move to Test Area B67	03/17/95.09:00A	03/17/95.10:00A	
1.1.1.66.B2K	1	Pre-Clean & Black Light B67	03/17/95.10:00A	03/17/95.11:00A	
1.1.1.66.B2L	30	Leak Test B67	03/17/95.11:00A	03/18/95.05:00P	
1.1.1.66.B20	1	Move to Post Test Storage B67	03/20/95.08:00A	03/20/95.09:00A	
1.1.1.66.B2P	1	Clean, Dry & End Cap B67	03/20/95.09:00A	03/20/95.10:00A	
1.1.1.66.B2R	1	Transport to Erection B67	04/06/95.08:00A	04/06/95.09:00A	
1.1.1.66.B2S	1	Set & Align B67	04/06/95.09:00A	04/06/95.10:00A	
1.1.1.66.B2T	1	Set Clean Room, Purge & Fit B67	04/06/95.10:00A	04/06/95.11:00A	
1.1.1.66.B2U	2	Weld Joint B67	04/06/95.11:00A	04/06/95.02:00P	
1.1.1.66.B2V	2	Leak Test Joint B67	04/06/95.02:00P	04/06/95.04:00P	
1.1.1.66.B2W	2	Install Tube SupportsB67	04/06/95.02:00P	04/06/95.04:00P	
1.1.1.66.B2X	2	Remove Equip'mt, Clean & Cap B67	04/06/95.04:00P	04/07/95.09:00A	
1.1.1.66.B3A	1	Unload,Rec/Insp Tube B68	03/14/95.10:00A	03/14/95.11:00A	
1.1.1.66.B3B	1	Move to Stiff Fit Up Stat. B68	03/16/95.11:00A	03/16/95.12:00P	
1.1.1.66.B3C	1	Set-up & Purge B68	03/16/95.01:00P	03/16/95.02:00P	
1.1.1.66.B3D	2	Fit Stiffeners B68	03/16/95.02:00P	03/16/95.04:00P	
1.1.1.66.B3E	4	Weld Stiffeners B68	03/16/95.04:00P	03/17/95.11:00A	
1.1.1.66.B3F	1	Move to Exp.Bellows Stat. B68	03/17/95.11:00A	03/17/95.12:00P	
1.1.1.66.B3G	3	Fit,Purge,Weld Exp. Bellows B68	03/17/95.01:00P	03/17/95.04:00P	
1.1.1.66.B3H	1	Inspect, Install End Caps B68	03/17/95.04:00P	03/17/95.05:00P	
1.1.1.66.B3J	1	Move to Test Area B68	03/20/95.09:00A	03/20/95.10:00A	
1.1.1.66.B3K	1	Pre-Clean & Black Light B68	03/20/95.10:00A	03/20/95.11:00A	
1.1.1.66.B3L	30	Leak TestB68	03/20/95.11:00A	03/21/95.05:00P	
1.1.1.66.B30	1	Move to Post Test Storage B68	03/22/95.08:00A	03/22/95.09:00A	
1.1.1.66.B3P	1	Clean, Dry & End Cap B68	03/22/95.09:00A	03/22/95.10:00A	
1.1.1.66.B3R	1	Transport to Erection B68	04/07/95.03:00P	04/07/95.04:00P	
1.1.1.66.B3S	1	Set & Align B68	04/07/95.04:00P	04/07/95.05:00P	
1.1.1.66.B3T	1	Set Clean Room, Purge & Fit B68	04/10/95.08:00A	04/10/95.09:00A	
1.1.1.66.B3U	2	Weld Joint B68	04/10/95.09:00A	04/10/95.11:00A	
1.1.1.66.B3V	2	Leak Test Joint B68	04/10/95.11:00A	04/10/95.02:00P	
1.1.1.66.B3W	2	Install Tube Supports B68	04/10/95.11:00A	04/10/95.02:00P	
1.1.1.66.B3X	2	Remove Equip'mt, Clean & Cap B68	04/10/95.02:00P	04/10/95.04:00P	
1.1.1.66.B4A	1	Unload,Rec/Insp Tube B69	03/14/95.11:00A	03/14/95.12:00P	
1.1.1.66.B4B	1	Move to Stiff Fit Up Stat. B69	03/17/95.01:00P	03/17/95.02:00P	
1.1.1.66.B4C	1	Set-up & Purge B69	03/17/95.02:00P	03/17/95.03:00P	
1.1.1.66.B4D	2	Fit Stiffeners B69	03/17/95.03:00P	03/17/95.05:00P	
1.1.1.66.B4E	4	Weld Stiffeners B69	03/20/95.08:00A	03/20/95.12:00P	
1.1.1.66.B4F	1	Move to Exp.Bellows Stat. B69	03/20/95.01:00P	03/20/95.02:00P	
1.1.1.66.B4G	3	Fit,Purge,Weld Exp. Bellows B69	03/20/95.02:00P	03/20/95.05:00P	
1.1.1.66.B4H	1	Inspect, Install End Caps B69	03/21/95.08:00A	03/21/95.09:00A	
1.1.1.66.B4J	1	Move to Test Area B69	03/22/95.09:00A	03/22/95.10:00A	
1.1.1.66.B4K	1	Pre-Clean & Black Light B69	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.66.B4L	30	Leak Test B69	03/22/95.11:00A	03/23/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.66.B4O	1	Move to Post Test Storage B69	03/24/95.08:00A	03/24/95.09:00A	
1.1.1.66.B4P	1	Clean, Dry & End Cap B69	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.66.B4R	1	Transport to Erection B69	04/11/95.01:00P	04/11/95.02:00P	
1.1.1.66.B4S	1	Set & Align B69	04/11/95.02:00P	04/11/95.03:00P	
1.1.1.66.B4T	1	Set Clean Room, Purge & Fit B69	04/11/95.03:00P	04/11/95.04:00P	
1.1.1.66.B4U	2	Weld Joint B69	04/11/95.04:00P	04/12/95.09:00A	
1.1.1.66.B4V	2	Leak Test Joint B69	04/12/95.09:00A	04/12/95.11:00A	
1.1.1.66.B4W	2	Install Tube Supports B69	04/12/95.09:00A	04/12/95.11:00A	
1.1.1.66.B4X	2	Remove Equip'mt, Clean & Cap B69	04/12/95.11:00A	04/12/95.02:00P	
1.1.1.66.B5A	1	Unload,Rec/Insp Tube B70	03/14/95.01:00P	03/14/95.02:00P	
1.1.1.66.B5B	1	Move to Stiff Fit Up Stat. B70	03/20/95.02:00P	03/20/95.03:00P	
1.1.1.66.B5C	1	Set-up & Purge B70	03/20/95.03:00P	03/20/95.04:00P	
1.1.1.66.B5D	2	Fit Stiffeners 70	03/20/95.04:00P	03/21/95.09:00A	
1.1.1.66.B5E	4	Weld Stiffeners B70	03/21/95.09:00A	03/21/95.02:00P	
1.1.1.66.B5F	1	Move to Exp.Bellows Stat. B70	03/22/95.10:00A	03/22/95.11:00A	
1.1.1.66.B5G	3	Fit,Purge,Weld Exp. Bellows B70	03/22/95.11:00A	03/22/95.03:00P	
1.1.1.66.B5H	1	Inspect, Install End Caps B707	03/22/95.03:00P	03/22/95.04:00P	
1.1.1.66.B5J	1	Move to Test Area B70	03/24/95.09:00A	03/24/95.10:00A	
1.1.1.66.B5K	1	Pre-Clean & Black Light B70	03/24/95.10:00A	03/24/95.11:00A	
1.1.1.66.B5L	30	Leak Test B70	03/24/95.11:00A	03/25/95.05:00P	
1.1.1.66.B5O	1	Move to Post Test Storage B70	03/27/95.08:00A	03/27/95.09:00A	
1.1.1.66.B5P	1	Clean, Dry & End Cap B70	03/27/95.09:00A	03/27/95.10:00A	
1.1.1.66.B5R	1	Transport to Erection B70	04/13/95.10:00A	04/13/95.11:00A	
1.1.1.66.B5S	1	Set & Align B70	04/13/95.11:00A	04/13/95.12:00P	
1.1.1.66.B5T	1	Set Clean Room, Purge & Fit B70	04/13/95.01:00P	04/13/95.02:00P	
1.1.1.66.B5U	2	Weld Joint B5	04/13/95.02:00P	04/13/95.04:00P	
1.1.1.66.B5V	2	Leak Test Joint B70	04/13/95.04:00P	04/14/95.09:00A	
1.1.1.66.B5W	2	Install Tube Supports B70	04/13/95.04:00P	04/14/95.09:00A	
1.1.66.B5X	2	Remove Equip'mt, Clean & Cap B70	04/14/95.09:00A	04/14/95.11:00A	
1.1.71	187	Cans 71-75	03/27/95.04:00P	04/28/95.10:00A	
1.1.1.71.1A	1	Unload,Rec/Insp Tube 71	03/28/95.08:00A	03/28/95.09:00A	
1.1.1.71.1B	1	Move to Stiff Fit Up Stat. 71	03/28/95.09:00A	03/28/95.10:00A	
1.1.1.71.1C	1	Set-up & Purge 71	03/28/95.10:00A	03/28/95.11:00A	
1.1.1.71.1D	2	Fit Stiffeners 71	03/28/95.11:00A	03/28/95.02:00P	
1.1.1.71.1E	4	Weld Stiffeners 71	03/28/95.02:00P	03/29/95.09:00A	
1.1.1.71.1F	1	Inspect, Install End Caps 71	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.71.1H	1	Move to Test Area 71	03/29/95.10:00A	03/29/95.11:00A	
1.1.1.71.1I	1	Pre-Clean & Black Light 71	03/29/95.11:00A	03/29/95.12:00P	
1.1.1.71.1J	30	Leak Test 71	03/29/95.12:00P	03/30/95.06:00P	
1.1.1.71.1M	1	Move to Post Test Storage 71	03/31/95.08:00A	03/31/95.09:00A	
1.1.1.71.1N	1	Clean, Dry & End Cap 71	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.71.1P	1	Transport to Erection 71	04/18/95.09:00A	04/18/95.10:00A	
1.1.1.71.1Q	1	Set & Align 71	04/18/95.10:00A	04/18/95.11:00A	
1.1.1.71.1R	1	Set Clean Room, Purge & Fit 71	04/18/95.11:00A	04/18/95.12:00P	
1.1.1.71.1S	2	Weld Joint 71	04/18/95.01:00P	04/18/95.03:00P	
1.1.1.71.1T	2	Leak Test Joint 71	04/18/95.03:00P	04/18/95.05:00P	
1.1.1.71.1U	2	Install Tube Supports 71	04/18/95.03:00P	04/18/95.05:00P	
1.1.1.71.1V	2	Remove Equip'mt, Clean & Cap 71	04/19/95.08:00A	04/19/95.10:00A	
1.1.1.71.2A	1	Unload,Rec. & Inspect 72	03/28/95.09:00A	03/28/95.10:00A	
1.1.1.71.2B	1	Move to Stiff Fit Up Stat. 72	03/29/95.11:00A	03/29/95.12:00P	
1.1.1.71.2C	1	Set-up & Purge 72	03/29/95.01:00P	03/29/95.02:00P	
1.1.1.71.2D	2	Fit Stiffeners 72	03/29/95.02:00P	03/29/95.04:00P	
1.1.1.71.2E	4	Weld Stiffeners 72	03/29/95.04:00P	03/30/95.11:00A	
1.1.1.71.2F	1	Inspect, Install End Caps 72	03/30/95.11:00A	03/30/95.12:00P	
1.1.1.71.2H	1	Move to Test Area 72	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.71.2I	1	Pre-Clean & Black Light 72	03/31/95.10:00A	03/31/95.11:00A	
1.1.1.71.2J	30	Leak Test 72	03/31/95.11:00A	04/01/95.05:00P	
1.1.1.71.2M	1	Move to Post Test Storage 72	04/03/95.08:00A	04/03/95.09:00A	
1.1.1.71.2N	1	Clean, Dry & End Cap 72	04/03/95.09:00A	04/03/95.10:00A	
1.1.1.71.2P	1	Transport to Erection 72	04/19/95.04:00P	04/19/95.05:00P	
1.1.1.71.2Q	1	Set & Align 72	04/20/95.08:00A	04/20/95.09:00A	
1.1.1.71.2R	1	Set Clean Room, Purge & Fit 72	04/20/95.09:00A	04/20/95.10:00A	
1.1.71.2S	2	Weld Joint 72	04/20/95.10:00A	04/20/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.71.2T	2	Leak Test Joint 72	04/20/95.01:00P	04/20/95.03:00P	
1.1.1.71.2U	2	Install Tube Supports 72	04/20/95.01:00P	04/20/95.03:00P	
1.1.1.71.2V	2	Remove Equip'mt, Clean & Cap 72	04/20/95.03:00P	04/20/95.05:00P	
1.1.1.71.3A	1	Unload,Rec/Insp Tube 73	03/28/95.10:00A	03/28/95.11:00A	
1.1.1.71.3B	1	Move to Stiff Fit Up Stat. 73	03/31/95.10:00A	03/31/95.11:00A	
1.1.1.71.3C	1	Set-up & Purge 73	03/31/95.11:00A	03/31/95.12:00P	
1.1.1.71.3D	2	Fit Stiffeners 73	03/31/95.01:00P	03/31/95.03:00P	
1.1.1.71.3E	4	Weld Stiffeners 73	03/31/95.03:00P	04/03/95.10:00A	
1.1.1.71.3F	1	Inspect, Install End Caps 73	04/03/95.10:00A	04/03/95.11:00A	
1.1.1.71.3H	1	Move to Test Area 73	04/03/95.11:00A	04/03/95.12:00P	
1.1.1.71.3I	1	Pre-Clean & Black Light 73	04/03/95.01:00P	04/03/95.02:00P	
1.1.1.71.3J	30	Leak Test 73	04/03/95.02:00P	04/04/95.08:00P	
1.1.1.71.3M	1	Move to Post Test Storage 73	04/05/95.08:00A	04/05/95.09:00A	
1.1.1.71.3N	1	Clean, Dry & End Cap 73	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.71.3P	1	Transport to Erection 73	04/21/95.02:00P	04/21/95.03:00P	
1.1.1.71.3Q	1	Set & Align 73	04/21/95.03:00P	04/21/95.04:00P	
1.1.1.71.3R	1	Set Clean Room, Purge & Fit 73	04/21/95.04:00P	04/21/95.05:00P	
1.1.1.71.3S	2	Weld Joint 73	04/24/95.08:00A	04/24/95.10:00A	
1.1.1.71.3T	2	Leak Test Joint 73	04/24/95.10:00A	04/24/95.12:00P	
1.1.1.71.3U	2	Install Tube Supports 73	04/24/95.10:00A	04/24/95.12:00P	
1.1.1.71.3V	2	Remove Equip'mt, Clean & Cap 73	04/24/95.01:00P	04/24/95.03:00P	
1.1.1.71.4A	1	Unload,Rec/Insp Tube 74	03/28/95.11:00A	03/28/95.12:00P	
1.1.1.71.4B	1	Move to Stiff Fit Up Stat. 74	04/03/95.01:00P	04/03/95.02:00P	
1.1.1.71.4C	1	Set-up & Purge 74	04/03/95.02:00P	04/03/95.03:00P	
1.1.1.71.4D	2	Fit Stiffeners 74	04/03/95.03:00P	04/03/95.05:00P	
1.1.1.71.4E	4	Weld Stiffeners 74	04/04/95.08:00A	04/04/95.12:00P	
1.1.1.71.4F	1	Inspect, Install End Caps 74	04/04/95.01:00P	04/04/95.02:00P	
1.1.1.71.4H	1	Move to Test Area 74	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.71.4I	1	Pre-Clean & Black Light 74	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.71.4J	30	Leak Test 74	04/05/95.11:00A	04/06/95.05:00P	
1.1.1.71.4M	1	Move to Post Test Storage 74	04/07/95.08:00A	04/07/95.09:00A	
1.1.1.71.4N	1	Clean, Dry & End Cap 74	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.71.4P	1	Transport to Erection 74	04/25/95.11:00A	04/25/95.12:00P	
1.1.1.71.4Q	1	Set & Align 74	04/25/95.01:00P	04/25/95.02:00P	
1.1.1.71.4R	1	Set Clean Room, Purge & Fit 74	04/25/95.02:00P	04/25/95.03:00P	
1.1.1.71.4S	2	Weld Joint 74	04/25/95.03:00P	04/25/95.05:00P	
1.1.1.71.4T	2	Leak Test Joint 74	04/26/95.08:00A	04/26/95.10:00A	
1.1.1.71.4U	2	Install Tube Supports 74	04/26/95.08:00A	04/26/95.10:00A	
1.1.1.71.4V	2	Remove Equip'mt, Clean & Cap 74	04/26/95.10:00A	04/26/95.12:00P	
1.1.1.71.5A	1	Unload,Rec/Insp Tube 57	03/28/95.01:00P	03/28/95.02:00P	
1.1.1.71.5B	1	Move to Stiff Fit Up Stat. 75	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.71.5C	1	Set-up & Purge 75	04/05/95.11:00A	04/05/95.12:00P	
1.1.1.71.5D	1	F/W Pump Port Reinf. 75	04/05/95.01:00P	04/05/95.02:00P	
1.1.1.71.5E	2	Fit Stiffeners 75	04/05/95.02:00P	04/05/95.04:00P	
1.1.1.71.5F	4	Weld Stiffeners 75	04/05/95.04:00P	04/06/95.11:00A	
1.1.1.71.5G	1	Move to P.Port Stat. 75	04/06/95.11:00A	04/06/95.12:00P	
1.1.1.71.5H	1	Setup & Bore 10" Inlet 75	04/06/95.01:00P	04/06/95.02:00P	
1.1.1.71.5I	2	Purge/F/W Pump Port 75	04/06/95.02:00P	04/06/95.04:00P	
1.1.1.71.5J	1	Inspect, Install End Caps 75	04/06/95.04:00P	04/06/95.05:00P	
1.1.1.71.5L	1	Move to Test Area 75	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.71.5M	1	Pre-Clean & Black Light 75	04/07/95.10:00A	04/07/95.11:00A	
1.1.1.71.5N	30	Leak Test 75	04/07/95.11:00A	04/08/95.05:00P	
1.1.1.71.5Q	1	Move to Post Test Storage 75	04/10/95.08:00A	04/10/95.09:00A	
1.1.1.71.5R	1	Clean, Dry & End Cap 75	04/10/95.09:00A	04/10/95.10:00A	
1.1.1.71.5T	1	Transport to Erection 75	04/27/95.09:00A	04/27/95.10:00A	
1.1.1.71.5U	1	Set & Align 75	04/27/95.10:00A	04/27/95.11:00A	
1.1.1.71.5V	1	Set Clean Room, Purge & Fit 75	04/27/95.11:00A	04/27/95.12:00P	
1.1.1.71.5W	2	Weld Joint 75	04/27/95.01:00P	04/27/95.03:00P	
1.1.1.71.5X	2	Leak Test Joint 75	04/27/95.03:00P	04/27/95.05:00P	
1.1.1.71.5Y	2	Install Tube Supports 75	04/27/95.03:00P	04/27/95.05:00P	
1.1.1.71.5Z	2	Remove Equip'mt, Clean & Cap 75	04/28/95.08:00A	04/28/95.10:00A	
1.1.1.71.B1A	1	Unload,Rec/Insp Tube B71	03/28/95.08:00A	03/28/95.09:00A	
1.1.1.71.B1B	1	Move to Stiff Fit Up Stat. B71	03/28/95.09:00A	03/28/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.71.B1C	1	Set-up & Purge B71	03/28/95.10:00A	03/28/95.11:00A	
1.1.1.71.B1D	2	Fit Stiffeners B71	03/28/95.11:00A	03/28/95.02:00P	
1.1.1.71.B1E	4	Weld Stiffeners B71	03/28/95.02:00P	03/29/95.09:00A	
1.1.1.71.B1F	1	Move to Exp.Bellows Stat. B71	03/29/95.09:00A	03/29/95.10:00A	
1.1.1.71.B1G	3	Fit,Purge,Weld Exp. Bellows B71	03/29/95.10:00A	03/29/95.02:00P	
1.1.1.71.B1H	1	Inspect, Install End Caps B71	03/29/95.02:00P	03/29/95.03:00P	
1.1.1.71.B1J	1	Move to Test Area B71	03/29/95.03:00P	03/29/95.04:00P	
1.1.1.71.B1K	1	Pre-Clean & Black Light B71	03/29/95.04:00P	03/29/95.05:00P	
1.1.1.71.B1L	30	Leak Test B71	03/29/95.05:00P	03/30/95.11:00P	
1.1.1.71.B1O	1	Move to Post Test Storage B71	03/31/95.08:00A	03/31/95.09:00A	
1.1.1.71.B1P	1	Clean, Dry & End Cap B71	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.71.B1R	1	Transport to Erection B71	04/17/95.10:00A	04/17/95.11:00A	
1.1.1.71.B1S	1	Set & Align B71	04/17/95.11:00A	04/17/95.12:00P	
1.1.1.71.B1T	1	Set Clean Room, Purge & Fit B71	04/17/95.01:00P	04/17/95.02:00P	
1.1.1.71.B1U	2	Weld Joint B71	04/17/95.02:00P	04/17/95.04:00P	
1.1.1.71.B1V	2	Leak Test Joint B71	04/17/95.04:00P	04/18/95.09:00A	
1.1.1.71.B1W	2	Install Tube Supports B71	04/17/95.04:00P	04/18/95.09:00A	
1.1.1.71.B1X	2	Remove Equip'mt, Clean & Cap B71	04/18/95.09:00A	04/18/95.11:00A	
1.1.1.71.B2A	1	Unload,Rec/Insp Tube B72	03/28/95.09:00A	03/28/95.10:00A	
1.1.1.71.B2B	1	Move to Stiff Fit Up Stat. B72	03/29/95.10:00A	03/29/95.11:00A	
1.1.1.71.B2C	1	Set-up & Purge B72	03/29/95.11:00A	03/29/95.12:00P	
1.1.1.71.B2D	2	Fit Stiffeners B72	03/29/95.01:00P	03/29/95.03:00P	
1.1.1.71.B2E	4	Weld Stiffeners B72	03/29/95.03:00P	03/30/95.10:00A	
1.1.1.71.B2F	1	Move to Exp.Bellows Stat. B72	03/30/95.10:00A	03/30/95.11:00A	
1.1.1.71.B2G	3	Fit,Purge,Weld Exp. Bellows B72	03/30/95.11:00A	03/30/95.03:00P	
1.1.1.71.B2H	1	Inspect, Install End Caps B72	03/30/95.03:00P	03/30/95.04:00P	
1.1.1.71.B2J	1	Move to Test Area B72	03/31/95.09:00A	03/31/95.10:00A	
1.1.1.71.B2K	1	Pre-Clean & Black Light B72	03/31/95.10:00A	03/31/95.11:00A	
1.1.1.71.B2L	30	Leak Test B72	03/31/95.11:00A	04/01/95.05:00P	
1.1.1.71.B2O	1	Move to Post Test Storage B72	04/03/95.08:00A	04/03/95.09:00A	
1.1.1.71.B2P	1	Clean, Dry & End Cap B72	04/03/95.09:00A	04/03/95.10:00A	
1.1.1.71.B2R	1	Transport to Erection B72	04/19/95.08:00A	04/19/95.09:00A	
1.1.1.71.B2S	1	Set & Align B72	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.71.B2T	1	Set Clean Room, Purge & Fit B72	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.71.B2U	2	Weld Joint B72	04/19/95.11:00A	04/19/95.02:00P	
1.1.1.71.B2V	2	Leak Test Joint B72	04/19/95.02:00P	04/19/95.04:00P	
1.1.1.71.B2W	2	Install Tube Supports B72	04/19/95.02:00P	04/19/95.04:00P	
1.1.1.71.B2X	2	Remove Equip'mt, Clean & Cap B72	04/19/95.04:00P	04/20/95.09:00A	
1.1.1.71.B3A	1	Unload,Rec/Insp Tube B73	03/28/95.10:00A	03/28/95.11:00A	
1.1.1.71.B3B	1	Move to Stiff Fit Up Stat. B73	03/30/95.11:00A	03/30/95.12:00P	
1.1.1.71.B3C	1	Set-up & Purge B73	03/30/95.01:00P	03/30/95.02:00P	
1.1.1.71.B3D	2	Fit Stiffeners B73	03/30/95.02:00P	03/30/95.04:00P	
1.1.1.71.B3E	4	Weld Stiffeners B73	03/30/95.04:00P	03/31/95.11:00A	
1.1.1.71.B3F	1	Move to Exp.Bellows Stat. B73	03/31/95.11:00A	03/31/95.12:00P	
1.1.1.71.B3G	3	Fit,Purge,Weld Exp. Bellows B73	03/31/95.01:00P	03/31/95.04:00P	
1.1.1.71.B3H	1	Inspect, Install End Caps B73	03/31/95.04:00P	03/31/95.05:00P	
1.1.1.71.B3J	1	Move to Test Area B73	04/03/95.09:00A	04/03/95.10:00A	
1.1.1.71.B3K	1	Pre-Clean & Black Light B3	04/03/95.10:00A	04/03/95.11:00A	
1.1.1.71.B3L	30	Leak Test B3	04/03/95.11:00A	04/04/95.05:00P	
1.1.1.71.B3O	1	Move to Post Test Storage B73	04/05/95.08:00A	04/05/95.09:00A	
1.1.1.71.B3P	1	Clean, Dry & End Cap B73	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.71.B3R	1	Transport to Erection B73	04/20/95.03:00P	04/20/95.04:00P	
1.1.1.71.B3S	1	Set & Align B73	04/20/95.04:00P	04/20/95.05:00P	
1.1.1.71.B3T	1	Set Clean Room, Purge & Fit B73	04/21/95.08:00A	04/21/95.09:00A	
1.1.1.71.B3U	2	Weld Joint B73	04/21/95.09:00A	04/21/95.11:00A	
1.1.1.71.B3V	2	Leak Test Joint B73	04/21/95.11:00A	04/21/95.02:00P	
1.1.1.71.B3W	2	Install Tube Supports B73	04/21/95.11:00A	04/21/95.02:00P	
1.1.1.71.B3X	2	Remove Equip'mt, Clean & Cap B73	04/21/95.02:00P	04/21/95.04:00P	
1.1.1.71.B4A	1	Unload,Rec/Insp Tube B74	03/28/95.11:00A	03/28/95.12:00P	
1.1.1.71.B4B	1	Move to Stiff Fit Up Stat. B74	03/31/95.01:00P	03/31/95.02:00P	
1.1.1.71.B4C	1	Set-up & Purge B74	03/31/95.02:00P	03/31/95.03:00P	
1.1.1.71.B4D	2	Fit Stiffeners B74	03/31/95.03:00P	03/31/95.05:00P	
1.1.1.71.B4E	4	Weld Stiffeners B74	04/03/95.08:00A	04/03/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.71.B4F	1	Move to Exp.Bellows Stat. B74	04/03/95.01:00P	04/03/95.02:00P	
1.1.1.71.B4G	3	Fit,Purge,Weld Exp. Bellows B74	04/03/95.02:00P	04/03/95.05:00P	
1.1.1.71.B4H	1	Inspect, Install End Caps B74	04/04/95.08:00A	04/04/95.09:00A	
1.1.1.71.B4J	1	Move to Test Area B74	04/05/95.09:00A	04/05/95.10:00A	
1.1.1.71.B4K	1	Pre-Clean & Black Light B74	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.71.B4L	30	Leak Test B74	04/05/95.11:00A	04/06/95.05:00P	
1.1.1.71.B4O	1	Move to Post Test Storage B74	04/07/95.08:00A	04/07/95.09:00A	
1.1.1.71.B4P	1	Clean, Dry & End Cap B74	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.71.B4R	1	Transport to Erection B74	04/24/95.01:00P	04/24/95.02:00P	
1.1.1.71.B4S	1	Set & Align B74	04/24/95.02:00P	04/24/95.03:00P	
1.1.1.71.B4T	1	Set Clean Room, Purge & Fit B74	04/24/95.03:00P	04/24/95.04:00P	
1.1.1.71.B4U	2	Weld Joint B74	04/24/95.04:00P	04/25/95.09:00A	
1.1.1.71.B4V	2	Leak Test Joint B74	04/25/95.09:00A	04/25/95.11:00A	
1.1.1.71.B4W	2	Install Tube Supports B74	04/25/95.09:00A	04/25/95.11:00A	
1.1.1.71.B4X	2	Remove Equip'mt, Clean & Cap B74	04/25/95.11:00A	04/25/95.02:00P	
1.1.1.71.B5A	1	Unload,Rec/Insp Tube B75	03/28/95.01:00P	03/28/95.02:00P	
1.1.1.71.B5B	1	Move to Stiff Fit Up Stat. B75	04/03/95.02:00P	04/03/95.03:00P	
1.1.1.71.B5C	1	Set-up & Purge B75	04/03/95.03:00P	04/03/95.04:00P	
1.1.1.71.B5D	2	Fit Stiffeners B75	04/03/95.04:00P	04/04/95.09:00A	
1.1.1.71.B5E	4	Weld Stiffeners B75	04/04/95.09:00A	04/04/95.02:00P	
1.1.1.71.B5F	1	Move to Exp.Bellows Stat. B75	04/05/95.10:00A	04/05/95.11:00A	
1.1.1.71.B5G	3	Fit,Purge,Weld Exp. Bellows B75	04/05/95.11:00A	04/05/95.03:00P	
1.1.1.71.B5H	1	Inspect, Install End Caps B75	04/05/95.03:00P	04/05/95.04:00P	
1.1.1.71.B5J	1	Move to Test Area B75	04/07/95.09:00A	04/07/95.10:00A	
1.1.1.71.B5K	1	Pre-Clean & Black Light B75	04/07/95.10:00A	04/07/95.11:00A	
1.1.1.71.B5L	30	Leak Test B75	04/07/95.11:00A	04/08/95.05:00P	
1.1.1.71.B5O	1	Move to Post Test Storage B75	04/10/95.08:00A	04/10/95.09:00A	
1.1.1.71.B5P	1	Clean, Dry & End Cap B75	04/10/95.09:00A	04/10/95.10:00A	
1.1.1.71.B5R	1	Transport to Erection B75	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.71.B5S	1	Set & Align B75	04/26/95.11:00A	04/26/95.12:00P	
1.1.1.71.B5T	1	Set Clean Room, Purge & Fit B75	04/26/95.01:00P	04/26/95.02:00P	
1.1.1.71.B5U	2	Weld Joint B75	04/26/95.02:00P	04/26/95.04:00P	
1.1.1.71.B5V	2	Leak Test Joint B75	04/26/95.04:00P	04/27/95.09:00A	
1.1.1.71.B5W	2	Install Tube Supports B75	04/26/95.04:00P	04/27/95.09:00A	
1.1.1.71.B5X	2	Remove Equip'mt, Clean & Cap B75	04/27/95.09:00A	04/27/95.11:00A	
1.1.1.76	179	Cans 76-80	04/10/95.04:00P	05/11/95.10:00A	
1.1.1.76.1A	1	Unload,Rec/Insp Tube 76	04/11/95.08:00A	04/11/95.09:00A	
1.1.1.76.1B	1	Move to Stiff Fit Up Stat. 76	04/11/95.09:00A	04/11/95.10:00A	
1.1.1.76.1C	1	Set-up & Purge 76	04/11/95.10:00A	04/11/95.11:00A	
1.1.1.76.1D	2	Fit Stiffeners 76	04/11/95.11:00A	04/11/95.02:00P	
1.1.1.76.1E	4	Weld Stiffeners 76	04/11/95.02:00P	04/12/95.09:00A	
1.1.1.76.1F	1	Inspect, Install End Caps 76	04/12/95.09:00A	04/12/95.10:00A	
1.1.1.76.1H	1	Move to Test Area 76	04/12/95.10:00A	04/12/95.11:00A	
1.1.1.76.1I	1	Pre-Clean & Black Light 76	04/12/95.11:00A	04/12/95.12:00P	
1.1.1.76.1J	30	Leak Test 76	04/12/95.12:00P	04/13/95.06:00P	
1.1.1.76.1M	1	Move to Post Test Storage 76	04/14/95.08:00A	04/14/95.09:00A	
1.1.1.76.1N	1	Clean, Dry & End Cap 76	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.76.1P	1	Transport to Erection 76	05/01/95.09:00A	05/01/95.10:00A	
1.1.1.76.1Q	1	Set & Align 76	05/01/95.10:00A	05/01/95.11:00A	
1.1.1.76.1R	1	Set Clean Room, Purge & Fit 76	05/01/95.11:00A	05/01/95.12:00P	
1.1.1.76.1S	2	Weld Joint 76	05/01/95.01:00P	05/01/95.03:00P	
1.1.1.76.1T	2	Leak Test Joint 76	05/01/95.03:00P	05/01/95.05:00P	
1.1.1.76.1U	2	Install Tube Supports 76	05/01/95.03:00P	05/01/95.05:00P	
1.1.1.76.1V	2	Remove Equip'mt, Clean & Cap 76	05/02/95.08:00A	05/02/95.10:00A	
1.1.1.76.2A	1	Unload,Rec. & Insp 77	04/11/95.09:00A	04/11/95.10:00A	
1.1.1.76.2B	1	Move to Stiff Fit Up Stat. 77	04/12/95.11:00A	04/12/95.12:00P	
1.1.1.76.2C	1	Set-up & Purge 77	04/12/95.01:00P	04/12/95.02:00P	
1.1.1.76.2D	2	Fit Stiffeners 77	04/12/95.02:00P	04/12/95.04:00P	
1.1.1.76.2E	4	Weld Stiffeners 77	04/12/95.04:00P	04/13/95.11:00A	
1.1.1.76.2F	1	Inspect, Install End Caps 77	04/13/95.11:00A	04/13/95.12:00P	
1.1.1.76.2H	1	Move to Test Area 77	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.76.2I	1	Pre-Clean & Black Light 77	04/14/95.10:00A	04/14/95.11:00A	
1.1.1.76.2J	30	Leak Test 77	04/14/95.11:00A	04/15/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.76.2M	1	Move to Post Test Storage 77	04/17/95.08:00A	04/17/95.09:00A	
1.1.1.76.2N	1	Clean, Dry & End Cap 77	04/17/95.09:00A	04/17/95.10:00A	
1.1.1.76.2P	1	Transport to Erection 77	05/02/95.04:00P	05/02/95.05:00P	
1.1.1.76.2Q	1	Set & Align 77	05/03/95.08:00A	05/03/95.09:00A	
1.1.1.76.2R	1	Set Clean Room, Purge & Fit 77	05/03/95.09:00A	05/03/95.10:00A	
1.1.1.76.2S	2	Weld Joint 77	05/03/95.10:00A	05/03/95.12:00P	
1.1.1.76.2T	2	Leak Test Joint 77	05/03/95.01:00P	05/03/95.03:00P	
1.1.1.76.2U	2	Install Tube Supports 77	05/03/95.01:00P	05/03/95.03:00P	
1.1.1.76.2V	2	Remove Equip'mt, Clean & Cap 77	05/03/95.03:00P	05/03/95.05:00P	
1.1.1.76.3A	1	Unload,Rec/Insp Tube 78	04/11/95.10:00A	04/11/95.11:00A	
1.1.1.76.3B	1	Move to Stiff Fit Up Stat. 78	04/14/95.10:00A	04/14/95.11:00A	
1.1.1.76.3C	1	Set-up & Purge 78	04/14/95.11:00A	04/14/95.12:00P	
1.1.1.76.3D	2	Fit Stiffeners 78	04/14/95.01:00P	04/14/95.03:00P	
1.1.1.76.3E	4	Weld Stiffeners 78	04/14/95.03:00P	04/17/95.10:00A	
1.1.1.76.3F	1	Inspect, Install End Caps 78	04/17/95.10:00A	04/17/95.11:00A	
1.1.1.76.3H	1	Move to Test Area 78	04/17/95.11:00A	04/17/95.12:00P	
1.1.1.76.3I	1	Pre-Clean & Black Light 78	04/17/95.01:00P	04/17/95.02:00P	
1.1.1.76.3J	30	Leak Test 787	04/17/95.02:00P	04/18/95.08:00P	
1.1.1.76.3M	1	Move to Post Test Storage 78	04/19/95.08:00A	04/19/95.09:00A	
1.1.1.76.3N	1	Clean, Dry & End Cap 78	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.76.3P	1	Transport to Erection 78	05/04/95.02:00P	05/04/95.03:00P	
1.1.1.76.3Q	1	Set & Align 78	05/04/95.03:00P	05/04/95.04:00P	
1.1.1.76.3R	1	Set Clean Room, Purge & Fit 78	05/04/95.04:00P	05/04/95.05:00P	
1.1.1.76.3S	2	Weld Joint 78	05/05/95.08:00A	05/05/95.10:00A	
1.1.1.76.3T	2	Leak Test Joint 78	05/05/95.10:00A	05/05/95.12:00P	
1.1.1.76.3U	2	Install Tube Supports 78	05/05/95.10:00A	05/05/95.12:00P	
1.1.1.76.3V	2	Remove Equip'mt, Clean & Cap 78	05/05/95.01:00P	05/05/95.03:00P	
1.1.1.76.4A	1	Unload,Rec/Insp Tube 79	04/11/95.11:00A	04/11/95.12:00P	
1.1.1.76.4B	1	Move to Stiff Fit Up Stat. 79	04/17/95.01:00P	04/17/95.02:00P	
1.1.1.76.4C	1	Set-up & Purge 79	04/17/95.02:00P	04/17/95.03:00P	
1.1.1.76.4D	2	Fit Stiffeners 79	04/17/95.03:00P	04/17/95.05:00P	
1.1.1.76.4E	4	Weld Stiffeners 79	04/18/95.08:00A	04/18/95.12:00P	
1.1.1.76.4F	1	Inspect, Install End Caps 79	04/18/95.01:00P	04/18/95.02:00P	
1.1.1.76.4H	1	Move to Test Area 79	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.76.4I	1	Pre-Clean & Black Light 79	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.76.4J	30	Leak Test 79	04/19/95.11:00A	04/20/95.05:00P	
1.1.1.76.4M	1	Move to Post Test Storage 79	04/21/95.08:00A	04/21/95.09:00A	
1.1.1.76.4N	1	Clean, Dry & End Cap 79	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.76.4P	1	Transport to Erection 79	05/08/95.11:00A	05/08/95.12:00P	
1.1.1.76.4Q	1	Set & Align 79	05/08/95.01:00P	05/08/95.02:00P	
1.1.1.76.4R	1	Set Clean Room, Purge & Fit 79	05/08/95.02:00P	05/08/95.03:00P	
1.1.1.76.4S	2	Weld Joint 79	05/08/95.03:00P	05/08/95.05:00P	
1.1.1.76.4T	2	Leak Test Joint 79	05/09/95.08:00A	05/09/95.10:00A	
1.1.1.76.4U	2	Install Tube Supports 79	05/09/95.08:00A	05/09/95.10:00A	
1.1.1.76.4V	2	Remove Equip'mt, Clean & Cap 79	05/09/95.10:00A	05/09/95.12:00P	
1.1.1.76.5A	1	Unload,Rec/Insp Tube 79	04/11/95.01:00P	04/11/95.02:00P	
1.1.1.76.5B	1	Move to Stiff Fit Up Stat. 79	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.76.5C	1	Set-up & Purge 80	04/19/95.11:00A	04/19/95.12:00P	
1.1.1.76.5D	1	F/W Pump Port Reinf. 80	04/19/95.01:00P	04/19/95.02:00P	
1.1.1.76.5E	2	Fit Stiffeners80	04/19/95.02:00P	04/19/95.04:00P	
1.1.1.76.5F	4	Weld Stiffeners 80	04/19/95.04:00P	04/20/95.11:00A	
1.1.1.76.5G	1	Move to P.Port Stat. 80	04/20/95.11:00A	04/20/95.12:00P	
1.1.1.76.5H	1	Setup & Bore 10" Inlet 80	04/20/95.01:00P	04/20/95.02:00P	
1.1.1.76.5I	2	Purge/F/W Pump Port 80	04/20/95.02:00P	04/20/95.04:00P	
1.1.1.76.5J	1	Inspect, Install End Caps 80	04/20/95.04:00P	04/20/95.05:00P	
1.1.1.76.5L	1	Move to Test Area 80	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.76.5M	1	Pre-Clean & Black Light 80	04/21/95.10:00A	04/21/95.11:00A	
1.1.1.76.5N	30	Leak Test 80	04/21/95.11:00A	04/22/95.05:00P	
1.1.1.76.5Q	1	Move to Post Test Storage 80	04/24/95.08:00A	04/24/95.09:00A	
1.1.1.76.5R	1	Clean, Dry & End Cap 80	04/24/95.09:00A	04/24/95.10:00A	
1.1.1.76.5T	1	Transport to Erection 80	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.76.5U	1	Set & Align 80	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.76.5V	1	Set Clean Room, Purge & Fit 80	05/10/95.11:00A	05/10/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.76.5W	2	Weld Joint 80	05/10/95.01:00P	05/10/95.03:00P	
1.1.1.76.5X	2	Leak Test Joint 80	05/10/95.03:00P	05/10/95.05:00P	
1.1.1.76.5Y	2	Install Tube Supports 80	05/10/95.03:00P	05/10/95.05:00P	
1.1.1.76.5Z	2	Remove Equip'mt, Clean & Cap 80	05/11/95.08:00A	05/11/95.10:00A	
1.1.1.76.B1A	1	Unload,Rec/Insp Tube B76	04/11/95.08:00A	04/11/95.09:00A	
1.1.1.76.B1B	1	Move to Stiff Fit Up Stat. B76	04/11/95.09:00A	04/11/95.10:00A	
1.1.1.76.B1C	1	Set-up & Purge B76	04/11/95.10:00A	04/11/95.11:00A	
1.1.1.76.B1D	2	Fit Stiffeners B76	04/11/95.11:00A	04/11/95.02:00P	
1.1.1.76.B1E	4	Weld Stiffeners B76	04/11/95.02:00P	04/12/95.09:00A	
1.1.1.76.B1F	1	Move to Exp.Bellows Stat. B76	04/12/95.09:00A	04/12/95.10:00A	
1.1.1.76.B1G	3	Fit,Purge,Weld Exp. Bellows B76	04/12/95.10:00A	04/12/95.02:00P	
1.1.1.76.B1H	1	Inspect, Install End Caps B76	04/12/95.02:00P	04/12/95.03:00P	
1.1.1.76.B1J	1	Move to Test Area B76	04/12/95.03:00P	04/12/95.04:00P	
1.1.1.76.B1K	1	Pre-Clean & Black Light B76	04/12/95.04:00P	04/12/95.05:00P	
1.1.1.76.B1L	30	Leak Test B76	04/12/95.05:00P	04/13/95.11:00P	
1.1.1.76.B1O	1	Move to Post Test Storage B76	04/14/95.08:00A	04/14/95.09:00A	
1.1.1.76.B1P	1	Clean, Dry & End Cap B76	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.76.B1R	1	Transport to Erection B76	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.76.B1S	1	Set & Align B76	04/28/95.11:00A	04/28/95.12:00P	
1.1.1.76.B1T	1	Set Clean Room, Purge & Fit B76	04/28/95.01:00P	04/28/95.02:00P	
1.1.1.76.B1U	2	Weld Joint B76	04/28/95.02:00P	04/28/95.04:00P	
1.1.1.76.B1V	2	Leak Test Joint B76	04/28/95.04:00P	05/01/95.09:00A	
1.1.1.76.B1W	2	Install Tube Supports B76	04/28/95.04:00P	05/01/95.09:00A	
1.1.1.76.B1X	2	Remove Equip'mt, Clean & Cap B76	05/01/95.09:00A	05/01/95.11:00A	
1.1.1.76.B2A	1	Unload,Rec/Insp Tube B77	04/11/95.09:00A	04/11/95.10:00A	
1.1.1.76.B2B	1	Move to Stiff Fit Up Stat. B77	04/12/95.10:00A	04/12/95.11:00A	
1.1.1.76.B2C	1	Set-up & Purge B77	04/12/95.11:00A	04/12/95.12:00P	
1.1.1.76.B2D	2	Fit Stiffeners B77	04/12/95.01:00P	04/12/95.03:00P	
1.1.1.76.B2E	4	Weld Stiffeners B77	04/12/95.03:00P	04/13/95.10:00A	
1.1.1.76.B2F	1	Move to Exp.Bellows Stat. B77	04/13/95.10:00A	04/13/95.11:00A	
1.1.1.76.B2G	3	Fit,Purge,Weld Exp. Bellows B77	04/13/95.11:00A	04/13/95.03:00P	
1.1.1.76.B2H	1	Inspect, Install End Caps B77	04/13/95.03:00P	04/13/95.04:00P	
1.1.1.76.B2J	1	Move to Test Area B77	04/14/95.09:00A	04/14/95.10:00A	
1.1.1.76.B2K	1	Pre-Clean & Black Light B77	04/14/95.10:00A	04/14/95.11:00A	
1.1.1.76.B2L	30	Leak Test B77	04/14/95.11:00A	04/15/95.05:00P	
1.1.1.76.B2O	1	Move to Post Test Storage B77	04/17/95.08:00A	04/17/95.09:00A	
1.1.1.76.B2P	1	Clean, Dry & End Cap B77	04/17/95.09:00A	04/17/95.10:00A	
1.1.1.76.B2R	1	Transport to Erection B77	05/02/95.08:00A	05/02/95.09:00A	
1.1.1.76.B2S	1	Set & Align B77	05/02/95.09:00A	05/02/95.10:00A	
1.1.1.76.B2T	1	Set Clean Room, Purge & Fit B77	05/02/95.10:00A	05/02/95.11:00A	
1.1.1.76.B2U	2	Weld Joint B77	05/02/95.11:00A	05/02/95.02:00P	
1.1.1.76.B2V	2	Leak Test Joint B77	05/02/95.02:00P	05/02/95.04:00P	
1.1.1.76.B2W	2	Install Tube Supports B77	05/02/95.02:00P	05/02/95.04:00P	
1.1.1.76.B2X	2	Remove Equip'mt, Clean & Cap B77	05/02/95.04:00P	05/03/95.09:00A	
1.1.1.76.B3A	1	Unload,Rec/Insp Tube B78	04/11/95.10:00A	04/11/95.11:00A	
1.1.1.76.B3B	1	Move to Stiff Fit Up Stat. B78	04/13/95.11:00A	04/13/95.12:00P	
1.1.1.76.B3C	1	Set-up & Purge B78	04/13/95.01:00P	04/13/95.02:00P	
1.1.1.76.B3D	2	Fit Stiffeners B3	04/13/95.02:00P	04/13/95.04:00P	
1.1.1.76.B3E	4	Weld Stiffeners B3	04/13/95.04:00P	04/14/95.11:00A	
1.1.1.76.B3F	1	Move to Exp.Bellows Stat. B78	04/14/95.11:00A	04/14/95.12:00P	
1.1.1.76.B3G	3	Fit,Purge,Weld Exp. Bellows B78	04/14/95.01:00P	04/14/95.04:00P	
1.1.1.76.B3H	1	Inspect, Install End Caps B78	04/14/95.04:00P	04/14/95.05:00P	
1.1.1.76.B3J	1	Move to Test Area B78	04/17/95.09:00A	04/17/95.10:00A	
1.1.1.76.B3K	1	Pre-Clean & Black Light B78	04/17/95.10:00A	04/17/95.11:00A	
1.1.1.76.B3L	30	Leak Test B78	04/17/95.11:00A	04/18/95.05:00P	
1.1.1.76.B3O	1	Move to Post Test Storage B78	04/19/95.08:00A	04/19/95.09:00A	
1.1.1.76.B3P	1	Clean, Dry & End Cap B78	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.76.B3R	1	Transport to Erection B78	05/03/95.03:00P	05/03/95.04:00P	
1.1.1.76.B3S	1	Set & Align B78	05/03/95.04:00P	05/03/95.05:00P	
1.1.1.76.B3T	1	Set Clean Room, Purge & Fit B78	05/04/95.08:00A	05/04/95.09:00A	
1.1.1.76.B3U	2	Weld Joint B78	05/04/95.09:00A	05/04/95.11:00A	
1.1.1.76.B3V	2	Leak Test Joint B78	05/04/95.11:00A	05/04/95.02:00P	
1.1.1.76.B3W	2	Install Tube Supports B78	05/04/95.11:00A	05/04/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.76.B3X	2	Remove Equip'mt, Clean & Cap B78	05/04/95.02:00P	05/04/95.04:00P	
1.1.1.76.B4A	1	Unload,Rec/Insp Tube B79	04/11/95.11:00A	04/11/95.12:00P	
1.1.1.76.B4B	1	Move to Stiff Fit Up Stat. B79	04/14/95.01:00P	04/14/95.02:00P	
1.1.1.76.B4C	1	Set-up & Purge B79	04/14/95.02:00P	04/14/95.03:00P	
1.1.1.76.B4D	2	Fit Stiffeners B79	04/14/95.03:00P	04/14/95.05:00P	
1.1.1.76.B4E	4	Weld Stiffeners B79	04/17/95.08:00A	04/17/95.12:00P	
1.1.1.76.B4F	1	Move to Exp.Bellows Stat. B79	04/17/95.01:00P	04/17/95.02:00P	
1.1.1.76.B4G	3	Fit,Purge,Weld Exp. Bellows B79	04/17/95.02:00P	04/17/95.05:00P	
1.1.1.76.B4H	1	Inspect, Install End Caps B79	04/18/95.08:00A	04/18/95.09:00A	
1.1.1.76.B4J	1	Move to Test Area B79	04/19/95.09:00A	04/19/95.10:00A	
1.1.1.76.B4K	1	Pre-Clean & Black Light B79	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.76.B4L	30	Leak Test B79	04/19/95.11:00A	04/20/95.05:00P	
1.1.1.76.B4O	1	Move to Post Test Storage B79	04/21/95.08:00A	04/21/95.09:00A	
1.1.1.76.B4P	1	Clean, Dry & End Cap B79	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.76.B4R	1	Transport to Erection B79	05/05/95.01:00P	05/05/95.02:00P	
1.1.1.76.B4S	1	Set & Align B4	05/05/95.02:00P	05/05/95.03:00P	
1.1.1.76.B4T	1	Set Clean Room, Purge & Fit B79	05/05/95.03:00P	05/05/95.04:00P	
1.1.1.76.B4U	2	Weld Joint B79	05/05/95.04:00P	05/08/95.09:00A	
1.1.1.76.B4V	2	Leak Test Joint B79	05/08/95.09:00A	05/08/95.11:00A	
1.1.1.76.B4W	2	Install Tube Supports B79	05/08/95.09:00A	05/08/95.11:00A	
1.1.1.76.B4X	2	Remove Equip'mt, Clean & Cap B79	05/08/95.11:00A	05/08/95.02:00P	
1.1.1.76.B5A	1	Unload,Rec/Insp Tube B80	04/11/95.01:00P	04/11/95.02:00P	
1.1.1.76.B5B	1	Move to Stiff Fit Up Stat. B80	04/17/95.02:00P	04/17/95.03:00P	
1.1.1.76.B5C	1	Set-up & Purge B80	04/17/95.03:00P	04/17/95.04:00P	
1.1.1.76.B5D	2	Fit Stiffeners B80	04/17/95.04:00P	04/18/95.09:00A	
1.1.1.76.B5E	4	Weld Stiffeners B80	04/18/95.09:00A	04/18/95.02:00P	
1.1.1.76.B5F	1	Move to Exp.Bellows Stat. B80	04/19/95.10:00A	04/19/95.11:00A	
1.1.1.76.B5G	3	Fit,Purge,Weld Exp. Bellows B80	04/19/95.11:00A	04/19/95.03:00P	
1.1.1.76.B5H	1	Inspect, Install End Caps B80	04/19/95.03:00P	04/19/95.04:00P	
1.1.1.76.B5J	1	Move to Test Area B80	04/21/95.09:00A	04/21/95.10:00A	
1.1.1.76.B5K	1	Pre-Clean & Black Light B80	04/21/95.10:00A	04/21/95.11:00A	
1.1.1.76.B5L	30	Leak Test B80	04/21/95.11:00A	04/22/95.05:00P	
1.1.1.76.B5O	1	Move to Post Test Storage B80	04/24/95.08:00A	04/24/95.09:00A	
1.1.1.76.B5P	1	Clean, Dry & End Cap B80	04/24/95.09:00A	04/24/95.10:00A	
1.1.1.76.B5R	1	Transport to Erection B80	05/09/95.10:00A	05/09/95.11:00A	
1.1.1.76.B5S	1	Set & Align B80	05/09/95.11:00A	05/09/95.12:00P	
1.1.1.76.B5T	1	Set Clean Room, Purge & Fit B80	05/09/95.01:00P	05/09/95.02:00P	
1.1.1.76.B5U	2	Weld Joint B80	05/09/95.02:00P	05/09/95.04:00P	
1.1.1.76.B5V	2	Leak Test Joint B80	05/09/95.04:00P	05/10/95.09:00A	
1.1.1.76.B5W	2	Install Tube Supports B80	05/09/95.04:00P	05/10/95.09:00A	
1.1.1.76.B5X	2	Remove Equip'mt, Clean & Cap B80	05/10/95.09:00A	05/10/95.11:00A	
1.1.1.81	171	Cans 81-85	04/24/95.04:00P	05/24/95.10:00A	
1.1.1.81.1A	1	Unload,Rec/Insp Tube 81	04/25/95.08:00A	04/25/95.09:00A	
1.1.1.81.1B	1	Move to Stiff Fit Up Stat. 81	04/25/95.09:00A	04/25/95.10:00A	
1.1.1.81.1C	1	Set-up & Purge 81	04/25/95.10:00A	04/25/95.11:00A	
1.1.1.81.1D	2	Fit Stiffeners 81	04/25/95.11:00A	04/25/95.02:00P	
1.1.1.81.1E	4	Weld Stiffeners 81	04/25/95.02:00P	04/26/95.09:00A	
1.1.1.81.1F	1	Inspect, Install End Caps 81	04/26/95.09:00A	04/26/95.10:00A	
1.1.1.81.1H	1	Move to Test Area 81	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.81.1I	1	Pre-Clean & Black Light 81	04/26/95.11:00A	04/26/95.12:00P	
1.1.1.81.1J	30	Leak Test 81	04/26/95.12:00P	04/27/95.06:00P	
1.1.1.81.1M	1	Move to Post Test Storage 81	04/28/95.08:00A	04/28/95.09:00A	
1.1.1.81.1N	1	Clean, Dry & End Cap 81	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.81.1P	1	Transport to Erection 81	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.81.1Q	1	Set & Align 81	05/12/95.10:00A	05/12/95.11:00A	
1.1.1.81.1R	1	Set Clean Room, Purge & Fit 81	05/12/95.11:00A	05/12/95.12:00P	
1.1.1.81.1S	2	Weld Joint 81	05/12/95.01:00P	05/12/95.03:00P	
1.1.1.81.1T	2	Leak Test Joint 81	05/12/95.03:00P	05/12/95.05:00P	
1.1.1.81.1U	2	Install Tube Supports 81	05/12/95.03:00P	05/12/95.05:00P	
1.1.1.81.1V	2	Remove Equip'mt, Clean & Cap 81	05/15/95.08:00A	05/15/95.10:00A	
1.1.1.81.2A	1	Unload,Rec. & Inspect 82	04/25/95.09:00A	04/25/95.10:00A	
1.1.1.81.2B	1	Move to Stiff Fit Up Stat. 82	04/26/95.11:00A	04/26/95.12:00P	
1.1.1.81.2C	1	Set-up & Purge 82	04/26/95.01:00P	04/26/95.02:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.81.2D	2	Fit Stiffeners 82	04/26/95.02:00P	04/26/95.04:00P	
1.1.1.81.2E	4	Weld Stiffeners 82	04/26/95.04:00P	04/27/95.11:00A	
1.1.1.81.2F	1	Inspect, Install End Caps 82	04/27/95.11:00A	04/27/95.12:00P	
1.1.1.81.2H	1	Move to Test Area 82	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.81.2I	1	Pre-Clean & Black Light 82	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.81.2J	30	Leak Test 82	04/28/95.11:00A	04/29/95.05:00P	
1.1.1.81.2M	1	Move to Post Test Storage 82	05/01/95.08:00A	05/01/95.09:00A	
1.1.1.81.2N	1	Clean, Dry & End Cap 82	05/01/95.09:00A	05/01/95.10:00A	
1.1.1.81.2P	1	Transport to Erection 82	05/15/95.04:00P	05/15/95.05:00P	
1.1.1.81.2Q	1	Set & Align 82	05/16/95.08:00A	05/16/95.09:00A	
1.1.1.81.2R	1	Set Clean Room, Purge & Fit 82	05/16/95.09:00A	05/16/95.10:00A	
1.1.1.81.2S	2	Weld Joint 82	05/16/95.10:00A	05/16/95.12:00P	
1.1.1.81.2T	2	Leak Test Joint 82	05/16/95.01:00P	05/16/95.03:00P	
1.1.1.81.2U	2	Install Tube Supports 82	05/16/95.01:00P	05/16/95.03:00P	
1.1.1.81.2V	2	Remove Equip'mt, Clean & Cap 82	05/16/95.03:00P	05/16/95.05:00P	
1.1.1.81.3A	1	Unload,Rec/Insp Tube 83	04/25/95.10:00A	04/25/95.11:00A	
1.1.1.81.3B	1	Move to Stiff Fit Up Stat. 83	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.81.3C	1	Set-up & Purge 83	04/28/95.11:00A	04/28/95.12:00P	
1.1.1.81.3D	2	Fit Stiffeners 83	04/28/95.01:00P	04/28/95.03:00P	
1.1.1.81.3E	4	Weld Stiffeners 83	04/28/95.03:00P	05/01/95.10:00A	
1.1.1.81.3F	1	Inspect, Install End Caps 83	05/01/95.10:00A	05/01/95.11:00A	
1.1.1.81.3H	1	Move to Test Area 83	05/01/95.11:00A	05/01/95.12:00P	
1.1.1.81.3I	1	Pre-Clean & Black Light 83	05/01/95.01:00P	05/01/95.02:00P	
1.1.1.81.3J	30	Leak Test 83	05/01/95.02:00P	05/02/95.08:00P	
1.1.1.81.3M	1	Move to Post Test Storage 83	05/03/95.08:00A	05/03/95.09:00A	
1.1.1.81.3N	1	Clean, Dry & End Cap 83	05/03/95.09:00A	05/03/95.10:00A	
1.1.1.81.3P	1	Transport to Erection 83	05/17/95.02:00P	05/17/95.03:00P	
1.1.1.81.3Q	1	Set & Align 83	05/17/95.03:00P	05/17/95.04:00P	
1.1.1.81.3R	1	Set Clean Room, Purge & Fit 83	05/17/95.04:00P	05/17/95.05:00P	
1.1.1.81.3S	2	Weld Joint 83	05/18/95.08:00A	05/18/95.10:00A	
1.1.1.81.3T	2	Leak Test Joint 83	05/18/95.10:00A	05/18/95.12:00P	
1.1.1.81.3U	2	Install Tube Supports 83	05/18/95.10:00A	05/18/95.12:00P	
1.1.1.81.3V	2	Remove Equip'mt, Clean & Cap 83	05/18/95.01:00P	05/18/95.03:00P	
1.1.1.81.4A	1	Unload,Rec/Insp Tube 84	04/25/95.11:00A	04/25/95.12:00P	
1.1.1.81.4B	1	Move to Stiff Fit Up Stat. 84	05/01/95.01:00P	05/01/95.02:00P	
1.1.1.81.4C	1	Set-up & Purge 84	05/01/95.02:00P	05/01/95.03:00P	
1.1.1.81.4D	2	Fit Stiffeners 84	05/01/95.03:00P	05/01/95.05:00P	
1.1.1.81.4E	4	Weld Stiffeners 84	05/02/95.08:00A	05/02/95.12:00P	
1.1.1.81.4F	1	Inspect, Install End Caps 84	05/02/95.01:00P	05/02/95.02:00P	
1.1.1.81.4H	1	Move to Test Area 84	05/03/95.09:00A	05/03/95.10:00A	
1.1.1.81.4I	1	Pre-Clean & Black Light 84	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.81.4J	30	Leak Test 84	05/03/95.11:00A	05/04/95.05:00P	
1.1.1.81.4M	1	Move to Post Test Storage 84	05/05/95.08:00A	05/05/95.09:00A	
1.1.1.81.4N	1	Clean, Dry & End Cap 84	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.81.4P	1	Transport to Erection 84	05/19/95.11:00A	05/19/95.12:00P	
1.1.1.81.4Q	1	Set & Align 84	05/19/95.01:00P	05/19/95.02:00P	
1.1.1.81.4R	1	Set Clean Room, Purge & Fit 84	05/19/95.02:00P	05/19/95.03:00P	
1.1.1.81.4S	2	Weld Joint 84	05/19/95.03:00P	05/19/95.05:00P	
1.1.1.81.4T	2	Leak Test Joint 84	05/22/95.08:00A	05/22/95.10:00A	
1.1.1.81.4U	2	Install Tube Supports 84	05/22/95.08:00A	05/22/95.10:00A	
1.1.1.81.4V	2	Remove Equip'mt, Clean & Cap 84	05/22/95.10:00A	05/22/95.12:00P	
1.1.1.81.5A	1	Unload,Rec/Insp Tube 85	04/25/95.01:00P	04/25/95.02:00P	
1.1.1.81.5B	1	Move to Stiff Fit Up Stat. 85	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.81.5C	1	Set-up & Purge 85	05/03/95.11:00A	05/03/95.12:00P	
1.1.1.81.5D	1	F/W Pump Port Reinf. 85	05/03/95.01:00P	05/03/95.02:00P	
1.1.1.81.5E	2	Fit Stiffeners 85	05/03/95.02:00P	05/03/95.04:00P	
1.1.1.81.5F	4	Weld Stiffeners 85	05/03/95.04:00P	05/04/95.11:00A	
1.1.1.81.5G	1	Move to P.Port Stat. 85	05/04/95.11:00A	05/04/95.12:00P	
1.1.1.81.5H	1	Setup & Bore 10" Inlet 85	05/04/95.01:00P	05/04/95.02:00P	
1.1.1.81.5I	2	Purge/F/W Pump Port 85	05/04/95.02:00P	05/04/95.04:00P	
1.1.1.81.5J	1	Inspect, Install End Caps 85	05/04/95.04:00P	05/04/95.05:00P	
1.1.1.81.5L	1	Move to Test Area 85	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.81.5M	1	Pre-Clean & Black Light 85	05/05/95.10:00A	05/05/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.81.5N	30	Leak Test 85	05/05/95.11:00A	05/06/95.05:00P	
1.1.1.81.5Q	1	Move to Post Test Storage 85	05/08/95.08:00A	05/08/95.09:00A	
1.1.1.81.5R	1	Clean, Dry & End Cap 85	05/08/95.09:00A	05/08/95.10:00A	
1.1.1.81.5T	1	Transport to Erection 85	05/23/95.09:00A	05/23/95.10:00A	
1.1.1.81.5U	1	Set & Align 85	05/23/95.10:00A	05/23/95.11:00A	
1.1.1.81.5V	1	Set Clean Room, Purge & Fit 85	05/23/95.11:00A	05/23/95.12:00P	
1.1.1.81.5W	2	Weld Joint 85	05/23/95.01:00P	05/23/95.03:00P	
1.1.1.81.5X	2	Leak Test Joint 85	05/23/95.03:00P	05/23/95.05:00P	
1.1.1.81.5Y	2	Install Tube Supports 85	05/23/95.03:00P	05/23/95.05:00P	
1.1.1.81.5Z	2	Remove Equip'mt, Clean & Cap 85	05/24/95.08:00A	05/24/95.10:00A	
1.1.1.81.81A	1	Unload,Rec/Insp Tube B81	04/25/95.08:00A	04/25/95.09:00A	
1.1.1.81.81B	1	Move to Stiff Fit Up Stat. B81	04/25/95.09:00A	04/25/95.10:00A	
1.1.1.81.81C	1	Set-up & Purge B81	04/25/95.10:00A	04/25/95.11:00A	
1.1.1.81.81D	2	Fit Stiffeners B81	04/25/95.11:00A	04/25/95.02:00P	
1.1.1.81.81E	4	Weld Stiffeners B81	04/25/95.02:00P	04/26/95.09:00A	
1.1.1.81.81F	1	Move to Exp.Bellows Stat. B81	04/26/95.09:00A	04/26/95.10:00A	
1.1.1.81.81G	3	Fit,Purge,Weld Exp. Bellows B81	04/26/95.10:00A	04/26/95.02:00P	
1.1.1.81.81H	1	Inspect, Install End Caps B81	04/26/95.02:00P	04/26/95.03:00P	
1.1.1.81.81J	1	Move to Test Area B81	04/26/95.03:00P	04/26/95.04:00P	
1.1.1.81.81K	1	Pre-Clean & Black Light B81	04/26/95.04:00P	04/26/95.05:00P	
1.1.1.81.81L	30	Leak Test B81	04/26/95.05:00P	04/27/95.11:00P	
1.1.1.81.81O	1	Move to Post Test Storage B81	04/28/95.08:00A	04/28/95.09:00A	
1.1.1.81.81P	1	Clean, Dry & End Cap B81	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.81.81R	1	Transport to Erection B81	05/11/95.10:00A	05/11/95.11:00A	
1.1.1.81.81S	1	Set & Align B81	05/11/95.11:00A	05/11/95.12:00P	
1.1.1.81.81T	1	Set Clean Room, Purge & Fit B1	05/11/95.01:00P	05/11/95.02:00P	
1.1.1.81.81U	2	Weld Joint B81	05/11/95.02:00P	05/11/95.04:00P	
1.1.1.81.81V	2	Leak Test Joint B81	05/11/95.04:00P	05/12/95.09:00A	
1.1.1.81.81W	2	Install Tube Supports B81	05/11/95.04:00P	05/12/95.09:00A	
1.1.1.81.81X	2	Remove Equip'mt, Clean & Cap B81	05/12/95.09:00A	05/12/95.11:00A	
1.1.1.81.82A	1	Unload,Rec/Insp Tube B82	04/25/95.09:00A	04/25/95.10:00A	
1.1.1.81.82B	1	Move to Stiff Fit Up Stat. B82	04/26/95.10:00A	04/26/95.11:00A	
1.1.1.81.82C	1	Set-up & Purge B82	04/26/95.11:00A	04/26/95.12:00P	
1.1.1.81.82D	2	Fit Stiffeners B82	04/26/95.01:00P	04/26/95.03:00P	
1.1.1.81.82E	4	Weld Stiffeners B82	04/26/95.03:00P	04/27/95.10:00A	
1.1.1.81.82F	1	Move to Exp.Bellows Stat. B82	04/27/95.10:00A	04/27/95.11:00A	
1.1.1.81.82G	3	Fit,Purge,Weld Exp. Bellows B82	04/27/95.11:00A	04/27/95.03:00P	
1.1.1.81.82H	1	Inspect, Install End Caps B82	04/27/95.03:00P	04/27/95.04:00P	
1.1.1.81.82J	1	Move to Test Area B82	04/28/95.09:00A	04/28/95.10:00A	
1.1.1.81.82K	1	Pre-Clean & Black Light B82	04/28/95.10:00A	04/28/95.11:00A	
1.1.1.81.82L	30	Leak Test B82	04/28/95.11:00A	04/29/95.05:00P	
1.1.1.81.82O	1	Move to Post Test Storage B82	05/01/95.08:00A	05/01/95.09:00A	
1.1.1.81.82P	1	Clean, Dry & End Cap B82	05/01/95.09:00A	05/01/95.10:00A	
1.1.1.81.82R	1	Transport to Erection B82	05/15/95.08:00A	05/15/95.09:00A	
1.1.1.81.82S	1	Set & Align B82	05/15/95.09:00A	05/15/95.10:00A	
1.1.1.81.82T	1	Set Clean Room, Purge & Fit B82	05/15/95.10:00A	05/15/95.11:00A	
1.1.1.81.82U	2	Weld Joint B82	05/15/95.11:00A	05/15/95.02:00P	
1.1.1.81.82V	2	Leak Test Joint B82	05/15/95.02:00P	05/15/95.04:00P	
1.1.1.81.82W	2	Install Tube SupportsB82	05/15/95.02:00P	05/15/95.04:00P	
1.1.1.81.82X	2	Remove Equip'mt, Clean & Cap B82	05/15/95.04:00P	05/16/95.09:00A	
1.1.1.81.83A	1	Unload,Rec/Insp Tube B83	04/25/95.10:00A	04/25/95.11:00A	
1.1.1.81.83B	1	Move to Stiff Fit Up Stat. B83	04/27/95.11:00A	04/27/95.12:00P	
1.1.1.81.83C	1	Set-up & Purge B83	04/27/95.01:00P	04/27/95.02:00P	
1.1.1.81.83D	2	Fit Stiffeners B83	04/27/95.02:00P	04/27/95.04:00P	
1.1.1.81.83E	4	Weld Stiffeners B83	04/27/95.04:00P	04/28/95.11:00A	
1.1.1.81.83F	1	Move to Exp.Bellows Stat. B83	04/28/95.11:00A	04/28/95.12:00P	
1.1.1.81.83G	3	Fit,Purge,Weld Exp. Bellows B83	04/28/95.01:00P	04/28/95.04:00P	
1.1.1.81.83H	1	Inspect, Install End Caps B83	04/28/95.04:00P	04/28/95.05:00P	
1.1.1.81.83J	1	Move to Test Area B83	05/01/95.09:00A	05/01/95.10:00A	
1.1.1.81.83K	1	Pre-Clean & Black Light B83	05/01/95.10:00A	05/01/95.11:00A	
1.1.1.81.83L	30	Leak Test B83	05/01/95.11:00A	05/02/95.05:00P	
1.1.1.81.83O	1	Move to Post Test Storage B83	05/03/95.08:00A	05/03/95.09:00A	
1.1.1.81.83P	1	Clean, Dry & End Cap B83	05/03/95.09:00A	05/03/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.81.B3R	1	Transport to Erection B883	05/16/95.03:00P	05/16/95.04:00P	
1.1.1.81.B3S	1	Set & Align B83	05/16/95.04:00P	05/16/95.05:00P	
1.1.1.81.B3T	1	Set Clean Room, Purge & Fit B83	05/17/95.08:00A	05/17/95.09:00A	
1.1.1.81.B3U	2	Weld Joint B83	05/17/95.09:00A	05/17/95.11:00A	
1.1.1.81.B3V	2	Leak Test Joint B83	05/17/95.11:00A	05/17/95.02:00P	
1.1.1.81.B3W	2	Install Tube Supports B83	05/17/95.11:00A	05/17/95.02:00P	
1.1.1.81.B3X	2	Remove Equip'mt, Clean & Cap B83	05/17/95.02:00P	05/17/95.04:00P	
1.1.1.81.B4A	1	Unload,Rec/Insp Tube B84	04/25/95.11:00A	04/25/95.12:00P	
1.1.1.81.B4B	1	Move to Stiff Fit Up Stat. B84	04/28/95.01:00P	04/28/95.02:00P	
1.1.1.81.B4C	1	Set-up & Purge B84	04/28/95.02:00P	04/28/95.03:00P	
1.1.1.81.B4D	2	Fit Stiffeners B84	04/28/95.03:00P	04/28/95.05:00P	
1.1.1.81.B4E	4	Weld Stiffeners B84	05/01/95.08:00A	05/01/95.12:00P	
1.1.1.81.B4F	1	Move to Exp.Bellows Stat. B84	05/01/95.01:00P	05/01/95.02:00P	
1.1.1.81.B4G	3	Fit,Purge,Weld Exp. Bellows B84	05/01/95.02:00P	05/01/95.05:00P	
1.1.1.81.B4H	1	Inspect, Install End Caps B84	05/02/95.08:00A	05/02/95.09:00A	
1.1.1.81.B4J	1	Move to Test Area B84	05/03/95.09:00A	05/03/95.10:00A	
1.1.1.81.B4K	1	Pre-Clean & Black Light B84	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.81.B4L	30	Leak Test B84	05/03/95.11:00A	05/04/95.05:00P	
1.1.1.81.B4O	1	Move to Post Test Storage B84	05/05/95.08:00A	05/05/95.09:00A	
1.1.1.81.B4P	1	Clean, Dry & End Cap B84	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.81.B4R	1	Transport to Erection B84	05/18/95.01:00P	05/18/95.02:00P	
1.1.1.81.B4S	1	Set & Align B84	05/18/95.02:00P	05/18/95.03:00P	
1.1.1.81.B4T	1	Set Clean Room, Purge & Fit B84	05/18/95.03:00P	05/18/95.04:00P	
1.1.1.81.B4U	2	Weld Joint B84	05/18/95.04:00P	05/19/95.09:00A	
1.1.1.81.B4V	2	Leak Test Joint B84	05/19/95.09:00A	05/19/95.11:00A	
1.1.1.81.B4W	2	Install Tube Supports B84	05/19/95.09:00A	05/19/95.11:00A	
1.1.1.81.B4X	2	Remove Equip'mt, Clean & Cap B84	05/19/95.11:00A	05/19/95.02:00P	
1.1.1.81.B5A	1	Unload,Rec/Insp Tube B85	04/25/95.01:00P	04/25/95.02:00P	
1.1.1.81.B5B	1	Move to Stiff Fit Up Stat. B85	05/01/95.02:00P	05/01/95.03:00P	
1.1.1.81.B5C	1	Set-up & Purge B85	05/01/95.03:00P	05/01/95.04:00P	
1.1.1.81.B5D	2	Fit Stiffeners B85	05/01/95.04:00P	05/02/95.09:00A	
1.1.1.81.B5E	4	Weld Stiffeners B85	05/02/95.09:00A	05/02/95.02:00P	
1.1.1.81.B5F	1	Move to Exp.Bellows Stat. B85	05/03/95.10:00A	05/03/95.11:00A	
1.1.1.81.B5G	3	Fit,Purge,Weld Exp. Bellows B85	05/03/95.11:00A	05/03/95.03:00P	
1.1.1.81.B5H	1	Inspect, Install End Caps B85	05/03/95.03:00P	05/03/95.04:00P	
1.1.1.81.B5J	1	Move to Test Area B85	05/05/95.09:00A	05/05/95.10:00A	
1.1.1.81.B5K	1	Pre-Clean & Black Light B85	05/05/95.10:00A	05/05/95.11:00A	
1.1.1.81.B5L	30	Leak Test B85	05/05/95.11:00A	05/06/95.05:00P	
1.1.1.81.B5O	1	Move to Post Test Storage B85	05/08/95.08:00A	05/08/95.09:00A	
1.1.1.81.B5P	1	Clean, Dry & End Cap B85	05/08/95.09:00A	05/08/95.10:00A	
1.1.1.81.B5R	1	Transport to Erection B85	05/22/95.10:00A	05/22/95.11:00A	
1.1.1.81.B5S	1	Set & Align B85	05/22/95.11:00A	05/22/95.12:00P	
1.1.1.81.B5T	1	Set Clean Room, Purge & Fit B85	05/22/95.01:00P	05/22/95.02:00P	
1.1.1.81.B5U	2	Weld Joint B85	05/22/95.02:00P	05/22/95.04:00P	
1.1.1.81.B5V	2	Leak Test Joint B85	05/22/95.04:00P	05/23/95.09:00A	
1.1.1.81.B5W	2	Install Tube Supports B85	05/22/95.04:00P	05/23/95.09:00A	
1.1.1.81.B5X	2	Remove Equip'mt, Clean & Cap B85	05/23/95.09:00A	05/23/95.11:00A	
1.1.1.86	163	Cans 86-90	05/08/95.04:00P	06/06/95.10:00A	
1.1.1.86.1A	1	Unload,Rec/Insp Tube 86	05/09/95.08:00A	05/09/95.09:00A	
1.1.1.86.1B	1	Move to Stiff Fit Up Stat. 86	05/09/95.09:00A	05/09/95.10:00A	
1.1.1.86.1C	1	Set-up & Purge 86	05/09/95.10:00A	05/09/95.11:00A	
1.1.1.86.1D	2	Fit Stiffeners 86	05/09/95.11:00A	05/09/95.02:00P	
1.1.1.86.1E	4	Weld Stiffeners 86	05/09/95.02:00P	05/10/95.09:00A	
1.1.1.86.1F	1	Inspect, Install End Caps 86	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.86.1H	1	Move to Test Area 86	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.86.1I	1	Pre-Clean & Black Light 86	05/10/95.11:00A	05/10/95.12:00P	
1.1.1.86.1J	30	Leak Test 86	05/10/95.12:00P	05/11/95.06:00P	
1.1.1.86.1M	1	Move to Post Test Storage 86	05/12/95.08:00A	05/12/95.09:00A	
1.1.1.86.1N	1	Clean, Dry & End Cap 86	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.86.1P	1	Transport to Erection 86	05/25/95.09:00A	05/25/95.10:00A	
1.1.1.86.1Q	1	Set & Align 86	05/25/95.10:00A	05/25/95.11:00A	
1.1.1.86.1R	1	Set Clean Room, Purge & Fit 86	05/25/95.11:00A	05/25/95.12:00P	
1.1.1.86.1S	2	Weld Joint 86	05/25/95.01:00P	05/25/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.86.1T	2	Leak Test Joint 86	05/25/95.03:00P	05/25/95.05:00P	
1.1.1.86.1U	2	Install Tube Supports 86	05/25/95.03:00P	05/25/95.05:00P	
1.1.1.86.1V	2	Remove Equip'mt, Clean & Cap 86	05/26/95.08:00A	05/26/95.10:00A	
1.1.1.86.2A	1	Unload,Rec. & Inspect 87	05/09/95.09:00A	05/09/95.10:00A	
1.1.1.86.2B	1	Move to Stiff Fit Up Stat. 87	05/10/95.11:00A	05/10/95.12:00P	
1.1.1.86.2C	1	Set-up & Purge 87	05/10/95.01:00P	05/10/95.02:00P	
1.1.1.86.2D	2	Fit Stiffeners 87	05/10/95.02:00P	05/10/95.04:00P	
1.1.1.86.2E	4	Weld Stiffeners 87	05/10/95.04:00P	05/11/95.11:00A	
1.1.1.86.2F	1	Inspect, Install End Caps 87	05/11/95.11:00A	05/11/95.12:00P	
1.1.1.86.2H	1	Move to Test Area 87	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.86.2I	1	Pre-Clean & Black Light 87	05/12/95.10:00A	05/12/95.11:00A	
1.1.1.86.2J	30	Leak Test 87	05/12/95.11:00A	05/13/95.05:00P	
1.1.1.86.2M	1	Move to Post Test Storage 87	05/15/95.08:00A	05/15/95.09:00A	
1.1.1.86.2N	1	Clean, Dry & End Cap 87	05/15/95.09:00A	05/15/95.10:00A	
1.1.1.86.2P	1	Transport to Erection 87	05/26/95.04:00P	05/26/95.05:00P	
1.1.1.86.2Q	1	Set & Align 87	05/29/95.08:00A	05/29/95.09:00A	
1.1.1.86.2R	1	Set Clean Room, Purge & Fit 87	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.86.2S	2	Weld Joint 87	05/29/95.10:00A	05/29/95.12:00P	
1.1.1.86.2T	2	Leak Test Joint 87	05/29/95.01:00P	05/29/95.03:00P	
1.1.1.86.2U	2	Install Tube Supports 87	05/29/95.01:00P	05/29/95.03:00P	
1.1.1.86.2V	2	Remove Equip'mt, Clean & Cap 87	05/29/95.03:00P	05/29/95.05:00P	
1.1.1.86.3A	1	Unload,Rec/Insp Tube 88	05/09/95.10:00A	05/09/95.11:00A	
1.1.1.86.3B	1	Move to Stiff Fit Up Stat. 88	05/12/95.10:00A	05/12/95.11:00A	
1.1.1.86.3C	1	Set-up & Purge 88	05/12/95.11:00A	05/12/95.12:00P	
1.1.1.86.3D	2	Fit Stiffeners 88	05/12/95.01:00P	05/12/95.03:00P	
1.1.1.86.3E	4	Weld Stiffeners 88	05/12/95.03:00P	05/15/95.10:00A	
1.1.1.86.3F	1	Inspect, Install End Caps 88	05/15/95.10:00A	05/15/95.11:00A	
1.1.1.86.3H	1	Move to Test Area 88	05/15/95.11:00A	05/15/95.12:00P	
1.1.1.86.3I	1	Pre-Clean & Black Light 88	05/15/95.01:00P	05/15/95.02:00P	
1.1.1.86.3J	30	Leak Test 88	05/15/95.02:00P	05/16/95.08:00P	
1.1.1.86.3M	1	Move to Post Test Storage 88	05/17/95.08:00A	05/17/95.09:00A	
1.1.1.86.3N	1	Clean, Dry & End Cap 88	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.86.3P	1	Transport to Erection 88	05/30/95.02:00P	05/30/95.03:00P	
1.1.1.86.3Q	1	Set & Align 88	05/30/95.03:00P	05/30/95.04:00P	
1.1.1.86.3R	1	Set Clean Room, Purge & Fit 88	05/30/95.04:00P	05/30/95.05:00P	
1.1.1.86.3S	2	Weld Joint 88	05/31/95.08:00A	05/31/95.10:00A	
1.1.1.86.3T	2	Leak Test Joint 88	05/31/95.10:00A	05/31/95.12:00P	
1.1.1.86.3U	2	Install Tube Supports 88	05/31/95.10:00A	05/31/95.12:00P	
1.1.1.86.3V	2	Remove Equip'mt, Clean & Cap 88	05/31/95.01:00P	05/31/95.03:00P	
1.1.1.86.4A	1	Unload,Rec/Insp Tube 89	05/09/95.11:00A	05/09/95.12:00P	
1.1.1.86.4B	1	Move to Stiff Fit Up Stat. 89	05/15/95.01:00P	05/15/95.02:00P	
1.1.1.86.4C	1	Set-up & Purge 89	05/15/95.02:00P	05/15/95.03:00P	
1.1.1.86.4D	2	Fit Stiffeners 89	05/15/95.03:00P	05/15/95.05:00P	
1.1.1.86.4E	4	Weld Stiffeners 89	05/16/95.08:00A	05/16/95.12:00P	
1.1.1.86.4F	1	Inspect, Install End Caps 89	05/16/95.01:00P	05/16/95.02:00P	
1.1.1.86.4H	1	Move to Test Area 89	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.86.4I	1	Pre-Clean & Black Light 89	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.86.4J	30	Leak Test 89	05/17/95.11:00A	05/18/95.05:00P	
1.1.1.86.4M	1	Move to Post Test Storage 89	05/19/95.08:00A	05/19/95.09:00A	
1.1.1.86.4N	1	Clean, Dry & End Cap 89	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.86.4P	1	Transport to Erection 89	06/01/95.11:00A	06/01/95.12:00P	
1.1.1.86.4Q	1	Set & Align 89	06/01/95.01:00P	06/01/95.02:00P	
1.1.1.86.4R	1	Set Clean Room, Purge & Fit 89	06/01/95.02:00P	06/01/95.03:00P	
1.1.1.86.4S	2	Weld Joint 89	06/01/95.03:00P	06/01/95.05:00P	
1.1.1.86.4T	2	Leak Test Joint 89	06/02/95.08:00A	06/02/95.10:00A	
1.1.1.86.4U	2	Install Tube Supports 89	06/02/95.08:00A	06/02/95.10:00A	
1.1.1.86.4V	2	Remove Equip'mt, Clean & Cap 89	06/02/95.10:00A	06/02/95.12:00P	
1.1.1.86.5A	1	Unload,Rec/Insp Tube 90	05/09/95.01:00P	05/09/95.02:00P	
1.1.1.86.5B	1	Move to Stiff Fit Up Stat. 90	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.86.5C	1	Set-up & Purge 90	05/17/95.11:00A	05/17/95.12:00P	
1.1.1.86.5D	1	F/W Pump Port Reinf. 90	05/17/95.01:00P	05/17/95.02:00P	
1.1.1.86.5E	2	Fit Stiffeners 90	05/17/95.02:00P	05/17/95.04:00P	
1.1.1.86.5F	4	Weld Stiffeners 90	05/17/95.04:00P	05/18/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.86.5G	1	Move to P.Port Stat. 90	05/18/95.11:00A	05/18/95.12:00P	
1.1.1.86.5H	1	Setup & Bore 10" Inlet90	05/18/95.01:00P	05/18/95.02:00P	
1.1.1.86.5I	2	Purge/F/W Pump Port 90	05/18/95.02:00P	05/18/95.04:00P	
1.1.1.86.5J	1	Inspect, Install End Caps 90	05/18/95.04:00P	05/18/95.05:00P	
1.1.1.86.5L	1	Move to Test Area 90	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.86.5M	1	Pre-Clean & Black Light 90	05/19/95.10:00A	05/19/95.11:00A	
1.1.1.86.5N	30	Leak Test 90	05/19/95.11:00A	05/20/95.05:00P	
1.1.1.86.5Q	1	Move to Post Test Storage 90	05/22/95.08:00A	05/22/95.09:00A	
1.1.1.86.5R	1	Clean, Dry & End Cap90	05/22/95.09:00A	05/22/95.10:00A	
1.1.1.86.5T	1	Transport to Erection 90	06/05/95.09:00A	06/05/95.10:00A	
1.1.1.86.5U	1	Set & Align 90	06/05/95.10:00A	06/05/95.11:00A	
1.1.1.86.5V	1	Set Clean Room, Purge & Fit 90	06/05/95.11:00A	06/05/95.12:00P	
1.1.1.86.5W	2	Weld Joint 90	06/05/95.01:00P	06/05/95.03:00P	
1.1.1.86.5X	2	Leak Test Joint 90	06/05/95.03:00P	06/05/95.05:00P	
1.1.1.86.5Y	2	Install Tube Supports 90	06/05/95.03:00P	06/05/95.05:00P	
1.1.1.86.5Z	2	Remove Equip'mt, Clean & Cap 90	06/06/95.08:00A	06/06/95.10:00A	
1.1.1.86.B1A	1	Unload,Rec/Insp Tube B86	05/09/95.08:00A	05/09/95.09:00A	
1.1.1.86.B1B	1	Move to Stiff Fit Up Stat. B86	05/09/95.09:00A	05/09/95.10:00A	
1.1.1.86.B1C	1	Set-up & Purge B86	05/09/95.10:00A	05/09/95.11:00A	
1.1.1.86.B1D	2	Fit Stiffeners B86	05/09/95.11:00A	05/09/95.02:00P	
1.1.1.86.B1E	4	Weld Stiffeners B86	05/09/95.02:00P	05/10/95.09:00A	
1.1.1.86.B1F	1	Move to Exp.Bellows Stat. B86	05/10/95.09:00A	05/10/95.10:00A	
1.1.1.86.B1G	3	Fit,Purge,Weld Exp. Bellows B86	05/10/95.10:00A	05/10/95.02:00P	
1.1.1.86.B1H	1	Inspect, Install End Caps B86	05/10/95.02:00P	05/10/95.03:00P	
1.1.1.86.B1J	1	Move to Test Area B86	05/10/95.03:00P	05/10/95.04:00P	
1.1.1.86.B1K	1	Pre-Clean & Black Light B86	05/10/95.04:00P	05/10/95.05:00P	
1.1.1.86.B1L	30	Leak Test B86	05/10/95.05:00P	05/11/95.11:00P	
1.1.1.86.B1O	1	Move to Post Test Storage B86	05/12/95.08:00A	05/12/95.09:00A	
1.1.1.86.B1P	1	Clean, Dry & End Cap B86	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.86.B1R	1	Transport to Erection B86	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.86.B1S	1	Set & Align B86	05/24/95.11:00A	05/24/95.12:00P	
1.1.1.86.B1T	1	Set Clean Room, Purge & Fit B86	05/24/95.01:00P	05/24/95.02:00P	
1.1.1.86.B1U	2	Weld Joint B86	05/24/95.02:00P	05/24/95.04:00P	
1.1.1.86.B1V	2	Leak Test Joint B86	05/24/95.04:00P	05/25/95.09:00A	
1.1.1.86.B1W	2	Install Tube Supports B86	05/24/95.04:00P	05/25/95.09:00A	
1.1.1.86.B1X	2	Remove Equip'mt, Clean & Cap B86	05/25/95.09:00A	05/25/95.11:00A	
1.1.1.86.B2A	1	Unload,Rec/Insp Tube B87	05/09/95.09:00A	05/09/95.10:00A	
1.1.1.86.B2B	1	Move to Stiff Fit Up Stat. B87	05/10/95.10:00A	05/10/95.11:00A	
1.1.1.86.B2C	1	Set-up & Purge B87	05/10/95.11:00A	05/10/95.12:00P	
1.1.1.86.B2D	2	Fit Stiffeners B87	05/10/95.01:00P	05/10/95.03:00P	
1.1.1.86.B2E	4	Weld Stiffeners B87	05/10/95.03:00P	05/11/95.10:00A	
1.1.1.86.B2F	1	Move to Exp.Bellows Stat. B87	05/11/95.10:00A	05/11/95.11:00A	
1.1.1.86.B2G	3	Fit,Purge,Weld Exp. Bellows B87	05/11/95.11:00A	05/11/95.03:00P	
1.1.1.86.B2H	1	Inspect, Install End Caps B87	05/11/95.03:00P	05/11/95.04:00P	
1.1.1.86.B2J	1	Move to Test Area B87	05/12/95.09:00A	05/12/95.10:00A	
1.1.1.86.B2K	1	Pre-Clean & Black Light B87	05/12/95.10:00A	05/12/95.11:00A	
1.1.1.86.B2L	30	Leak Test B87	05/12/95.11:00A	05/13/95.05:00P	
1.1.1.86.B2O	1	Move to Post Test Storage 87	05/15/95.08:00A	05/15/95.09:00A	
1.1.1.86.B2P	1	Clean, Dry & End Cap B87	05/15/95.09:00A	05/15/95.10:00A	
1.1.1.86.B2R	1	Transport to Erection B87	05/26/95.08:00A	05/26/95.09:00A	
1.1.1.86.B2S	1	Set & Align B87	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.86.B2T	1	Set Clean Room, Purge & Fit B87	05/26/95.10:00A	05/26/95.11:00A	
1.1.1.86.B2U	2	Weld Joint B87	05/26/95.11:00A	05/26/95.02:00P	
1.1.1.86.B2V	2	Leak Test Joint B87	05/26/95.02:00P	05/26/95.04:00P	
1.1.1.86.B2W	2	Install Tube SupportsB87	05/26/95.02:00P	05/26/95.04:00P	
1.1.1.86.B2X	2	Remove Equip'mt, Clean & Cap B87	05/26/95.04:00P	05/29/95.09:00A	
1.1.1.86.B3A	1	Unload,Rec/Insp Tube B88	05/09/95.10:00A	05/09/95.11:00A	
1.1.1.86.B3B	1	Move to Stiff Fit Up Stat. B88	05/11/95.11:00A	05/11/95.12:00P	
1.1.1.86.B3C	1	Set-up & Purge B88	05/11/95.01:00P	05/11/95.02:00P	
1.1.1.86.B3D	2	Fit Stiffeners B88	05/11/95.02:00P	05/11/95.04:00P	
1.1.1.86.B3E	4	Weld Stiffeners B88	05/11/95.04:00P	05/12/95.11:00A	
1.1.1.86.B3F	1	Move to Exp.Bellows Stat. B88	05/12/95.11:00A	05/12/95.12:00P	
1.1.1.86.B3G	3	Fit,Purge,Weld Exp. Bellows B88	05/12/95.01:00P	05/12/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.86.B3H	1	Inspect, Install End Caps B88	05/12/95.04:00P	05/12/95.05:00P	
1.1.1.86.B3J	1	Move to Test Area B88	05/15/95.09:00A	05/15/95.10:00A	
1.1.1.86.B3K	1	Pre-Clean & Black Light B88	05/15/95.10:00A	05/15/95.11:00A	
1.1.1.86.B3L	30	Leak Test B88	05/15/95.11:00A	05/16/95.05:00P	
1.1.1.86.B3O	1	Move to Post Test Storage B88	05/17/95.08:00A	05/17/95.09:00A	
1.1.1.86.B3P	1	Clean, Dry & End Cap B88	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.86.B3R	1	Transport to Erection B88	05/29/95.03:00P	05/29/95.04:00P	
1.1.1.86.B3S	1	Set & Align B88	05/29/95.04:00P	05/29/95.05:00P	
1.1.1.86.B3T	1	Set Clean Room, Purge & Fit B88	05/30/95.08:00A	05/30/95.09:00A	
1.1.1.86.B3U	2	Weld Joint B88	05/30/95.09:00A	05/30/95.11:00A	
1.1.1.86.B3V	2	Leak Test Joint B88	05/30/95.11:00A	05/30/95.02:00P	
1.1.1.86.B3W	2	Install Tube Supports B88	05/30/95.11:00A	05/30/95.02:00P	
1.1.1.86.B3X	2	Remove Equip'mt, Clean & Cap B88	05/30/95.02:00P	05/30/95.04:00P	
1.1.1.86.B4A	1	Unload,Rec/Insp Tube B89	05/09/95.11:00A	05/09/95.12:00P	
1.1.1.86.B4B	1	Move to Stiff Fit Up Stat. B89	05/12/95.01:00P	05/12/95.02:00P	
1.1.1.86.B4C	1	Set-up & Purge B89	05/12/95.02:00P	05/12/95.03:00P	
1.1.1.86.B4D	2	Fit Stiffeners B89	05/12/95.03:00P	05/12/95.05:00P	
1.1.1.86.B4E	4	Weld Stiffeners B89	05/15/95.08:00A	05/15/95.12:00P	
1.1.1.86.B4F	1	Move to Exp.Bellows Stat. B89	05/15/95.01:00P	05/15/95.02:00P	
1.1.1.86.B4G	3	Fit,Purge,Weld Exp. Bellows B89	05/15/95.02:00P	05/15/95.05:00P	
1.1.1.86.B4H	1	Inspect, Install End Caps B89	05/16/95.08:00A	05/16/95.09:00A	
1.1.1.86.B4J	1	Move to Test Area B89	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.86.B4K	1	Pre-Clean & Black Light B89	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.86.B4L	30	Leak Test B89	05/17/95.11:00A	05/18/95.05:00P	
1.1.1.86.B4O	1	Move to Post Test Storage B89	05/19/95.08:00A	05/19/95.09:00A	
1.1.1.86.B4P	1	Clean, Dry & End Cap B89	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.86.B4R	1	Transport to Erection B89	05/31/95.01:00P	05/31/95.02:00P	
1.1.1.86.B4S	1	Set & Align B89	05/31/95.02:00P	05/31/95.03:00P	
1.1.1.86.B4T	1	Set Clean Room, Purge & Fit B89	05/31/95.03:00P	05/31/95.04:00P	
1.1.1.86.B4U	2	Weld Joint B89	05/31/95.04:00P	06/01/95.09:00A	
1.1.1.86.B4V	2	Leak Test Joint B89	06/01/95.09:00A	06/01/95.11:00A	
1.1.1.86.B4W	2	Install Tube Supports B89	06/01/95.09:00A	06/01/95.11:00A	
1.1.1.86.B4X	2	Remove Equip'mt, Clean & Cap B89	06/01/95.11:00A	06/01/95.02:00P	
1.1.1.86.B5A	1	Unload,Rec/Insp Tube B90	05/09/95.01:00P	05/09/95.02:00P	
1.1.1.86.B5B	1	Move to Stiff Fit Up Stat. B90	05/15/95.02:00P	05/15/95.03:00P	
1.1.1.86.B5C	1	Set-up & Purge B90	05/15/95.03:00P	05/15/95.04:00P	
1.1.1.86.B5D	2	Fit Stiffeners B90	05/15/95.04:00P	05/16/95.09:00A	
1.1.1.86.B5E	4	Weld Stiffeners B90	05/16/95.09:00A	05/16/95.02:00P	
1.1.1.86.B5F	1	Move to Exp.Bellows Stat. B90	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.86.B5G	3	Fit,Purge,Weld Exp. Bellows B90	05/17/95.11:00A	05/17/95.03:00P	
1.1.1.86.B5H	1	Inspect, Install End Caps B90	05/17/95.03:00P	05/17/95.04:00P	
1.1.1.86.B5J	1	Move to Test Area B90	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.86.B5K	1	Pre-Clean & Black Light B90	05/19/95.10:00A	05/19/95.11:00A	
1.1.1.86.B5L	30	Leak Test B90	05/19/95.11:00A	05/20/95.05:00P	
1.1.1.86.B5O	1	Move to Post Test Storage B90	05/22/95.08:00A	05/22/95.09:00A	
1.1.1.86.B5P	1	Clean, Dry & End Cap B90	05/22/95.09:00A	05/22/95.10:00A	
1.1.1.86.B5R	1	Transport to Erection B90	06/02/95.10:00A	06/02/95.11:00A	
1.1.1.86.B5S	1	Set & Align B90	06/02/95.11:00A	06/02/95.12:00P	
1.1.1.86.B5T	1	Set Clean Room, Purge & Fit B90	06/02/95.01:00P	06/02/95.02:00P	
1.1.1.86.B5U	2	Weld Joint B90	06/02/95.02:00P	06/02/95.04:00P	
1.1.1.86.B5V	2	Leak Test Joint 90	06/02/95.04:00P	06/05/95.09:00A	
1.1.1.86.B5W	2	Install Tube Supports B90	06/02/95.04:00P	06/05/95.09:00A	
1.1.1.86.B5X	2	Remove Equip'mt, Clean & Cap B90	06/05/95.09:00A	06/05/95.11:00A	
1.1.1.91	195	Cans 91-95	05/15/95.04:00P	06/19/95.10:00A	
1.1.1.91.1A	1	Unload,Rec/Insp Tube 91	05/16/95.08:00A	05/16/95.09:00A	
1.1.1.91.1B	1	Move to Stiff Fit Up Stat. 91	05/16/95.09:00A	05/16/95.10:00A	
1.1.1.91.1C	1	Set-up & Purge 91	05/16/95.10:00A	05/16/95.11:00A	
1.1.1.91.1D	2	Fit Stiffeners 91	05/16/95.11:00A	05/16/95.02:00P	
1.1.1.91.1E	4	Weld Stiffeners 91	05/16/95.02:00P	05/17/95.09:00A	
1.1.1.91.1F	1	Inspect, Install End Caps 91	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.91.1H	1	Move to Test Area 91	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.91.1I	1	Pre-Clean & Black Light 91	05/17/95.11:00A	05/17/95.12:00P	
1.1.1.91.1J	30	Leak Test 91	05/17/95.12:00P	05/18/95.06:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.91.1M	1	Move to Post Test Storage 91	05/19/95.08:00A	05/19/95.09:00A	
1.1.1.91.1N	1	Clean, Dry & End Cap 91	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.91.1P	1	Transport to Erection 91	06/07/95.09:00A	06/07/95.10:00A	
1.1.1.91.1Q	1	Set & Align 91	06/07/95.10:00A	06/07/95.11:00A	
1.1.1.91.1R	1	Set Clean Room, Purge & Fit 91	06/07/95.11:00A	06/07/95.12:00P	
1.1.1.91.1S	2	Weld Joint 9	06/07/95.01:00P	06/07/95.03:00P	
1.1.1.91.1T	2	Leak Test Joint 91	06/07/95.03:00P	06/07/95.05:00P	
1.1.1.91.1U	2	Install Tube Supports 91	06/07/95.03:00P	06/07/95.05:00P	
1.1.1.91.1V	2	Remove Equip'mt, Clean & Cap 91	06/08/95.08:00A	06/08/95.10:00A	
1.1.1.91.2A	1	Unload, Rec. & Inspct 92	05/16/95.09:00A	05/16/95.10:00A	
1.1.1.91.2B	1	Move to Stiff Fit Up Stat. 92	05/17/95.11:00A	05/17/95.12:00P	
1.1.1.91.2C	1	Set-up & Purge 92	05/17/95.01:00P	05/17/95.02:00P	
1.1.1.91.2D	2	Fit Stiffeners 92	05/17/95.02:00P	05/17/95.04:00P	
1.1.1.91.2E	4	Weld Stiffeners 92	05/17/95.04:00P	05/18/95.11:00A	
1.1.1.91.2F	1	Inspect, Install End Caps 92	05/18/95.11:00A	05/18/95.12:00P	
1.1.1.91.2H	1	Move to Test Area 92	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.91.2I	1	Pre-Clean & Black Light 92	05/19/95.10:00A	05/19/95.11:00A	
1.1.1.91.2J	30	Leak Test 92	05/19/95.11:00A	05/20/95.05:00P	
1.1.1.91.2M	1	Move to Post Test Storage 92	05/22/95.08:00A	05/22/95.09:00A	
1.1.1.91.2N	1	Clean, Dry & End Cap 92	05/22/95.09:00A	05/22/95.10:00A	
1.1.1.91.2P	1	Transport to Erection 92	06/08/95.04:00P	06/08/95.05:00P	
1.1.1.91.2Q	1	Set & Align 92	06/09/95.08:00A	06/09/95.09:00A	
1.1.1.91.2R	1	Set Clean Room, Purge & Fit 92	06/09/95.09:00A	06/09/95.10:00A	
1.1.1.91.2S	2	Weld Joint 92	06/09/95.10:00A	06/09/95.12:00P	
1.1.1.91.2T	2	Leak Test Joint 92	06/09/95.01:00P	06/09/95.03:00P	
1.1.1.91.2U	2	Install Tube Supports 92	06/09/95.01:00P	06/09/95.03:00P	
1.1.1.91.2V	2	Remove Equip'mt, Clean & Cap 92	06/09/95.03:00P	06/09/95.05:00P	
1.1.1.91.3A	1	Unload, Rec/Insp Tube 93	05/16/95.10:00A	05/16/95.11:00A	
1.1.1.91.3B	1	Move to Stiff Fit Up Stat. 93	05/19/95.10:00A	05/19/95.11:00A	
1.1.1.91.3C	1	Set-up & Purge 93	05/19/95.11:00A	05/19/95.12:00P	
1.1.1.91.3D	2	Fit Stiffeners 93	05/19/95.01:00P	05/19/95.03:00P	
1.1.1.91.3E	4	Weld Stiffeners 93	05/19/95.03:00P	05/22/95.10:00A	
1.1.1.91.3F	1	Inspect, Install End Caps 93	05/22/95.10:00A	05/22/95.11:00A	
1.1.1.91.3H	1	Move to Test Area 93	05/22/95.11:00A	05/22/95.12:00P	
1.1.1.91.3I	1	Pre-Clean & Black Light 93	05/22/95.01:00P	05/22/95.02:00P	
1.1.1.91.3J	30	Leak Test 93	05/22/95.02:00P	05/23/95.08:00P	
1.1.1.91.3M	1	Move to Post Test Storage 93	05/24/95.08:00A	05/24/95.09:00A	
1.1.1.91.3N	1	Clean, Dry & End Cap 93	05/24/95.09:00A	05/24/95.10:00A	
1.1.1.91.3P	1	Transport to Erection 93	06/12/95.02:00P	06/12/95.03:00P	
1.1.1.91.3Q	1	Set & Align 93	06/12/95.03:00P	06/12/95.04:00P	
1.1.1.91.3R	1	Set Clean Room, Purge & Fit 93	06/12/95.04:00P	06/12/95.05:00P	
1.1.1.91.3S	2	Weld Joint 93	06/13/95.08:00A	06/13/95.10:00A	
1.1.1.91.3T	2	Leak Test Joint 93	06/13/95.10:00A	06/13/95.12:00P	
1.1.1.91.3U	2	Install Tube Supports 93	06/13/95.10:00A	06/13/95.12:00P	
1.1.1.91.3V	2	Remove Equip'mt, Clean & Cap 93	06/13/95.01:00P	06/13/95.03:00P	
1.1.1.91.4A	1	Unload, Rec/Insp Tube 94	05/16/95.11:00A	05/16/95.12:00P	
1.1.1.91.4B	1	Move to Stiff Fit Up Stat. 94	05/22/95.01:00P	05/22/95.02:00P	
1.1.1.91.4C	1	Set-up & Purge 94	05/22/95.02:00P	05/22/95.03:00P	
1.1.1.91.4D	2	Fit Stiffeners 94	05/22/95.03:00P	05/22/95.05:00P	
1.1.1.91.4E	4	Weld Stiffeners 94	05/23/95.08:00A	05/23/95.12:00P	
1.1.1.91.4F	1	Inspect, Install End Caps 94	05/23/95.01:00P	05/23/95.02:00P	
1.1.1.91.4H	1	Move to Test Area 94	05/24/95.09:00A	05/24/95.10:00A	
1.1.1.91.4I	1	Pre-Clean & Black Light 94	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.91.4J	30	Leak Test 94	05/24/95.11:00A	05/25/95.05:00P	
1.1.1.91.4M	1	Move to Post Test Storage 94	05/26/95.08:00A	05/26/95.09:00A	
1.1.1.91.4N	1	Clean, Dry & End Cap 94	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.91.4P	1	Transport to Erection 94	06/14/95.11:00A	06/14/95.12:00P	
1.1.1.91.4Q	1	Set & Align 94	06/14/95.01:00P	06/14/95.02:00P	
1.1.1.91.4R	1	Set Clean Room, Purge & Fit 94	06/14/95.02:00P	06/14/95.03:00P	
1.1.1.91.4S	2	Weld Joint 94	06/14/95.03:00P	06/14/95.05:00P	
1.1.1.91.4T	2	Leak Test Joint 94	06/15/95.08:00A	06/15/95.10:00A	
1.1.1.91.4U	2	Install Tube Supports 94	06/15/95.08:00A	06/15/95.10:00A	
1.1.1.91.4V	2	Remove Equip'mt, Clean & Cap 94	06/15/95.10:00A	06/15/95.12:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

OBJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.91.5A	1	Unload,Rec/Insp Tube 95	05/16/95.01:00P	05/16/95.02:00P	
1.1.1.91.5B	1	Move to Stiff Fit Up Stat. 95	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.91.5C	1	Set-up & Purge 95	05/24/95.11:00A	05/24/95.12:00P	
1.1.1.91.5D	1	F/W Pump Port Reinf. 95	05/24/95.01:00P	05/24/95.02:00P	
1.1.1.91.5E	2	Fit Stiffeners 95	05/24/95.02:00P	05/24/95.04:00P	
1.1.1.91.5F	4	Weld Stiffeners 95	05/24/95.04:00P	05/25/95.11:00A	
1.1.1.91.5G	1	Move to P.Port Stat. 95	05/25/95.11:00A	05/25/95.12:00P	
1.1.1.91.5H	1	Setup & Bore 10" Inlet 95	05/25/95.01:00P	05/25/95.02:00P	
1.1.1.91.5I	2	Purge/F/W Pump Port 5	05/25/95.02:00P	05/25/95.04:00P	
1.1.1.91.5J	1	Inspect, Install End Caps 5	05/25/95.04:00P	05/25/95.05:00P	
1.1.1.91.5L	1	Move to Test Area 95	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.91.5M	1	Pre-Clean & Black Light 95	05/26/95.10:00A	05/26/95.11:00A	
1.1.1.91.5N	30	Leak Test 95	05/26/95.11:00A	05/27/95.05:00P	
1.1.1.91.5Q	1	Move to Post Test Storage 95	05/29/95.08:00A	05/29/95.09:00A	
1.1.1.91.5R	1	Clean, Dry & End Cap 95	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.91.5T	1	Transport to Erection 95	06/16/95.09:00A	06/16/95.10:00A	
1.1.1.91.5U	1	Set & Align 9	06/16/95.10:00A	06/16/95.11:00A	
1.1.1.91.5V	1	Set Clean Room, Purge & Fit 95	06/16/95.11:00A	06/16/95.12:00P	
1.1.1.91.5W	2	Weld Joint 95	06/16/95.01:00P	06/16/95.03:00P	
1.1.1.91.5X	2	Leak Test Joint 95	06/16/95.03:00P	06/16/95.05:00P	
1.1.1.91.5Y	2	Install Tube Supports 95	06/16/95.03:00P	06/16/95.05:00P	
1.1.1.91.5Z	2	Remove Equip'mt, Clean & Cap95	06/19/95.08:00A	06/19/95.10:00A	
1.1.1.91.B1A	1	Unload,Rec/Insp Tube B91	05/16/95.08:00A	05/16/95.09:00A	
1.1.1.91.B1B	1	Move to Stiff Fit Up Stat. B91	05/16/95.09:00A	05/16/95.10:00A	
1.1.1.91.B1C	1	Set-up & Purge B91	05/16/95.10:00A	05/16/95.11:00A	
1.1.1.91.B1D	2	Fit Stiffeners B91	05/16/95.11:00A	05/16/95.02:00P	
1.1.1.91.B1E	4	Weld Stiffeners B91	05/16/95.02:00P	05/17/95.09:00A	
1.1.1.91.B1F	1	Move to Exp.Bellows Stat. B91	05/17/95.09:00A	05/17/95.10:00A	
1.1.1.91.B1G	3	Fit,Purge,Weld Exp. Bellows B91	05/17/95.10:00A	05/17/95.02:00P	
1.1.1.91.B1H	1	Inspect, Install End Caps B91	05/17/95.02:00P	05/17/95.03:00P	
1.1.1.91.B1J	1	Move to Test Area B91	05/17/95.03:00P	05/17/95.04:00P	
1.1.1.91.B1K	1	Pre-Clean & Black Light B91	05/17/95.04:00P	05/17/95.05:00P	
1.1.1.91.B1L	30	Leak Test B91	05/17/95.05:00P	05/18/95.11:00P	
1.1.1.91.B1O	1	Move to Post Test Storage B91	05/19/95.08:00A	05/19/95.09:00A	
1.1.1.91.B1P	1	Clean, Dry & End Cap B91	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.91.B1R	1	Transport to Erection B91	06/06/95.10:00A	06/06/95.11:00A	
1.1.1.91.B1S	1	Set & Align B91	06/06/95.11:00A	06/06/95.12:00P	
1.1.1.91.B1T	1	Set Clean Room, Purge & Fit B91	06/06/95.01:00P	06/06/95.02:00P	
1.1.1.91.B1U	2	Weld Joint B91	06/06/95.02:00P	06/06/95.04:00P	
1.1.1.91.B1V	2	Leak Test Joint B91	06/06/95.04:00P	06/07/95.09:00A	
1.1.1.91.B1W	2	Install Tube Supports B91	06/06/95.04:00P	06/07/95.09:00A	
1.1.1.91.B1X	2	Remove Equip'mt, Clean & Cap B91	06/07/95.09:00A	06/07/95.11:00A	
1.1.1.91.B2A	1	Unload,Rec/Insp Tube B92	05/16/95.09:00A	05/16/95.10:00A	
1.1.1.91.B2B	1	Move to Stiff Fit Up Stat. B92	05/17/95.10:00A	05/17/95.11:00A	
1.1.1.91.B2C	1	Set-up & Purge B92	05/17/95.11:00A	05/17/95.12:00P	
1.1.1.91.B2D	2	Fit Stiffeners B92	05/17/95.01:00P	05/17/95.03:00P	
1.1.1.91.B2E	4	Weld Stiffeners B92	05/17/95.03:00P	05/18/95.10:00A	
1.1.1.91.B2F	1	Move to Exp.Bellows Stat. B92	05/18/95.10:00A	05/18/95.11:00A	
1.1.1.91.B2G	3	Fit,Purge,Weld Exp. Bellows B92	05/18/95.11:00A	05/18/95.03:00P	
1.1.1.91.B2H	1	Inspect, Install End Caps B92	05/18/95.03:00P	05/18/95.04:00P	
1.1.1.91.B2J	1	Move to Test Area B92	05/19/95.09:00A	05/19/95.10:00A	
1.1.1.91.B2K	1	Pre-Clean & Black Light B92	05/19/95.10:00A	05/19/95.11:00A	
1.1.1.91.B2L	30	Leak Test B92	05/19/95.11:00A	05/20/95.05:00P	
1.1.1.91.B2O	1	Move to Post Test Storage B92	05/22/95.08:00A	05/22/95.09:00A	
1.1.1.91.B2P	1	Clean, Dry & End Cap B92	05/22/95.09:00A	05/22/95.10:00A	
1.1.1.91.B2R	1	Transport to Erection B92	06/08/95.08:00A	06/08/95.09:00A	
1.1.1.91.B2S	1	Set & Align B92	06/08/95.09:00A	06/08/95.10:00A	
1.1.1.91.B2T	1	Set Clean Room, Purge & Fit B92	06/08/95.10:00A	06/08/95.11:00A	
1.1.1.91.B2U	2	Weld Joint B92	06/08/95.11:00A	06/08/95.02:00P	
1.1.1.91.B2V	2	Leak Test Joint B92	06/08/95.02:00P	06/08/95.04:00P	
1.1.1.91.B2W	2	Install Tube SupportsB92	06/08/95.02:00P	06/08/95.04:00P	
1.1.1.91.B2X	2	Remove Equip'mt, Clean & Cap B92	06/08/95.04:00P	06/09/95.09:00A	
1.1.1.91.B3A	1	Unload,Rec/Insp Tube B93	05/16/95.10:00A	05/16/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.91.B3B	1	Move to Stiff Fit Up Stat. B93	05/18/95.11:00A	05/18/95.12:00P	
1.1.1.91.B3C	1	Set-up & Purge B9	05/18/95.01:00P	05/18/95.02:00P	
1.1.1.91.B3D	2	Fit Stiffeners B93	05/18/95.02:00P	05/18/95.04:00P	
1.1.1.91.B3E	4	Weld Stiffeners B9	05/18/95.04:00P	05/19/95.11:00A	
1.1.1.91.B3F	1	Move to Exp.Bellows Stat. B93	05/19/95.11:00A	05/19/95.12:00P	
1.1.1.91.B3G	3	Fit,Purge,Weld Exp. Bellows B93	05/19/95.01:00P	05/19/95.04:00P	
1.1.1.91.B3H	1	Inspect, Install End Caps B93	05/19/95.04:00P	05/19/95.05:00P	
1.1.1.91.B3J	1	Move to Test Area B93	05/22/95.09:00A	05/22/95.10:00A	
1.1.1.91.B3K	1	Pre-Clean & Black Light B93	05/22/95.10:00A	05/22/95.11:00A	
1.1.1.91.B3L	30	Leak Test B93	05/22/95.11:00A	05/23/95.05:00P	
1.1.1.91.B3O	1	Move to Post Test Storage B93	05/24/95.08:00A	05/24/95.09:00A	
1.1.1.91.B3P	1	Clean, Dry & End Cap B93	05/24/95.09:00A	05/24/95.10:00A	
1.1.1.91.B3R	1	Transport to Erection B93	06/09/95.03:00P	06/09/95.04:00P	
1.1.1.91.B3S	1	Set & Align B93	06/09/95.04:00P	06/09/95.05:00P	
1.1.1.91.B3T	1	Set Clean Room, Purge & Fit B93	06/12/95.08:00A	06/12/95.09:00A	
1.1.1.91.B3U	2	Weld Joint B93	06/12/95.09:00A	06/12/95.11:00A	
1.1.1.91.B3V	2	Leak Test Joint B93	06/12/95.11:00A	06/12/95.02:00P	
1.1.1.91.B3W	2	Install Tube Supports B9	06/12/95.11:00A	06/12/95.02:00P	
1.1.1.91.B3X	2	Remove Equip'mt, Clean & Cap B93	06/12/95.02:00P	06/12/95.04:00P	
1.1.1.91.B4A	1	Unload,Rec/Insp Tube B94	05/16/95.11:00A	05/16/95.12:00P	
1.1.1.91.B4B	1	Move to Stiff Fit Up Stat. B94	05/19/95.01:00P	05/19/95.02:00P	
1.1.1.91.B4C	1	Set-up & Purge B94	05/19/95.02:00P	05/19/95.03:00P	
1.1.1.91.B4D	2	Fit Stiffeners B94	05/19/95.03:00P	05/19/95.05:00P	
1.1.1.91.B4E	4	Weld Stiffeners B94	05/22/95.08:00A	05/22/95.12:00P	
1.1.1.91.B4F	1	Move to Exp.Bellows Stat. B94	05/22/95.01:00P	05/22/95.02:00P	
1.1.1.91.B4G	3	Fit,Purge,Weld Exp. Bellows B94	05/22/95.02:00P	05/22/95.05:00P	
1.1.1.91.B4H	1	Inspect, Install End Caps B94	05/23/95.08:00A	05/23/95.09:00A	
1.1.1.91.B4J	1	Move to Test Area B94	05/24/95.09:00A	05/24/95.10:00A	
1.1.1.91.B4K	1	Pre-Clean & Black Light B94	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.91.B4L	30	Leak Test B9	05/24/95.11:00A	05/25/95.05:00P	
1.1.1.91.B4O	1	Move to Post Test Storage B94	05/26/95.08:00A	05/26/95.09:00A	
1.1.1.91.B4P	1	Clean, Dry & End Cap B94	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.91.B4R	1	Transport to Erection B94	06/13/95.01:00P	06/13/95.02:00P	
1.1.1.91.B4S	1	Set & Align B94	06/13/95.02:00P	06/13/95.03:00P	
1.1.1.91.B4T	1	Set Clean Room, Purge & Fit B94	06/13/95.03:00P	06/13/95.04:00P	
1.1.1.91.B4U	2	Weld Joint B94	06/13/95.04:00P	06/14/95.09:00A	
1.1.1.91.B4V	2	Leak Test Joint B94	06/14/95.09:00A	06/14/95.11:00A	
1.1.1.91.B4W	2	Install Tube Supports B94	06/14/95.09:00A	06/14/95.11:00A	
1.1.1.91.B4X	2	Remove Equip'mt, Clean & Cap B94	06/14/95.11:00A	06/14/95.02:00P	
1.1.1.91.B5A	1	Unload,Rec/Insp Tube B95	05/16/95.01:00P	05/16/95.02:00P	
1.1.1.91.B5B	1	Move to Stiff Fit Up Stat. B95	05/22/95.02:00P	05/22/95.03:00P	
1.1.1.91.B5C	1	Set-up & Purge B95	05/22/95.03:00P	05/22/95.04:00P	
1.1.1.91.B5D	2	Fit Stiffeners B95	05/22/95.04:00P	05/23/95.09:00A	
1.1.1.91.B5E	4	Weld Stiffeners B95	05/23/95.09:00A	05/23/95.02:00P	
1.1.1.91.B5F	1	Move to Exp.Bellows Stat. B95	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.91.B5G	3	Fit,Purge,Weld Exp. Bellows B95	05/24/95.11:00A	05/24/95.03:00P	
1.1.1.91.B5H	1	Inspect, Install End Caps B95	05/24/95.03:00P	05/24/95.04:00P	
1.1.1.91.B5J	1	Move to Test Area B95	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.91.B5K	1	Pre-Clean & Black Light B95	05/26/95.10:00A	05/26/95.11:00A	
1.1.1.91.B5L	30	Leak Test B95	05/26/95.11:00A	05/27/95.05:00P	
1.1.1.91.B5O	1	Move to Post Test Storage B95	05/29/95.08:00A	05/29/95.09:00A	
1.1.1.91.B5P	1	Clean, Dry & End Cap B95	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.91.B5R	1	Transport to Erection B95	06/15/95.10:00A	06/15/95.11:00A	
1.1.1.91.B5S	1	Set & Align B95	06/15/95.11:00A	06/15/95.12:00P	
1.1.1.91.B5T	1	Set Clean Room, Purge & Fit B95	06/15/95.01:00P	06/15/95.02:00P	
1.1.1.91.B5U	2	Weld Joint B95	06/15/95.02:00P	06/15/95.04:00P	
1.1.1.91.B5V	2	Leak Test Joint B95	06/15/95.04:00P	06/16/95.09:00A	
1.1.1.91.B5W	2	Install Tube Supports B95	06/15/95.04:00P	06/16/95.09:00A	
1.1.1.91.B5X	2	Remove Equip'mt, Clean & Cap B95	06/16/95.09:00A	06/16/95.11:00A	
1.1.1.96	199	Cans 96-98	05/22/95.04:00P	06/26/95.03:00P	
1.1.1.96.1A	1	Unload,Rec/Insp Tube 96	05/23/95.08:00A	05/23/95.09:00A	
1.1.1.96.1B	1	Move to Stiff Fit Up Stat. 96	05/23/95.09:00A	05/23/95.10:00A	
1.1.1.96.1C	1	Set-up & Purge 96	05/23/95.10:00A	05/23/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.96.1D	2	Fit Stiffeners 96	05/23/95.11:00A	05/23/95.02:00P	
1.1.1.96.1E	4	Weld Stiffeners 96	05/23/95.02:00P	05/24/95.09:00A	
1.1.1.96.1F	1	Inspect, Install End Caps 96	05/24/95.09:00A	05/24/95.10:00A	
1.1.1.96.1H	1	Move to Test Area 96	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.96.1I	1	Pre-Clean & Black Light 96	05/24/95.11:00A	05/24/95.12:00P	
1.1.1.96.1J	30	Leak Test 96	05/24/95.12:00P	05/25/95.06:00P	
1.1.1.96.1M	1	Move to Post Test Storage 96	05/26/95.08:00A	05/26/95.09:00A	
1.1.1.96.1N	1	Clean, Dry & End Cap 96	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.96.1P	1	Transport to Erection 96	06/20/95.09:00A	06/20/95.10:00A	
1.1.1.96.1Q	1	Set & Align 96	06/20/95.10:00A	06/20/95.11:00A	
1.1.1.96.1R	1	Set Clean Room, Purge & Fit 96	06/20/95.11:00A	06/20/95.12:00P	
1.1.1.96.1S	2	Weld Joint 96	06/20/95.01:00P	06/20/95.03:00P	
1.1.1.96.1T	2	Leak Test Joint 96	06/20/95.03:00P	06/20/95.05:00P	
1.1.1.96.1U	2	Install Tube Supports 96	06/20/95.03:00P	06/20/95.05:00P	
1.1.1.96.1V	2	Remove Equip'mt, Clean & Cap 96	06/21/95.08:00A	06/21/95.10:00A	
1.1.1.96.2A	1	Unload,Rec. & Inspect 97	05/23/95.09:00A	05/23/95.10:00A	
1.1.1.96.2B	1	Move to Stiff Fit Up Stat. 97	05/24/95.11:00A	05/24/95.12:00P	
1.1.1.96.2C	1	Set-up & Purge 97	05/24/95.01:00P	05/24/95.02:00P	
1.1.1.96.2D	2	Fit Stiffeners 97	05/24/95.02:00P	05/24/95.04:00P	
1.1.1.96.2E	4	Weld Stiffeners 97	05/24/95.04:00P	05/25/95.11:00A	
1.1.1.96.2F	1	Inspect, Install End Caps 97	05/25/95.11:00A	05/25/95.12:00P	
1.1.1.96.2H	1	Move to Test Area 97	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.96.2I	1	Pre-Clean & Black Light 97	05/26/95.10:00A	05/26/95.11:00A	
1.1.1.96.2J	30	Leak Test 97	05/26/95.11:00A	05/27/95.05:00P	
1.1.1.96.2M	1	Move to Post Test Storage 97	05/29/95.08:00A	05/29/95.09:00A	
1.1.1.96.2N	1	Clean, Dry & End Cap 97	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.96.2P	1	Transport to Erection 97	06/21/95.04:00P	06/21/95.05:00P	
1.1.1.96.2Q	1	Set & Align 97	06/22/95.08:00A	06/22/95.09:00A	
1.1.1.96.2R	1	Set Clean Room, Purge & Fit 97	06/22/95.09:00A	06/22/95.10:00A	
1.1.1.96.2S	2	Weld Joint 97	06/22/95.10:00A	06/22/95.12:00P	
1.1.1.96.2T	2	Leak Test Joint 97	06/22/95.01:00P	06/22/95.03:00P	
1.1.1.96.2U	2	Install Tube Supports 97	06/22/95.01:00P	06/22/95.03:00P	
1.1.1.96.2V	2	Remove Equip'mt, Clean & Cap 97	06/22/95.03:00P	06/22/95.05:00P	
1.1.1.96.3A	1	Unload,Rec/Insp Tube 98	05/23/95.10:00A	05/23/95.11:00A	
1.1.1.96.3B	1	Move to Stiff Fit Up Stat. 98	05/26/95.10:00A	05/26/95.11:00A	
1.1.1.96.3C	1	Set-up & Purge 98	05/26/95.11:00A	05/26/95.12:00P	
1.1.1.96.3D	2	Fit Stiffeners 98	05/26/95.01:00P	05/26/95.03:00P	
1.1.1.96.3E	4	Weld Stiffeners 98	05/26/95.03:00P	05/29/95.10:00A	
1.1.1.96.3F	1	Inspect, Install End Caps 98	05/29/95.10:00A	05/29/95.11:00A	
1.1.1.96.3H	1	Move to Test Area 98	05/29/95.11:00A	05/29/95.12:00P	
1.1.1.96.3I	1	Pre-Clean & Black Light 98	05/29/95.01:00P	05/29/95.02:00P	
1.1.1.96.3J	30	Leak Test 98	05/29/95.02:00P	05/30/95.08:00P	
1.1.1.96.3M	1	Move to Post Test Storage 98	05/31/95.08:00A	05/31/95.09:00A	
1.1.1.96.3N	1	Clean, Dry & End Cap 98	05/31/95.09:00A	05/31/95.10:00A	
1.1.1.96.3P	1	Transport to Erection 98	06/23/95.02:00P	06/23/95.03:00P	
1.1.1.96.3Q	1	Set & Align 98	06/23/95.03:00P	06/23/95.04:00P	
1.1.1.96.3R	1	Set Clean Room, Purge & Fit 98	06/23/95.04:00P	06/23/95.05:00P	
1.1.1.96.3S	2	Weld Joint 98	06/26/95.08:00A	06/26/95.10:00A	
1.1.1.96.3T	2	Leak Test Joint 98	06/26/95.10:00A	06/26/95.12:00P	
1.1.1.96.3U	2	Install Tube Supports 98	06/26/95.10:00A	06/26/95.12:00P	
1.1.1.96.3V	2	Remove Equip'mt, Clean & Cap 98	06/26/95.01:00P	06/26/95.03:00P	
1.1.1.96.B1A	1	Unload,Rec/Insp Tube B96	05/23/95.08:00A	05/23/95.09:00A	
1.1.1.96.B1B	1	Move to Stiff Fit Up Stat. B96	05/23/95.09:00A	05/23/95.10:00A	
1.1.1.96.B1C	1	Set-up & Purge B96	05/23/95.10:00A	05/23/95.11:00A	
1.1.1.96.B1D	2	Fit Stiffeners B96	05/23/95.11:00A	05/23/95.02:00P	
1.1.1.96.B1E	4	Weld Stiffeners B96	05/23/95.02:00P	05/24/95.09:00A	
1.1.1.96.B1F	1	Move to Exp.Bellows Stat. B96	05/24/95.09:00A	05/24/95.10:00A	
1.1.1.96.B1G	3	Fit,Purge,Weld Exp. Bellows B96	05/24/95.10:00A	05/24/95.02:00P	
1.1.1.96.B1H	1	Inspect, Install End Caps B96	05/24/95.02:00P	05/24/95.03:00P	
1.1.1.96.B1J	1	Move to Test Area B96	05/24/95.03:00P	05/24/95.04:00P	
1.1.1.96.B1K	1	Pre-Clean & Black Light B96	05/24/95.04:00P	05/24/95.05:00P	
1.1.1.96.B1L	30	Leak Test B96	05/24/95.05:00P	05/25/95.11:00P	
1.1.1.96.B1O	1	Move to Post Test Storage B96	05/26/95.08:00A	05/26/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.1.96.B1P	1	Clean, Dry & End Cap B96	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.96.B1R	1	Transport to Erection B96	06/19/95.10:00A	06/19/95.11:00A	
1.1.1.96.B1S	1	Set & Align B96	06/19/95.11:00A	06/19/95.12:00P	
1.1.1.96.B1T	1	Set Clean Room, Purge & Fit B96	06/19/95.01:00P	06/19/95.02:00P	
1.1.1.96.B1U	2	Weld Joint B96	06/19/95.02:00P	06/19/95.04:00P	
1.1.1.96.B1V	2	Leak Test Joint B96	06/19/95.04:00P	06/20/95.09:00A	
1.1.1.96.B1W	2	Install Tube Supports B96	06/19/95.04:00P	06/20/95.09:00A	
1.1.1.96.B1X	2	Remove Equip'mt, Clean & Cap B96	06/20/95.09:00A	06/20/95.11:00A	
1.1.1.96.B2A	1	Unload,Rec/Insp Tube B97	05/23/95.09:00A	05/23/95.10:00A	
1.1.1.96.B2B	1	Move to Stiff Fit Up Stat. B97	05/24/95.10:00A	05/24/95.11:00A	
1.1.1.96.B2C	1	Set-up & Purge B97	05/24/95.11:00A	05/24/95.12:00P	
1.1.1.96.B2D	2	Fit Stiffeners B97	05/24/95.01:00P	05/24/95.03:00P	
1.1.1.96.B2E	4	Weld Stiffeners B97	05/24/95.03:00P	05/25/95.10:00A	
1.1.1.96.B2F	1	Move to Exp.Bellows Stat. B97	05/25/95.10:00A	05/25/95.11:00A	
1.1.1.96.B2G	3	Fit,Purge,Weld Exp. Bellows B97	05/25/95.11:00A	05/25/95.03:00P	
1.1.1.96.B2H	1	Inspect, Install End Caps B97	05/25/95.03:00P	05/25/95.04:00P	
1.1.1.96.B2J	1	Move to Test Area B97	05/26/95.09:00A	05/26/95.10:00A	
1.1.1.96.B2K	1	Pre-Clean & Black Light B97	05/26/95.10:00A	05/26/95.11:00A	
1.1.1.96.B2L	30	Leak Test B97	05/26/95.11:00A	05/27/95.05:00P	
1.1.1.96.B2O	1	Move to Post Test Storage B97	05/29/95.08:00A	05/29/95.09:00A	
1.1.1.96.B2P	1	Clean, Dry & End Cap B97	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.96.B2R	1	Transport to Erection B97	06/21/95.08:00A	06/21/95.09:00A	
1.1.1.96.B2S	1	Set & Align B97	06/21/95.09:00A	06/21/95.10:00A	
1.1.1.96.B2T	1	Set Clean Room, Purge & Fit B97	06/21/95.10:00A	06/21/95.11:00A	
1.1.1.96.B2U	2	Weld Joint B97	06/21/95.11:00A	06/21/95.02:00P	
1.1.1.96.B2V	2	Leak Test Joint B97	06/21/95.02:00P	06/21/95.04:00P	
1.1.1.96.B2W	2	Install Tube SupportsB97	06/21/95.02:00P	06/21/95.04:00P	
1.1.1.96.B2X	2	Remove Equip'mt, Clean & Cap B97	06/21/95.04:00P	06/22/95.09:00A	
1.1.1.96.B3A	1	Unload,Rec/Insp Tube B98	05/23/95.10:00A	05/23/95.11:00A	
1.1.1.96.B3B	1	Move to Stiff Fit Up Stat. B98	05/25/95.11:00A	05/25/95.12:00P	
1.1.1.96.B3C	1	Set-up & Purge B98	05/25/95.01:00P	05/25/95.02:00P	
1.1.1.96.B3D	2	Fit Stiffeners B98	05/25/95.02:00P	05/25/95.04:00P	
1.1.1.96.B3E	4	Weld Stiffeners B98	05/25/95.04:00P	05/26/95.11:00A	
1.1.1.96.B3F	1	Move to Exp.Bellows Stat. B98	05/26/95.11:00A	05/26/95.12:00P	
1.1.1.96.B3G	3	Fit,Purge,Weld Exp. Bellows 98	05/26/95.01:00P	05/26/95.04:00P	
1.1.1.96.B3H	1	Inspect, Install End Caps B98	05/26/95.04:00P	05/26/95.05:00P	
1.1.1.96.B3J	1	Move to Test Area B98	05/29/95.09:00A	05/29/95.10:00A	
1.1.1.96.B3K	1	Pre-Clean & Black Light B98	05/29/95.10:00A	05/29/95.11:00A	
1.1.1.96.B3L	30	Leak Test B98	05/29/95.11:00A	05/30/95.05:00P	
1.1.1.96.B3O	1	Move to Post Test Storage B98	05/31/95.08:00A	05/31/95.09:00A	
1.1.1.96.B3P	1	Clean, Dry & End Cap B98	05/31/95.09:00A	05/31/95.10:00A	
1.1.1.96.B3R	1	Transport to Erection B98	06/22/95.03:00P	06/22/95.04:00P	
1.1.1.96.B3S	1	Set & Align B98	06/22/95.04:00P	06/22/95.05:00P	
1.1.1.96.B3T	1	Set Clean Room, Purge & Fit B98	06/23/95.08:00A	06/23/95.09:00A	
1.1.1.96.B3U	2	Weld Joint B98	06/23/95.09:00A	06/23/95.11:00A	
1.1.1.96.B3V	2	Leak Test Joint B98	06/23/95.11:00A	06/23/95.02:00P	
1.1.1.96.B3W	2	Install Tube Supports B98	06/23/95.11:00A	06/23/95.02:00P	
1.1.1.96.B3X	2	Remove Equip'mt, Clean & Cap B98	06/23/95.02:00P	06/23/95.04:00P	
1.1.2	895	Leg 2 Can Assy & Erect	05/29/95.04:00P	11/01/95.03:00P	
1.1.2.01	252	Cans 1-5	05/29/95.04:00P	07/12/95.11:00A	
1.1.2.01.1A	1	Unload,Rec/Insp Tube 1	05/30/95.08:00A	05/30/95.09:00A	
1.1.2.01.1B	1	Move to Stiff Fit Up Stat. 1	05/30/95.09:00A	05/30/95.10:00A	
1.1.2.01.1C	1	Set-up & Purge 1	05/30/95.10:00A	05/30/95.11:00A	
1.1.2.01.1D	2	Fit Stiffeners 1	05/30/95.11:00A	05/30/95.02:00P	
1.1.2.01.1E	4	Weld Stiffeners 1	05/30/95.02:00P	05/31/95.09:00A	
1.1.2.01.1F	1	Inspect, Install End Caps 1	05/31/95.09:00A	05/31/95.10:00A	
1.1.2.01.1H	1	Move to Test Area 1	05/31/95.10:00A	05/31/95.11:00A	
1.1.2.01.1I	1	Pre-Clean & Black Light 1	05/31/95.11:00A	05/31/95.12:00P	
1.1.2.01.1J	30	Leak Test 1	05/31/95.12:00P	06/01/95.06:00P	
1.1.2.01.1M	1	Move to Post Test Storage 1	06/02/95.08:00A	06/02/95.09:00A	
1.1.2.01.1N	1	Clean, Dry & End Cap 1	06/02/95.09:00A	06/02/95.10:00A	
1.1.2.01.1P	1	Transport to Erection 1	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.01.1Q	1	Set & Align 1	06/30/95.11:00A	06/30/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.01.1R	1	Set Clean Room, Purge & Fit 1	06/30/95.01:00P	06/30/95.02:00P	
1.1.2.01.1S	2	Weld Joint 1	06/30/95.02:00P	06/30/95.04:00P	
1.1.2.01.1T	2	Leak Test Joint 1	06/30/95.04:00P	07/03/95.09:00A	
1.1.2.01.1U	2	Install Tube Supports 1	06/30/95.04:00P	07/03/95.09:00A	
1.1.2.01.1V	2	Remove Equip'mt, Clean & Cap 1	07/03/95.09:00A	07/03/95.11:00A	
1.1.2.01.2A	1	Unload,Rec. & Inspect 2	05/30/95.09:00A	05/30/95.10:00A	
1.1.2.01.2B	1	Move to Stiff Fit Up Stat. 2	05/31/95.11:00A	05/31/95.12:00P	
1.1.2.01.2C	1	Set-up & Purge 2	05/31/95.01:00P	05/31/95.02:00P	
1.1.2.01.2D	2	Fit Stiffeners 2	05/31/95.02:00P	05/31/95.04:00P	
1.1.2.01.2E	4	Weld Stiffeners 2	05/31/95.04:00P	06/01/95.11:00A	
1.1.2.01.2F	1	Inspect, Install End Caps 2	06/01/95.11:00A	06/01/95.12:00P	
1.1.2.01.2H	1	Move to Test Area 2	06/02/95.09:00A	06/02/95.10:00A	
1.1.2.01.2I	1	Pre-Clean & Black Light 2	06/02/95.10:00A	06/02/95.11:00A	
1.1.2.01.2J	30	Leak Test 2	06/02/95.11:00A	06/03/95.05:00P	
1.1.2.01.2M	1	Move to Post Test Storage 2	06/05/95.08:00A	06/05/95.09:00A	
1.1.2.01.2N	1	Clean, Dry & End Cap 2	06/05/95.09:00A	06/05/95.10:00A	
1.1.2.01.2P	1	Transport to Erection 2	07/04/95.08:00A	07/04/95.09:00A	
1.1.2.01.2Q	1	Set & Align 2	07/04/95.09:00A	07/04/95.10:00A	
1.1.2.01.2R	1	Set Clean Room, Purge & Fit 2	07/04/95.10:00A	07/04/95.11:00A	
1.1.2.01.2S	2	Weld Joint 2	07/04/95.11:00A	07/04/95.02:00P	
1.1.2.01.2T	2	Leak Test Joint 2	07/04/95.02:00P	07/04/95.04:00P	
1.1.2.01.2U	2	Install Tube Supports 2	07/04/95.02:00P	07/04/95.04:00P	
1.1.2.01.2V	2	Remove Equip'mt, Clean & Cap 2	07/04/95.04:00P	07/05/95.09:00A	
1.1.2.01.3A	1	Unload,Rec/Insp Tube 3	05/30/95.10:00A	05/30/95.11:00A	
1.1.2.01.3B	1	Move to Stiff Fit Up Stat. 3	06/02/95.10:00A	06/02/95.11:00A	
1.1.2.01.3C	1	Set-up & Purge 3	06/02/95.11:00A	06/02/95.12:00P	
1.1.2.01.3D	2	Fit Stiffeners 3	06/02/95.01:00P	06/02/95.03:00P	
1.1.2.01.3E	4	Weld Stiffeners 3	06/02/95.03:00P	06/05/95.10:00A	
1.1.2.01.3F	1	Inspect, Install End Caps 3	06/05/95.10:00A	06/05/95.11:00A	
1.1.2.01.3H	1	Move to Test Area 3	06/05/95.11:00A	06/05/95.12:00P	
1.1.2.01.3I	1	Pre-Clean & Black Light 3	06/05/95.01:00P	06/05/95.02:00P	
1.1.2.01.3J	30	Leak Test 3	06/05/95.02:00P	06/06/95.08:00P	
1.1.2.01.3M	1	Move to Post Test Storage 3	06/07/95.08:00A	06/07/95.09:00A	
1.1.2.01.3N	1	Clean, Dry & End Cap 3	06/07/95.09:00A	06/07/95.10:00A	
1.1.2.01.3P	1	Transport to Erection 3	07/05/95.03:00P	07/05/95.04:00P	
1.1.2.01.3Q	1	Set & Align 3	07/05/95.04:00P	07/05/95.05:00P	
1.1.2.01.3R	1	Set Clean Room, Purge & Fit 3	07/06/95.08:00A	07/06/95.09:00A	
1.1.2.01.3S	2	Weld Joint 3	07/06/95.09:00A	07/06/95.11:00A	
1.1.2.01.3T	2	Leak Test Joint 3	07/06/95.11:00A	07/06/95.02:00P	
1.1.2.01.3U	2	Install Tube Supports 3	07/06/95.11:00A	07/06/95.02:00P	
1.1.2.01.3V	2	Remove Equip'mt, Clean & Cap 3	07/06/95.02:00P	07/06/95.04:00P	
1.1.2.01.4A	1	Unload,Rec/Insp Tube 4	05/30/95.11:00A	05/30/95.12:00P	
1.1.2.01.4B	1	Move to Stiff Fit Up Stat. 4	06/05/95.01:00P	06/05/95.02:00P	
1.1.2.01.4C	1	Set-up & Purge 4	06/05/95.02:00P	06/05/95.03:00P	
1.1.2.01.4D	2	Fit Stiffeners 4	06/05/95.03:00P	06/05/95.05:00P	
1.1.2.01.4E	4	Weld Stiffeners 4	06/06/95.08:00A	06/06/95.12:00P	
1.1.2.01.4F	1	Inspect, Install End Caps 4	06/06/95.01:00P	06/06/95.02:00P	
1.1.2.01.4H	1	Move to Test Area 4	06/07/95.09:00A	06/07/95.10:00A	
1.1.2.01.4I	1	Pre-Clean & Black Light 4	06/07/95.10:00A	06/07/95.11:00A	
1.1.2.01.4J	30	Leak Test 4	06/07/95.11:00A	06/08/95.05:00P	
1.1.2.01.4M	1	Move to Post Test Storage 4	06/09/95.08:00A	06/09/95.09:00A	
1.1.2.01.4N	1	Clean, Dry & End Cap 4	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.01.4P	1	Transport to Erection 4	07/07/95.01:00P	07/07/95.02:00P	
1.1.2.01.4Q	1	Set & Align 4	07/07/95.02:00P	07/07/95.03:00P	
1.1.2.01.4R	1	Set Clean Room, Purge & Fit 4	07/07/95.03:00P	07/07/95.04:00P	
1.1.2.01.4S	2	Weld Joint 4	07/07/95.04:00P	07/10/95.09:00A	
1.1.2.01.4T	2	Leak Test Joint 4	07/10/95.09:00A	07/10/95.11:00A	
1.1.2.01.4U	2	Install Tube Supports 4	07/10/95.09:00A	07/10/95.11:00A	
1.1.2.01.4V	2	Remove Equip'mt, Clean & Cap 4	07/10/95.11:00A	07/10/95.02:00P	
1.1.2.01.5A	1	Unload,Rec/Insp Tube 5	05/30/95.01:00P	05/30/95.02:00P	
1.1.2.01.5B	1	Move to Stiff Fit Up Stat. 5	06/07/95.10:00A	06/07/95.11:00A	
1.1.2.01.5C	1	Set-up & Purge 5	06/07/95.11:00A	06/07/95.12:00P	
1.1.2.01.5D	1	F/W Pump Port Reinf. 5	06/07/95.01:00P	06/07/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.01.5E	2	Fit Stiffeners 5	06/07/95.02:00P	06/07/95.04:00P	
1.1.2.01.5F	4	Weld Stiffeners 5	06/07/95.04:00P	06/08/95.11:00A	
1.1.2.01.5G	1	Move to P.Port Stat.	06/08/95.11:00A	06/08/95.12:00P	
1.1.2.01.5H	1	Setup & Bore 10" Inlet 5	06/08/95.01:00P	06/08/95.02:00P	
1.1.2.01.5I	2	Purge/F/W Pump Port 5	06/08/95.02:00P	06/08/95.04:00P	
1.1.2.01.5J	1	Inspect, Install End Caps 5	06/08/95.04:00P	06/08/95.05:00P	
1.1.2.01.5L	1	Move to Test Area 5	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.01.5M	1	Pre-Clean & Black Light 5	06/09/95.10:00A	06/09/95.11:00A	
1.1.2.01.5N	30	Leak Test 5	06/09/95.11:00A	06/10/95.05:00P	
1.1.2.01.5Q	1	Move to Post Test Storage 5	06/12/95.08:00A	06/12/95.09:00A	
1.1.2.01.5R	1	Clean, Dry & End Cap 5	06/12/95.09:00A	06/12/95.10:00A	
1.1.2.01.5T	1	Transport to Erection 5	07/11/95.10:00A	07/11/95.11:00A	
1.1.2.01.5U	1	Set & Align 5	07/11/95.11:00A	07/11/95.12:00P	
1.1.2.01.5V	1	Set Clean Room, Purge & Fit 5	07/11/95.01:00P	07/11/95.02:00P	
1.1.2.01.5W	2	Weld Joint 5	07/11/95.02:00P	07/11/95.04:00P	
1.1.2.01.5X	2	Leak Test Joint 5	07/11/95.04:00P	07/12/95.09:00A	
1.1.2.01.5Y	2	Install Tube Supports 5	07/11/95.04:00P	07/12/95.09:00A	
1.1.2.01.5Z	2	Remove Equip'mt, Clean & Cap 5	07/12/95.09:00A	07/12/95.11:00A	
1.1.2.01.B1A	1	Unload,Rec/Insp Tube B1	05/30/95.08:00A	05/30/95.09:00A	
1.1.2.01.B1B	1	Move to Stiff Fit Up Stat. B1	05/30/95.09:00A	05/30/95.10:00A	
1.1.2.01.B1C	1	Set-up & Purge B1	05/30/95.10:00A	05/30/95.11:00A	
1.1.2.01.B1D	2	Fit Stiffeners B1	05/30/95.11:00A	05/30/95.02:00P	
1.1.2.01.B1E	4	Weld Stiffeners B1	05/30/95.02:00P	05/31/95.09:00A	
1.1.2.01.B1F	1	Move to Exp.Bellows Stat. B1	05/31/95.09:00A	05/31/95.10:00A	
1.1.2.01.B1G	3	Fit,Purge,Weld Exp. Bellows B1	05/31/95.10:00A	05/31/95.02:00P	
1.1.2.01.B1H	1	Inspect, Install End Caps B1	05/31/95.02:00P	05/31/95.03:00P	
1.1.2.01.B1J	1	Move to Test Area B1	05/31/95.03:00P	05/31/95.04:00P	
1.1.2.01.B1K	1	Pre-Clean & Black Light B1	05/31/95.04:00P	05/31/95.05:00P	
1.1.2.01.B1L	30	Leak Test B1	05/31/95.05:00P	06/01/95.11:00P	
1.1.2.01.B1O	1	Move to Post Test Storage B1	06/02/95.08:00A	06/02/95.09:00A	
1.1.2.01.B1P	1	Clean, Dry & End Cap B1	06/02/95.09:00A	06/02/95.10:00A	
1.1.2.01.B1R	1	Transport to Erection B1	06/29/95.11:00A	06/29/95.12:00P	
1.1.2.01.B1S	1	Set & Align B1	06/29/95.01:00P	06/29/95.02:00P	
1.1.2.01.B1T	1	Set Clean Room, Purge & Fit B1	06/29/95.02:00P	06/29/95.03:00P	
1.1.2.01.B1U	2	Weld Joint B1	06/29/95.03:00P	06/29/95.05:00P	
1.1.2.01.B1V	2	Leak Test Joint B1	06/30/95.08:00A	06/30/95.10:00A	
1.1.2.01.B1W	2	Install Tube Supports B1	06/30/95.08:00A	06/30/95.10:00A	
1.1.2.01.B1X	2	Remove Equip'mt, Clean & Cap B1	06/30/95.10:00A	06/30/95.12:00P	
1.1.2.01.B2A	1	Unload,Rec/Insp Tube B2	05/30/95.09:00A	05/30/95.10:00A	
1.1.2.01.B2B	1	Move to Stiff Fit Up Stat. B2	05/31/95.10:00A	05/31/95.11:00A	
1.1.2.01.B2C	1	Set-up & Purge B2	05/31/95.11:00A	05/31/95.12:00P	
1.1.2.01.B2D	2	Fit Stiffeners B2	05/31/95.01:00P	05/31/95.03:00P	
1.1.2.01.B2E	4	Weld Stiffeners B2	05/31/95.03:00P	06/01/95.10:00A	
1.1.2.01.B2F	1	Move to Exp.Bellows Stat. B2	06/01/95.10:00A	06/01/95.11:00A	
1.1.2.01.B2G	3	Fit,Purge,Weld Exp. Bellows B2	06/01/95.11:00A	06/01/95.03:00P	
1.1.2.01.B2H	1	Inspect, Install End Caps B2	06/01/95.03:00P	06/01/95.04:00P	
1.1.2.01.B2J	1	Move to Test Area B2	06/02/95.09:00A	06/02/95.10:00A	
1.1.2.01.B2K	1	Pre-Clean & Black Light B2	06/02/95.10:00A	06/02/95.11:00A	
1.1.2.01.B2L	30	Leak Test B2	06/02/95.11:00A	06/03/95.05:00P	
1.1.2.01.B2O	1	Move to Post Test Storage B2	06/05/95.08:00A	06/05/95.09:00A	
1.1.2.01.B2P	1	Clean, Dry & End Cap B2	06/05/95.09:00A	06/05/95.10:00A	
1.1.2.01.B2R	1	Transport to Erection B2	07/03/95.09:00A	07/03/95.10:00A	
1.1.2.01.B2S	1	Set & Align B2	07/03/95.10:00A	07/03/95.11:00A	
1.1.2.01.B2T	1	Set Clean Room, Purge & Fit B2	07/03/95.11:00A	07/03/95.12:00P	
1.1.2.01.B2U	2	Weld Joint B2	07/03/95.01:00P	07/03/95.03:00P	
1.1.2.01.B2V	2	Leak Test Joint B2	07/03/95.03:00P	07/03/95.05:00P	
1.1.2.01.B2W	2	Install Tube Supports B2	07/03/95.03:00P	07/03/95.05:00P	
1.1.2.01.B2X	2	Remove Equip'mt, Clean & Cap B2	07/04/95.08:00A	07/04/95.10:00A	
1.1.2.01.B3A	1	Unload,Rec/Insp Tube B3	05/30/95.10:00A	05/30/95.11:00A	
1.1.2.01.B3B	1	Move to Stiff Fit Up Stat. B3	06/01/95.11:00A	06/01/95.12:00P	
1.1.2.01.B3C	1	Set-up & Purge B3	06/01/95.01:00P	06/01/95.02:00P	
1.1.2.01.B3D	2	Fit Stiffeners B3	06/01/95.02:00P	06/01/95.04:00P	
1.1.2.01.B3E	4	Weld Stiffeners B3	06/01/95.04:00P	06/02/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.01.B3F	1	Move to Exp.Bellows Stat. B3	06/02/95.11:00A	06/02/95.12:00P	
1.1.2.01.B3G	3	Fit,Purge,Weld Exp. Bellows B3	06/02/95.01:00P	06/02/95.04:00P	
1.1.2.01.B3H	1	Inspect, Install End Caps B3	06/02/95.04:00P	06/02/95.05:00P	
1.1.2.01.B3J	1	Move to Test Area B3	06/05/95.09:00A	06/05/95.10:00A	
1.1.2.01.B3K	1	Pre-Clean & Black Light B3	06/05/95.10:00A	06/05/95.11:00A	
1.1.2.01.B3L	30	Leak Test B3	06/05/95.11:00A	06/06/95.05:00P	
1.1.2.01.B3O	1	Move to Post Test Storage B3	06/07/95.08:00A	06/07/95.09:00A	
1.1.2.01.B3P	1	Clean, Dry & End Cap B3	06/07/95.09:00A	06/07/95.10:00A	
1.1.2.01.B3R	1	Transport to Erection B3	07/04/95.04:00P	07/04/95.05:00P	
1.1.2.01.B3S	1	Set & Align B3	07/05/95.08:00A	07/05/95.09:00A	
1.1.2.01.B3T	1	Set Clean Room, Purge & Fit B3	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.01.B3U	2	Weld Joint B3	07/05/95.10:00A	07/05/95.12:00P	
1.1.2.01.B3V	2	Leak Test Joint B3	07/05/95.01:00P	07/05/95.03:00P	
1.1.2.01.B3W	2	Install Tube Supports B3	07/05/95.01:00P	07/05/95.03:00P	
1.1.2.01.B3X	2	Remove Equip'mt, Clean & Cap B3	07/05/95.03:00P	07/05/95.05:00P	
1.1.2.01.B4A	1	Unload,Rec/Insp Tube B4	05/30/95.11:00A	05/30/95.12:00P	
1.1.2.01.B4B	1	Move to Stiff Fit Up Stat. B4	06/02/95.01:00P	06/02/95.02:00P	
1.1.2.01.B4C	1	Set-up & Purge B4	06/02/95.02:00P	06/02/95.03:00P	
1.1.2.01.B4D	2	Fit Stiffeners B4	06/02/95.03:00P	06/02/95.05:00P	
1.1.2.01.B4E	4	Weld Stiffeners B4	06/05/95.08:00A	06/05/95.12:00P	
1.1.2.01.B4F	1	Move to Exp.Bellows Stat. B4	06/05/95.01:00P	06/05/95.02:00P	
1.1.2.01.B4G	3	Fit,Purge,Weld Exp. Bellows B4	06/05/95.02:00P	06/05/95.05:00P	
1.1.2.01.B4H	1	Inspect, Install End Caps B4	06/06/95.08:00A	06/06/95.09:00A	
1.1.2.01.B4J	1	Move to Test Area B4	06/07/95.09:00A	06/07/95.10:00A	
1.1.2.01.B4K	1	Pre-Clean & Black Light B4	06/07/95.10:00A	06/07/95.11:00A	
1.1.2.01.B4L	30	Leak Test B4	06/07/95.11:00A	06/08/95.05:00P	
1.1.2.01.B4O	1	Move to Post Test Storage B4	06/09/95.08:00A	06/09/95.09:00A	
1.1.2.01.B4P	1	Clean, Dry & End Cap B4	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.01.B4R	1	Transport to Erection B4	07/06/95.02:00P	07/06/95.03:00P	
1.1.2.01.B4S	1	Set & Align B4	07/06/95.03:00P	07/06/95.04:00P	
1.1.2.01.B4T	1	Set Clean Room, Purge & Fit B4	07/06/95.04:00P	07/06/95.05:00P	
1.1.2.01.B4U	2	Weld Joint B4	07/07/95.08:00A	07/07/95.10:00A	
1.1.2.01.B4V	2	Leak Test Joint B4	07/07/95.10:00A	07/07/95.12:00P	
1.1.2.01.B4W	2	Install Tube Supports B4	07/07/95.10:00A	07/07/95.12:00P	
1.1.2.01.B4X	2	Remove Equip'mt, Clean & Cap B4	07/07/95.01:00P	07/07/95.03:00P	
1.1.2.01.B5A	1	Unload,Rec/Insp Tube B5	05/30/95.01:00P	05/30/95.02:00P	
1.1.2.01.B5B	1	Move to Stiff Fit Up Stat. B5	06/05/95.02:00P	06/05/95.03:00P	
1.1.2.01.B5C	1	Set-up & Purge B5	06/05/95.03:00P	06/05/95.04:00P	
1.1.2.01.B5D	2	Fit Stiffeners B5	06/05/95.04:00P	06/06/95.09:00A	
1.1.2.01.B5E	4	Weld Stiffeners B5	06/06/95.09:00A	06/06/95.02:00P	
1.1.2.01.B5F	1	Move to Exp.Bellows Stat. B5	06/07/95.10:00A	06/07/95.11:00A	
1.1.2.01.B5G	3	Fit,Purge,Weld Exp. Bellows B5	06/07/95.11:00A	06/07/95.03:00P	
1.1.2.01.B5H	1	Inspect, Install End Caps B5	06/07/95.03:00P	06/07/95.04:00P	
1.1.2.01.B5J	1	Move to Test Area B5	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.01.B5K	1	Pre-Clean & Black Light B5	06/09/95.10:00A	06/09/95.11:00A	
1.1.2.01.B5L	30	Leak Test B5	06/09/95.11:00A	06/10/95.05:00P	
1.1.2.01.B5O	1	Move to Post Test Storage B5	06/12/95.08:00A	06/12/95.09:00A	
1.1.2.01.B5P	1	Clean, Dry & End Cap B5	06/12/95.09:00A	06/12/95.10:00A	
1.1.2.01.B5R	1	Transport to Erection B5	07/10/95.11:00A	07/10/95.12:00P	
1.1.2.01.B5S	1	Set & Align B5	07/10/95.01:00P	07/10/95.02:00P	
1.1.2.01.B5T	1	Set Clean Room, Purge & Fit B5	07/10/95.02:00P	07/10/95.03:00P	
1.1.2.01.B5U	2	Weld Joint B5	07/10/95.03:00P	07/10/95.05:00P	
1.1.2.01.B5V	2	Leak Test Joint B5	07/11/95.08:00A	07/11/95.10:00A	
1.1.2.01.B5W	2	Install Tube Supports B5	07/11/95.08:00A	07/11/95.10:00A	
1.1.2.01.B5X	2	Remove Equip'mt, Clean & Cap B5	07/11/95.10:00A	07/11/95.12:00P	
1.1.2.06	244	Cans 6-10	06/12/95.04:00P	07/25/95.11:00A	
1.1.2.06.1A	1	Unload,Rec/Insp Tube 6	06/13/95.08:00A	06/13/95.09:00A	
1.1.2.06.1B	1	Move to Stiff Fit Up Stat. 6	06/13/95.09:00A	06/13/95.10:00A	
1.1.2.06.1C	1	Set-up & Purge 6	06/13/95.10:00A	06/13/95.11:00A	
1.1.2.06.1D	2	Fit Stiffeners 6	06/13/95.11:00A	06/13/95.02:00P	
1.1.2.06.1E	4	Weld Stiffeners 6	06/13/95.02:00P	06/14/95.09:00A	
1.1.2.06.1F	1	Inspect, Install End Caps 6	06/14/95.09:00A	06/14/95.10:00A	
1.1.2.06.1H	1	Move to Test Area 6	06/14/95.10:00A	06/14/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.06.1I	1	Pre-Clean & Black Light 6	06/14/95.11:00A	06/14/95.12:00P	
1.1.2.06.1J	30	Leak Test 6	06/14/95.12:00P	06/15/95.06:00P	
1.1.2.06.1M	1	Move to Post Test Storage 6	06/16/95.08:00A	06/16/95.09:00A	
1.1.2.06.1N	1	Clean, Dry & End Cap 6	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.06.1P	1	Transport to Erection 6	07/13/95.10:00A	07/13/95.11:00A	
1.1.2.06.1Q	1	Set & Align 6	07/13/95.11:00A	07/13/95.12:00P	
1.1.2.06.1R	1	Set Clean Room, Purge & Fit 6	07/13/95.01:00P	07/13/95.02:00P	
1.1.2.06.1S	2	Weld Joint 6	07/13/95.02:00P	07/13/95.04:00P	
1.1.2.06.1T	2	Leak Test Joint 6	07/13/95.04:00P	07/14/95.09:00A	
1.1.2.06.1U	2	Install Tube Supports 6	07/13/95.04:00P	07/14/95.09:00A	
1.1.2.06.1V	2	Remove Equip'mt, Clean & Cap 6	07/14/95.09:00A	07/14/95.11:00A	
1.1.2.06.2A	1	Unload,Rec. & Inspect 7	06/13/95.09:00A	06/13/95.10:00A	
1.1.2.06.2B	1	Move to Stiff Fit Up Stat. 7	06/14/95.11:00A	06/14/95.12:00P	
1.1.2.06.2C	1	Set-up & Purge 7	06/14/95.01:00P	06/14/95.02:00P	
1.1.2.06.2D	2	Fit Stiffeners 7	06/14/95.02:00P	06/14/95.04:00P	
1.1.2.06.2E	4	Weld Stiffeners 7	06/14/95.04:00P	06/15/95.11:00A	
1.1.2.06.2F	1	Inspect, Install End Caps 7	06/15/95.11:00A	06/15/95.12:00P	
1.1.2.06.2H	1	Move to Test Area 7	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.06.2I	1	Pre-Clean & Black Light 7	06/16/95.10:00A	06/16/95.11:00A	
1.1.2.06.2J	30	Leak Test 7	06/16/95.11:00A	06/17/95.05:00P	
1.1.2.06.2M	1	Move to Post Test Storage 7	06/19/95.08:00A	06/19/95.09:00A	
1.1.2.06.2N	1	Clean, Dry & End Cap 7	06/19/95.09:00A	06/19/95.10:00A	
1.1.2.06.2P	1	Transport to Erection 7	07/17/95.08:00A	07/17/95.09:00A	
1.1.2.06.2Q	1	Set & Align 7	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.06.2R	1	Set Clean Room, Purge & Fit 7	07/17/95.10:00A	07/17/95.11:00A	
1.1.2.06.2S	2	Weld Joint 7	07/17/95.11:00A	07/17/95.02:00P	
1.1.2.06.2T	2	Leak Test Joint 7	07/17/95.02:00P	07/17/95.04:00P	
1.1.2.06.2U	2	Install Tube Supports 7	07/17/95.02:00P	07/17/95.04:00P	
1.1.2.06.2V	2	Remove Equip'mt, Clean & Cap 7	07/17/95.04:00P	07/18/95.09:00A	
1.1.2.06.3A	1	Unload,Rec/Insp Tube 8	06/13/95.10:00A	06/13/95.11:00A	
1.1.2.06.3B	1	Move to Stiff Fit Up Stat. 8	06/16/95.10:00A	06/16/95.11:00A	
1.1.2.06.3C	1	Set-up & Purge 8	06/16/95.11:00A	06/16/95.12:00P	
1.1.2.06.3D	2	Fit Stiffeners 8	06/16/95.01:00P	06/16/95.03:00P	
1.1.2.06.3E	4	Weld Stiffeners 8	06/16/95.03:00P	06/19/95.10:00A	
1.1.2.06.3F	1	Inspect, Install End Caps 8	06/19/95.10:00A	06/19/95.11:00A	
1.1.2.06.3H	1	Move to Test Area 8	06/19/95.11:00A	06/19/95.12:00P	
1.1.2.06.3I	1	Pre-Clean & Black Light 8	06/19/95.01:00P	06/19/95.02:00P	
1.1.2.06.3J	30	Leak Test 8	06/19/95.02:00P	06/20/95.08:00P	
1.1.2.06.3M	1	Move to Post Test Storage 8	06/21/95.08:00A	06/21/95.09:00A	
1.1.2.06.3N	1	Clean, Dry & End Cap 8	06/21/95.09:00A	06/21/95.10:00A	
1.1.2.06.3P	1	Transport to Erection 8	07/18/95.03:00P	07/18/95.04:00P	
1.1.2.06.3Q	1	Set & Align 8	07/18/95.04:00P	07/18/95.05:00P	
1.1.2.06.3R	1	Set Clean Room, Purge & Fit 8	07/19/95.08:00A	07/19/95.09:00A	
1.1.2.06.3S	2	Weld Joint 8	07/19/95.09:00A	07/19/95.11:00A	
1.1.2.06.3T	2	Leak Test Joint 8	07/19/95.11:00A	07/19/95.02:00P	
1.1.2.06.3U	2	Install Tube Supports 8	07/19/95.11:00A	07/19/95.02:00P	
1.1.2.06.3V	2	Remove Equip'mt, Clean & Cap 8	07/19/95.02:00P	07/19/95.04:00P	
1.1.2.06.4A	1	Unload,Rec/Insp Tube 100	06/13/95.11:00A	06/13/95.12:00P	
1.1.2.06.4B	1	Move to Stiff Fit Up Stat. 100	06/19/95.01:00P	06/19/95.02:00P	
1.1.2.06.4C	1	Set-up & Purge 100	06/19/95.02:00P	06/19/95.03:00P	
1.1.2.06.4D	2	Fit Stiffeners 100	06/19/95.03:00P	06/19/95.05:00P	
1.1.2.06.4E	4	Weld Stiffeners 100	06/20/95.08:00A	06/20/95.12:00P	
1.1.2.06.4F	1	Inspect, Install End Caps 100	06/20/95.01:00P	06/20/95.02:00P	
1.1.2.06.4H	1	Move to Test Area 100	06/21/95.09:00A	06/21/95.10:00A	
1.1.2.06.4I	1	Pre-Clean & Black Light 100	06/21/95.10:00A	06/21/95.11:00A	
1.1.2.06.4J	30	Leak Test 100	06/21/95.11:00A	06/22/95.05:00P	
1.1.2.06.4M	1	Move to Post Test Storage 100	06/23/95.08:00A	06/23/95.09:00A	
1.1.2.06.4N	1	Clean, Dry & End Cap 100	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.06.4P	1	Transport to Erection 100	07/20/95.01:00P	07/20/95.02:00P	
1.1.2.06.4Q	1	Set & Align 100	07/20/95.02:00P	07/20/95.03:00P	
1.1.2.06.4R	1	Set Clean Room, Purge & Fit 100	07/20/95.03:00P	07/20/95.04:00P	
1.1.2.06.4S	2	Weld Joint 100	07/20/95.04:00P	07/21/95.09:00A	
1.1.2.06.4T	2	Leak Test Joint 100	07/21/95.09:00A	07/21/95.11:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGO A

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.06.4U	2	Install Tube Supports 100	07/21/95.09:00A	07/21/95.11:00A	
1.1.2.06.4V	2	Remove Equip'mt, Clean & Cap 100	07/21/95.11:00A	07/21/95.02:00P	
1.1.2.06.5A	1	Unload,Rec/Insp Tube 10	06/13/95.01:00P	06/13/95.02:00P	
1.1.2.06.5B	1	Move to Stiff Fit Up Stat. 10	06/21/95.10:00A	06/21/95.11:00A	
1.1.2.06.5C	1	Set-up & Purge 10	06/21/95.11:00A	06/21/95.12:00P	
1.1.2.06.5D	1	F/W Pump Port Reinf. 10	06/21/95.01:00P	06/21/95.02:00P	
1.1.2.06.5E	2	Fit Stiffeners 10	06/21/95.02:00P	06/21/95.04:00P	
1.1.2.06.5F	4	Weld Stiffeners 10	06/21/95.04:00P	06/22/95.11:00A	
1.1.2.06.5G	1	Move to P.Port Stat.10	06/22/95.11:00A	06/22/95.12:00P	
1.1.2.06.5H	1	Setup & Bore 10" Inlet 10	06/22/95.01:00P	06/22/95.02:00P	
1.1.2.06.5I	2	Purge/F/W Pump Port 10	06/22/95.02:00P	06/22/95.04:00P	
1.1.2.06.5J	1	Inspect, Install End Caps 10	06/22/95.04:00P	06/22/95.05:00P	
1.1.2.06.5L	1	Move to Test Area 10	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.06.5M	1	Pre-Clean & Black Light 10	06/23/95.10:00A	06/23/95.11:00A	
1.1.2.06.5N	30	Leak Test 10	06/23/95.11:00A	06/24/95.05:00P	
1.1.2.06.5Q	1	Move to Post Test Storage 10	06/26/95.08:00A	06/26/95.09:00A	
1.1.2.06.5R	1	Clean, Dry & End Cap 10	06/26/95.09:00A	06/26/95.10:00A	
1.1.2.06.5T	1	Transport to Erection 10	07/24/95.10:00A	07/24/95.11:00A	
1.1.2.06.5U	1	Set & Align 10	07/24/95.11:00A	07/24/95.12:00P	
1.1.2.06.5V	1	Set Clean Room, Purge & Fit 10	07/24/95.01:00P	07/24/95.02:00P	
1.1.2.06.5W	2	Weld Joint 10	07/24/95.02:00P	07/24/95.04:00P	
1.1.2.06.5X	2	Leak Test Joint 10	07/24/95.04:00P	07/25/95.09:00A	
1.1.2.06.5Y	2	Install Tube Supports 10	07/24/95.04:00P	07/25/95.09:00A	
1.1.2.06.5Z	2	Remove Equip'mt, Clean & Cap 10	07/25/95.09:00A	07/25/95.11:00A	
1.1.2.06.B1A	1	Unload,Rec/Insp Tube B6	06/13/95.08:00A	06/13/95.09:00A	
1.1.2.06.B1B	1	Move to Stiff Fit Up Stat. B6	06/13/95.09:00A	06/13/95.10:00A	
1.1.2.06.B1C	1	Set-up & Purge B6	06/13/95.10:00A	06/13/95.11:00A	
1.1.2.06.B1D	2	Fit Stiffeners B6	06/13/95.11:00A	06/13/95.02:00P	
1.1.2.06.B1E	4	Weld Stiffeners B6	06/13/95.02:00P	06/14/95.09:00A	
1.1.2.06.B1F	1	Move to Exp.Bellows Stat. B6	06/14/95.09:00A	06/14/95.10:00A	
1.1.2.06.B1G	3	Fit,Purge,Weld Exp. Bellows B6	06/14/95.10:00A	06/14/95.02:00P	
1.1.2.06.B1H	1	Inspect, Install End Caps B6	06/14/95.02:00P	06/14/95.03:00P	
1.1.2.06.B1J	1	Move to Test Area B6	06/14/95.03:00P	06/14/95.04:00P	
1.1.2.06.B1K	1	Pre-Clean & Black Light B6	06/14/95.04:00P	06/14/95.05:00P	
1.1.2.06.B1L	30	Leak Test B6	06/14/95.05:00P	06/15/95.11:00P	
1.1.2.06.B1O	1	Move to Post Test Storage B6	06/16/95.08:00A	06/16/95.09:00A	
1.1.2.06.B1P	1	Clean, Dry & End Cap B6	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.06.B1R	1	Transport to Erection B6	07/12/95.11:00A	07/12/95.12:00P	
1.1.2.06.B1S	1	Set & Align B6	07/12/95.01:00P	07/12/95.02:00P	
1.1.2.06.B1T	1	Set Clean Room, Purge & Fit B6	07/12/95.02:00P	07/12/95.03:00P	
1.1.2.06.B1U	2	Weld Joint B6	07/12/95.03:00P	07/12/95.05:00P	
1.1.2.06.B1V	2	Leak Test Joint B6	07/13/95.08:00A	07/13/95.10:00A	
1.1.2.06.B1W	2	Install Tube Supports B6	07/13/95.08:00A	07/13/95.10:00A	
1.1.2.06.B1X	2	Remove Equip'mt, Clean & Cap B6	07/13/95.10:00A	07/13/95.12:00P	
1.1.2.06.B2A	1	Unload,Rec/Insp Tube B7	06/13/95.09:00A	06/13/95.10:00A	
1.1.2.06.B2B	1	Move to Stiff Fit Up Stat. B7	06/14/95.10:00A	06/14/95.11:00A	
1.1.2.06.B2C	1	Set-up & Purge B7	06/14/95.11:00A	06/14/95.12:00P	
1.1.2.06.B2D	2	Fit Stiffeners B7	06/14/95.01:00P	06/14/95.03:00P	
1.1.2.06.B2E	4	Weld Stiffeners B7	06/14/95.03:00P	06/15/95.10:00A	
1.1.2.06.B2F	1	Move to Exp.Bellows Stat. B7	06/15/95.10:00A	06/15/95.11:00A	
1.1.2.06.B2G	3	Fit,Purge,Weld Exp. Bellows B7	06/15/95.11:00A	06/15/95.03:00P	
1.1.2.06.B2H	1	Inspect, Install End Caps B7	06/15/95.03:00P	06/15/95.04:00P	
1.1.2.06.B2J	1	Move to Test Area B7	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.06.B2K	1	Pre-Clean & Black Light B7	06/16/95.10:00A	06/16/95.11:00A	
1.1.2.06.B2L	30	Leak Test B7	06/16/95.11:00A	06/17/95.05:00P	
1.1.2.06.B2O	1	Move to Post Test Storage B7	06/19/95.08:00A	06/19/95.09:00A	
1.1.2.06.B2P	1	Clean, Dry & End Cap B7	06/19/95.09:00A	06/19/95.10:00A	
1.1.2.06.B2R	1	Transport to Erection B7	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.06.B2S	1	Set & Align B7	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.06.B2T	1	Set Clean Room, Purge & Fit B7	07/14/95.11:00A	07/14/95.12:00P	
1.1.2.06.B2U	2	Weld Joint B7	07/14/95.01:00P	07/14/95.03:00P	
1.1.2.06.B2V	2	Leak Test Joint B7	07/14/95.03:00P	07/14/95.05:00P	
1.1.2.06.B2W	2	Install Tube SupportsB7	07/14/95.03:00P	07/14/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.06.B2X	2	Remove Equip'mt, Clean & Cap B7	07/17/95.08:00A	07/17/95.10:00A	
1.1.2.06.B3A	1	Unload,Rec/Insp Tube B8	06/13/95.10:00A	06/13/95.11:00A	
1.1.2.06.B3B	1	Move to Stiff Fit Up Stat. B8	06/15/95.11:00A	06/15/95.12:00P	
1.1.2.06.B3C	1	Set-up & Purge B8	06/15/95.01:00P	06/15/95.02:00P	
1.1.2.06.B3D	2	Fit Stiffeners B8	06/15/95.02:00P	06/15/95.04:00P	
1.1.2.06.B3E	4	Weld Stiffeners B8	06/15/95.04:00P	06/16/95.11:00A	
1.1.2.06.B3F	1	Move to Exp.Bellows Stat. B8	06/16/95.11:00A	06/16/95.12:00P	
1.1.2.06.B3G	3	Fit,Purge,Weld Exp. Bellows B8	06/16/95.01:00P	06/16/95.04:00P	
1.1.2.06.B3H	1	Inspect, Install End Caps B8	06/16/95.04:00P	06/16/95.05:00P	
1.1.2.06.B3J	1	Move to Test Area B8	06/19/95.09:00A	06/19/95.10:00A	
1.1.2.06.B3K	1	Pre-Clean & Black Light B8	06/19/95.10:00A	06/19/95.11:00A	
1.1.2.06.B3L	30	Leak Test B8	06/19/95.11:00A	06/20/95.05:00P	
1.1.2.06.B3O	1	Move to Post Test Storage B8	06/21/95.08:00A	06/21/95.09:00A	
1.1.2.06.B3P	1	Clean, Dry & End Cap B8	06/21/95.09:00A	06/21/95.10:00A	
1.1.2.06.B3R	1	Transport to Erection B8	07/17/95.04:00P	07/17/95.05:00P	
1.1.2.06.B3S	1	Set & Align B8	07/18/95.08:00A	07/18/95.09:00A	
1.1.2.06.B3T	1	Set Clean Room, Purge & Fit B8	07/18/95.09:00A	07/18/95.10:00A	
1.1.2.06.B3U	2	Weld Joint B8	07/18/95.10:00A	07/18/95.12:00P	
1.1.2.06.B3V	2	Leak Test Joint B8	07/18/95.01:00P	07/18/95.03:00P	
1.1.2.06.B3W	2	Install Tube Supports B8	07/18/95.01:00P	07/18/95.03:00P	
1.1.2.06.B3X	2	Remove Equip'mt, Clean & Cap B8	07/18/95.03:00P	07/18/95.05:00P	
1.1.2.06.B4A	1	Unload,Rec/Insp Tube B9	06/13/95.11:00A	06/13/95.12:00P	
1.1.2.06.B4B	1	Move to Stiff Fit Up Stat. B9	06/16/95.01:00P	06/16/95.02:00P	
1.1.2.06.B4C	1	Set-up & Purge B9	06/16/95.02:00P	06/16/95.03:00P	
1.1.2.06.B4D	2	Fit Stiffeners B9	06/16/95.03:00P	06/16/95.05:00P	
1.1.2.06.B4E	4	Weld Stiffeners B9	06/19/95.08:00A	06/19/95.12:00P	
1.1.2.06.B4F	1	Move to Exp.Bellows Stat. B9	06/19/95.01:00P	06/19/95.02:00P	
1.1.2.06.B4G	3	Fit,Purge,Weld Exp. Bellows B9	06/19/95.02:00P	06/19/95.05:00P	
1.1.2.06.B4H	1	Inspect, Install End Caps B9	06/20/95.08:00A	06/20/95.09:00A	
1.1.2.06.B4J	1	Move to Test Area B9	06/21/95.09:00A	06/21/95.10:00A	
1.1.2.06.B4K	1	Pre-Clean & Black Light B9	06/21/95.10:00A	06/21/95.11:00A	
1.1.2.06.B4L	30	Leak Test B9	06/21/95.11:00A	06/22/95.05:00P	
1.1.2.06.B4O	1	Move to Post Test Storage B9	06/23/95.08:00A	06/23/95.09:00A	
1.1.2.06.B4P	1	Clean, Dry & End Cap B9	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.06.B4R	1	Transport to Erection B9	07/19/95.02:00P	07/19/95.03:00P	
1.1.2.06.B4S	1	Set & Align B9	07/19/95.03:00P	07/19/95.04:00P	
1.1.2.06.B4T	1	Set Clean Room, Purge & Fit B9	07/19/95.04:00P	07/19/95.05:00P	
1.1.2.06.B4U	2	Weld Joint B9	07/20/95.08:00A	07/20/95.10:00A	
1.1.2.06.B4V	2	Leak Test Joint B9	07/20/95.10:00A	07/20/95.12:00P	
1.1.2.06.B4W	2	Install Tube Supports B9	07/20/95.10:00A	07/20/95.12:00P	
1.1.2.06.B4X	2	Remove Equip'mt, Clean & Cap B9	07/20/95.01:00P	07/20/95.03:00P	
1.1.2.06.B5A	1	Unload,Rec/Insp Tube B10	06/13/95.01:00P	06/13/95.02:00P	
1.1.2.06.B5B	1	Move to Stiff Fit Up Stat. B10	06/19/95.02:00P	06/19/95.03:00P	
1.1.2.06.B5C	1	Set-up & Purge B10	06/19/95.03:00P	06/19/95.04:00P	
1.1.2.06.B5D	2	Fit Stiffeners B10	06/19/95.04:00P	06/20/95.09:00A	
1.1.2.06.B5E	4	Weld Stiffeners B10	06/20/95.09:00A	06/20/95.02:00P	
1.1.2.06.B5F	1	Move to Exp.Bellows Stat. B10	06/21/95.10:00A	06/21/95.11:00A	
1.1.2.06.B5G	3	Fit,Purge,Weld Exp. Bellows B10	06/21/95.11:00A	06/21/95.03:00P	
1.1.2.06.B5H	1	Inspect, Install End Caps B10	06/21/95.03:00P	06/21/95.04:00P	
1.1.2.06.B5J	1	Move to Test Area B10	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.06.B5K	1	Pre-Clean & Black Light B10	06/23/95.10:00A	06/23/95.11:00A	
1.1.2.06.B5L	30	Leak Test B10	06/23/95.11:00A	06/24/95.05:00P	
1.1.2.06.B5O	1	Move to Post Test Storage B10	06/26/95.08:00A	06/26/95.09:00A	
1.1.2.06.B5P	1	Clean, Dry & End Cap B10	06/26/95.09:00A	06/26/95.10:00A	
1.1.2.06.B5R	1	Transport to Erection B10	07/21/95.11:00A	07/21/95.12:00P	
1.1.2.06.B5S	1	Set & Align B10	07/21/95.01:00P	07/21/95.02:00P	
1.1.2.06.B5T	1	Set Clean Room, Purge & Fit B10	07/21/95.02:00P	07/21/95.03:00P	
1.1.2.06.B5U	2	Weld Joint B10	07/21/95.03:00P	07/21/95.05:00P	
1.1.2.06.B5V	2	Leak Test Joint B10	07/24/95.08:00A	07/24/95.10:00A	
1.1.2.06.B5W	2	Install Tube Supports B10	07/24/95.08:00A	07/24/95.10:00A	
1.1.2.06.B5X	2	Remove Equip'mt, Clean & Cap B10	07/24/95.10:00A	07/24/95.12:00P	
1.1.2.11	236	Cans 11-15	06/26/95.04:00P	08/07/95.11:00A	
1.2.11.1A	1	Unload,Rec/Insp Tube 11	06/27/95.08:00A	06/27/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.11.1B	1	Move to Stiff Fit Up Stat. 11	06/27/95.09:00A	06/27/95.10:00A	
1.1.2.11.1C	1	Set-up & Purge 11	06/27/95.10:00A	06/27/95.11:00A	
1.1.2.11.1D	2	Fit Stiffeners 11	06/27/95.11:00A	06/27/95.02:00P	
1.1.2.11.1E	4	Weld Stiffeners 11	06/27/95.02:00P	06/28/95.09:00A	
1.1.2.11.1F	1	Inspect, Install End Caps 11	06/28/95.09:00A	06/28/95.10:00A	
1.1.2.11.1H	1	Move to Test Area 1 1	06/28/95.10:00A	06/28/95.11:00A	
1.1.2.11.1I	1	Pre-Clean & Black Light 11	06/28/95.11:00A	06/28/95.12:00P	
1.1.2.11.1J	30	Leak Test 11	06/28/95.12:00P	06/29/95.06:00P	
1.1.2.11.1M	1	Move to Post Test Storage 1 1	06/30/95.08:00A	06/30/95.09:00A	
1.1.2.11.1N	1	Clean, Dry & End Cap 11	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.11.1P	1	Transport to Erection 11	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.11.1Q	1	Set & Align 11	07/26/95.11:00A	07/26/95.12:00P	
1.1.2.11.1R	1	Set Clean Room, Purge & Fit 11	07/26/95.01:00P	07/26/95.02:00P	
1.1.2.11.1S	2	Weld Joint 11	07/26/95.02:00P	07/26/95.04:00P	
1.1.2.11.1T	2	Leak Test Joint 11	07/26/95.04:00P	07/27/95.09:00A	
1.1.2.11.1U	2	Install Tube Supports 11	07/26/95.04:00P	07/27/95.09:00A	
1.1.2.11.1V	2	Remove Equip'mt, Clean & Cap 11	07/27/95.09:00A	07/27/95.11:00A	
1.1.2.11.2A	1	Unload,Rec. & Insp 12	06/27/95.09:00A	06/27/95.10:00A	
1.1.2.11.2B	1	Move to Stiff Fit Up Stat. 12	06/28/95.11:00A	06/28/95.12:00P	
1.1.2.11.2C	1	Set-up & Purge 12	06/28/95.01:00P	06/28/95.02:00P	
1.1.2.11.2D	2	Fit Stiffeners 12	06/28/95.02:00P	06/28/95.04:00P	
1.1.2.11.2E	4	Weld Stiffeners 12	06/28/95.04:00P	06/29/95.11:00A	
1.1.2.11.2F	1	Inspect, Install End Caps 12	06/29/95.11:00A	06/29/95.12:00P	
1.1.2.11.2H	1	Move to Test Area 12	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.11.2I	1	Pre-Clean & Black Light 12	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.11.2J	30	Leak Test 12	06/30/95.11:00A	07/01/95.05:00P	
1.1.2.11.2M	1	Move to Post Test Storage 12	07/03/95.08:00A	07/03/95.09:00A	
1.1.2.11.2N	1	Clean, Dry & End Cap 12	07/03/95.09:00A	07/03/95.10:00A	
1.1.2.11.2P	1	Transport to Erection 12	07/28/95.08:00A	07/28/95.09:00A	
1.1.2.11.2Q	1	Set & Align 12	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.11.2R	1	Set Clean Room, Purge & Fit 12	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.11.2S	2	Weld Joint 12	07/28/95.11:00A	07/28/95.02:00P	
1.1.2.11.2T	2	Leak Test Joint 12	07/28/95.02:00P	07/28/95.04:00P	
1.1.2.11.2U	2	Install Tube Supports 12	07/28/95.02:00P	07/28/95.04:00P	
1.1.2.11.2V	2	Remove Equip'mt, Clean & Cap 12	07/28/95.04:00P	07/31/95.09:00A	
1.1.2.11.3A	1	Unload,Rec/Insp Tube 13	06/27/95.10:00A	06/27/95.11:00A	
1.1.2.11.3B	1	Move to Stiff Fit Up Stat. 13	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.11.3C	1	Set-up & Purge 13	06/30/95.11:00A	06/30/95.12:00P	
1.1.2.11.3D	2	Fit Stiffeners 13	06/30/95.01:00P	06/30/95.03:00P	
1.1.2.11.3E	4	Weld Stiffeners 13	06/30/95.03:00P	07/03/95.10:00A	
1.1.2.11.3F	1	Inspect, Install End Caps 13	07/03/95.10:00A	07/03/95.11:00A	
1.1.2.11.3H	1	Move to Test Area 13	07/03/95.11:00A	07/03/95.12:00P	
1.1.2.11.3I	1	Pre-Clean & Black Light 13	07/03/95.01:00P	07/03/95.02:00P	
1.1.2.11.3J	30	Leak Test 13	07/03/95.02:00P	07/04/95.08:00P	
1.1.2.11.3M	1	Move to Post Test Storage 13	07/05/95.08:00A	07/05/95.09:00A	
1.1.2.11.3N	1	Clean, Dry & End Cap 13	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.11.3P	1	Transport to Erection 13	07/31/95.03:00P	07/31/95.04:00P	
1.1.2.11.3Q	1	Set & Align 13	07/31/95.04:00P	07/31/95.05:00P	
1.1.2.11.3R	1	Set Clean Room, Purge & Fit 13	08/01/95.08:00A	08/01/95.09:00A	
1.1.2.11.3S	2	Weld Joint 13	08/01/95.09:00A	08/01/95.11:00A	
1.1.2.11.3T	2	Leak Test Joint 13	08/01/95.11:00A	08/01/95.02:00P	
1.1.2.11.3U	2	Install Tube Supports 13	08/01/95.11:00A	08/01/95.02:00P	
1.1.2.11.3V	2	Remove Equip'mt, Clean & Cap 13	08/01/95.02:00P	08/01/95.04:00P	
1.1.2.11.4A	1	Unload,Rec/Insp Tube 14	06/27/95.11:00A	06/27/95.12:00P	
1.1.2.11.4B	1	Move to Stiff Fit Up Stat. 14	07/03/95.01:00P	07/03/95.02:00P	
1.1.2.11.4C	1	Set-up & Purge 14	07/03/95.02:00P	07/03/95.03:00P	
1.1.2.11.4D	2	Fit Stiffeners 14	07/03/95.03:00P	07/03/95.05:00P	
1.1.2.11.4E	4	Weld Stiffeners 14	07/04/95.08:00A	07/04/95.12:00P	
1.1.2.11.4F	1	Inspect, Install End Caps 14	07/04/95.01:00P	07/04/95.02:00P	
1.1.2.11.4H	1	Move to Test Area 14	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.11.4I	1	Pre-Clean & Black Light 14	07/05/95.10:00A	07/05/95.11:00A	
1.1.2.11.4J	30	Leak Test 14	07/05/95.11:00A	07/06/95.05:00P	
1.1.2.11.4M	1	Move to Post Test Storage 14	07/07/95.08:00A	07/07/95.09:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

OBJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.11.4N	1	Clean, Dry & End Cap 14	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.11.4P	1	Transport to Erection 14	08/02/95.01:00P	08/02/95.02:00P	
1.1.2.11.4Q	1	Set & Align 14	08/02/95.02:00P	08/02/95.03:00P	
1.1.2.11.4R	1	Set Clean Room, Purge & Fit 14	08/02/95.03:00P	08/02/95.04:00P	
1.1.2.11.4S	2	Weld Joint14	08/02/95.04:00P	08/03/95.09:00A	
1.1.2.11.4T	2	Leak Test Joint 4	08/03/95.09:00A	08/03/95.11:00A	
1.1.2.11.4U	2	Install Tube Supports 14	08/03/95.09:00A	08/03/95.11:00A	
1.1.2.11.4V	2	Remove Equip'mt, Clean & Cap 14	08/03/95.11:00A	08/03/95.02:00P	
1.1.2.11.5A	1	Unload,Rec/Insp Tube 1	06/27/95.01:00P	06/27/95.02:00P	
1.1.2.11.5B	1	Move to Stiff Fit Up Stat. 15	07/05/95.10:00A	07/05/95.11:00A	
1.1.2.11.5C	1	Set-up & Purge 15	07/05/95.11:00A	07/05/95.12:00P	
1.1.2.11.5D	1	F/W Pump Port Reinf. 15	07/05/95.01:00P	07/05/95.02:00P	
1.1.2.11.5E	2	Fit Stiffeners 15	07/05/95.02:00P	07/05/95.04:00P	
1.1.2.11.5F	4	Weld Stiffeners15	07/05/95.04:00P	07/06/95.11:00A	
1.1.2.11.5G	1	Move to P.Port Stat. 15	07/06/95.11:00A	07/06/95.12:00P	
1.1.2.11.5H	1	Setup & Bore 10" Inlet15	07/06/95.01:00P	07/06/95.02:00P	
1.1.2.11.5I	2	Purge/F/W Pump Port 15	07/06/95.02:00P	07/06/95.04:00P	
1.1.2.11.5J	1	Inspect, Install End Caps 15	07/06/95.04:00P	07/06/95.05:00P	
1.1.2.11.5L	1	Move to Test Area 115	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.11.5M	1	Pre-Clean & Black Light 15	07/07/95.10:00A	07/07/95.11:00A	
1.1.2.11.5N	30	Leak Test 15	07/07/95.11:00A	07/08/95.05:00P	
1.1.2.11.5Q	1	Move to Post Test Storage 15	07/10/95.08:00A	07/10/95.09:00A	
1.1.2.11.5R	1	Clean, Dry & End Cap 15	07/10/95.09:00A	07/10/95.10:00A	
1.1.2.11.5T	1	Transport to Erection 15	08/04/95.10:00A	08/04/95.11:00A	
1.1.2.11.5U	1	Set & Align 15	08/04/95.11:00A	08/04/95.12:00P	
1.1.2.11.5V	1	Set Clean Room, Purge & Fit 15	08/04/95.01:00P	08/04/95.02:00P	
1.1.2.11.5W	2	Weld Joint 15	08/04/95.02:00P	08/04/95.04:00P	
1.1.2.11.5X	2	Leak Test Joint 15	08/04/95.04:00P	08/07/95.09:00A	
1.1.2.11.5Y	2	Install Tube Supports 15	08/04/95.04:00P	08/07/95.09:00A	
1.1.2.11.5Z	2	Remove Equip'mt, Clean & Cap 15	08/07/95.09:00A	08/07/95.11:00A	
1.1.2.11.B1A	1	Unload,Rec/Insp Tube B11	06/27/95.08:00A	06/27/95.09:00A	
1.1.2.11.B1B	1	Move to Stiff Fit Up Stat. B11	06/27/95.09:00A	06/27/95.10:00A	
1.1.2.11.B1C	1	Set-up & Purge B11	06/27/95.10:00A	06/27/95.11:00A	
1.1.2.11.B1D	2	Fit Stiffeners B11	06/27/95.11:00A	06/27/95.02:00P	
1.1.2.11.B1E	4	Weld Stiffeners B11	06/27/95.02:00P	06/28/95.09:00A	
1.1.2.11.B1F	1	Move to Exp.Bellows Stat. B11	06/28/95.09:00A	06/28/95.10:00A	
1.1.2.11.B1G	3	Fit,Purge,Weld Exp. Bellows B11	06/28/95.10:00A	06/28/95.02:00P	
1.1.2.11.B1H	1	Inspect, Install End Caps B11	06/28/95.02:00P	06/28/95.03:00P	
1.1.2.11.B1J	1	Move to Test Area B11	06/28/95.03:00P	06/28/95.04:00P	
1.1.2.11.B1K	1	Pre-Clean & Black Light B11	06/28/95.04:00P	06/28/95.05:00P	
1.1.2.11.B1L	30	Leak Test B11	06/28/95.05:00P	06/29/95.11:00P	
1.1.2.11.B1O	1	Move to Post Test Storage B11	06/30/95.08:00A	06/30/95.09:00A	
1.1.2.11.B1P	1	Clean, Dry & End Cap B11	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.11.B1R	1	Transport to Erection B11	07/25/95.11:00A	07/25/95.12:00P	
1.1.2.11.B1S	1	Set & Align B11	07/25/95.01:00P	07/25/95.02:00P	
1.1.2.11.B1T	1	Set Clean Room, Purge & Fit B11	07/25/95.02:00P	07/25/95.03:00P	
1.1.2.11.B1U	2	Weld Joint B11	07/25/95.03:00P	07/25/95.05:00P	
1.1.2.11.B1V	2	Leak Test Joint B11	07/26/95.08:00A	07/26/95.10:00A	
1.1.2.11.B1W	2	Install Tube Supports B11	07/26/95.08:00A	07/26/95.10:00A	
1.1.2.11.B1X	2	Remove Equip'mt, Clean & Cap B11	07/26/95.10:00A	07/26/95.12:00P	
1.1.2.11.B2A	1	Unload,Rec/Insp Tube B12	06/27/95.09:00A	06/27/95.10:00A	
1.1.2.11.B2B	1	Move to Stiff Fit Up Stat. B12	06/28/95.10:00A	06/28/95.11:00A	
1.1.2.11.B2C	1	Set-up & Purge B12	06/28/95.11:00A	06/28/95.12:00P	
1.1.2.11.B2D	2	Fit Stiffeners B12	06/28/95.01:00P	06/28/95.03:00P	
1.1.2.11.B2E	4	Weld Stiffeners B12	06/28/95.03:00P	06/29/95.10:00A	
1.1.2.11.B2F	1	Move to Exp.Bellows Stat. B12	06/29/95.10:00A	06/29/95.11:00A	
1.1.2.11.B2G	3	Fit,Purge,Weld Exp. Bellows B12	06/29/95.11:00A	06/29/95.03:00P	
1.1.2.11.B2H	1	Inspect, Install End Caps B12	06/29/95.03:00P	06/29/95.04:00P	
1.1.2.11.B2J	1	Move to Test Area B12	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.11.B2K	1	Pre-Clean & Black Light B12	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.11.B2L	30	Leak Test B12	06/30/95.11:00A	07/01/95.05:00P	
1.1.2.11.B2O	1	Move to Post Test Storage B12	07/03/95.08:00A	07/03/95.09:00A	
1.1.2.11.B2P	1	Clean, Dry & End Cap B12	07/03/95.09:00A	07/03/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.11.B2R	1	Transport to Erection B12	07/27/95.09:00A	07/27/95.10:00A	
1.1.2.11.B2S	1	Set & Align B12	07/27/95.10:00A	07/27/95.11:00A	
1.1.2.11.B2T	1	Set Clean Room, Purge & Fit B12	07/27/95.11:00A	07/27/95.12:00P	
1.1.2.11.B2U	2	Weld Joint B12	07/27/95.01:00P	07/27/95.03:00P	
1.1.2.11.B2V	2	Leak Test Joint B12	07/27/95.03:00P	07/27/95.05:00P	
1.1.2.11.B2W	2	Install Tube SupportsB12	07/27/95.03:00P	07/27/95.05:00P	
1.1.2.11.B2X	2	Remove Equip'mt, Clean & Cap B12	07/28/95.08:00A	07/28/95.10:00A	
1.1.2.11.B3A	1	Unload,Rec/Insp Tube B13	06/27/95.10:00A	06/27/95.11:00A	
1.1.2.11.B3B	1	Move to Stiff Fit Up Stat. B13	06/29/95.11:00A	06/29/95.12:00P	
1.1.2.11.B3C	1	Set-up & Purge B13	06/29/95.01:00P	06/29/95.02:00P	
1.1.2.11.B3D	2	Fit Stiffeners B3	06/29/95.02:00P	06/29/95.04:00P	
1.1.2.11.B3E	4	Weld Stiffeners B3	06/29/95.04:00P	06/30/95.11:00A	
1.1.2.11.B3F	1	Move to Exp.Bellows Stat. B13	06/30/95.11:00A	06/30/95.12:00P	
1.1.2.11.B3G	3	Fit,Purge,Weld Exp. Bellows B13	06/30/95.01:00P	06/30/95.04:00P	
1.1.2.11.B3H	1	Inspect, Install End Caps B13	06/30/95.04:00P	06/30/95.05:00P	
1.1.2.11.B3J	1	Move to Test Area B13	07/03/95.09:00A	07/03/95.10:00A	
1.1.2.11.B3K	1	Pre-Clean & Black Light B13	07/03/95.10:00A	07/03/95.11:00A	
1.1.2.11.B3L	30	Leak Test B13	07/03/95.11:00A	07/04/95.05:00P	
1.1.2.11.B3O	1	Move to Post Test Storage B13	07/05/95.08:00A	07/05/95.09:00A	
1.1.2.11.B3P	1	Clean, Dry & End Cap B13	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.11.B3R	1	Transport to Erection B13	07/28/95.04:00P	07/28/95.05:00P	
1.1.2.11.B3S	1	Set & Align B13	07/31/95.08:00A	07/31/95.09:00A	
1.1.2.11.B3T	1	Set Clean Room, Purge & Fit B13	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.11.B3U	2	Weld Joint B13	07/31/95.10:00A	07/31/95.12:00P	
1.1.2.11.B3V	2	Leak Test Joint B13	07/31/95.01:00P	07/31/95.03:00P	
1.1.2.11.B3W	2	Install Tube Supports B13	07/31/95.01:00P	07/31/95.03:00P	
1.1.2.11.B3X	2	Remove Equip'mt, Clean & Cap B13	07/31/95.03:00P	07/31/95.05:00P	
1.1.2.11.B4A	1	Unload,Rec/Insp Tube B14	06/27/95.11:00A	06/27/95.12:00P	
1.1.2.11.B4B	1	Move to Stiff Fit Up Stat. B14	06/30/95.01:00P	06/30/95.02:00P	
1.1.2.11.B4C	1	Set-up & Purge B14	06/30/95.02:00P	06/30/95.03:00P	
1.1.2.11.B4D	2	Fit Stiffeners B14	06/30/95.03:00P	06/30/95.05:00P	
1.1.2.11.B4E	4	Weld Stiffeners B14	07/03/95.08:00A	07/03/95.12:00P	
1.1.2.11.B4F	1	Move to Exp.Bellows Stat. B14	07/03/95.01:00P	07/03/95.02:00P	
1.1.2.11.B4G	3	Fit,Purge,Weld Exp. Bellows B14	07/03/95.02:00P	07/03/95.05:00P	
1.1.2.11.B4H	1	Inspect, Install End Caps B14	07/04/95.08:00A	07/04/95.09:00A	
1.1.2.11.B4J	1	Move to Test Area B14	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.11.B4K	1	Pre-Clean & Black Light B14	07/05/95.10:00A	07/05/95.11:00A	
1.1.2.11.B4L	30	Leak Test B14	07/05/95.11:00A	07/06/95.05:00P	
1.1.2.11.B4O	1	Move to Post Test Storage B14	07/07/95.08:00A	07/07/95.09:00A	
1.1.2.11.B4P	1	Clean, Dry & End Cap B14	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.11.B4R	1	Transport to Erection B14	08/01/95.02:00P	08/01/95.03:00P	
1.1.2.11.B4S	1	Set & Align B14	08/01/95.03:00P	08/01/95.04:00P	
1.1.2.11.B4T	1	Set Clean Room, Purge & Fit B14	08/01/95.04:00P	08/01/95.05:00P	
1.1.2.11.B4U	2	Weld Joint B14	08/02/95.08:00A	08/02/95.10:00A	
1.1.2.11.B4V	2	Leak Test Joint B14	08/02/95.10:00A	08/02/95.12:00P	
1.1.2.11.B4W	2	Install Tube Supports B14	08/02/95.10:00A	08/02/95.12:00P	
1.1.2.11.B4X	2	Remove Equip'mt, Clean & Cap B14	08/02/95.01:00P	08/02/95.03:00P	
1.1.2.11.B5A	1	Unload,Rec/Insp Tube B15	06/27/95.01:00P	06/27/95.02:00P	
1.1.2.11.B5B	1	Move to Stiff Fit Up Stat. B15	07/03/95.02:00P	07/03/95.03:00P	
1.1.2.11.B5C	1	Set-up & Purge B15	07/03/95.03:00P	07/03/95.04:00P	
1.1.2.11.B5D	2	Fit Stiffeners B15	07/03/95.04:00P	07/04/95.09:00A	
1.1.2.11.B5E	4	Weld Stiffeners B15	07/04/95.09:00A	07/04/95.02:00P	
1.1.2.11.B5F	1	Move to Exp.Bellows Stat. B15	07/05/95.10:00A	07/05/95.11:00A	
1.1.2.11.B5G	3	Fit,Purge,Weld Exp. Bellows B15	07/05/95.11:00A	07/05/95.03:00P	
1.1.2.11.B5H	1	Inspect, Install End Caps B15	07/05/95.03:00P	07/05/95.04:00P	
1.1.2.11.B5J	1	Move to Test Area B15	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.11.B5K	1	Pre-Clean & Black Light B15	07/07/95.10:00A	07/07/95.11:00A	
1.1.2.11.B5L	30	Leak Test B15	07/07/95.11:00A	07/08/95.05:00P	
1.1.2.11.B5O	1	Move to Post Test Storage B15	07/10/95.08:00A	07/10/95.09:00A	
1.1.2.11.B5P	1	Clean, Dry & End Cap B15	07/10/95.09:00A	07/10/95.10:00A	
1.1.2.11.B5R	1	Transport to Erection B15	08/03/95.11:00A	08/03/95.12:00P	
1.1.2.11.B5S	1	Set & Align B15	08/03/95.01:00P	08/03/95.02:00P	
1.1.2.11.B5T	1	Set Clean Room, Purge & Fit B15	08/03/95.02:00P	08/03/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.11.B5U	2	Weld Joint B15	08/03/95.03:00P	08/03/95.05:00P	
1.1.2.11.B5V	2	Leak Test Joint B15	08/04/95.08:00A	08/04/95.10:00A	
1.1.2.11.B5W	2	Install Tube Supports B15	08/04/95.08:00A	08/04/95.10:00A	
1.1.2.11.B5X	2	Remove Equip'mt, Clean & Cap B15	08/04/95.10:00A	08/04/95.12:00P	
1.1.2.16	228	Cans 16-20	07/10/95.04:00P	08/18/95.11:00A	
1.1.2.16.1A	1	Unload,Rec/Insp Tube 16	07/11/95.08:00A	07/11/95.09:00A	
1.1.2.16.1B	1	Move to Stiff Fit Up Stat. 16	07/11/95.09:00A	07/11/95.10:00A	
1.1.2.16.1C	1	Set-up & Purge 16	07/11/95.10:00A	07/11/95.11:00A	
1.1.2.16.1D	2	Fit Stiffeners 16	07/11/95.11:00A	07/11/95.02:00P	
1.1.2.16.1E	4	Weld Stiffeners 16	07/11/95.02:00P	07/12/95.09:00A	
1.1.2.16.1F	1	Inspect, Install End Caps 16	07/12/95.09:00A	07/12/95.10:00A	
1.1.2.16.1H	1	Move to Test Area 16	07/12/95.10:00A	07/12/95.11:00A	
1.1.2.16.1I	1	Pre-Clean & Black Light 16	07/12/95.11:00A	07/12/95.12:00P	
1.1.2.16.1J	30	Leak Test 16	07/12/95.12:00P	07/13/95.06:00P	
1.1.2.16.1M	1	Move to Post Test Storage 16	07/14/95.08:00A	07/14/95.09:00A	
1.1.2.16.1N	1	Clean, Dry & End Cap 16	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.16.1P	1	Transport to Erection 16	08/08/95.10:00A	08/08/95.11:00A	
1.1.2.16.1Q	1	Set & Align 16	08/08/95.11:00A	08/08/95.12:00P	
1.1.2.16.1R	1	Set Clean Room, Purge & Fit 16	08/08/95.01:00P	08/08/95.02:00P	
1.1.2.16.1S	2	Weld Joint 16	08/08/95.02:00P	08/08/95.04:00P	
1.1.2.16.1T	2	Leak Test Joint 16	08/08/95.04:00P	08/09/95.09:00A	
1.1.2.16.1U	2	Install Tube Supports 16	08/08/95.04:00P	08/09/95.09:00A	
1.1.2.16.1V	2	Remove Equip'mt, Clean & Cap 16	08/09/95.09:00A	08/09/95.11:00A	
1.1.2.16.2A	1	Unload,Rec. & Inspect 17	07/11/95.09:00A	07/11/95.10:00A	
1.1.2.16.2B	1	Move to Stiff Fit Up Stat. 17	07/12/95.11:00A	07/12/95.12:00P	
1.1.2.16.2C	1	Set-up & Purge 17	07/12/95.01:00P	07/12/95.02:00P	
1.1.2.16.2D	2	Fit Stiffeners 17	07/12/95.02:00P	07/12/95.04:00P	
1.1.2.16.2E	4	Weld Stiffeners 17	07/12/95.04:00P	07/13/95.11:00A	
1.1.2.16.2F	1	Inspect, Install End Caps 17	07/13/95.11:00A	07/13/95.12:00P	
1.1.2.16.2H	1	Move to Test Area 17	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.16.2I	1	Pre-Clean & Black Light 17	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.16.2J	30	Leak Test 17	07/14/95.11:00A	07/15/95.05:00P	
1.1.2.16.2M	1	Move to Post Test Storage 17	07/17/95.08:00A	07/17/95.09:00A	
1.1.2.16.2N	1	Clean, Dry & End Cap 17	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.16.2P	1	Transport to Erection 17	08/10/95.08:00A	08/10/95.09:00A	
1.1.2.16.2Q	1	Set & Align 17	08/10/95.09:00A	08/10/95.10:00A	
1.1.2.16.2R	1	Set Clean Room, Purge & Fit 17	08/10/95.10:00A	08/10/95.11:00A	
1.1.2.16.2S	2	Weld Joint 17	08/10/95.11:00A	08/10/95.02:00P	
1.1.2.16.2T	2	Leak Test Joint 17	08/10/95.02:00P	08/10/95.04:00P	
1.1.2.16.2U	2	Install Tube Supports 17	08/10/95.02:00P	08/10/95.04:00P	
1.1.2.16.2V	2	Remove Equip'mt, Clean & Cap 17	08/10/95.04:00P	08/11/95.09:00A	
1.1.2.16.3A	1	Unload,Rec/Insp Tube 18	07/11/95.10:00A	07/11/95.11:00A	
1.1.2.16.3B	1	Move to Stiff Fit Up Stat. 18	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.16.3C	1	Set-up & Purge 18	07/14/95.11:00A	07/14/95.12:00P	
1.1.2.16.3D	2	Fit Stiffeners 18	07/14/95.01:00P	07/14/95.03:00P	
1.1.2.16.3E	4	Weld Stiffeners 18	07/14/95.03:00P	07/17/95.10:00A	
1.1.2.16.3F	1	Inspect, Install End Caps 18	07/17/95.10:00A	07/17/95.11:00A	
1.1.2.16.3H	1	Move to Test Area 18	07/17/95.11:00A	07/17/95.12:00P	
1.1.2.16.3I	1	Pre-Clean & Black Light 18	07/17/95.01:00P	07/17/95.02:00P	
1.1.2.16.3J	30	Leak Test 18	07/17/95.02:00P	07/18/95.08:00P	
1.1.2.16.3M	1	Move to Post Test Storage 18	07/19/95.08:00A	07/19/95.09:00A	
1.1.2.16.3N	1	Clean, Dry & End Cap 18	07/19/95.09:00A	07/19/95.10:00A	
1.1.2.16.3P	1	Transport to Erection 18	08/11/95.03:00P	08/11/95.04:00P	
1.1.2.16.3Q	1	Set & Align 18	08/11/95.04:00P	08/11/95.05:00P	
1.1.2.16.3R	1	Set Clean Room, Purge & Fit 18	08/14/95.08:00A	08/14/95.09:00A	
1.1.2.16.3S	2	Weld Joint 18	08/14/95.09:00A	08/14/95.11:00A	
1.1.2.16.3T	2	Leak Test Joint 18	08/14/95.11:00A	08/14/95.02:00P	
1.1.2.16.3U	2	Install Tube Supports 18	08/14/95.11:00A	08/14/95.02:00P	
1.1.2.16.3V	2	Remove Equip'mt, Clean & Cap 18	08/14/95.02:00P	08/14/95.04:00P	
1.1.2.16.4A	1	Unload,Rec/Insp Tube 19	07/11/95.11:00A	07/11/95.12:00P	
1.1.2.16.4B	1	Move to Stiff Fit Up Stat. 19	07/17/95.01:00P	07/17/95.02:00P	
1.1.2.16.4C	1	Set-up & Purge 19	07/17/95.02:00P	07/17/95.03:00P	
1.1.2.16.4D	2	Fit Stiffeners 19	07/17/95.03:00P	07/17/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.16.4E	4	Weld Stiffeners 19	07/18/95.08:00A	07/18/95.12:00P	
1.1.2.16.4F	1	Inspect, Install End Caps 19	07/18/95.01:00P	07/18/95.02:00P	
1.1.2.16.4H	1	Move to Test Area 19	07/19/95.09:00A	07/19/95.10:00A	
1.1.2.16.4I	1	Pre-Clean & Black Light 19	07/19/95.10:00A	07/19/95.11:00A	
1.1.2.16.4J	30	Leak Test 19	07/19/95.11:00A	07/20/95.05:00P	
1.1.2.16.4M	1	Move to Post Test Storage 19	07/21/95.08:00A	07/21/95.09:00A	
1.1.2.16.4N	1	Clean, Dry & End Cap 19	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.16.4P	1	Transport to Erection 19	08/15/95.01:00P	08/15/95.02:00P	
1.1.2.16.4Q	1	Set & Align 19	08/15/95.02:00P	08/15/95.03:00P	
1.1.2.16.4R	1	Set Clean Room, Purge & Fit 19	08/15/95.03:00P	08/15/95.04:00P	
1.1.2.16.4S	2	Weld Joint 19	08/15/95.04:00P	08/16/95.09:00A	
1.1.2.16.4T	2	Leak Test Joint 19	08/16/95.09:00A	08/16/95.11:00A	
1.1.2.16.4U	2	Install Tube Supports 19	08/16/95.09:00A	08/16/95.11:00A	
1.1.2.16.4V	2	Remove Equip'mt, Clean & Cap 19	08/16/95.11:00A	08/16/95.02:00P	
1.1.2.16.5A	1	Unload,Rec/Insp Tube 20	07/11/95.01:00P	07/11/95.02:00P	
1.1.2.16.5B	1	Move to Stiff Fit Up Stat. 20	07/19/95.10:00A	07/19/95.11:00A	
1.1.2.16.5C	1	Set-up & Purge 20	07/19/95.11:00A	07/19/95.12:00P	
1.1.2.16.5D	1	F/W Pump Port Reinf. 20	07/19/95.01:00P	07/19/95.02:00P	
1.1.2.16.5E	2	Fit Stiffeners 20	07/19/95.02:00P	07/19/95.04:00P	
1.1.2.16.5F	4	Weld Stiffeners 20	07/19/95.04:00P	07/20/95.11:00A	
1.1.2.16.5G	1	Move to P.Port Stat. 20	07/20/95.11:00A	07/20/95.12:00P	
1.1.2.16.5H	1	Setup & Bore 10" Inlet 20	07/20/95.01:00P	07/20/95.02:00P	
1.1.2.16.5I	2	Purge/F/W Pump Port 20	07/20/95.02:00P	07/20/95.04:00P	
1.1.2.16.5J	1	Inspect, Install End Caps 20	07/20/95.04:00P	07/20/95.05:00P	
1.1.2.16.5L	1	Move to Test Area 20	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.16.5M	1	Pre-Clean & Black Light 20	07/21/95.10:00A	07/21/95.11:00A	
1.1.2.16.5N	30	Leak Test 20	07/21/95.11:00A	07/22/95.05:00P	
1.1.2.16.5Q	1	Move to Post Test Storage 20	07/24/95.08:00A	07/24/95.09:00A	
1.1.2.16.5R	1	Clean, Dry & End Cap 20	07/24/95.09:00A	07/24/95.10:00A	
1.1.2.16.5T	1	Transport to Erection 20	08/17/95.10:00A	08/17/95.11:00A	
1.1.2.16.5U	1	Set & Align 20	08/17/95.11:00A	08/17/95.12:00P	
1.1.2.16.5V	1	Set Clean Room, Purge & Fit 20	08/17/95.01:00P	08/17/95.02:00P	
1.1.2.16.5W	2	Weld Joint 20	08/17/95.02:00P	08/17/95.04:00P	
1.1.2.16.5X	2	Leak Test Joint 20	08/17/95.04:00P	08/18/95.09:00A	
1.1.2.16.5Y	2	Install Tube Supports 20	08/17/95.04:00P	08/18/95.09:00A	
1.1.2.16.5Z	2	Remove Equip'mt, Clean & Cap 20	08/18/95.09:00A	08/18/95.11:00A	
1.1.2.16.B1A	1	Unload,Rec/Insp Tube B15	07/11/95.08:00A	07/11/95.09:00A	
1.1.2.16.B1B	1	Move to Stiff Fit Up Stat. B16	07/11/95.09:00A	07/11/95.10:00A	
1.1.2.16.B1C	1	Set-up & Purge B16	07/11/95.10:00A	07/11/95.11:00A	
1.1.2.16.B1D	2	Fit Stiffeners B6	07/11/95.11:00A	07/11/95.02:00P	
1.1.2.16.B1E	4	Weld Stiffeners B16	07/11/95.02:00P	07/12/95.09:00A	
1.1.2.16.B1F	1	Move to Exp.Bellows Stat. B16	07/12/95.09:00A	07/12/95.10:00A	
1.1.2.16.B1G	3	Fit,Purge,Weld Exp. Bellows B16	07/12/95.10:00A	07/12/95.02:00P	
1.1.2.16.B1H	1	Inspect, Install End Caps B16	07/12/95.02:00P	07/12/95.03:00P	
1.1.2.16.B1J	1	Move to Test Area B16	07/12/95.03:00P	07/12/95.04:00P	
1.1.2.16.B1K	1	Pre-Clean & Black Light B16	07/12/95.04:00P	07/12/95.05:00P	
1.1.2.16.B1L	30	Leak Test B16	07/12/95.05:00P	07/13/95.11:00P	
1.1.2.16.B1O	1	Move to Post Test Storage B16	07/14/95.08:00A	07/14/95.09:00A	
1.1.2.16.B1P	1	Clean, Dry & End Cap B16	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.16.B1R	1	Transport to Erection B16	08/07/95.11:00A	08/07/95.12:00P	
1.1.2.16.B1S	1	Set & Align B16	08/07/95.01:00P	08/07/95.02:00P	
1.1.2.16.B1T	1	Set Clean Room, Purge & Fit B16	08/07/95.02:00P	08/07/95.03:00P	
1.1.2.16.B1U	2	Weld Joint B16	08/07/95.03:00P	08/07/95.05:00P	
1.1.2.16.B1V	2	Leak Test Joint B16	08/08/95.08:00A	08/08/95.10:00A	
1.1.2.16.B1W	2	Install Tube Supports B16	08/08/95.08:00A	08/08/95.10:00A	
1.1.2.16.B1X	2	Remove Equip'mt, Clean & Cap B16	08/08/95.10:00A	08/08/95.12:00P	
1.1.2.16.B2A	1	Unload,Rec/Insp Tube B17	07/11/95.09:00A	07/11/95.10:00A	
1.1.2.16.B2B	1	Move to Stiff Fit Up Stat. B17	07/12/95.10:00A	07/12/95.11:00A	
1.1.2.16.B2C	1	Set-up & Purge B17	07/12/95.11:00A	07/12/95.12:00P	
1.1.2.16.B2D	2	Fit Stiffeners B17	07/12/95.01:00P	07/12/95.03:00P	
1.1.2.16.B2E	4	Weld Stiffeners B17	07/12/95.03:00P	07/13/95.10:00A	
1.1.2.16.B2F	1	Move to Exp.Bellows Stat. B17	07/13/95.10:00A	07/13/95.11:00A	
1.1.2.16.B2G	3	Fit,Purge,Weld Exp. Bellows B17	07/13/95.11:00A	07/13/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.16.B2H	1	Inspect, Install End Caps B17	07/13/95.03:00P	07/13/95.04:00P	
1.1.2.16.B2J	1	Move to Test Area B17	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.16.B2K	1	Pre-Clean & Black Light B17	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.16.B2L	30	Leak Test B17	07/14/95.11:00A	07/15/95.05:00P	
1.1.2.16.B2O	1	Move to Post Test Storage B17	07/17/95.08:00A	07/17/95.09:00A	
1.1.2.16.B2P	1	Clean, Dry & End Cap B17	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.16.B2R	1	Transport to Erection B17	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.16.B2S	1	Set & Align B17	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.16.B2T	1	Set Clean Room, Purge & Fit B17	08/09/95.11:00A	08/09/95.12:00P	
1.1.2.16.B2U	2	Weld Joint B17	08/09/95.01:00P	08/09/95.03:00P	
1.1.2.16.B2V	2	Leak Test Joint B17	08/09/95.03:00P	08/09/95.05:00P	
1.1.2.16.B2W	2	Install Tube Supports B17	08/09/95.03:00P	08/09/95.05:00P	
1.1.2.16.B2X	2	Remove Equip'mt, Clean & Cap B17	08/10/95.08:00A	08/10/95.10:00A	
1.1.2.16.B3A	1	Unload,Rec/Insp Tube B18	07/11/95.10:00A	07/11/95.11:00A	
1.1.2.16.B3B	1	Move to Stiff Fit Up Stat. B18	07/13/95.11:00A	07/13/95.12:00P	
1.1.2.16.B3C	1	Set-up & Purge B18	07/13/95.01:00P	07/13/95.02:00P	
1.1.2.16.B3D	2	Fit Stiffeners B18	07/13/95.02:00P	07/13/95.04:00P	
1.1.2.16.B3E	4	Weld Stiffeners B18	07/13/95.04:00P	07/14/95.11:00A	
1.1.2.16.B3F	1	Move to Exp.Bellows Stat. B18	07/14/95.11:00A	07/14/95.12:00P	
1.1.2.16.B3G	3	Fit,Purge,Weld Exp. Bellows B18	07/14/95.01:00P	07/14/95.04:00P	
1.1.2.16.B3H	1	Inspect, Install End Caps B18	07/14/95.04:00P	07/14/95.05:00P	
1.1.2.16.B3J	1	Move to Test Area B18	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.16.B3K	1	Pre-Clean & Black Light B18	07/17/95.10:00A	07/17/95.11:00A	
1.1.2.16.B3L	30	Leak Test B18	07/17/95.11:00A	07/18/95.05:00P	
1.1.2.16.B3O	1	Move to Post Test Storage B18	07/19/95.08:00A	07/19/95.09:00A	
1.1.2.16.B3P	1	Clean, Dry & End Cap B18	07/19/95.09:00A	07/19/95.10:00A	
1.1.2.16.B3R	1	Transport to Erection B18	08/10/95.04:00P	08/10/95.05:00P	
1.1.2.16.B3S	1	Set & Align B18	08/11/95.08:00A	08/11/95.09:00A	
1.1.2.16.B3T	1	Set Clean Room, Purge & Fit B18	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.16.B3U	2	Weld Joint B18	08/11/95.10:00A	08/11/95.12:00P	
1.1.2.16.B3V	2	Leak Test Joint B18	08/11/95.01:00P	08/11/95.03:00P	
1.1.2.16.B3W	2	Install Tube Supports B18	08/11/95.01:00P	08/11/95.03:00P	
1.1.2.16.B3X	2	Remove Equip'mt, Clean & Cap B18	08/11/95.03:00P	08/11/95.05:00P	
1.1.2.16.B4A	1	Unload,Rec/Insp Tube B190	07/11/95.11:00A	07/11/95.12:00P	
1.1.2.16.B4B	1	Move to Stiff Fit Up Stat. B190	07/14/95.01:00P	07/14/95.02:00P	
1.1.2.16.B4C	1	Set-up & Purge B19	07/14/95.02:00P	07/14/95.03:00P	
1.1.2.16.B4D	2	Fit Stiffeners B19	07/14/95.03:00P	07/14/95.05:00P	
1.1.2.16.B4E	4	Weld Stiffeners B19	07/17/95.08:00A	07/17/95.12:00P	
1.1.2.16.B4F	1	Move to Exp.Bellows Stat. B19	07/17/95.01:00P	07/17/95.02:00P	
1.1.2.16.B4G	3	Fit,Purge,Weld Exp. Bellows B19	07/17/95.02:00P	07/17/95.05:00P	
1.1.2.16.B4H	1	Inspect, Install End Caps B19	07/18/95.08:00A	07/18/95.09:00A	
1.1.2.16.B4J	1	Move to Test Area B19	07/19/95.09:00A	07/19/95.10:00A	
1.1.2.16.B4K	1	Pre-Clean & Black Light B19	07/19/95.10:00A	07/19/95.11:00A	
1.1.2.16.B4L	30	Leak Test B19	07/19/95.11:00A	07/20/95.05:00P	
1.1.2.16.B4O	1	Move to Post Test Storage B19	07/21/95.08:00A	07/21/95.09:00A	
1.1.2.16.B4P	1	Clean, Dry & End Cap B19	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.16.B4R	1	Transport to Erection B19	08/14/95.02:00P	08/14/95.03:00P	
1.1.2.16.B4S	1	Set & Align B19	08/14/95.03:00P	08/14/95.04:00P	
1.1.2.16.B4T	1	Set Clean Room, Purge & Fit B19	08/14/95.04:00P	08/14/95.05:00P	
1.1.2.16.B4U	2	Weld Joint B19	08/15/95.08:00A	08/15/95.10:00A	
1.1.2.16.B4V	2	Leak Test Joint B19	08/15/95.10:00A	08/15/95.12:00P	
1.1.2.16.B4W	2	Install Tube Supports B19	08/15/95.10:00A	08/15/95.12:00P	
1.1.2.16.B4X	2	Remove Equip'mt, Clean & Cap B19	08/15/95.01:00P	08/15/95.03:00P	
1.1.2.16.B5A	1	Unload,Rec/Insp Tube B19	07/11/95.01:00P	07/11/95.02:00P	
1.1.2.16.B5B	1	Move to Stiff Fit Up Stat. B19	07/17/95.02:00P	07/17/95.03:00P	
1.1.2.16.B5C	1	Set-up & Purge B20	07/17/95.03:00P	07/17/95.04:00P	
1.1.2.16.B5D	2	Fit Stiffeners B20	07/17/95.04:00P	07/18/95.09:00A	
1.1.2.16.B5E	4	Weld Stiffeners B20	07/18/95.09:00A	07/18/95.02:00P	
1.1.2.16.B5F	1	Move to Exp.Bellows Stat. B20	07/19/95.10:00A	07/19/95.11:00A	
1.1.2.16.B5G	3	Fit,Purge,Weld Exp. Bellows B20	07/19/95.11:00A	07/19/95.03:00P	
1.1.2.16.B5H	1	Inspect, Install End Caps B20	07/19/95.03:00P	07/19/95.04:00P	
1.1.2.16.B5J	1	Move to Test Area B20	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.16.B5K	1	Pre-Clean & Black Light B20	07/21/95.10:00A	07/21/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.16.B5L	30	Leak Test B20	07/21/95.11:00A	07/22/95.05:00P	
1.1.2.16.B5O	1	Move to Post Test Storage B20	07/24/95.08:00A	07/24/95.09:00A	
1.1.2.16.B5P	1	Clean, Dry & End Cap B20	07/24/95.09:00A	07/24/95.10:00A	
1.1.2.16.B5R	1	Transport to Erection B20	08/16/95.11:00A	08/16/95.12:00P	
1.1.2.16.B5S	1	Set & Align B20	08/16/95.01:00P	08/16/95.02:00P	
1.1.2.16.B5T	1	Set Clean Room, Purge & Fit B20	08/16/95.02:00P	08/16/95.03:00P	
1.1.2.16.B5U	2	Weld Joint B20	08/16/95.03:00P	08/16/95.05:00P	
1.1.2.16.B5V	2	Leak Test Joint B20	08/17/95.08:00A	08/17/95.10:00A	
1.1.2.16.B5W	2	Install Tube Supports B20	08/17/95.08:00A	08/17/95.10:00A	
1.1.2.16.B5X	2	Remove Equip'mt, Clean & Cap B20	08/17/95.10:00A	08/17/95.12:00P	
1.1.2.21	220	Cans 21-25	07/24/95.04:00P	08/31/95.11:00A	
1.1.2.21.1A	1	Unload,Rec/Insp Tube 21	07/25/95.08:00A	07/25/95.09:00A	
1.1.2.21.1B	1	Move to Stiff Fit Up Stat. 21	07/25/95.09:00A	07/25/95.10:00A	
1.1.2.21.1C	1	Set-up & Purge 21	07/25/95.10:00A	07/25/95.11:00A	
1.1.2.21.1D	2	Fit Stiffeners 21	07/25/95.11:00A	07/25/95.02:00P	
1.1.2.21.1E	4	Weld Stiffeners 21	07/25/95.02:00P	07/26/95.09:00A	
1.1.2.21.1F	1	Inspect, Install End Caps 21	07/26/95.09:00A	07/26/95.10:00A	
1.1.2.21.1H	1	Move to Test Area 21	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.21.1I	1	Pre-Clean & Black Light 21	07/26/95.11:00A	07/26/95.12:00P	
1.1.2.21.1J	30	Leak Test 21	07/26/95.12:00P	07/27/95.06:00P	
1.1.2.21.1M	1	Move to Post Test Storage 21	07/28/95.08:00A	07/28/95.09:00A	
1.1.2.21.1N	1	Clean, Dry & End Cap 21	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.21.1P	1	Transport to Erection 210	08/21/95.10:00A	08/21/95.11:00A	
1.1.2.21.1Q	1	Set & Align 21	08/21/95.11:00A	08/21/95.12:00P	
1.1.2.21.1R	1	Set Clean Room, Purge & Fit 21	08/21/95.01:00P	08/21/95.02:00P	
1.1.2.21.1S	2	Weld Joint 21	08/21/95.02:00P	08/21/95.04:00P	
1.1.2.21.1T	2	Leak Test Joint 21	08/21/95.04:00P	08/22/95.09:00A	
1.1.2.21.1U	2	Install Tube Supports 21	08/21/95.04:00P	08/22/95.09:00A	
1.1.2.21.1V	2	Remove Equip'mt, Clean & Cap 21	08/22/95.09:00A	08/22/95.11:00A	
1.1.2.21.2A	1	Unload,Rec. & Inspct 22	07/25/95.09:00A	07/25/95.10:00A	
1.1.2.21.2B	1	Move to Stiff Fit Up Stat. 22	07/26/95.11:00A	07/26/95.12:00P	
1.1.2.21.2C	1	Set-up & Purge 22	07/26/95.01:00P	07/26/95.02:00P	
1.1.2.21.2D	2	Fit Stiffeners 22	07/26/95.02:00P	07/26/95.04:00P	
1.1.2.21.2E	4	Weld Stiffeners 22	07/26/95.04:00P	07/27/95.11:00A	
1.1.2.21.2F	1	Inspect, Install End Caps 22	07/27/95.11:00A	07/27/95.12:00P	
1.1.2.21.2H	1	Move to Test Area 22	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.21.2I	1	Pre-Clean & Black Light 22	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.21.2J	30	Leak Test 22	07/28/95.11:00A	07/29/95.05:00P	
1.1.2.21.2M	1	Move to Post Test Storage 22	07/31/95.08:00A	07/31/95.09:00A	
1.1.2.21.2N	1	Clean, Dry & End Cap 22	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.21.2P	1	Transport to Erection 22	08/23/95.08:00A	08/23/95.09:00A	
1.1.2.21.2Q	1	Set & Align 22	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.21.2R	1	Set Clean Room, Purge & Fit 22	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.21.2S	2	Weld Joint 22	08/23/95.11:00A	08/23/95.02:00P	
1.1.2.21.2T	2	Leak Test Joint 22	08/23/95.02:00P	08/23/95.04:00P	
1.1.2.21.2U	2	Install Tube Supports 22	08/23/95.02:00P	08/23/95.04:00P	
1.1.2.21.2V	2	Remove Equip'mt, Clean & Cap 22	08/23/95.04:00P	08/24/95.09:00A	
1.1.2.21.3A	1	Unload,Rec/Insp Tube 23	07/25/95.10:00A	07/25/95.11:00A	
1.1.2.21.3B	1	Move to Stiff Fit Up Stat. 23	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.21.3C	1	Set-up & Purge 23	07/28/95.11:00A	07/28/95.12:00P	
1.1.2.21.3D	2	Fit Stiffeners 23	07/28/95.01:00P	07/28/95.03:00P	
1.1.2.21.3E	4	Weld Stiffeners 23	07/28/95.03:00P	07/31/95.10:00A	
1.1.2.21.3F	1	Inspect, Install End Caps 23	07/31/95.10:00A	07/31/95.11:00A	
1.1.2.21.3H	1	Move to Test Area 23	07/31/95.11:00A	07/31/95.12:00P	
1.1.2.21.3I	1	Pre-Clean & Black Light 23	07/31/95.01:00P	07/31/95.02:00P	
1.1.2.21.3J	30	Leak Test 23	07/31/95.02:00P	08/01/95.08:00P	
1.1.2.21.3M	1	Move to Post Test Storage 23	08/02/95.08:00A	08/02/95.09:00A	
1.1.2.21.3N	1	Clean, Dry & End Cap 23	08/02/95.09:00A	08/02/95.10:00A	
1.1.2.21.3P	1	Transport to Erection 23	08/24/95.03:00P	08/24/95.04:00P	
1.1.2.21.3Q	1	Set & Align 23	08/24/95.04:00P	08/24/95.05:00P	
1.1.2.21.3R	1	Set Clean Room, Purge & Fit 23	08/25/95.08:00A	08/25/95.09:00A	
1.1.2.21.3S	2	Weld Joint 23	08/25/95.09:00A	08/25/95.11:00A	
1.1.2.21.3T	2	Leak Test Joint 23	08/25/95.11:00A	08/25/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.21.3U	2	Install Tube Supports 23	08/25/95.11:00A	08/25/95.02:00P	
1.1.2.21.3V	2	Remove Equip'mt, Clean & Cap 23	08/25/95.02:00P	08/25/95.04:00P	
1.1.2.21.4A	1	Unload,Rec/Insp Tube 24	07/25/95.11:00A	07/25/95.12:00P	
1.1.2.21.4B	1	Move to Stiff Fit Up Stat. 24	07/31/95.01:00P	07/31/95.02:00P	
1.1.2.21.4C	1	Set-up & Purge 24	07/31/95.02:00P	07/31/95.03:00P	
1.1.2.21.4D	2	Fit Stiffeners 24	07/31/95.03:00P	07/31/95.05:00P	
1.1.2.21.4E	4	Weld Stiffeners 24	08/01/95.08:00A	08/01/95.12:00P	
1.1.2.21.4F	1	Inspect, Install End Caps 24	08/01/95.01:00P	08/01/95.02:00P	
1.1.2.21.4H	1	Move to Test Area2 4	08/02/95.09:00A	08/02/95.10:00A	
1.1.2.21.4I	1	Pre-Clean & Black Light 24	08/02/95.10:00A	08/02/95.11:00A	
1.1.2.21.4J	30	Leak Test 24	08/02/95.11:00A	08/03/95.05:00P	
1.1.2.21.4M	1	Move to Post Test Storage 24	08/04/95.08:00A	08/04/95.09:00A	
1.1.2.21.4N	1	Clean, Dry & End Cap 24	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.21.4P	1	Transport to Erection 24	08/28/95.01:00P	08/28/95.02:00P	
1.1.2.21.4Q	1	Set & Align 24	08/28/95.02:00P	08/28/95.03:00P	
1.1.2.21.4R	1	Set Clean Room, Purge & Fit 24	08/28/95.03:00P	08/28/95.04:00P	
1.1.2.21.4S	2	Weld Joint 24	08/28/95.04:00P	08/29/95.09:00A	
1.1.2.21.4T	2	Leak Test Joint 24	08/29/95.09:00A	08/29/95.11:00A	
1.1.2.21.4U	2	Install Tube Supports 24	08/29/95.09:00A	08/29/95.11:00A	
1.1.2.21.4V	2	Remove Equip'mt, Clean & Cap 24	08/29/95.11:00A	08/29/95.02:00P	
1.1.2.21.5A	1	Unload,Rec/Insp Tube 25	07/25/95.01:00P	07/25/95.02:00P	
1.1.2.21.5B	1	Move to Stiff Fit Up Stat. 25	08/02/95.10:00A	08/02/95.11:00A	
1.1.2.21.5C	1	Set-up & Purge 25	08/02/95.11:00A	08/02/95.12:00P	
1.1.2.21.5D	1	F/W Pump Port Reinf. 25	08/02/95.01:00P	08/02/95.02:00P	
1.1.2.21.5E	2	Fit Stiffeners 25	08/02/95.02:00P	08/02/95.04:00P	
1.1.2.21.5F	4	Weld Stiffeners 25	08/02/95.04:00P	08/03/95.11:00A	
1.1.2.21.5G	1	Move to P.Port Stat.25	08/03/95.11:00A	08/03/95.12:00P	
1.1.2.21.5H	1	Setup & Bore 10" Inlet 25	08/03/95.01:00P	08/03/95.02:00P	
1.1.2.21.5I	2	Purge/F/W Pump Port 25	08/03/95.02:00P	08/03/95.04:00P	
1.1.2.21.5J	1	Inspect, Install End Caps 25	08/03/95.04:00P	08/03/95.05:00P	
1.1.2.21.5L	1	Move to Test Area 25	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.21.5M	1	Pre-Clean & Black Light 25	08/04/95.10:00A	08/04/95.11:00A	
1.1.2.21.5N	30	Leak Test 25	08/04/95.11:00A	08/05/95.05:00P	
1.1.2.21.5Q	1	Move to Post Test Storage 25	08/07/95.08:00A	08/07/95.09:00A	
1.1.2.21.5R	1	Clean, Dry & End Cap 25	08/07/95.09:00A	08/07/95.10:00A	
1.1.2.21.5T	1	Transport to Erection 25	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.21.5U	1	Set & Align 25	08/30/95.11:00A	08/30/95.12:00P	
1.1.2.21.5V	1	Set Clean Room, Purge & Fit 25	08/30/95.01:00P	08/30/95.02:00P	
1.1.2.21.5W	2	Weld Joint25	08/30/95.02:00P	08/30/95.04:00P	
1.1.2.21.5X	2	Leak Test Joint 25	08/30/95.04:00P	08/31/95.09:00A	
1.1.2.21.5Y	2	Install Tube Supports 250	08/30/95.04:00P	08/31/95.09:00A	
1.1.2.21.5Z	2	Remove Equip'mt, Clean & Cap 25	08/31/95.09:00A	08/31/95.11:00A	
1.1.2.21.B1A	1	Unload,Rec/Insp Tube B21	07/25/95.08:00A	07/25/95.09:00A	
1.1.2.21.B1B	1	Move to Stiff Fit Up Stat. B21	07/25/95.09:00A	07/25/95.10:00A	
1.1.2.21.B1C	1	Set-up & Purge B21	07/25/95.10:00A	07/25/95.11:00A	
1.1.2.21.B1D	2	Fit Stiffeners B21	07/25/95.11:00A	07/25/95.02:00P	
1.1.2.21.B1E	4	Weld Stiffeners B21	07/25/95.02:00P	07/26/95.09:00A	
1.1.2.21.B1F	1	Move to Exp.Bellows Stat. B21	07/26/95.09:00A	07/26/95.10:00A	
1.1.2.21.B1G	3	Fit,Purge,Weld Exp. Bellows B21	07/26/95.10:00A	07/26/95.02:00P	
1.1.2.21.B1H	1	Inspect, Install End Caps B21	07/26/95.02:00P	07/26/95.03:00P	
1.1.2.21.B1J	1	Move to Test Area B21	07/26/95.03:00P	07/26/95.04:00P	
1.1.2.21.B1K	1	Pre-Clean & Black Light B21	07/26/95.04:00P	07/26/95.05:00P	
1.1.2.21.B1L	30	Leak Test B21	07/26/95.05:00P	07/27/95.11:00P	
1.1.2.21.B1O	1	Move to Post Test Storage B21	07/28/95.08:00A	07/28/95.09:00A	
1.1.2.21.B1P	1	Clean, Dry & End Cap B21	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.21.B1R	1	Transport to Erection 21	08/18/95.11:00A	08/18/95.12:00P	
1.1.2.21.B1S	1	Set & Align B21	08/18/95.01:00P	08/18/95.02:00P	
1.1.2.21.B1T	1	Set Clean Room, Purge & Fit B21	08/18/95.02:00P	08/18/95.03:00P	
1.1.2.21.B1U	2	Weld Joint B21	08/18/95.03:00P	08/18/95.05:00P	
1.1.2.21.B1V	2	Leak Test Joint B21	08/21/95.08:00A	08/21/95.10:00A	
1.1.2.21.B1W	2	Install Tube Supports B21	08/21/95.08:00A	08/21/95.10:00A	
1.1.2.21.B1X	2	Remove Equip'mt, Clean & Cap B21	08/21/95.10:00A	08/21/95.12:00P	
1.1.2.21.B2A	1	Unload,Rec/Insp Tube B22	07/25/95.09:00A	07/25/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.21.B2B	1	Move to Stiff Fit Up Stat. B22	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.21.B2C	1	Set-up & Purge B22	07/26/95.11:00A	07/26/95.12:00P	
1.1.2.21.B2D	2	Fit Stiffeners B22	07/26/95.01:00P	07/26/95.03:00P	
1.1.2.21.B2E	4	Weld Stiffeners B22	07/26/95.03:00P	07/27/95.10:00A	
1.1.2.21.B2F	1	Move to Exp.Bellows Stat. B22	07/27/95.10:00A	07/27/95.11:00A	
1.1.2.21.B2G	3	Fit,Purge,Weld Exp. Bellows B22	07/27/95.11:00A	07/27/95.03:00P	
1.1.2.21.B2H	1	Inspect, Install End Caps B22	07/27/95.03:00P	07/27/95.04:00P	
1.1.2.21.B2J	1	Move to Test Area B2	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.21.B2K	1	Pre-Clean & Black Light B22	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.21.B2L	30	Leak Test B22	07/28/95.11:00A	07/29/95.05:00P	
1.1.2.21.B2O	1	Move to Post Test Storage B22	07/31/95.08:00A	07/31/95.09:00A	
1.1.2.21.B2P	1	Clean, Dry & End Cap B22	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.21.B2R	1	Transport to Erection B22	08/22/95.09:00A	08/22/95.10:00A	
1.1.2.21.B2S	1	Set & Align B22	08/22/95.10:00A	08/22/95.11:00A	
1.1.2.21.B2T	1	Set Clean Room, Purge & Fit B22	08/22/95.11:00A	08/22/95.12:00P	
1.1.2.21.B2U	2	Weld Joint B22	08/22/95.01:00P	08/22/95.03:00P	
1.1.2.21.B2V	2	Leak Test Joint B22	08/22/95.03:00P	08/22/95.05:00P	
1.1.2.21.B2W	2	Install Tube Supports B22	08/22/95.03:00P	08/22/95.05:00P	
1.1.2.21.B2X	2	Remove Equip'mt, Clean & Cap B22	08/23/95.08:00A	08/23/95.10:00A	
1.1.2.21.B3A	1	Unload,Rec/Insp Tube B23	07/25/95.10:00A	07/25/95.11:00A	
1.1.2.21.B3B	1	Move to Stiff Fit Up Stat. B23	07/27/95.11:00A	07/27/95.12:00P	
1.1.2.21.B3C	1	Set-up & Purge B23	07/27/95.01:00P	07/27/95.02:00P	
1.1.2.21.B3D	2	Fit Stiffeners B23	07/27/95.02:00P	07/27/95.04:00P	
1.1.2.21.B3E	4	Weld Stiffeners B23	07/27/95.04:00P	07/28/95.11:00A	
1.1.2.21.B3F	1	Move to Exp.Bellows Stat. B23	07/28/95.11:00A	07/28/95.12:00P	
1.1.2.21.B3G	3	Fit,Purge,Weld Exp. Bellows B23	07/28/95.01:00P	07/28/95.04:00P	
1.1.2.21.B3H	1	Inspect, Install End Caps B23	07/28/95.04:00P	07/28/95.05:00P	
1.1.2.21.B3J	1	Move to Test Area B23	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.21.B3K	1	Pre-Clean & Black Light B23	07/31/95.10:00A	07/31/95.11:00A	
1.1.2.21.B3L	30	Leak Test B23	07/31/95.11:00A	08/01/95.05:00P	
1.1.2.21.B3O	1	Move to Post Test Storage B23	08/02/95.08:00A	08/02/95.09:00A	
1.1.2.21.B3P	1	Clean, Dry & End Cap B23	08/02/95.09:00A	08/02/95.10:00A	
1.1.2.21.B3R	1	Transport to Erection B23	08/23/95.04:00P	08/23/95.05:00P	
1.1.2.21.B3S	1	Set & Align B23	08/24/95.08:00A	08/24/95.09:00A	
1.1.2.21.B3T	1	Set Clean Room, Purge & Fit B23	08/24/95.09:00A	08/24/95.10:00A	
1.1.2.21.B3U	2	Weld Joint B23	08/24/95.10:00A	08/24/95.12:00P	
1.1.2.21.B3V	2	Leak Test Joint B23	08/24/95.01:00P	08/24/95.03:00P	
1.1.2.21.B3W	2	Install Tube Supports B23	08/24/95.01:00P	08/24/95.03:00P	
1.1.2.21.B3X	2	Remove Equip'mt, Clean & Cap B23	08/24/95.03:00P	08/24/95.05:00P	
1.1.2.21.B4A	1	Unload,Rec/Insp Tube B20	07/25/95.11:00A	07/25/95.12:00P	
1.1.2.21.B4B	1	Move to Stiff Fit Up Stat. B24	07/28/95.01:00P	07/28/95.02:00P	
1.1.2.21.B4C	1	Set-up & Purge B24	07/28/95.02:00P	07/28/95.03:00P	
1.1.2.21.B4D	2	Fit Stiffeners B24	07/28/95.03:00P	07/28/95.05:00P	
1.1.2.21.B4E	4	Weld Stiffeners B24	07/31/95.08:00A	07/31/95.12:00P	
1.1.2.21.B4F	1	Move to Exp.Bellows Stat. B24	07/31/95.01:00P	07/31/95.02:00P	
1.1.2.21.B4G	3	Fit,Purge,Weld Exp. Bellows B24	07/31/95.02:00P	07/31/95.05:00P	
1.1.2.21.B4H	1	Inspect, Install End Caps B24	08/01/95.08:00A	08/01/95.09:00A	
1.1.2.21.B4J	1	Move to Test Area B24	08/02/95.09:00A	08/02/95.10:00A	
1.1.2.21.B4K	1	Pre-Clean & Black Light B24	08/02/95.10:00A	08/02/95.11:00A	
1.1.2.21.B4L	30	Leak Test B24	08/02/95.11:00A	08/03/95.05:00P	
1.1.2.21.B4O	1	Move to Post Test Storage B24	08/04/95.08:00A	08/04/95.09:00A	
1.1.2.21.B4P	1	Clean, Dry & End Cap B24	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.21.B4R	1	Transport to Erection B24	08/25/95.02:00P	08/25/95.03:00P	
1.1.2.21.B4S	1	Set & Align B24	08/25/95.03:00P	08/25/95.04:00P	
1.1.2.21.B4T	1	Set Clean Room, Purge & Fit B24	08/25/95.04:00P	08/25/95.05:00P	
1.1.2.21.B4U	2	Weld Joint B24	08/28/95.08:00A	08/28/95.10:00A	
1.1.2.21.B4V	2	Leak Test Joint B24	08/28/95.10:00A	08/28/95.12:00P	
1.1.2.21.B4W	2	Install Tube Supports B24	08/28/95.10:00A	08/28/95.12:00P	
1.1.2.21.B4X	2	Remove Equip'mt, Clean & Cap B24	08/28/95.01:00P	08/28/95.03:00P	
1.1.2.21.B5A	1	Unload,Rec/Insp Tube B2	07/25/95.01:00P	07/25/95.02:00P	
1.1.2.21.B5B	1	Move to Stiff Fit Up Stat. B25	07/31/95.02:00P	07/31/95.03:00P	
1.1.2.21.B5C	1	Set-up & Purge B25	07/31/95.03:00P	07/31/95.04:00P	
1.1.2.21.B5D	2	Fit Stiffeners B25	07/31/95.04:00P	08/01/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.21.B5E	4	Weld Stiffeners B25	08/01/95.09:00A	08/01/95.02:00P	
1.1.2.21.B5F	1	Move to Exp.Bellows Stat. B25	08/02/95.10:00A	08/02/95.11:00A	
1.1.2.21.B5G	3	Fit,Purge,Weld Exp. Bellows B25	08/02/95.11:00A	08/02/95.03:00P	
1.1.2.21.B5H	1	Inspect, Install End Caps B25	08/02/95.03:00P	08/02/95.04:00P	
1.1.2.21.B5J	1	Move to Test Area B25	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.21.B5K	1	Pre-Clean & Black Light B25	08/04/95.10:00A	08/04/95.11:00A	
1.1.2.21.B5L	30	Leak Test B25	08/04/95.11:00A	08/05/95.05:00P	
1.1.2.21.B5O	1	Move to Post Test Storage B25	08/07/95.08:00A	08/07/95.09:00A	
1.1.2.21.B5P	1	Clean, Dry & End Cap B25	08/07/95.09:00A	08/07/95.10:00A	
1.1.2.21.B5R	1	Transport to Erection B25	08/29/95.11:00A	08/29/95.12:00P	
1.1.2.21.B5S	1	Set & Align B25	08/29/95.01:00P	08/29/95.02:00P	
1.1.2.21.B5T	1	Set Clean Room, Purge & Fit B25	08/29/95.02:00P	08/29/95.03:00P	
1.1.2.21.B5U	2	Weld Joint B25	08/29/95.03:00P	08/29/95.05:00P	
1.1.2.21.B5V	2	Leak Test Joint B25	08/30/95.08:00A	08/30/95.10:00A	
1.1.2.21.B5W	2	Install Tube Supports 25	08/30/95.08:00A	08/30/95.10:00A	
1.1.2.21.B5X	2	Remove Equip'mt, Clean & Cap B25	08/30/95.10:00A	08/30/95.12:00P	
1.1.2.26	212	Cans 26-30	08/07/95.04:00P	09/13/95.11:00A	
1.1.2.26.1A	1	Unload,Rec/Insp Tube 26	08/08/95.08:00A	08/08/95.09:00A	
1.1.2.26.1B	1	Move to Stiff Fit Up Stat. 26	08/08/95.09:00A	08/08/95.10:00A	
1.1.2.26.1C	1	Set-up & Purge 26	08/08/95.10:00A	08/08/95.11:00A	
1.1.2.26.1D	2	Fit Stiffeners 26	08/08/95.11:00A	08/08/95.02:00P	
1.1.2.26.1E	4	Weld Stiffeners 26	08/08/95.02:00P	08/09/95.09:00A	
1.1.2.26.1F	1	Inspect, Install End Caps 26	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.26.1H	1	Move to Test Area 26	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.26.1I	1	Pre-Clean & Black Light 26	08/09/95.11:00A	08/09/95.12:00P	
1.1.2.26.1J	30	Leak Test 26	08/09/95.12:00P	08/10/95.06:00P	
1.1.2.26.1M	1	Move to Post Test Storage 26	08/11/95.08:00A	08/11/95.09:00A	
1.1.2.26.1N	1	Clean, Dry & End Cap 26	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.26.1P	1	Transport to Erection 26	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.26.1Q	1	Set & Align 26	09/01/95.11:00A	09/01/95.12:00P	
1.1.2.26.1R	1	Set Clean Room, Purge & Fit 26	09/01/95.01:00P	09/01/95.02:00P	
1.1.2.26.1S	2	Weld Joint 26	09/01/95.02:00P	09/01/95.04:00P	
1.1.2.26.1T	2	Leak Test Joint 26	09/01/95.04:00P	09/04/95.09:00A	
1.1.2.26.1U	2	Install Tube Supports 26	09/01/95.04:00P	09/04/95.09:00A	
1.1.2.26.1V	2	Remove Equip'mt, Clean & Cap 26	09/04/95.09:00A	09/04/95.11:00A	
1.1.2.26.2A	1	Unload,Rec. & Inspect 27	08/08/95.09:00A	08/08/95.10:00A	
1.1.2.26.2B	1	Move to Stiff Fit Up Stat. 27	08/09/95.11:00A	08/09/95.12:00P	
1.1.2.26.2C	1	Set-up & Purge 27	08/09/95.01:00P	08/09/95.02:00P	
1.1.2.26.2D	2	Fit Stiffeners 27	08/09/95.02:00P	08/09/95.04:00P	
1.1.2.26.2E	4	Weld Stiffeners 27	08/09/95.04:00P	08/10/95.11:00A	
1.1.2.26.2F	1	Inspect, Install End Caps 27	08/10/95.11:00A	08/10/95.12:00P	
1.1.2.26.2H	1	Move to Test Area 27	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.26.2I	1	Pre-Clean & Black Light 27	08/11/95.10:00A	08/11/95.11:00A	
1.1.2.26.2J	30	Leak Test 27	08/11/95.11:00A	08/12/95.05:00P	
1.1.2.26.2M	1	Move to Post Test Storage 27	08/14/95.08:00A	08/14/95.09:00A	
1.1.2.26.2N	1	Clean, Dry & End Cap 27	08/14/95.09:00A	08/14/95.10:00A	
1.1.2.26.2P	1	Transport to Erection 27	09/05/95.08:00A	09/05/95.09:00A	
1.1.2.26.2Q	1	Set & Align 27	09/05/95.09:00A	09/05/95.10:00A	
1.1.2.26.2R	1	Set Clean Room, Purge & Fit 27	09/05/95.10:00A	09/05/95.11:00A	
1.1.2.26.2S	2	Weld Joint 27	09/05/95.11:00A	09/05/95.02:00P	
1.1.2.26.2T	2	Leak Test Joint 27	09/05/95.02:00P	09/05/95.04:00P	
1.1.2.26.2U	2	Install Tube Supports 27	09/05/95.02:00P	09/05/95.04:00P	
1.1.2.26.2V	2	Remove Equip'mt, Clean & Cap 27	09/05/95.04:00P	09/06/95.09:00A	
1.1.2.26.3A	1	Unload,Rec/Insp Tube 28	08/08/95.10:00A	08/08/95.11:00A	
1.1.2.26.3B	1	Move to Stiff Fit Up Stat. 28	08/11/95.10:00A	08/11/95.11:00A	
1.1.2.26.3C	1	Set-up & Purge 28	08/11/95.11:00A	08/11/95.12:00P	
1.1.2.26.3D	2	Fit Stiffeners 28	08/11/95.01:00P	08/11/95.03:00P	
1.1.2.26.3E	4	Weld Stiffeners 28	08/11/95.03:00P	08/14/95.10:00A	
1.1.2.26.3F	1	Inspect, Install End Caps 28	08/14/95.10:00A	08/14/95.11:00A	
1.1.2.26.3H	1	Move to Test Area 28	08/14/95.11:00A	08/14/95.12:00P	
1.1.2.26.3I	1	Pre-Clean & Black Light 28	08/14/95.01:00P	08/14/95.02:00P	
1.1.2.26.3J	30	Leak Test 28	08/14/95.02:00P	08/15/95.08:00P	
1.1.2.26.3M	1	Move to Post Test Storage 28	08/16/95.08:00A	08/16/95.09:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.26.3N	1	Clean, Dry & End Cap 28	08/16/95.09:00A	08/16/95.10:00A	
1.1.2.26.3P	1	Transport to Erection 28	09/06/95.03:00P	09/06/95.04:00P	
1.1.2.26.3Q	1	Set & Align 28	09/06/95.04:00P	09/06/95.05:00P	
1.1.2.26.3R	1	Set Clean Room, Purge & Fit 28	09/07/95.08:00A	09/07/95.09:00A	
1.1.2.26.3S	2	Weld Joint 28	09/07/95.09:00A	09/07/95.11:00A	
1.1.2.26.3T	2	Leak Test Joint 28	09/07/95.11:00A	09/07/95.02:00P	
1.1.2.26.3U	2	Install Tube Supports 28	09/07/95.11:00A	09/07/95.02:00P	
1.1.2.26.3V	2	Remove Equip'mt, Clean & Cap 58	09/07/95.02:00P	09/07/95.04:00P	
1.1.2.26.4A	1	Unload,Rec/Insp Tube 29	08/08/95.11:00A	08/08/95.12:00P	
1.1.2.26.4B	1	Move to Stiff Fit Up Stat. 29	08/14/95.01:00P	08/14/95.02:00P	
1.1.2.26.4C	1	Set-up & Purge 29	08/14/95.02:00P	08/14/95.03:00P	
1.1.2.26.4D	2	Fit Stiffeners 29	08/14/95.03:00P	08/14/95.05:00P	
1.1.2.26.4E	4	Weld Stiffeners 29	08/15/95.08:00A	08/15/95.12:00P	
1.1.2.26.4F	1	Inspect, Install End Caps 29	08/15/95.01:00P	08/15/95.02:00P	
1.1.2.26.4H	1	Move to Test Area 29	08/16/95.09:00A	08/16/95.10:00A	
1.1.2.26.4I	1	Pre-Clean & Black Light 29	08/16/95.10:00A	08/16/95.11:00A	
1.1.2.26.4J	30	Leak Test 29	08/16/95.11:00A	08/17/95.05:00P	
1.1.2.26.4M	1	Move to Post Test Storage 29	08/18/95.08:00A	08/18/95.09:00A	
1.1.2.26.4N	1	Clean, Dry & End Cap 29	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.26.4P	1	Transport to Erection 29	09/08/95.01:00P	09/08/95.02:00P	
1.1.2.26.4Q	1	Set & Align 29	09/08/95.02:00P	09/08/95.03:00P	
1.1.2.26.4R	1	Set Clean Room, Purge & Fit 29	09/08/95.03:00P	09/08/95.04:00P	
1.1.2.26.4S	2	Weld Joint 29	09/08/95.04:00P	09/11/95.09:00A	
1.1.2.26.4T	2	Leak Test Joint 29	09/11/95.09:00A	09/11/95.11:00A	
1.1.2.26.4U	2	Install Tube Supports 29	09/11/95.09:00A	09/11/95.11:00A	
1.1.2.26.4V	2	Remove Equip'mt, Clean & Cap 29	09/11/95.11:00A	09/11/95.02:00P	
1.1.2.26.5A	1	Unload,Rec/Insp Tube 30	08/08/95.01:00P	08/08/95.02:00P	
1.1.2.26.5B	1	Move to Stiff Fit Up Stat. 30	08/16/95.10:00A	08/16/95.11:00A	
1.1.2.26.5C	1	Set-up & Purge 30	08/16/95.11:00A	08/16/95.12:00P	
1.1.2.26.5D	1	F/W Pump Port Reinf. 30	08/16/95.01:00P	08/16/95.02:00P	
1.1.2.26.5E	2	Fit Stiffeners 30	08/16/95.02:00P	08/16/95.04:00P	
1.1.2.26.5F	4	Weld Stiffeners 30	08/16/95.04:00P	08/17/95.11:00A	
1.1.2.26.5G	1	Move to P.Port Stat.30	08/17/95.11:00A	08/17/95.12:00P	
1.1.2.26.5H	1	Setup & Bore 10" Inlet 30	08/17/95.01:00P	08/17/95.02:00P	
1.1.2.26.5I	2	Purge/F/W Pump Port 30	08/17/95.02:00P	08/17/95.04:00P	
1.1.2.26.5J	1	Inspect, Install End Caps 30	08/17/95.04:00P	08/17/95.05:00P	
1.1.2.26.5L	1	Move to Test Area 30	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.26.5M	1	Pre-Clean & Black Light 30	08/18/95.10:00A	08/18/95.11:00A	
1.1.2.26.5N	30	Leak Test 30	08/18/95.11:00A	08/19/95.05:00P	
1.1.2.26.5Q	1	Move to Post Test Storage 30	08/21/95.08:00A	08/21/95.09:00A	
1.1.2.26.5R	1	Clean, Dry & End Cap 30	08/21/95.09:00A	08/21/95.10:00A	
1.1.2.26.5T	1	Transport to Erection 30	09/12/95.10:00A	09/12/95.11:00A	
1.1.2.26.5U	1	Set & Align 30	09/12/95.11:00A	09/12/95.12:00P	
1.1.2.26.5V	1	Set Clean Room, Purge & Fit 30	09/12/95.01:00P	09/12/95.02:00P	
1.1.2.26.5W	2	Weld Joint 30	09/12/95.02:00P	09/12/95.04:00P	
1.1.2.26.5X	2	Leak Test Joint 30	09/12/95.04:00P	09/13/95.09:00A	
1.1.2.26.5Y	2	Install Tube Supports 30	09/12/95.04:00P	09/13/95.09:00A	
1.1.2.26.5Z	2	Remove Equip'mt, Clean & Cap 30	09/13/95.09:00A	09/13/95.11:00A	
1.1.2.26.B1A	1	Unload,Rec/Insp Tube B26	08/08/95.08:00A	08/08/95.09:00A	
1.1.2.26.B1B	1	Move to Stiff Fit Up Stat. B26	08/08/95.09:00A	08/08/95.10:00A	
1.1.2.26.B1C	1	Set-up & Purge B26	08/08/95.10:00A	08/08/95.11:00A	
1.1.2.26.B1D	2	Fit Stiffeners B26	08/08/95.11:00A	08/08/95.02:00P	
1.1.2.26.B1E	4	Weld Stiffeners B26	08/08/95.02:00P	08/09/95.09:00A	
1.1.2.26.B1F	1	Move to Exp.Bellows Stat. B26	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.26.B1G	3	Fit,Purge,Weld Exp. Bellows B26	08/09/95.10:00A	08/09/95.02:00P	
1.1.2.26.B1H	1	Inspect, Install End Caps B26	08/09/95.02:00P	08/09/95.03:00P	
1.1.2.26.B1J	1	Move to Test Area B26	08/09/95.03:00P	08/09/95.04:00P	
1.1.2.26.B1K	1	Pre-Clean & Black Light B26	08/09/95.04:00P	08/09/95.05:00P	
1.1.2.26.B1L	30	Leak Test B26	08/09/95.05:00P	08/10/95.11:00P	
1.1.2.26.B1O	1	Move to Post Test Storage B26	08/11/95.08:00A	08/11/95.09:00A	
1.1.2.26.B1P	1	Clean, Dry & End Cap B26	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.26.B1R	1	Transport to Erection B26	08/31/95.11:00A	08/31/95.12:00P	
1.1.2.26.B1S	1	Set & Align B26	08/31/95.01:00P	08/31/95.02:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.26.B1T	1	Set Clean Room, Purge & Fit B26	08/31/95.02:00P	08/31/95.03:00P	
1.1.2.26.B1U	2	Weld Joint B26	08/31/95.03:00P	08/31/95.05:00P	
1.1.2.26.B1V	2	Leak Test Joint B26	09/01/95.08:00A	09/01/95.10:00A	
1.1.2.26.B1W	2	Install Tube Supports B26	09/01/95.08:00A	09/01/95.10:00A	
1.1.2.26.B1X	2	Remove Equip'mt, Clean & Cap B26	09/01/95.10:00A	09/01/95.12:00P	
1.1.2.26.B2A	1	Unload,Rec/Insp Tube B27	08/08/95.09:00A	08/08/95.10:00A	
1.1.2.26.B2B	1	Move to Stiff Fit Up Stat. B27	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.26.B2C	1	Set-up & Purge B27	08/09/95.11:00A	08/09/95.12:00P	
1.1.2.26.B2D	2	Fit Stiffeners B27	08/09/95.01:00P	08/09/95.03:00P	
1.1.2.26.B2E	4	Weld Stiffeners B27	08/09/95.03:00P	08/10/95.10:00A	
1.1.2.26.B2F	1	Move to Exp.Bellows Stat. B27	08/10/95.10:00A	08/10/95.11:00A	
1.1.2.26.B2G	3	Fit,Purge,Weld Exp. Bellows B27	08/10/95.11:00A	08/10/95.03:00P	
1.1.2.26.B2H	1	Inspect, Install End Caps B27	08/10/95.03:00P	08/10/95.04:00P	
1.1.2.26.B2J	1	Move to Test Area B27	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.26.B2K	1	Pre-Clean & Black Light B27	08/11/95.10:00A	08/11/95.11:00A	
1.1.2.26.B2L	30	Leak Test B27	08/11/95.11:00A	08/12/95.05:00P	
1.1.2.26.B2O	1	Move to Post Test Storage B27	08/14/95.08:00A	08/14/95.09:00A	
1.1.2.26.B2P	1	Clean, Dry & End Cap B27	08/14/95.09:00A	08/14/95.10:00A	
1.1.2.26.B2R	1	Transport to Erection B27	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.26.B2S	1	Set & Align B27	09/04/95.10:00A	09/04/95.11:00A	
1.1.2.26.B2T	1	Set Clean Room, Purge & Fit B27	09/04/95.11:00A	09/04/95.12:00P	
1.1.2.26.B2U	2	Weld Joint B27	09/04/95.01:00P	09/04/95.03:00P	
1.1.2.26.B2V	2	Leak Test Joint B27	09/04/95.03:00P	09/04/95.05:00P	
1.1.2.26.B2W	2	Install Tube SupportsB27	09/04/95.03:00P	09/04/95.05:00P	
1.1.2.26.B2X	2	Remove Equip'mt, Clean & Cap B27	09/05/95.08:00A	09/05/95.10:00A	
1.1.2.26.B3A	1	Unload,Rec/Insp Tube B280	08/08/95.10:00A	08/08/95.11:00A	
1.1.2.26.B3B	1	Move to Stiff Fit Up Stat. B28	08/10/95.11:00A	08/10/95.12:00P	
1.1.2.26.B3C	1	Set-up & Purge B28	08/10/95.01:00P	08/10/95.02:00P	
1.1.2.26.B3D	2	Fit Stiffeners B28	08/10/95.02:00P	08/10/95.04:00P	
1.1.2.26.B3E	4	Weld Stiffeners B28	08/10/95.04:00P	08/11/95.11:00A	
1.1.2.26.B3F	1	Move to Exp.Bellows Stat. B28	08/11/95.11:00A	08/11/95.12:00P	
1.1.2.26.B3G	3	Fit,Purge,Weld Exp. Bellows B28	08/11/95.01:00P	08/11/95.04:00P	
1.1.2.26.B3H	1	Inspect, Install End Caps B28	08/11/95.04:00P	08/11/95.05:00P	
1.1.2.26.B3J	1	Move to Test Area B28	08/14/95.09:00A	08/14/95.10:00A	
1.1.2.26.B3K	1	Pre-Clean & Black Light B28	08/14/95.10:00A	08/14/95.11:00A	
1.1.2.26.B3L	30	Leak Test B28	08/14/95.11:00A	08/15/95.05:00P	
1.1.2.26.B3O	1	Move to Post Test Storage B28	08/16/95.08:00A	08/16/95.09:00A	
1.1.2.26.B3P	1	Clean, Dry & End Cap B28	08/16/95.09:00A	08/16/95.10:00A	
1.1.2.26.B3R	1	Transport to Erection B28	09/05/95.04:00P	09/05/95.05:00P	
1.1.2.26.B3S	1	Set & Align B28	09/06/95.08:00A	09/06/95.09:00A	
1.1.2.26.B3T	1	Set Clean Room, Purge & Fit B28	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.26.B3U	2	Weld Joint B28	09/06/95.10:00A	09/06/95.12:00P	
1.1.2.26.B3V	2	Leak Test Joint B28	09/06/95.01:00P	09/06/95.03:00P	
1.1.2.26.B3W	2	Install Tube Supports B28	09/06/95.01:00P	09/06/95.03:00P	
1.1.2.26.B3X	2	Remove Equip'mt, Clean & Cap B28	09/06/95.03:00P	09/06/95.05:00P	
1.1.2.26.B4A	1	Unload,Rec/Insp Tube B28	08/08/95.11:00A	08/08/95.12:00P	
1.1.2.26.B4B	1	Move to Stiff Fit Up Stat. B29	08/11/95.01:00P	08/11/95.02:00P	
1.1.2.26.B4C	1	Set-up & Purge B29	08/11/95.02:00P	08/11/95.03:00P	
1.1.2.26.B4D	2	Fit Stiffeners B29	08/11/95.03:00P	08/11/95.05:00P	
1.1.2.26.B4E	4	Weld Stiffeners B29	08/14/95.08:00A	08/14/95.12:00P	
1.1.2.26.B4F	1	Move to Exp.Bellows Stat. B29	08/14/95.01:00P	08/14/95.02:00P	
1.1.2.26.B4G	3	Fit,Purge,Weld Exp. Bellows B29	08/14/95.02:00P	08/14/95.05:00P	
1.1.2.26.B4H	1	Inspect, Install End Caps B29	08/15/95.08:00A	08/15/95.09:00A	
1.1.2.26.B4J	1	Move to Test Area B29	08/16/95.09:00A	08/16/95.10:00A	
1.1.2.26.B4K	1	Pre-Clean & Black Light B29	08/16/95.10:00A	08/16/95.11:00A	
1.1.2.26.B4L	30	Leak Test B29	08/16/95.11:00A	08/17/95.05:00P	
1.1.2.26.B4O	1	Move to Post Test Storage B29	08/18/95.08:00A	08/18/95.09:00A	
1.1.2.26.B4P	1	Clean, Dry & End Cap B29	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.26.B4R	1	Transport to Erection B29	09/07/95.02:00P	09/07/95.03:00P	
1.1.2.26.B4S	1	Set & Align B29	09/07/95.03:00P	09/07/95.04:00P	
1.1.2.26.B4T	1	Set Clean Room, Purge & Fit B29	09/07/95.04:00P	09/07/95.05:00P	
1.1.2.26.B4U	2	Weld Joint B29	09/08/95.08:00A	09/08/95.10:00A	
1.1.2.26.B4V	2	Leak Test Joint B29	09/08/95.10:00A	09/08/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.26.B4W	2	Install Tube Supports B29	09/08/95.10:00A	09/08/95.12:00P	
1.1.2.26.B4X	2	Remove Equip'mt, Clean & Cap B29	09/08/95.01:00P	09/08/95.03:00P	
1.1.2.26.B5A	1	Unload,Rec/Insp Tube B30	08/08/95.01:00P	08/08/95.02:00P	
1.1.2.26.B5B	1	Move to Stiff Fit Up Stat. B30	08/14/95.02:00P	08/14/95.03:00P	
1.1.2.26.B5C	1	Set-up & Purge B30	08/14/95.03:00P	08/14/95.04:00P	
1.1.2.26.B5D	2	Fit Stiffeners B30	08/14/95.04:00P	08/15/95.09:00A	
1.1.2.26.B5E	4	Weld Stiffeners B30	08/15/95.09:00A	08/15/95.02:00P	
1.1.2.26.B5F	1	Move to Exp.Bellows Stat. B30	08/16/95.10:00A	08/16/95.11:00A	
1.1.2.26.B5G	3	Fit,Purge,Weld Exp. Bellows B30	08/16/95.11:00A	08/16/95.03:00P	
1.1.2.26.B5H	1	Inspect, Install End Caps B30	08/16/95.03:00P	08/16/95.04:00P	
1.1.2.26.B5J	1	Move to Test Area B30	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.26.B5K	1	Pre-Clean & Black Light B30	08/18/95.10:00A	08/18/95.11:00A	
1.1.2.26.B5L	30	Leak Test B30	08/18/95.11:00A	08/19/95.05:00P	
1.1.2.26.B5O	1	Move to Post Test Storage B30	08/21/95.08:00A	08/21/95.09:00A	
1.1.2.26.B5P	1	Clean, Dry & End Cap B30	08/21/95.09:00A	08/21/95.10:00A	
1.1.2.26.B5R	1	Transport to Erection B30	09/11/95.11:00A	09/11/95.12:00P	
1.1.2.26.B5S	1	Set & Align B30	09/11/95.01:00P	09/11/95.02:00P	
1.1.2.26.B5T	1	Set Clean Room, Purge & Fit B30	09/11/95.02:00P	09/11/95.03:00P	
1.1.2.26.B5U	2	Weld Joint B30	09/11/95.03:00P	09/11/95.05:00P	
1.1.2.26.B5V	2	Leak Test Joint B30	09/12/95.08:00A	09/12/95.10:00A	
1.1.2.26.B5W	2	Install Tube Supports B30	09/12/95.08:00A	09/12/95.10:00A	
1.1.2.26.B5X	2	Remove Equip'mt, Clean & Cap B30	09/12/95.10:00A	09/12/95.12:00P	
1.1.2.31	204	Cans 31-35	08/21/95.04:00P	09/26/95.11:00A	
1.1.2.31.1A	1	Unload,Rec/Insp Tube 31	08/22/95.08:00A	08/22/95.09:00A	
1.1.2.31.1B	1	Move to Stiff Fit Up Stat. 31	08/22/95.09:00A	08/22/95.10:00A	
1.1.2.31.1C	1	Set-up & Purge 31	08/22/95.10:00A	08/22/95.11:00A	
1.1.2.31.1D	2	Fit Stiffeners 31	08/22/95.11:00A	08/22/95.02:00P	
1.1.2.31.1E	4	Weld Stiffeners 31	08/22/95.02:00P	08/23/95.09:00A	
1.1.2.31.1F	1	Inspect, Install End Caps 31	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.31.1H	1	Move to Test Area 31	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.31.1I	1	Pre-Clean & Black Light 31	08/23/95.11:00A	08/23/95.12:00P	
1.1.2.31.1J	30	Leak Test 31	08/23/95.12:00P	08/24/95.06:00P	
1.1.2.31.1M	1	Move to Post Test Storage 31	08/25/95.08:00A	08/25/95.09:00A	
1.1.2.31.1N	1	Clean, Dry & End Cap 31	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.31.1P	1	Transport to Erection 31	09/14/95.10:00A	09/14/95.11:00A	
1.1.2.31.1Q	1	Set & Align 31	09/14/95.11:00A	09/14/95.12:00P	
1.1.2.31.1R	1	Set Clean Room, Purge & Fit 31	09/14/95.01:00P	09/14/95.02:00P	
1.1.2.31.1S	2	Weld Joint 31	09/14/95.02:00P	09/14/95.04:00P	
1.1.2.31.1T	2	Leak Test Joint 31	09/14/95.04:00P	09/15/95.09:00A	
1.1.2.31.1U	2	Install Tube Supports 31	09/14/95.04:00P	09/15/95.09:00A	
1.1.2.31.1V	2	Remove Equip'mt, Clean & Cap 31	09/15/95.09:00A	09/15/95.11:00A	
1.1.2.31.2A	1	Unload,Rec. & Inspect 32	08/22/95.09:00A	08/22/95.10:00A	
1.1.2.31.2B	1	Move to Stiff Fit Up Stat. 32	08/23/95.11:00A	08/23/95.12:00P	
1.1.2.31.2C	1	Set-up & Purge32	08/23/95.01:00P	08/23/95.02:00P	
1.1.2.31.2D	2	Fit Stiffeners 32	08/23/95.02:00P	08/23/95.04:00P	
1.1.2.31.2E	4	Weld Stiffeners 32	08/23/95.04:00P	08/24/95.11:00A	
1.1.2.31.2F	1	Inspect, Install End Caps 32	08/24/95.11:00A	08/24/95.12:00P	
1.1.2.31.2H	1	Move to Test Area 32	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.31.2I	1	Pre-Clean & Black Light 32	08/25/95.10:00A	08/25/95.11:00A	
1.1.2.31.2J	30	Leak Test 32	08/25/95.11:00A	08/26/95.05:00P	
1.1.2.31.2M	1	Move to Post Test Storage 3 2	08/28/95.08:00A	08/28/95.09:00A	
1.1.2.31.2N	1	Clean, Dry & End Cap 32	08/28/95.09:00A	08/28/95.10:00A	
1.1.2.31.2P	1	Transport to Erection 32	09/18/95.08:00A	09/18/95.09:00A	
1.1.2.31.2Q	1	Set & Align 32	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.31.2R	1	Set Clean Room, Purge & Fit 32	09/18/95.10:00A	09/18/95.11:00A	
1.1.2.31.2S	2	Weld Joint 32	09/18/95.11:00A	09/18/95.02:00P	
1.1.2.31.2T	2	Leak Test Joint 32	09/18/95.02:00P	09/18/95.04:00P	
1.1.2.31.2U	2	Install Tube Supports 32	09/18/95.02:00P	09/18/95.04:00P	
1.1.2.31.2V	2	Remove Equip'mt, Clean & Cap 32	09/18/95.04:00P	09/19/95.09:00A	
1.1.2.31.3A	1	Unload,Rec/Insp Tube 33	08/22/95.10:00A	08/22/95.11:00A	
1.1.2.31.3B	1	Move to Stiff Fit Up Stat. 33	08/25/95.10:00A	08/25/95.11:00A	
1.1.2.31.3C	1	Set-up & Purge 33	08/25/95.11:00A	08/25/95.12:00P	
1.1.2.31.3D	2	Fit Stiffeners 33	08/25/95.01:00P	08/25/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.31.3E	4	Weld Stiffeners 33	08/25/95.03:00P	08/28/95.10:00A	
1.1.2.31.3F	1	Inspect, Install End Caps 33	08/28/95.10:00A	08/28/95.11:00A	
1.1.2.31.3H	1	Move to Test Area 33	08/28/95.11:00A	08/28/95.12:00P	
1.1.2.31.3I	1	Pre-Clean & Black Light 33	08/28/95.01:00P	08/28/95.02:00P	
1.1.2.31.3J	30	Leak Test 33	08/28/95.02:00P	08/29/95.08:00P	
1.1.2.31.3M	1	Move to Post Test Storage 3	08/30/95.08:00A	08/30/95.09:00A	
1.1.2.31.3N	1	Clean, Dry & End Cap 33 3	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.31.3P	1	Transport to Erection 33	09/19/95.03:00P	09/19/95.04:00P	
1.1.2.31.3Q	1	Set & Align 33	09/19/95.04:00P	09/19/95.05:00P	
1.1.2.31.3R	1	Set Clean Room, Purge & Fit 33	09/20/95.08:00A	09/20/95.09:00A	
1.1.2.31.3S	2	Weld Joint 33	09/20/95.09:00A	09/20/95.11:00A	
1.1.2.31.3T	2	Leak Test Joint 33	09/20/95.11:00A	09/20/95.02:00P	
1.1.2.31.3U	2	Install Tube Supports 33	09/20/95.11:00A	09/20/95.02:00P	
1.1.2.31.3V	2	Remove Equip'mt, Clean & Cap 33	09/20/95.02:00P	09/20/95.04:00P	
1.1.2.31.4A	1	Unload,Rec/Insp Tube 34	08/22/95.11:00A	08/22/95.12:00P	
1.1.2.31.4B	1	Move to Stiff Fit Up Stat.34	08/28/95.01:00P	08/28/95.02:00P	
1.1.2.31.4C	1	Set-up & Purge 34	08/28/95.02:00P	08/28/95.03:00P	
1.1.2.31.4D	2	Fit Stiffeners 34	08/28/95.03:00P	08/28/95.05:00P	
1.1.2.31.4E	4	Weld Stiffeners 34	08/29/95.08:00A	08/29/95.12:00P	
1.1.2.31.4F	1	Inspect, Install End Caps 334	08/29/95.01:00P	08/29/95.02:00P	
1.1.2.31.4H	1	Move to Test Area 34	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.31.4I	1	Pre-Clean & Black Light 34	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.31.4J	30	Leak Test 34	08/30/95.11:00A	08/31/95.05:00P	
1.1.2.31.4M	1	Move to Post Test Storage 34	09/01/95.08:00A	09/01/95.09:00A	
1.1.2.31.4N	1	Clean, Dry & End Cap 34	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.31.4P	1	Transport to Erection 34	09/21/95.01:00P	09/21/95.02:00P	
1.1.2.31.4Q	1	Set & Align 34	09/21/95.02:00P	09/21/95.03:00P	
1.1.2.31.4R	1	Set Clean Room, Purge & Fit 34	09/21/95.03:00P	09/21/95.04:00P	
1.1.2.31.4S	2	Weld Joint 34	09/21/95.04:00P	09/22/95.09:00A	
1.1.2.31.4T	2	Leak Test Joint 34	09/22/95.09:00A	09/22/95.11:00A	
1.1.2.31.4U	2	Install Tube Supports 34	09/22/95.09:00A	09/22/95.11:00A	
1.1.2.31.4V	2	Remove Equip'mt, Clean & Cap 34	09/22/95.11:00A	09/22/95.02:00P	
1.1.2.31.5A	1	Unload,Rec/Insp Tube 35	08/22/95.01:00P	08/22/95.02:00P	
1.1.2.31.5B	1	Move to Stiff Fit Up Stat. 35	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.31.5C	1	Set-up & Purge 35	08/30/95.11:00A	08/30/95.12:00P	
1.1.2.31.5D	1	F/W Pump Port Reinf. 35	08/30/95.01:00P	08/30/95.02:00P	
1.1.2.31.5E	2	Fit Stiffeners 35	08/30/95.02:00P	08/30/95.04:00P	
1.1.2.31.5F	4	Weld Stiffeners 35	08/30/95.04:00P	08/31/95.11:00A	
1.1.2.31.5G	1	Move to P.Port Stat. 35	08/31/95.11:00A	08/31/95.12:00P	
1.1.2.31.5H	1	Setup & Bore 10" Inlet 35	08/31/95.01:00P	08/31/95.02:00P	
1.1.2.31.5I	2	Purge/F/W Pump Port 35	08/31/95.02:00P	08/31/95.04:00P	
1.1.2.31.5J	1	Inspect, Install End Caps 35	08/31/95.04:00P	08/31/95.05:00P	
1.1.2.31.5L	1	Move to Test Area 35	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.31.5M	1	Pre-Clean & Black Light 35	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.31.5N	30	Leak Test 35	09/01/95.11:00A	09/02/95.05:00P	
1.1.2.31.5Q	1	Move to Post Test Storage 35	09/04/95.08:00A	09/04/95.09:00A	
1.1.2.31.5R	1	Clean, Dry & End Cap 35	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.31.5T	1	Transport to Erection 35	09/25/95.10:00A	09/25/95.11:00A	
1.1.2.31.5U	1	Set & Align 35	09/25/95.11:00A	09/25/95.12:00P	
1.1.2.31.5V	1	Set Clean Room, Purge & Fit 35	09/25/95.01:00P	09/25/95.02:00P	
1.1.2.31.5W	2	Weld Joint 35	09/25/95.02:00P	09/25/95.04:00P	
1.1.2.31.5X	2	Leak Test Joint 35	09/25/95.04:00P	09/26/95.09:00A	
1.1.2.31.5Y	2	Install Tube Supports 35	09/25/95.04:00P	09/26/95.09:00A	
1.1.2.31.5Z	2	Remove Equip'mt, Clean & Cap 35	09/26/95.09:00A	09/26/95.11:00A	
1.1.2.31.B1A	1	Unload,Rec/Insp Tube B31	08/22/95.08:00A	08/22/95.09:00A	
1.1.2.31.B1B	1	Move to Stiff Fit Up Stat. B31	08/22/95.09:00A	08/22/95.10:00A	
1.1.2.31.B1C	1	Set-up & Purge B31	08/22/95.10:00A	08/22/95.11:00A	
1.1.2.31.B1D	2	Fit Stiffeners B31	08/22/95.11:00A	08/22/95.02:00P	
1.1.2.31.B1E	4	Weld Stiffeners B31	08/22/95.02:00P	08/23/95.09:00A	
1.1.2.31.B1F	1	Move to Exp.Bellows Stat. B31	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.31.B1G	3	Fit,Purge,Weld Exp. Bellows B31	08/23/95.10:00A	08/23/95.02:00P	
1.1.2.31.B1H	1	Inspect, Install End Caps B31	08/23/95.02:00P	08/23/95.03:00P	
1.1.2.31.B1J	1	Move to Test Area B31	08/23/95.03:00P	08/23/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.31.B1K	1	Pre-Clean & Black Light B31	08/23/95.04:00P	08/23/95.05:00P	
1.1.2.31.B1L	30	Leak Test B31	08/23/95.05:00P	08/24/95.11:00P	
1.1.2.31.B1O	1	Move to Post Test Storage B31	08/25/95.08:00A	08/25/95.09:00A	
1.1.2.31.B1P	1	Clean, Dry & End Cap B31	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.31.B1R	1	Transport to Erection B31	09/13/95.11:00A	09/13/95.12:00P	
1.1.2.31.B1S	1	Set & Align B31	09/13/95.01:00P	09/13/95.02:00P	
1.1.2.31.B1T	1	Set Clean Room, Purge & Fit B31	09/13/95.02:00P	09/13/95.03:00P	
1.1.2.31.B1U	2	Weld Joint B31	09/13/95.03:00P	09/13/95.05:00P	
1.1.2.31.B1V	2	Leak Test Joint B31	09/14/95.08:00A	09/14/95.10:00A	
1.1.2.31.B1W	2	Install Tube Supports B31	09/14/95.08:00A	09/14/95.10:00A	
1.1.2.31.B1X	2	Remove Equip'mt, Clean & Cap B31	09/14/95.10:00A	09/14/95.12:00P	
1.1.2.31.B2A	1	Unload,Rec/Insp Tube B32	08/22/95.09:00A	08/22/95.10:00A	
1.1.2.31.B2B	1	Move to Stiff Fit Up Stat. B32	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.31.B2C	1	Set-up & Purge B32	08/23/95.11:00A	08/23/95.12:00P	
1.1.2.31.B2D	2	Fit Stiffeners B32	08/23/95.01:00P	08/23/95.03:00P	
1.1.2.31.B2E	4	Weld Stiffeners B32	08/23/95.03:00P	08/24/95.10:00A	
1.1.2.31.B2F	1	Move to Exp.Bellows Stat. B32	08/24/95.10:00A	08/24/95.11:00A	
1.1.2.31.B2G	3	Fit,Purge,Weld Exp. Bellows B32	08/24/95.11:00A	08/24/95.03:00P	
1.1.2.31.B2H	1	Inspect, Install End Caps B332	08/24/95.03:00P	08/24/95.04:00P	
1.1.2.31.B2J	1	Move to Test Area B32	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.31.B2K	1	Pre-Clean & Black Light B32	08/25/95.10:00A	08/25/95.11:00A	
1.1.2.31.B2L	30	Leak Test B32	08/25/95.11:00A	08/26/95.05:00P	
1.1.2.31.B2O	1	Move to Post Test Storage B32	08/28/95.08:00A	08/28/95.09:00A	
1.1.2.31.B2P	1	Clean, Dry & End Cap B32	08/28/95.09:00A	08/28/95.10:00A	
1.1.2.31.B2R	1	Transport to Erection B32	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.31.B2S	1	Set & Align B32	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.31.B2T	1	Set Clean Room, Purge & Fit B32	09/15/95.11:00A	09/15/95.12:00P	
1.1.2.31.B2U	2	Weld Joint B32	09/15/95.01:00P	09/15/95.03:00P	
1.1.2.31.B2V	2	Leak Test Joint B32	09/15/95.03:00P	09/15/95.05:00P	
1.1.2.31.B2W	2	Install Tube SupportsB32	09/15/95.03:00P	09/15/95.05:00P	
1.1.2.31.B2X	2	Remove Equip'mt, Clean & Cap B32	09/18/95.08:00A	09/18/95.10:00A	
1.1.2.31.B3A	1	Unload,Rec/Insp Tube B33	08/22/95.10:00A	08/22/95.11:00A	
1.1.2.31.B3B	1	Move to Stiff Fit Up Stat. B33	08/24/95.11:00A	08/24/95.12:00P	
1.1.2.31.B3C	1	Set-up & Purge B33	08/24/95.01:00P	08/24/95.02:00P	
1.1.2.31.B3D	2	Fit Stiffeners B33	08/24/95.02:00P	08/24/95.04:00P	
1.1.2.31.B3E	4	Weld Stiffeners B33	08/24/95.04:00P	08/25/95.11:00A	
1.1.2.31.B3F	1	Move to Exp.Bellows Stat. B33	08/25/95.11:00A	08/25/95.12:00P	
1.1.2.31.B3G	3	Fit,Purge,Weld Exp. Bellows B33	08/25/95.01:00P	08/25/95.04:00P	
1.1.2.31.B3H	1	Inspect, Install End Caps B33	08/25/95.04:00P	08/25/95.05:00P	
1.1.2.31.B3J	1	Move to Test Area B33	08/28/95.09:00A	08/28/95.10:00A	
1.1.2.31.B3K	1	Pre-Clean & Black Light B33	08/28/95.10:00A	08/28/95.11:00A	
1.1.2.31.B3L	30	Leak Test B33	08/28/95.11:00A	08/29/95.05:00P	
1.1.2.31.B3O	1	Move to Post Test Storage B33	08/30/95.08:00A	08/30/95.09:00A	
1.1.2.31.B3P	1	Clean, Dry & End Cap B33	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.31.B3R	1	Transport to Erection B33	09/18/95.04:00P	09/18/95.05:00P	
1.1.2.31.B3S	1	Set & Align B33	09/19/95.08:00A	09/19/95.09:00A	
1.1.2.31.B3T	1	Set Clean Room, Purge & Fit B33	09/19/95.09:00A	09/19/95.10:00A	
1.1.2.31.B3U	2	Weld Joint B33	09/19/95.10:00A	09/19/95.12:00P	
1.1.2.31.B3V	2	Leak Test Joint B33	09/19/95.01:00P	09/19/95.03:00P	
1.1.2.31.B3W	2	Install Tube Supports B33	09/19/95.01:00P	09/19/95.03:00P	
1.1.2.31.B3X	2	Remove Equip'mt, Clean & Cap B33	09/19/95.03:00P	09/19/95.05:00P	
1.1.2.31.B4A	1	Unload,Rec/Insp Tube B34	08/22/95.11:00A	08/22/95.12:00P	
1.1.2.31.B4B	1	Move to Stiff Fit Up Stat. B34	08/25/95.01:00P	08/25/95.02:00P	
1.1.2.31.B4C	1	Set-up & Purge B34	08/25/95.02:00P	08/25/95.03:00P	
1.1.2.31.B4D	2	Fit Stiffeners B34	08/25/95.03:00P	08/25/95.05:00P	
1.1.2.31.B4E	4	Weld Stiffeners B34	08/28/95.08:00A	08/28/95.12:00P	
1.1.2.31.B4F	1	Move to Exp.Bellows Stat. B34	08/28/95.01:00P	08/28/95.02:00P	
1.1.2.31.B4G	3	Fit,Purge,Weld Exp. Bellows B34	08/28/95.02:00P	08/28/95.05:00P	
1.1.2.31.B4H	1	Inspect, Install End Caps B34	08/29/95.08:00A	08/29/95.09:00A	
1.1.2.31.B4J	1	Move to Test Area B34	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.31.B4K	1	Pre-Clean & Black Light B34	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.31.B4L	30	Leak Test B34	08/30/95.11:00A	08/31/95.05:00P	
1.1.2.31.B4O	1	Move to Post Test Storage B34	09/01/95.08:00A	09/01/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.31.B4P	1	Clean, Dry & End Cap B3	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.31.B4R	1	Transport to Erection B34	09/20/95.02:00P	09/20/95.03:00P	
1.1.2.31.B4S	1	Set & Align B34	09/20/95.03:00P	09/20/95.04:00P	
1.1.2.31.B4T	1	Set Clean Room, Purge & Fit B34	09/20/95.04:00P	09/20/95.05:00P	
1.1.2.31.B4U	2	Weld Joint B34	09/21/95.08:00A	09/21/95.10:00A	
1.1.2.31.B4V	2	Leak Test Joint B34	09/21/95.10:00A	09/21/95.12:00P	
1.1.2.31.B4W	2	Install Tube Supports B34	09/21/95.10:00A	09/21/95.12:00P	
1.1.2.31.B4X	2	Remove Equip'mt, Clean & Cap B34	09/21/95.01:00P	09/21/95.03:00P	
1.1.2.31.B5A	1	Unload,Rec/Insp Tube B35	08/22/95.01:00P	08/22/95.02:00P	
1.1.2.31.B5B	1	Move to Stiff Fit Up Stat. B35	08/28/95.02:00P	08/28/95.03:00P	
1.1.2.31.B5C	1	Set-up & Purge B35	08/28/95.03:00P	08/28/95.04:00P	
1.1.2.31.B5D	2	Fit Stiffeners B35	08/28/95.04:00P	08/29/95.09:00A	
1.1.2.31.B5E	4	Weld Stiffeners B35	08/29/95.09:00A	08/29/95.02:00P	
1.1.2.31.B5F	1	Move to Exp.Bellows Stat. B35	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.31.B5G	3	Fit,Purge,Weld Exp. Bellows B35	08/30/95.11:00A	08/30/95.03:00P	
1.1.2.31.B5H	1	Inspect, Install End Caps B35	08/30/95.03:00P	08/30/95.04:00P	
1.1.2.31.B5J	1	Move to Test Area B35	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.31.B5K	1	Pre-Clean & Black Light B35	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.31.B5L	30	Leak Test B35	09/01/95.11:00A	09/02/95.05:00P	
1.1.2.31.B5O	1	Move to Post Test Storage B35	09/04/95.08:00A	09/04/95.09:00A	
1.1.2.31.B5P	1	Clean, Dry & End Cap B35	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.31.B5R	1	Transport to Erection B35	09/22/95.11:00A	09/22/95.12:00P	
1.1.2.31.B5S	1	Set & Align B35	09/22/95.01:00P	09/22/95.02:00P	
1.1.2.31.B5T	1	Set Clean Room, Purge & Fit B35	09/22/95.02:00P	09/22/95.03:00P	
1.1.2.31.B5U	2	Weld Joint B35	09/22/95.03:00P	09/22/95.05:00P	
1.1.2.31.B5V	2	Leak Test Joint B35	09/25/95.08:00A	09/25/95.10:00A	
1.1.2.31.B5W	2	Install Tube Supports B35	09/25/95.08:00A	09/25/95.10:00A	
1.1.2.31.B5X	2	Remove Equip'mt, Clean & Cap B35	09/25/95.10:00A	09/25/95.12:00P	
1.2.36	196	Cans 36-40	09/04/95.04:00P	10/09/95.11:00A	
1.2.36.1A	1	Unload,Rec/Insp Tube 36	09/05/95.08:00A	09/05/95.09:00A	
1.1.2.36.1B	1	Move to Stiff Fit Up Stat. 36	09/05/95.09:00A	09/05/95.10:00A	
1.1.2.36.1C	1	Set-up & Purge 36	09/05/95.10:00A	09/05/95.11:00A	
1.1.2.36.1D	2	Fit Stiffeners 36	09/05/95.11:00A	09/05/95.02:00P	
1.1.2.36.1E	4	Weld Stiffeners 36	09/05/95.02:00P	09/06/95.09:00A	
1.1.2.36.1F	1	Inspect, Install End Caps 36	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.36.1H	1	Move to Test Area 36	09/06/95.10:00A	09/06/95.11:00A	
1.1.2.36.1I	1	Pre-Clean & Black Light 36	09/06/95.11:00A	09/06/95.12:00P	
1.1.2.36.1J	30	Leak Test 36	09/06/95.12:00P	09/07/95.06:00P	
1.1.2.36.1M	1	Move to Post Test Storage 36	09/08/95.08:00A	09/08/95.09:00A	
1.1.2.36.1N	1	Clean, Dry & End Cap 36	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.36.1P	1	Transport to Erection 36	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.36.1Q	1	Set & Align 36	09/27/95.11:00A	09/27/95.12:00P	
1.1.2.36.1R	1	Set Clean Room, Purge & Fit 36	09/27/95.01:00P	09/27/95.02:00P	
1.1.2.36.1S	2	Weld Joint 36	09/27/95.02:00P	09/27/95.04:00P	
1.1.2.36.1T	2	Leak Test Joint 36	09/27/95.04:00P	09/28/95.09:00A	
1.1.2.36.1U	2	Install Tube Supports 36	09/27/95.04:00P	09/28/95.09:00A	
1.1.2.36.1V	2	Remove Equip'mt, Clean & Cap 36	09/28/95.09:00A	09/28/95.11:00A	
1.1.2.36.2A	1	Unload,Rec. & Insp 37	09/05/95.09:00A	09/05/95.10:00A	
1.1.2.36.2B	1	Move to Stiff Fit Up Stat. 37	09/06/95.11:00A	09/06/95.12:00P	
1.1.2.36.2C	1	Set-up & Purge 37	09/06/95.01:00P	09/06/95.02:00P	
1.1.2.36.2D	2	Fit Stiffeners 37	09/06/95.02:00P	09/06/95.04:00P	
1.1.2.36.2E	4	Weld Stiffeners 37	09/06/95.04:00P	09/07/95.11:00A	
1.1.2.36.2F	1	Inspect, Install End Caps 37	09/07/95.11:00A	09/07/95.12:00P	
1.1.2.36.2H	1	Move to Test Area 37	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.36.2I	1	Pre-Clean & Black Light 37	09/08/95.10:00A	09/08/95.11:00A	
1.1.2.36.2J	30	Leak Test 37	09/08/95.11:00A	09/09/95.05:00P	
1.1.2.36.2M	1	Move to Post Test Storage 37	09/11/95.08:00A	09/11/95.09:00A	
1.1.2.36.2N	1	Clean, Dry & End Cap 37	09/11/95.09:00A	09/11/95.10:00A	
1.1.2.36.2P	1	Transport to Erection 37	09/29/95.08:00A	09/29/95.09:00A	
1.1.2.36.2Q	1	Set & Align 37	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.36.2R	1	Set Clean Room, Purge & Fit 37	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.36.2S	2	Weld Joint 37	09/29/95.11:00A	09/29/95.02:00P	
1.2.36.2T	2	Leak Test Joint 37	09/29/95.02:00P	09/29/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.36.2U	2	Install Tube Supports 37	09/29/95.02:00P	09/29/95.04:00P	
1.1.2.36.2V	2	Remove Equip'mt, Clean & Cap 37	09/29/95.04:00P	10/02/95.09:00A	
1.1.2.36.3A	1	Unload,Rec/Insp Tube 38	09/05/95.10:00A	09/05/95.11:00A	
1.1.2.36.3B	1	Move to Stiff Fit Up Stat. 38	09/08/95.10:00A	09/08/95.11:00A	
1.1.2.36.3C	1	Set-up & Purge 38	09/08/95.11:00A	09/08/95.12:00P	
1.1.2.36.3D	2	Fit Stiffeners 38	09/08/95.01:00P	09/08/95.03:00P	
1.1.2.36.3E	4	Weld Stiffeners 38	09/08/95.03:00P	09/11/95.10:00A	
1.1.2.36.3F	1	Inspect, Install End Caps 38	09/11/95.10:00A	09/11/95.11:00A	
1.1.2.36.3H	1	Move to Test Area 38	09/11/95.11:00A	09/11/95.12:00P	
1.1.2.36.3I	1	Pre-Clean & Black Light 8	09/11/95.01:00P	09/11/95.02:00P	
1.1.2.36.3J	30	Leak Test 38	09/11/95.02:00P	09/12/95.08:00P	
1.1.2.36.3M	1	Move to Post Test Storage 38	09/13/95.08:00A	09/13/95.09:00A	
1.1.2.36.3N	1	Clean, Dry & End Cap 38	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.36.3P	1	Transport to Erection 38	10/02/95.03:00P	10/02/95.04:00P	
1.1.2.36.3Q	1	Set & Align 38	10/02/95.04:00P	10/02/95.05:00P	
1.1.2.36.3R	1	Set Clean Room, Purge & Fit 38	10/03/95.08:00A	10/03/95.09:00A	
1.1.2.36.3S	2	Weld Joint 38	10/03/95.09:00A	10/03/95.11:00A	
1.1.2.36.3T	2	Leak Test Joint 38	10/03/95.11:00A	10/03/95.02:00P	
1.1.2.36.3U	2	Install Tube Supports 38	10/03/95.11:00A	10/03/95.02:00P	
1.1.2.36.3V	2	Remove Equip'mt, Clean & Cap 38	10/03/95.02:00P	10/03/95.04:00P	
1.1.2.36.4A	1	Unload,Rec/Insp Tube 39	09/05/95.11:00A	09/05/95.12:00P	
1.1.2.36.4B	1	Move to Stiff Fit Up Stat. 39	09/11/95.01:00P	09/11/95.02:00P	
1.1.2.36.4C	1	Set-up & Purge 39	09/11/95.02:00P	09/11/95.03:00P	
1.1.2.36.4D	2	Fit Stiffeners 39	09/11/95.03:00P	09/11/95.05:00P	
1.1.2.36.4E	4	Weld Stiffeners 39	09/12/95.08:00A	09/12/95.12:00P	
1.1.2.36.4F	1	Inspect, Install End Caps 39	09/12/95.01:00P	09/12/95.02:00P	
1.1.2.36.4H	1	Move to Test Area 39	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.36.4I	1	Pre-Clean & Black Light 39	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.36.4J	30	Leak Test 39	09/13/95.11:00A	09/14/95.05:00P	
1.1.2.36.4M	1	Move to Post Test Storage 39	09/15/95.08:00A	09/15/95.09:00A	
1.1.2.36.4N	1	Clean, Dry & End Cap 39	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.36.4P	1	Transport to Erection 39	10/04/95.01:00P	10/04/95.02:00P	
1.1.2.36.4Q	1	Set & Align 39	10/04/95.02:00P	10/04/95.03:00P	
1.1.2.36.4R	1	Set Clean Room, Purge & Fit 39	10/04/95.03:00P	10/04/95.04:00P	
1.1.2.36.4S	2	Weld Joint 39	10/04/95.04:00P	10/05/95.09:00A	
1.1.2.36.4T	2	Leak Test Joint 39	10/05/95.09:00A	10/05/95.11:00A	
1.1.2.36.4U	2	Install Tube Supports 39	10/05/95.09:00A	10/05/95.11:00A	
1.1.2.36.4V	2	Remove Equip'mt, Clean & Cap 39	10/05/95.11:00A	10/05/95.02:00P	
1.1.2.36.5A	1	Unload,Rec/Insp Tube 40	09/05/95.01:00P	09/05/95.02:00P	
1.1.2.36.5B	1	Move to Stiff Fit Up Stat. 40	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.36.5C	1	Set-up & Purge 40	09/13/95.11:00A	09/13/95.12:00P	
1.1.2.36.5D	1	F/W Pump Port Reinf. 40	09/13/95.01:00P	09/13/95.02:00P	
1.1.2.36.5E	2	Fit Stiffeners 40	09/13/95.02:00P	09/13/95.04:00P	
1.1.2.36.5F	4	Weld Stiffeners 40	09/13/95.04:00P	09/14/95.11:00A	
1.1.2.36.5G	1	Move to P.Port Stat.	09/14/95.11:00A	09/14/95.12:00P	
1.1.2.36.5H	1	Setup & Bore 10" Inlet 40	09/14/95.01:00P	09/14/95.02:00P	
1.1.2.36.5I	2	Purge/F/W Pump Port 40	09/14/95.02:00P	09/14/95.04:00P	
1.1.2.36.5J	1	Inspect, Install End Caps 40	09/14/95.04:00P	09/14/95.05:00P	
1.1.2.36.5L	1	Move to Test Area 40	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.36.5M	1	Pre-Clean & Black Light 40	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.36.5N	30	Leak Test 40	09/15/95.11:00A	09/16/95.05:00P	
1.1.2.36.5Q	1	Move to Post Test Storage 40	09/18/95.08:00A	09/18/95.09:00A	
1.1.2.36.5R	1	Clean, Dry & End Cap 40	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.36.5T	1	Transport to Erection 40	10/06/95.10:00A	10/06/95.11:00A	
1.1.2.36.5U	1	Set & Align 40	10/06/95.11:00A	10/06/95.12:00P	
1.1.2.36.5V	1	Set Clean Room, Purge & Fit 40	10/06/95.01:00P	10/06/95.02:00P	
1.1.2.36.5W	2	Weld Joint 40	10/06/95.02:00P	10/06/95.04:00P	
1.1.2.36.5X	2	Leak Test Joint 40	10/06/95.04:00P	10/09/95.09:00A	
1.1.2.36.5Y	2	Install Tube Supports 40	10/06/95.04:00P	10/09/95.09:00A	
1.1.2.36.5Z	2	Remove Equip'mt, Clean & Cap 40	10/09/95.09:00A	10/09/95.11:00A	
1.1.2.36.B1A	1	Unload,Rec/Insp Tube B36	09/05/95.08:00A	09/05/95.09:00A	
1.1.2.36.B1B	1	Move to Stiff Fit Up Stat. B36	09/05/95.09:00A	09/05/95.10:00A	
1.1.2.36.B1C	1	Set-up & Purge B36	09/05/95.10:00A	09/05/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.36.B1D	2	Fit Stiffeners B36	09/05/95.11:00A	09/05/95.02:00P	
1.1.2.36.B1E	4	Weld Stiffeners B36	09/05/95.02:00P	09/06/95.09:00A	
1.1.2.36.B1F	1	Move to Exp.Bellows Stat. B36	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.36.B1G	3	Fit,Purge,Weld Exp. Bellows B36	09/06/95.10:00A	09/06/95.02:00P	
1.1.2.36.B1H	1	Inspect, Install End Caps B36	09/06/95.02:00P	09/06/95.03:00P	
1.1.2.36.B1J	1	Move to Test Area B36	09/06/95.03:00P	09/06/95.04:00P	
1.1.2.36.B1K	1	Pre-Clean & Black Light B36	09/06/95.04:00P	09/06/95.05:00P	
1.1.2.36.B1L	30	Leak Test B36	09/06/95.05:00P	09/07/95.11:00P	
1.1.2.36.B1O	1	Move to Post Test Storage B36	09/08/95.08:00A	09/08/95.09:00A	
1.1.2.36.B1P	1	Clean, Dry & End Cap B36	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.36.B1R	1	Transport to Erection B363	09/26/95.11:00A	09/26/95.12:00P	
1.1.2.36.B1S	1	Set & Align B36	09/26/95.01:00P	09/26/95.02:00P	
1.1.2.36.B1T	1	Set Clean Room, Purge & Fit B36	09/26/95.02:00P	09/26/95.03:00P	
1.1.2.36.B1U	2	Weld Joint B36	09/26/95.03:00P	09/26/95.05:00P	
1.1.2.36.B1V	2	Leak Test Joint B36	09/27/95.08:00A	09/27/95.10:00A	
1.1.2.36.B1W	2	Install Tube Supports B36	09/27/95.08:00A	09/27/95.10:00A	
1.1.2.36.B1X	2	Remove Equip'mt, Clean & Cap B36	09/27/95.10:00A	09/27/95.12:00P	
1.1.2.36.B2A	1	Unload,Rec/Insp Tube B37	09/05/95.09:00A	09/05/95.10:00A	
1.1.2.36.B2B	1	Move to Stiff Fit Up Stat. B373	09/06/95.10:00A	09/06/95.11:00A	
1.1.2.36.B2C	1	Set-up & Purge B37	09/06/95.11:00A	09/06/95.12:00P	
1.1.2.36.B2D	2	Fit Stiffeners B37	09/06/95.01:00P	09/06/95.03:00P	
1.1.2.36.B2E	4	Weld Stiffeners B373	09/06/95.03:00P	09/07/95.10:00A	
1.1.2.36.B2F	1	Move to Exp.Bellows Stat. 37	09/07/95.10:00A	09/07/95.11:00A	
1.1.2.36.B2G	3	Fit,Purge,Weld Exp. Bellows B37	09/07/95.11:00A	09/07/95.03:00P	
1.1.2.36.B2H	1	Inspect, Install End Caps B37	09/07/95.03:00P	09/07/95.04:00P	
1.1.2.36.B2J	1	Move to Test Area B37	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.36.B2K	1	Pre-Clean & Black Light B37	09/08/95.10:00A	09/08/95.11:00A	
1.1.2.36.B2L	30	Leak Test B37	09/08/95.11:00A	09/09/95.05:00P	
1.1.2.36.B2O	1	Move to Post Test Storage B37	09/11/95.08:00A	09/11/95.09:00A	
1.1.2.36.B2P	1	Clean, Dry & End Cap B37	09/11/95.09:00A	09/11/95.10:00A	
1.1.2.36.B2R	1	Transport to Erection B37	09/28/95.09:00A	09/28/95.10:00A	
1.1.2.36.B2S	1	Set & Align B37	09/28/95.10:00A	09/28/95.11:00A	
1.1.2.36.B2T	1	Set Clean Room, Purge & Fit B37	09/28/95.11:00A	09/28/95.12:00P	
1.1.2.36.B2U	2	Weld Joint B37	09/28/95.01:00P	09/28/95.03:00P	
1.1.2.36.B2V	2	Leak Test Joint B37	09/28/95.03:00P	09/28/95.05:00P	
1.1.2.36.B2W	2	Install Tube SupportsB37	09/28/95.03:00P	09/28/95.05:00P	
1.1.2.36.B2X	2	Remove Equip'mt, Clean & Cap B37	09/29/95.08:00A	09/29/95.10:00A	
1.1.2.36.B3A	1	Unload,Rec/Insp Tube B38	09/05/95.10:00A	09/05/95.11:00A	
1.1.2.36.B3B	1	Move to Stiff Fit Up Stat. B38	09/07/95.11:00A	09/07/95.12:00P	
1.1.2.36.B3C	1	Set-up & Purge B38	09/07/95.01:00P	09/07/95.02:00P	
1.1.2.36.B3D	2	Fit Stiffeners B38	09/07/95.02:00P	09/07/95.04:00P	
1.1.2.36.B3E	4	Weld Stiffeners B38	09/07/95.04:00P	09/08/95.11:00A	
1.1.2.36.B3F	1	Move to Exp.Bellows Stat. B38	09/08/95.11:00A	09/08/95.12:00P	
1.1.2.36.B3G	3	Fit,Purge,Weld Exp. Bellows B38	09/08/95.01:00P	09/08/95.04:00P	
1.1.2.36.B3H	1	Inspect, Install End Caps B38	09/08/95.04:00P	09/08/95.05:00P	
1.1.2.36.B3J	1	Move to Test Area B38	09/11/95.09:00A	09/11/95.10:00A	
1.1.2.36.B3K	1	Pre-Clean & Black Light B38	09/11/95.10:00A	09/11/95.11:00A	
1.1.2.36.B3L	30	Leak Test B38	09/11/95.11:00A	09/12/95.05:00P	
1.1.2.36.B3O	1	Move to Post Test Storage B38	09/13/95.08:00A	09/13/95.09:00A	
1.1.2.36.B3P	1	Clean, Dry & End Cap B38	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.36.B3R	1	Transport to Erection B38	09/29/95.04:00P	09/29/95.05:00P	
1.1.2.36.B3S	1	Set & Align B38	10/02/95.08:00A	10/02/95.09:00A	
1.1.2.36.B3T	1	Set Clean Room, Purge & Fit B38	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.36.B3U	2	Weld Joint B38	10/02/95.10:00A	10/02/95.12:00P	
1.1.2.36.B3V	2	Leak Test Joint B38	10/02/95.01:00P	10/02/95.03:00P	
1.1.2.36.B3W	2	Install Tube Supports B38	10/02/95.01:00P	10/02/95.03:00P	
1.1.2.36.B3X	2	Remove Equip'mt, Clean & Cap B38	10/02/95.03:00P	10/02/95.05:00P	
1.1.2.36.B4A	1	Unload,Rec/Insp Tube B39	09/05/95.11:00A	09/05/95.12:00P	
1.1.2.36.B4B	1	Move to Stiff Fit Up Stat. B39	09/08/95.01:00P	09/08/95.02:00P	
1.1.2.36.B4C	1	Set-up & Purge B39	09/08/95.02:00P	09/08/95.03:00P	
1.1.2.36.B4D	2	Fit Stiffeners B39	09/08/95.03:00P	09/08/95.05:00P	
1.1.2.36.B4E	4	Weld Stiffeners B39	09/11/95.08:00A	09/11/95.12:00P	
1.1.2.36.B4F	1	Move to Exp.Bellows Stat. B39	09/11/95.01:00P	09/11/95.02:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.36.B4G	3	Fit,Purge,Weld Exp. Bellows B39	09/11/95.02:00P	09/11/95.05:00P	
1.1.2.36.B4H	1	Inspect, Install End Caps B39	09/12/95.08:00A	09/12/95.09:00A	
1.1.2.36.B4J	1	Move to Test Area B39	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.36.B4K	1	Pre-Clean & Black Light B39	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.36.B4L	30	Leak Test B39	09/13/95.11:00A	09/14/95.05:00P	
1.1.2.36.B4O	1	Move to Post Test Storage B39	09/15/95.08:00A	09/15/95.09:00A	
1.1.2.36.B4P	1	Clean, Dry & End Cap B39	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.36.B4R	1	Transport to Erection B39	10/03/95.02:00P	10/03/95.03:00P	
1.1.2.36.B4S	1	Set & Align B39	10/03/95.03:00P	10/03/95.04:00P	
1.1.2.36.B4T	1	Set Clean Room, Purge & Fit B39	10/03/95.04:00P	10/03/95.05:00P	
1.1.2.36.B4U	2	Weld Joint B39	10/04/95.08:00A	10/04/95.10:00A	
1.1.2.36.B4V	2	Leak Test Joint B39	10/04/95.10:00A	10/04/95.12:00P	
1.1.2.36.B4W	2	Install Tube Supports B39	10/04/95.10:00A	10/04/95.12:00P	
1.1.2.36.B4X	2	Remove Equip'mt, Clean & Cap B39	10/04/95.01:00P	10/04/95.03:00P	
1.1.2.36.B5A	1	Unload,Rec/Insp Tube B40	09/05/95.01:00P	09/05/95.02:00P	
1.1.2.36.B5B	1	Move to Stiff Fit Up Stat. B40	09/11/95.02:00P	09/11/95.03:00P	
1.1.2.36.B5C	1	Set-up & Purge B40	09/11/95.03:00P	09/11/95.04:00P	
1.1.2.36.B5D	2	Fit Stiffeners B40	09/11/95.04:00P	09/12/95.09:00A	
1.1.2.36.B5E	4	Weld Stiffeners B40	09/12/95.09:00A	09/12/95.02:00P	
1.1.2.36.B5F	1	Move to Exp.Bellows Stat. B40	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.36.B5G	3	Fit,Purge,Weld Exp. Bellows B40	09/13/95.11:00A	09/13/95.03:00P	
1.1.2.36.B5H	1	Inspect, Install End Caps B40	09/13/95.03:00P	09/13/95.04:00P	
1.1.2.36.B5J	1	Move to Test Area B40	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.36.B5K	1	Pre-Clean & Black Light B40	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.36.B5L	30	Leak Test B40	09/15/95.11:00A	09/16/95.05:00P	
1.1.2.36.B5O	1	Move to Post Test Storage B40	09/18/95.08:00A	09/18/95.09:00A	
1.1.2.36.B5P	1	Clean, Dry & End Cap B40	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.36.B5R	1	Transport to Erection B40	10/05/95.11:00A	10/05/95.12:00P	
1.1.2.36.B5S	1	Set & Align B40	10/05/95.01:00P	10/05/95.02:00P	
1.1.2.36.B5T	1	Set Clean Room, Purge & Fit B40	10/05/95.02:00P	10/05/95.03:00P	
1.1.2.36.B5U	2	Weld Joint B40	10/05/95.03:00P	10/05/95.05:00P	
1.1.2.36.B5V	2	Leak Test Joint B40	10/06/95.08:00A	10/06/95.10:00A	
1.1.2.36.B5W	2	Install Tube Supports B40	10/06/95.08:00A	10/06/95.10:00A	
1.1.2.36.B5X	2	Remove Equip'mt, Clean & Cap B40	10/06/95.10:00A	10/06/95.12:00P	
1.1.2.41	188	Cans 41-45	09/18/95.04:00P	10/20/95.11:00A	
1.1.2.41.1A	1	Unload,Rec/Insp Tube 41	09/19/95.08:00A	09/19/95.09:00A	
1.1.2.41.1B	1	Move to Stiff Fit Up Stat. 41	09/19/95.09:00A	09/19/95.10:00A	
1.1.2.41.1C	1	Set-up & Purge41	09/19/95.10:00A	09/19/95.11:00A	
1.1.2.41.1D	2	Fit Stiffeners 41	09/19/95.11:00A	09/19/95.02:00P	
1.1.2.41.1E	4	Weld Stiffeners 41	09/19/95.02:00P	09/20/95.09:00A	
1.1.2.41.1F	1	Inspect, Install End Caps 41	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.41.1H	1	Move to Test Area 41	09/20/95.10:00A	09/20/95.11:00A	
1.1.2.41.1I	1	Pre-Clean & Black Light 41	09/20/95.11:00A	09/20/95.12:00P	
1.1.2.41.1J	30	Leak Test 41	09/20/95.12:00P	09/21/95.06:00P	
1.1.2.41.1M	1	Move to Post Test Storage 41	09/22/95.08:00A	09/22/95.09:00A	
1.1.2.41.1N	1	Clean, Dry & End Cap 41	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.41.1P	1	Transport to Erection 41	10/10/95.10:00A	10/10/95.11:00A	
1.1.2.41.1Q	1	Set & Align 41	10/10/95.11:00A	10/10/95.12:00P	
1.1.2.41.1R	1	Set Clean Room, Purge & Fit 41	10/10/95.01:00P	10/10/95.02:00P	
1.1.2.41.1S	2	Weld Joint 41	10/10/95.02:00P	10/10/95.04:00P	
1.1.2.41.1T	2	Leak Test Joint 41	10/10/95.04:00P	10/11/95.09:00A	
1.1.2.41.1U	2	Install Tube Supports 41	10/10/95.04:00P	10/11/95.09:00A	
1.1.2.41.1V	2	Remove Equip'mt, Clean & Cap 41	10/11/95.09:00A	10/11/95.11:00A	
1.1.2.41.2A	1	Unload,Rec. & Inspect 42	09/19/95.09:00A	09/19/95.10:00A	
1.1.2.41.2B	1	Move to Stiff Fit Up Stat. 42	09/20/95.11:00A	09/20/95.12:00P	
1.1.2.41.2C	1	Set-up & Purge 42	09/20/95.01:00P	09/20/95.02:00P	
1.1.2.41.2D	2	Fit Stiffeners 42	09/20/95.02:00P	09/20/95.04:00P	
1.1.2.41.2E	4	Weld Stiffeners 42	09/20/95.04:00P	09/21/95.11:00A	
1.1.2.41.2F	1	Inspect, Install End Caps 42	09/21/95.11:00A	09/21/95.12:00P	
1.1.2.41.2H	1	Move to Test Area 42	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.41.2I	1	Pre-Clean & Black Light 42	09/22/95.10:00A	09/22/95.11:00A	
1.1.2.41.2J	30	Leak Test 42	09/22/95.11:00A	09/23/95.05:00P	
1.1.2.41.2M	1	Move to Post Test Storage 42	09/25/95.08:00A	09/25/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.41.2N	1	Clean, Dry & End Cap 42	09/25/95.09:00A	09/25/95.10:00A	
1.1.2.41.2P	1	Transport to Erection42	10/12/95.08:00A	10/12/95.09:00A	
1.1.2.41.2Q	1	Set & Align 42	10/12/95.09:00A	10/12/95.10:00A	
1.1.2.41.2R	1	Set Clean Room, Purge & Fit 42	10/12/95.10:00A	10/12/95.11:00A	
1.1.2.41.2S	2	Weld Joint 42	10/12/95.11:00A	10/12/95.02:00P	
1.1.2.41.2T	2	Leak Test Joint 42	10/12/95.02:00P	10/12/95.04:00P	
1.1.2.41.2U	2	Install Tube Supports 42	10/12/95.02:00P	10/12/95.04:00P	
1.1.2.41.2V	2	Remove Equip'mt, Clean & Cap 42	10/12/95.04:00P	10/13/95.09:00A	
1.1.2.41.3A	1	Unload,Rec/Insp Tube 43	09/19/95.10:00A	09/19/95.11:00A	
1.1.2.41.3B	1	Move to Stiff Fit Up Stat. 43	09/22/95.10:00A	09/22/95.11:00A	
1.1.2.41.3C	1	Set-up & Purge 43	09/22/95.11:00A	09/22/95.12:00P	
1.1.2.41.3D	2	Fit Stiffeners 43	09/22/95.01:00P	09/22/95.03:00P	
1.1.2.41.3E	4	Weld Stiffeners 43	09/22/95.03:00P	09/25/95.10:00A	
1.1.2.41.3F	1	Inspect, Install End Caps 43	09/25/95.10:00A	09/25/95.11:00A	
1.1.2.41.3H	1	Move to Test Area 43	09/25/95.11:00A	09/25/95.12:00P	
1.1.2.41.3I	1	Pre-Clean & Black Light 43	09/25/95.01:00P	09/25/95.02:00P	
1.1.2.41.3J	30	Leak Test 43	09/25/95.02:00P	09/26/95.08:00P	
1.1.2.41.3M	1	Move to Post Test Storage 43	09/27/95.08:00A	09/27/95.09:00A	
1.1.2.41.3N	1	Clean, Dry & End Cap 43	09/27/95.09:00A	09/27/95.10:00A	
1.1.2.41.3P	1	Transport to Erection 43	10/13/95.03:00P	10/13/95.04:00P	
1.1.2.41.3Q	1	Set & Align 43	10/13/95.04:00P	10/13/95.05:00P	
1.1.2.41.3R	1	Set Clean Room, Purge & Fit43	10/16/95.08:00A	10/16/95.09:00A	
1.1.2.41.3S	2	Weld Joint 43	10/16/95.09:00A	10/16/95.11:00A	
1.1.2.41.3T	2	Leak Test Joint 43	10/16/95.11:00A	10/16/95.02:00P	
1.1.2.41.3U	2	Install Tube Supports43	10/16/95.11:00A	10/16/95.02:00P	
1.1.2.41.3V	2	Remove Equip'mt, Clean & Cap 43	10/16/95.02:00P	10/16/95.04:00P	
1.1.2.41.4A	1	Unload,Rec/Insp Tube 44	09/19/95.11:00A	09/19/95.12:00P	
1.1.2.41.4B	1	Move to Stiff Fit Up Stat. 44	09/25/95.01:00P	09/25/95.02:00P	
1.1.2.41.4C	1	Set-up & Purge 44	09/25/95.02:00P	09/25/95.03:00P	
1.1.2.41.4D	2	Fit Stiffeners 44	09/25/95.03:00P	09/25/95.05:00P	
1.1.2.41.4E	4	Weld Stiffeners 44	09/26/95.08:00A	09/26/95.12:00P	
1.1.2.41.4F	1	Inspect, Install End Caps 44	09/26/95.01:00P	09/26/95.02:00P	
1.1.2.41.4H	1	Move to Test Area 44	09/27/95.09:00A	09/27/95.10:00A	
1.1.2.41.4I	1	Pre-Clean & Black Light 44	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.41.4J	30	Leak Test 44	09/27/95.11:00A	09/28/95.05:00P	
1.1.2.41.4M	1	Move to Post Test Storage 44	09/29/95.08:00A	09/29/95.09:00A	
1.1.2.41.4N	1	Clean, Dry & End Cap 44	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.41.4P	1	Transport to Erection 44	10/17/95.01:00P	10/17/95.02:00P	
1.1.2.41.4Q	1	Set & Align 44	10/17/95.02:00P	10/17/95.03:00P	
1.1.2.41.4R	1	Set Clean Room, Purge & Fit 44	10/17/95.03:00P	10/17/95.04:00P	
1.1.2.41.4S	2	Weld Joint 4 4	10/17/95.04:00P	10/18/95.09:00A	
1.1.2.41.4T	2	Leak Test Joint 44	10/18/95.09:00A	10/18/95.11:00A	
1.1.2.41.4U	2	Install Tube Supports 44	10/18/95.09:00A	10/18/95.11:00A	
1.1.2.41.4V	2	Remove Equip'mt, Clean & Cap 44	10/18/95.11:00A	10/18/95.02:00P	
1.1.2.41.5A	1	Unload,Rec/Insp Tube 4	09/19/95.01:00P	09/19/95.02:00P	
1.1.2.41.5B	1	Move to Stiff Fit Up Stat. 45	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.41.5C	1	Set-up & Purge 45	09/27/95.11:00A	09/27/95.12:00P	
1.1.2.41.5D	1	F/W Pump Port Reinf. 45	09/27/95.01:00P	09/27/95.02:00P	
1.1.2.41.5E	2	Fit Stiffeners 45	09/27/95.02:00P	09/27/95.04:00P	
1.1.2.41.5F	4	Weld Stiffeners 45	09/27/95.04:00P	09/28/95.11:00A	
1.1.2.41.5G	1	Move to P.Port Stat.45	09/28/95.11:00A	09/28/95.12:00P	
1.1.2.41.5H	1	Setup & Bore 10" Inlet 45	09/28/95.01:00P	09/28/95.02:00P	
1.1.2.41.5I	2	Purge/F/W Pump Port 45	09/28/95.02:00P	09/28/95.04:00P	
1.1.2.41.5J	1	Inspect, Install End Caps 45	09/28/95.04:00P	09/28/95.05:00P	
1.1.2.41.5L	1	Move to Test Area 45	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.41.5M	1	Pre-Clean & Black Light 55	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.41.5N	30	Leak Test 45	09/29/95.11:00A	09/30/95.05:00P	
1.1.2.41.5Q	1	Move to Post Test Storage 45	10/02/95.08:00A	10/02/95.09:00A	
1.1.2.41.5R	1	Clean, Dry & End Cap 45	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.41.5T	1	Transport to Erection 45	10/19/95.10:00A	10/19/95.11:00A	
1.1.2.41.5U	1	Set & Align 45	10/19/95.11:00A	10/19/95.12:00P	
1.1.2.41.5V	1	Set Clean Room, Purge & Fit 45	10/19/95.01:00P	10/19/95.02:00P	
1.1.2.41.5W	2	Weld Joint 45	10/19/95.02:00P	10/19/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.41.5X	2	Leak Test Joint 45	10/19/95.04:00P	10/20/95.09:00A	
1.1.2.41.5Y	2	Install Tube Supports 45	10/19/95.04:00P	10/20/95.09:00A	
1.1.2.41.5Z	2	Remove Equip'mt, Clean & Cap 45	10/20/95.09:00A	10/20/95.11:00A	
1.1.2.41.B1A	1	Unload,Rec/Insp Tube B41	09/19/95.08:00A	09/19/95.09:00A	
1.1.2.41.B1B	1	Move to Stiff Fit Up Stat. B41	09/19/95.09:00A	09/19/95.10:00A	
1.1.2.41.B1C	1	Set-up & Purge B41	09/19/95.10:00A	09/19/95.11:00A	
1.1.2.41.B1D	2	Fit Stiffeners B41	09/19/95.11:00A	09/19/95.02:00P	
1.1.2.41.B1E	4	Weld Stiffeners B41	09/19/95.02:00P	09/20/95.09:00A	
1.1.2.41.B1F	1	Move to Exp.Bellows Stat. B41	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.41.B1G	3	Fit,Purge,Weld Exp. Bellows B41	09/20/95.10:00A	09/20/95.02:00P	
1.1.2.41.B1H	1	Inspect, Install End Caps B41	09/20/95.02:00P	09/20/95.03:00P	
1.1.2.41.B1J	1	Move to Test Area B41	09/20/95.03:00P	09/20/95.04:00P	
1.1.2.41.B1K	1	Pre-Clean & Black Light B41	09/20/95.04:00P	09/20/95.05:00P	
1.1.2.41.B1L	30	Leak Test B41	09/20/95.05:00P	09/21/95.11:00P	
1.1.2.41.B1O	1	Move to Post Test Storage B41	09/22/95.08:00A	09/22/95.09:00A	
1.1.2.41.B1P	1	Clean, Dry & End Cap B41	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.41.B1R	1	Transport to Erection B41	10/09/95.11:00A	10/09/95.12:00P	
1.1.2.41.B1S	1	Set & Align B41	10/09/95.01:00P	10/09/95.02:00P	
1.1.2.41.B1T	1	Set Clean Room, Purge & Fit B41	10/09/95.02:00P	10/09/95.03:00P	
1.1.2.41.B1U	2	Weld Joint B41	10/09/95.03:00P	10/09/95.05:00P	
1.1.2.41.B1V	2	Leak Test Joint B41	10/10/95.08:00A	10/10/95.10:00A	
1.1.2.41.B1W	2	Install Tube Supports B41	10/10/95.08:00A	10/10/95.10:00A	
1.1.2.41.B1X	2	Remove Equip'mt, Clean & Cap B41	10/10/95.10:00A	10/10/95.12:00P	
1.1.2.41.B2A	1	Unload,Rec/Insp Tube B42	09/19/95.09:00A	09/19/95.10:00A	
1.1.2.41.B2B	1	Move to Stiff Fit Up Stat. B42	09/20/95.10:00A	09/20/95.11:00A	
1.1.2.41.B2C	1	Set-up & Purge B42	09/20/95.11:00A	09/20/95.12:00P	
1.1.2.41.B2D	2	Fit Stiffeners B42	09/20/95.01:00P	09/20/95.03:00P	
1.1.2.41.B2E	4	Weld Stiffeners B42	09/20/95.03:00P	09/21/95.10:00A	
1.1.2.41.B2F	1	Move to Exp.Bellows Stat. B42	09/21/95.10:00A	09/21/95.11:00A	
1.1.2.41.B2G	3	Fit,Purge,Weld Exp. Bellows B42	09/21/95.11:00A	09/21/95.03:00P	
1.1.2.41.B2H	1	Inspect, Install End Caps B42	09/21/95.03:00P	09/21/95.04:00P	
1.1.2.41.B2J	1	Move to Test Area B42	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.41.B2K	1	Pre-Clean & Black Light B42	09/22/95.10:00A	09/22/95.11:00A	
1.1.2.41.B2L	30	Leak Test B42	09/22/95.11:00A	09/23/95.05:00P	
1.1.2.41.B2O	1	Move to Post Test Storage B42	09/25/95.08:00A	09/25/95.09:00A	
1.1.2.41.B2P	1	Clean, Dry & End Cap B42	09/25/95.09:00A	09/25/95.10:00A	
1.1.2.41.B2R	1	Transport to Erection B42	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.41.B2S	1	Set & Align B42	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.41.B2T	1	Set Clean Room, Purge & Fit B42	10/11/95.11:00A	10/11/95.12:00P	
1.1.2.41.B2U	2	Weld Joint B42	10/11/95.01:00P	10/11/95.03:00P	
1.1.2.41.B2V	2	Leak Test Joint B42	10/11/95.03:00P	10/11/95.05:00P	
1.1.2.41.B2W	2	Install Tube SupportsB42	10/11/95.03:00P	10/11/95.05:00P	
1.1.2.41.B2X	2	Remove Equip'mt, Clean & Cap B42	10/12/95.08:00A	10/12/95.10:00A	
1.1.2.41.B3A	1	Unload,Rec/Insp Tube B43	09/19/95.10:00A	09/19/95.11:00A	
1.1.2.41.B3B	1	Move to Stiff Fit Up Stat. B43	09/21/95.11:00A	09/21/95.12:00P	
1.1.2.41.B3C	1	Set-up & Purge B43	09/21/95.01:00P	09/21/95.02:00P	
1.1.2.41.B3D	2	Fit Stiffeners B43	09/21/95.02:00P	09/21/95.04:00P	
1.1.2.41.B3E	4	Weld Stiffeners B43	09/21/95.04:00P	09/22/95.11:00A	
1.1.2.41.B3F	1	Move to Exp.Bellows Stat. B43	09/22/95.11:00A	09/22/95.12:00P	
1.1.2.41.B3G	3	Fit,Purge,Weld Exp. Bellows B43	09/22/95.01:00P	09/22/95.04:00P	
1.1.2.41.B3H	1	Inspect, Install End Caps B43	09/22/95.04:00P	09/22/95.05:00P	
1.1.2.41.B3J	1	Move to Test Area B43	09/25/95.09:00A	09/25/95.10:00A	
1.1.2.41.B3K	1	Pre-Clean & Black Light B43	09/25/95.10:00A	09/25/95.11:00A	
1.1.2.41.B3L	30	Leak Test B43	09/25/95.11:00A	09/26/95.05:00P	
1.1.2.41.B3O	1	Move to Post Test Storage B43	09/27/95.08:00A	09/27/95.09:00A	
1.1.2.41.B3P	1	Clean, Dry & End Cap B43	09/27/95.09:00A	09/27/95.10:00A	
1.1.2.41.B3R	1	Transport to Erection B43	10/12/95.04:00P	10/12/95.05:00P	
1.1.2.41.B3S	1	Set & Align B43	10/13/95.08:00A	10/13/95.09:00A	
1.1.2.41.B3T	1	Set Clean Room, Purge & Fit B43	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.41.B3U	2	Weld Joint B43	10/13/95.10:00A	10/13/95.12:00P	
1.1.2.41.B3V	2	Leak Test Joint B43	10/13/95.01:00P	10/13/95.03:00P	
1.1.2.41.B3W	2	Install Tube Supports B43	10/13/95.01:00P	10/13/95.03:00P	
1.1.2.41.B3X	2	Remove Equip'mt, Clean & Cap B43	10/13/95.03:00P	10/13/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.41.B4A	1	Unload,Rec/Insp Tube B44	09/19/95.11:00A	09/19/95.12:00P	
1.1.2.41.B4B	1	Move to Stiff Fit Up Stat. B44	09/22/95.01:00P	09/22/95.02:00P	
1.1.2.41.B4C	1	Set-up & Purge B44	09/22/95.02:00P	09/22/95.03:00P	
1.1.2.41.B4D	2	Fit Stiffeners B44	09/22/95.03:00P	09/22/95.05:00P	
1.1.2.41.B4E	4	Weld Stiffeners B44	09/25/95.08:00A	09/25/95.12:00P	
1.1.2.41.B4F	1	Move to Exp.Bellows Stat. B44	09/25/95.01:00P	09/25/95.02:00P	
1.1.2.41.B4G	3	Fit,Purge,Weld Exp. Bellows B44	09/25/95.02:00P	09/25/95.05:00P	
1.1.2.41.B4H	1	Inspect, Install End Caps B44	09/26/95.08:00A	09/26/95.09:00A	
1.1.2.41.B4J	1	Move to Test Area B44	09/27/95.09:00A	09/27/95.10:00A	
1.1.2.41.B4K	1	Pre-Clean & Black Light B44	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.41.B4L	30	Leak Test B44	09/27/95.11:00A	09/28/95.05:00P	
1.1.2.41.B4O	1	Move to Post Test Storage B44	09/29/95.08:00A	09/29/95.09:00A	
1.1.2.41.B4P	1	Clean, Dry & End Cap B44	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.41.B4R	1	Transport to Erection B44	10/16/95.02:00P	10/16/95.03:00P	
1.1.2.41.B4S	1	Set & Align B44	10/16/95.03:00P	10/16/95.04:00P	
1.1.2.41.B4T	1	Set Clean Room, Purge & Fit B44	10/16/95.04:00P	10/16/95.05:00P	
1.1.2.41.B4U	2	Weld Joint B44	10/17/95.08:00A	10/17/95.10:00A	
1.1.2.41.B4V	2	Leak Test Joint B44	10/17/95.10:00A	10/17/95.12:00P	
1.1.2.41.B4W	2	Install Tube Supports B44	10/17/95.10:00A	10/17/95.12:00P	
1.1.2.41.B4X	2	Remove Equip'mt, Clean & Cap B44	10/17/95.01:00P	10/17/95.03:00P	
1.1.2.41.B5A	1	Unload,Rec/Insp Tube B45	09/19/95.01:00P	09/19/95.02:00P	
1.1.2.41.B5B	1	Move to Stiff Fit Up Stat. B45	09/25/95.02:00P	09/25/95.03:00P	
1.1.2.41.B5C	1	Set-up & Purge B45	09/25/95.03:00P	09/25/95.04:00P	
1.1.2.41.B5D	2	Fit Stiffeners B45	09/25/95.04:00P	09/26/95.09:00A	
1.1.2.41.B5E	4	Weld Stiffeners B45	09/26/95.09:00A	09/26/95.02:00P	
1.1.2.41.B5F	1	Move to Exp.Bellows Stat. B45	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.41.B5G	3	Fit,Purge,Weld Exp. Bellows B45	09/27/95.11:00A	09/27/95.03:00P	
1.1.2.41.B5H	1	Inspect, Install End Caps B45	09/27/95.03:00P	09/27/95.04:00P	
1.1.2.41.B5J	1	Move to Test Area B45	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.41.B5K	1	Pre-Clean & Black Light B45	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.41.B5L	30	Leak Test B45	09/29/95.11:00A	09/30/95.05:00P	
1.1.2.41.B5O	1	Move to Post Test Storage B45	10/02/95.08:00A	10/02/95.09:00A	
1.1.2.41.B5P	1	Clean, Dry & End Cap B45	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.41.B5R	1	Transport to Erection B45	10/18/95.11:00A	10/18/95.12:00P	
1.1.2.41.B5S	1	Set & Align B45	10/18/95.01:00P	10/18/95.02:00P	
1.1.2.41.B5T	1	Set Clean Room, Purge & Fit B45	10/18/95.02:00P	10/18/95.03:00P	
1.1.2.41.B5U	2	Weld Joint B45	10/18/95.03:00P	10/18/95.05:00P	
1.1.2.41.B5V	2	Leak Test Joint B45	10/19/95.08:00A	10/19/95.10:00A	
1.1.2.41.B5W	2	Install Tube Supports B45	10/19/95.08:00A	10/19/95.10:00A	
1.1.2.41.B5X	2	Remove Equip'mt, Clean & Cap B45	10/19/95.10:00A	10/19/95.12:00P	
1.1.2.46	846	Cans 46-50	06/05/95.04:00P	10/31/95.02:00P	
1.1.2.46.1A	1	Unload,Rec/Insp Tube 46	06/06/95.08:00A	06/06/95.09:00A	
1.1.2.46.1B	1	Move to Stiff Fit Up Stat. 46	06/06/95.09:00A	06/06/95.10:00A	
1.1.2.46.1C	1	Set-up & Purge 46	06/06/95.10:00A	06/06/95.11:00A	
1.1.2.46.1D	2	Fit Stiffeners 46	06/06/95.11:00A	06/06/95.02:00P	
1.1.2.46.1E	4	Weld Stiffeners 46	06/06/95.02:00P	06/07/95.09:00A	
1.1.2.46.1F	1	Inspect, Install End Caps 46	06/07/95.09:00A	06/07/95.10:00A	
1.1.2.46.1H	1	Move to Test Area 46	06/07/95.10:00A	06/07/95.11:00A	
1.1.2.46.1I	1	Pre-Clean & Black Light 46	06/07/95.11:00A	06/07/95.12:00P	
1.1.2.46.1J	30	Leak Test 46	06/07/95.12:00P	06/08/95.06:00P	
1.1.2.46.1M	1	Move to Post Test Storage 46	06/09/95.08:00A	06/09/95.09:00A	
1.1.2.46.1N	1	Clean, Dry & End Cap 46	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.46.1P	1	Transport to Erection 46	10/23/95.10:00A	10/23/95.11:00A	
1.1.2.46.1Q	1	Set & Align 46	10/23/95.11:00A	10/23/95.12:00P	
1.1.2.46.1R	1	Set Clean Room, Purge & Fit 46	10/23/95.01:00P	10/23/95.02:00P	
1.1.2.46.1S	2	Weld Joint 46	10/23/95.02:00P	10/23/95.04:00P	
1.1.2.46.1T	2	Leak Test Joint 46	10/23/95.04:00P	10/24/95.09:00A	
1.1.2.46.1U	2	Install Tube Supports 46	10/23/95.04:00P	10/24/95.09:00A	
1.1.2.46.1V	2	Remove Equip'mt, Clean & Cap 46	10/24/95.09:00A	10/24/95.11:00A	
1.1.2.46.2A	1	Unload,Rec. & Inspect 47	06/06/95.09:00A	06/06/95.10:00A	
1.1.2.46.2B	1	Move to Stiff Fit Up Stat. 47	06/07/95.11:00A	06/07/95.12:00P	
1.1.2.46.2C	1	Set-up & Purge 47	06/07/95.01:00P	06/07/95.02:00P	
1.1.2.46.2D	2	Fit Stiffeners 47	06/07/95.02:00P	06/07/95.04:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.46.2E	4	Weld Stiffeners 47	06/07/95.04:00P	06/08/95.11:00A	
1.1.2.46.2F	1	Inspect, Install End Caps 47	06/08/95.11:00A	06/08/95.12:00P	
1.1.2.46.2H	1	Move to Test Area 47	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.46.2I	1	Pre-Clean & Black Light 47	06/09/95.10:00A	06/09/95.11:00A	
1.1.2.46.2J	30	Leak Test 47	06/09/95.11:00A	06/10/95.05:00P	
1.1.2.46.2M	1	Move to Post Test Storage 47	06/12/95.08:00A	06/12/95.09:00A	
1.1.2.46.2N	1	Clean, Dry & End Cap 47	06/12/95.09:00A	06/12/95.10:00A	
1.1.2.46.2P	1	Transport to Erection 47	10/25/95.08:00A	10/25/95.09:00A	
1.1.2.46.2Q	1	Set & Align 47	10/25/95.09:00A	10/25/95.10:00A	
1.1.2.46.2R	1	Set Clean Room, Purge & Fit 47	10/25/95.10:00A	10/25/95.11:00A	
1.1.2.46.2S	2	Weld Joint 47	10/25/95.11:00A	10/25/95.02:00P	
1.1.2.46.2T	2	Leak Test Joint 47	10/25/95.02:00P	10/25/95.04:00P	
1.1.2.46.2U	2	Install Tube Supports 47	10/25/95.02:00P	10/25/95.04:00P	
1.1.2.46.2V	2	Remove Equip'mt, Clean & Cap 47	10/25/95.04:00P	10/26/95.09:00A	
1.1.2.46.3A	1	Unload,Rec/Insp Tube 48	06/06/95.10:00A	06/06/95.11:00A	
1.1.2.46.3B	1	Move to Stiff Fit Up Stat. 48	06/09/95.10:00A	06/09/95.11:00A	
1.1.2.46.3C	1	Set-up & Purge 48	06/09/95.11:00A	06/09/95.12:00P	
1.1.2.46.3D	2	Fit Stiffeners 48	06/09/95.01:00P	06/09/95.03:00P	
1.1.2.46.3E	4	Weld Stiffeners 48	06/09/95.03:00P	06/12/95.10:00A	
1.1.2.46.3F	1	Inspect, Install End Caps 48	06/12/95.10:00A	06/12/95.11:00A	
1.1.2.46.3H	1	Move to Test Area 48	06/12/95.11:00A	06/12/95.12:00P	
1.1.2.46.3I	1	Pre-Clean & Black Light 48	06/12/95.01:00P	06/12/95.02:00P	
1.1.2.46.3J	30	Leak Test 48	06/12/95.02:00P	06/13/95.08:00P	
1.1.2.46.3M	1	Move to Post Test Storage 48	06/14/95.08:00A	06/14/95.09:00A	
1.1.2.46.3N	1	Clean, Dry & End Cap 48	06/14/95.09:00A	06/14/95.10:00A	
1.1.2.46.3P	1	Transport to Erection 48	10/26/95.03:00P	10/26/95.04:00P	
1.1.2.46.3Q	1	Set & Align 48	10/26/95.04:00P	10/26/95.05:00P	
1.1.2.46.3R	1	Set Clean Room, Purge & Fit 48	10/27/95.08:00A	10/27/95.09:00A	
1.1.2.46.3S	2	Weld Joint 48	10/27/95.09:00A	10/27/95.11:00A	
1.1.2.46.3T	2	Leak Test Joint 48	10/27/95.11:00A	10/27/95.02:00P	
1.1.2.46.3U	2	Install Tube Supports 48	10/27/95.11:00A	10/27/95.02:00P	
1.1.2.46.3V	2	Remove Equip'mt, Clean & Cap 48	10/27/95.02:00P	10/27/95.04:00P	
1.1.2.46.4A	1	Unload,Rec/Insp Tube 49	06/06/95.11:00A	06/06/95.12:00P	
1.1.2.46.4B	1	Move to Stiff Fit Up Stat. 49	06/12/95.01:00P	06/12/95.02:00P	
1.1.2.46.4C	1	Set-up & Purge 49	06/12/95.02:00P	06/12/95.03:00P	
1.1.2.46.4D	2	Fit Stiffeners 49	06/12/95.03:00P	06/12/95.05:00P	
1.1.2.46.4E	4	Weld Stiffeners 49	06/13/95.08:00A	06/13/95.12:00P	
1.1.2.46.4F	1	Inspect, Install End Caps 49	06/13/95.01:00P	06/13/95.02:00P	
1.1.2.46.4H	1	Move to Test Area 49	06/14/95.09:00A	06/14/95.10:00A	
1.1.2.46.4I	1	Pre-Clean & Black Light 49	06/14/95.10:00A	06/14/95.11:00A	
1.1.2.46.4J	30	Leak Test 49	06/14/95.11:00A	06/15/95.05:00P	
1.1.2.46.4M	1	Move to Post Test Storage 49	06/16/95.08:00A	06/16/95.09:00A	
1.1.2.46.4N	1	Clean, Dry & End Cap 49	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.46.4P	1	Transport to Erection 49	10/30/95.01:00P	10/30/95.02:00P	
1.1.2.46.4Q	1	Set & Align 49	10/30/95.02:00P	10/30/95.03:00P	
1.1.2.46.4R	1	Set Clean Room, Purge & Fit 49	10/30/95.03:00P	10/30/95.04:00P	
1.1.2.46.4S	2	Weld Joint 49	10/30/95.04:00P	10/31/95.09:00A	
1.1.2.46.4T	2	Leak Test Joint 49	10/31/95.09:00A	10/31/95.11:00A	
1.1.2.46.4U	2	Install Tube Supports 49	10/31/95.09:00A	10/31/95.11:00A	
1.1.2.46.4V	2	Remove Equip'mt, Clean & Cap 49	10/31/95.11:00A	10/31/95.02:00P	
1.1.2.46.5A	1	Unload,Rec/Insp Tube 50	06/06/95.01:00P	06/06/95.02:00P	
1.1.2.46.5B	1	Move to Stiff Fit Up Stat. 50	06/14/95.10:00A	06/14/95.11:00A	
1.1.2.46.5C	1	Set-up & Purge 50	06/14/95.11:00A	06/14/95.12:00P	
1.1.2.46.5D	1	F/W Pump Port Reinf. 50	06/14/95.01:00P	06/14/95.02:00P	
1.1.2.46.5E	2	Fit Stiffeners 50	06/14/95.02:00P	06/14/95.04:00P	
1.1.2.46.5F	4	Weld Stiffeners 50	06/14/95.04:00P	06/15/95.11:00A	
1.1.2.46.5G	1	Move to P.Port Stat.50	06/15/95.11:00A	06/15/95.12:00P	
1.1.2.46.5H	1	Setup & Bore 10" Inlet 50	06/15/95.01:00P	06/15/95.02:00P	
1.1.2.46.5I	2	Purge/F/W Pump Port 50	06/15/95.02:00P	06/15/95.04:00P	
1.1.2.46.5J	1	Inspect, Install End Caps 50	06/15/95.04:00P	06/15/95.05:00P	
1.1.2.46.5L	1	Move to Test Area 50	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.46.5M	1	Pre-Clean & Black Light 50	06/16/95.10:00A	06/16/95.11:00A	
1.1.2.46.5N	30	Leak Test 50	06/16/95.11:00A	06/17/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.46.5Q	1	Move to Post Test Storage 50	06/19/95.08:00A	06/19/95.09:00A	
1.1.2.46.5R	1	Clean, Dry & End Cap 50	06/19/95.09:00A	06/19/95.10:00A	
1.1.2.46.5T	1	Transport to Erection 50	06/27/95.11:00A	06/27/95.12:00P	
1.1.2.46.5U	1	Set & Align 50	06/27/95.01:00P	06/27/95.02:00P	
1.1.2.46.5V	1	Set Clean Room, Purge & Fit 50	06/27/95.02:00P	06/27/95.03:00P	
1.1.2.46.5W	2	Weld Joint 50	06/27/95.03:00P	06/27/95.05:00P	
1.1.2.46.5X	2	Leak Test Joint 50	06/28/95.08:00A	06/28/95.10:00A	
1.1.2.46.5Y	2	Install Tube Supports 50	06/28/95.08:00A	06/28/95.10:00A	
1.1.2.46.5Z	2	Remove Equip'mt, Clean & Cap 50	06/28/95.10:00A	06/28/95.12:00P	
1.1.2.46.B1A	1	Unload,Rec/Insp Tube B46	06/06/95.08:00A	06/06/95.09:00A	
1.1.2.46.B1B	1	Move to Stiff Fit Up Stat. B46	06/06/95.09:00A	06/06/95.10:00A	
1.1.2.46.B1C	1	Set-up & Purge B46	06/06/95.10:00A	06/06/95.11:00A	
1.1.2.46.B1D	2	Fit Stiffeners B46	06/06/95.11:00A	06/06/95.02:00P	
1.1.2.46.B1E	4	Weld Stiffeners B46	06/06/95.02:00P	06/07/95.09:00A	
1.1.2.46.B1F	1	Move to Exp.Bellows Stat. B46	06/07/95.09:00A	06/07/95.10:00A	
1.1.2.46.B1G	3	Fit,Purge,Weld Exp. Bellows B46	06/07/95.10:00A	06/07/95.02:00P	
1.1.2.46.B1H	1	Inspect, Install End Caps B46	06/07/95.02:00P	06/07/95.03:00P	
1.1.2.46.B1J	1	Move to Test Area B46	06/07/95.03:00P	06/07/95.04:00P	
1.1.2.46.B1K	1	Pre-Clean & Black Light B46	06/07/95.04:00P	06/07/95.05:00P	
1.1.2.46.B1L	30	Leak Test B46	06/07/95.05:00P	06/08/95.11:00P	
1.1.2.46.B1O	1	Move to Post Test Storage B46	06/09/95.08:00A	06/09/95.09:00A	
1.1.2.46.B1P	1	Clean, Dry & End Cap B46	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.46.B1R	1	Transport to Erection B46	10/20/95.11:00A	10/20/95.12:00P	
1.1.2.46.B1S	1	Set & Align B46	10/20/95.01:00P	10/20/95.02:00P	
1.1.2.46.B1T	1	Set Clean Room, Purge & Fit B46	10/20/95.02:00P	10/20/95.03:00P	
1.1.2.46.B1U	2	Weld Joint B46	10/20/95.03:00P	10/20/95.05:00P	
1.1.2.46.B1V	2	Leak Test Joint B46	10/23/95.08:00A	10/23/95.10:00A	
1.1.2.46.B1W	2	Install Tube Supports B46	10/23/95.08:00A	10/23/95.10:00A	
1.1.2.46.B1X	2	Remove Equip'mt, Clean & Cap B46	10/23/95.10:00A	10/23/95.12:00P	
1.1.2.46.B2A	1	Unload,Rec/Insp Tube B47	06/06/95.09:00A	06/06/95.10:00A	
1.1.2.46.B2B	1	Move to Stiff Fit Up Stat. B47	06/07/95.10:00A	06/07/95.11:00A	
1.1.2.46.B2C	1	Set-up & Purge B47	06/07/95.11:00A	06/07/95.12:00P	
1.1.2.46.B2D	2	Fit Stiffeners B47	06/07/95.01:00P	06/07/95.03:00P	
1.1.2.46.B2E	4	Weld Stiffeners B47	06/07/95.03:00P	06/08/95.10:00A	
1.1.2.46.B2F	1	Move to Exp.Bellows Stat. B47	06/08/95.10:00A	06/08/95.11:00A	
1.1.2.46.B2G	3	Fit,Purge,Weld Exp. Bellows B47	06/08/95.11:00A	06/08/95.03:00P	
1.1.2.46.B2H	1	Inspect, Install End Caps B47	06/08/95.03:00P	06/08/95.04:00P	
1.1.2.46.B2J	1	Move to Test Area B47	06/09/95.09:00A	06/09/95.10:00A	
1.1.2.46.B2K	1	Pre-Clean & Black Light B47	06/09/95.10:00A	06/09/95.11:00A	
1.1.2.46.B2L	30	Leak Test B47	06/09/95.11:00A	06/10/95.05:00P	
1.1.2.46.B2O	1	Move to Post Test Storage B47	06/12/95.08:00A	06/12/95.09:00A	
1.1.2.46.B2P	1	Clean, Dry & End Cap B47	06/12/95.09:00A	06/12/95.10:00A	
1.1.2.46.B2R	1	Transport to Erection B47	10/24/95.09:00A	10/24/95.10:00A	
1.1.2.46.B2S	1	Set & Align B47	10/24/95.10:00A	10/24/95.11:00A	
1.1.2.46.B2T	1	Set Clean Room, Purge & Fit B47	10/24/95.11:00A	10/24/95.12:00P	
1.1.2.46.B2U	2	Weld Joint B47	10/24/95.01:00P	10/24/95.03:00P	
1.1.2.46.B2V	2	Leak Test Joint B47	10/24/95.03:00P	10/24/95.05:00P	
1.1.2.46.B2W	2	Install Tube Supports B47	10/24/95.03:00P	10/24/95.05:00P	
1.1.2.46.B2X	2	Remove Equip'mt, Clean & Cap B47	10/25/95.08:00A	10/25/95.10:00A	
1.1.2.46.B3A	1	Unload,Rec/Insp Tube B48	06/06/95.10:00A	06/06/95.11:00A	
1.1.2.46.B3B	1	Move to Stiff Fit Up Stat. B48	06/08/95.11:00A	06/08/95.12:00P	
1.1.2.46.B3C	1	Set-up & Purge B48	06/08/95.01:00P	06/08/95.02:00P	
1.1.2.46.B3D	2	Fit Stiffeners B48	06/08/95.02:00P	06/08/95.04:00P	
1.1.2.46.B3E	4	Weld Stiffeners B48	06/08/95.04:00P	06/09/95.11:00A	
1.1.2.46.B3F	1	Move to Exp.Bellows Stat. B48	06/09/95.11:00A	06/09/95.12:00P	
1.1.2.46.B3G	3	Fit,Purge,Weld Exp. Bellows B48	06/09/95.01:00P	06/09/95.04:00P	
1.1.2.46.B3H	1	Inspect, Install End Caps B48	06/09/95.04:00P	06/09/95.05:00P	
1.1.2.46.B3J	1	Move to Test Area B48	06/12/95.09:00A	06/12/95.10:00A	
1.1.2.46.B3K	1	Pre-Clean & Black Light B48	06/12/95.10:00A	06/12/95.11:00A	
1.1.2.46.B3L	30	Leak Test B48	06/12/95.11:00A	06/13/95.05:00P	
1.1.2.46.B3O	1	Move to Post Test Storage B48	06/14/95.08:00A	06/14/95.09:00A	
1.1.2.46.B3P	1	Clean, Dry & End Cap B48	06/14/95.09:00A	06/14/95.10:00A	
1.1.2.46.B3R	1	Transport to Erection B48	10/25/95.04:00P	10/25/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.46.B3S	1	Set & Align B48	10/26/95.08:00A	10/26/95.09:00A	
1.1.2.46.B3T	1	Set Clean Room, Purge & Fit B48	10/26/95.09:00A	10/26/95.10:00A	
1.1.2.46.B3U	2	Weld Joint B48	10/26/95.10:00A	10/26/95.12:00P	
1.1.2.46.B3V	2	Leak Test Joint B48	10/26/95.01:00P	10/26/95.03:00P	
1.1.2.46.B3W	2	Install Tube Supports B48	10/26/95.01:00P	10/26/95.03:00P	
1.1.2.46.B3X	2	Remove Equip'mt, Clean & Cap B48	10/26/95.03:00P	10/26/95.05:00P	
1.1.2.46.B4A	1	Unload,Rec/Insp Tube B49	06/06/95.11:00A	06/06/95.12:00P	
1.1.2.46.B4B	1	Move to Stiff Fit Up Stat. B49	06/09/95.01:00P	06/09/95.02:00P	
1.1.2.46.B4C	1	Set-up & Purge B49	06/09/95.02:00P	06/09/95.03:00P	
1.1.2.46.B4D	2	Fit Stiffeners B49	06/09/95.03:00P	06/09/95.05:00P	
1.1.2.46.B4E	4	Weld Stiffeners B49	06/12/95.08:00A	06/12/95.12:00P	
1.1.2.46.B4F	1	Move to Exp.Bellows Stat. B49	06/12/95.01:00P	06/12/95.02:00P	
1.1.2.46.B4G	3	Fit,Purge,Weld Exp. Bellows B49	06/12/95.02:00P	06/12/95.05:00P	
1.1.2.46.B4H	1	Inspect, Install End Caps B49	06/13/95.08:00A	06/13/95.09:00A	
1.1.2.46.B4J	1	Move to Test Area B49	06/14/95.09:00A	06/14/95.10:00A	
1.1.2.46.B4K	1	Pre-Clean & Black Light B49	06/14/95.10:00A	06/14/95.11:00A	
1.1.2.46.B4L	30	Leak Test B49	06/14/95.11:00A	06/15/95.05:00P	
1.1.2.46.B4O	1	Move to Post Test Storage B49	06/16/95.08:00A	06/16/95.09:00A	
1.1.2.46.B4P	1	Clean, Dry & End Cap B49	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.46.B4R	1	Transport to Erection B49	10/27/95.02:00P	10/27/95.03:00P	
1.1.2.46.B4S	1	Set & Align B49	10/27/95.03:00P	10/27/95.04:00P	
1.1.2.46.B4T	1	Set Clean Room, Purge & Fit B49	10/27/95.04:00P	10/27/95.05:00P	
1.1.2.46.B4U	2	Weld Joint B49	10/30/95.08:00A	10/30/95.10:00A	
1.1.2.46.B4V	2	Leak Test Joint B49	10/30/95.10:00A	10/30/95.12:00P	
1.1.2.46.B4W	2	Install Tube Supports B49	10/30/95.10:00A	10/30/95.12:00P	
1.1.2.46.B4X	2	Remove Equip'mt, Clean & Cap B49	10/30/95.01:00P	10/30/95.03:00P	
1.1.2.46.B5A	1	Unload,Rec/Insp Tube B50	06/06/95.01:00P	06/06/95.02:00P	
1.1.2.46.B5B	1	Move to Stiff Fit Up Stat. B50	06/12/95.02:00P	06/12/95.03:00P	
1.1.2.46.B5C	1	Set-up & Purge B50	06/12/95.03:00P	06/12/95.04:00P	
1.1.2.46.B5D	2	Fit Stiffeners B50	06/12/95.04:00P	06/13/95.09:00A	
1.1.2.46.B5E	4	Weld Stiffeners B50	06/13/95.09:00A	06/13/95.02:00P	
1.1.2.46.B5F	1	Move to Exp.Bellows Stat. B50	06/14/95.10:00A	06/14/95.11:00A	
1.1.2.46.B5G	3	Fit,Purge,Weld Exp. Bellows B50	06/14/95.11:00A	06/14/95.03:00P	
1.1.2.46.B5H	1	Inspect, Install End Caps B50	06/14/95.03:00P	06/14/95.04:00P	
1.1.2.46.B5J	1	Move to Test Area B50	06/16/95.09:00A	06/16/95.10:00A	
1.1.2.46.B5K	1	Pre-Clean & Black Light B50	06/16/95.10:00A	06/16/95.11:00A	
1.1.2.46.B5L	30	Leak Test B50	06/16/95.11:00A	06/17/95.05:00P	
1.1.2.46.B5O	1	Move to Post Test Storage B50	06/19/95.08:00A	06/19/95.09:00A	
1.1.2.46.B5P	1	Clean, Dry & End Cap B50	06/19/95.09:00A	06/19/95.10:00A	
1.1.2.46.B5R	1	Transport to Erection B50	06/26/95.01:00P	06/26/95.02:00P	
1.1.2.46.B5S	1	Set & Align B50	06/26/95.02:00P	06/26/95.03:00P	
1.1.2.46.B5T	1	Set Clean Room, Purge & Fit B50	06/26/95.03:00P	06/26/95.04:00P	
1.1.2.46.B5U	2	Weld Joint B50	06/26/95.04:00P	06/27/95.09:00A	
1.1.2.46.B5V	2	Leak Test Joint B50	06/27/95.09:00A	06/27/95.11:00A	
1.1.2.46.B5W	2	Install Tube Supports B50	06/27/95.09:00A	06/27/95.11:00A	
1.1.2.46.B5X	2	Remove Equip'mt, Clean & Cap B50	06/27/95.11:00A	06/27/95.02:00P	
1.1.2.51	125	Cans 51-55	06/19/95.04:00P	07/11/95.12:00P	
1.1.2.51.1A	1	Unload,Rec/Insp Tube 51	06/20/95.08:00A	06/20/95.09:00A	
1.1.2.51.1B	1	Move to Stiff Fit Up Stat. 51	06/20/95.09:00A	06/20/95.10:00A	
1.1.2.51.1C	1	Set-up & Purge 51	06/20/95.10:00A	06/20/95.11:00A	
1.1.2.51.1D	2	Fit Stiffeners 51	06/20/95.11:00A	06/20/95.02:00P	
1.1.2.51.1E	4	Weld Stiffeners 51	06/20/95.02:00P	06/21/95.09:00A	
1.1.2.51.1F	1	Inspect, Install End Caps 51	06/21/95.09:00A	06/21/95.10:00A	
1.1.2.51.1H	1	Move to Test Area 51	06/21/95.10:00A	06/21/95.11:00A	
1.1.2.51.1I	1	Pre-Clean & Black Light 51	06/21/95.11:00A	06/21/95.12:00P	
1.1.2.51.1J	30	Leak Test 51	06/21/95.12:00P	06/22/95.06:00P	
1.1.2.51.1M	1	Move to Post Test Storage 51	06/23/95.08:00A	06/23/95.09:00A	
1.1.2.51.1N	1	Clean, Dry & End Cap 51	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.51.1P	1	Transport to Erection 51	06/29/95.11:00A	06/29/95.12:00P	
1.1.2.51.1Q	1	Set & Align 51	06/29/95.01:00P	06/29/95.02:00P	
1.1.2.51.1R	1	Set Clean Room, Purge & Fit 51	06/29/95.02:00P	06/29/95.03:00P	
1.1.2.51.1S	2	Weld Joint 51	06/29/95.03:00P	06/29/95.05:00P	
1.1.2.51.1T	2	Leak Test Joint 51	06/30/95.08:00A	06/30/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.51.1U	2	Install Tube Supports 51	06/30/95.08:00A	06/30/95.10:00A	
1.1.2.51.1V	2	Remove Equip'mt, Clean & Cap 51	06/30/95.10:00A	06/30/95.12:00P	
1.1.2.51.2A	1	Unload,Rec. & Inspect 52	06/20/95.09:00A	06/20/95.10:00A	
1.1.2.51.2B	1	Move to Stiff Fit Up Stat. 52	06/21/95.11:00A	06/21/95.12:00P	
1.1.2.51.2C	1	Set-up & Purge 52	06/21/95.01:00P	06/21/95.02:00P	
1.1.2.51.2D	2	Fit Stiffeners 52	06/21/95.02:00P	06/21/95.04:00P	
1.1.2.51.2E	4	Weld Stiffeners 52	06/21/95.04:00P	06/22/95.11:00A	
1.1.2.51.2F	1	Inspect, Install End Caps 52	06/22/95.11:00A	06/22/95.12:00P	
1.1.2.51.2H	1	Move to Test Area 52	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.51.2I	1	Pre-Clean & Black Light 52	06/23/95.10:00A	06/23/95.11:00A	
1.1.2.51.2J	30	Leak Test 52	06/23/95.11:00A	06/24/95.05:00P	
1.1.2.51.2M	1	Move to Post Test Storage 52	06/26/95.08:00A	06/26/95.09:00A	
1.1.2.51.2N	1	Clean, Dry & End Cap 52	06/26/95.09:00A	06/26/95.10:00A	
1.1.2.51.2P	1	Transport to Erection 52	07/03/95.09:00A	07/03/95.10:00A	
1.1.2.51.2Q	1	Set & Align 52	07/03/95.10:00A	07/03/95.11:00A	
1.1.2.51.2R	1	Set Clean Room, Purge & Fit 52	07/03/95.11:00A	07/03/95.12:00P	
1.1.2.51.2S	2	Weld Joint 52	07/03/95.01:00P	07/03/95.03:00P	
1.1.2.51.2T	2	Leak Test Joint 52	07/03/95.03:00P	07/03/95.05:00P	
1.1.2.51.2U	2	Install Tube Supports 52	07/03/95.03:00P	07/03/95.05:00P	
1.1.2.51.2V	2	Remove Equip'mt, Clean & Cap 52	07/04/95.08:00A	07/04/95.10:00A	
1.1.2.51.3A	1	Unload,Rec/Insp Tube 53	06/20/95.10:00A	06/20/95.11:00A	
1.1.2.51.3B	1	Move to Stiff Fit Up Stat. 53	06/23/95.10:00A	06/23/95.11:00A	
1.1.2.51.3C	1	Set-up & Purge 53	06/23/95.11:00A	06/23/95.12:00P	
1.1.2.51.3D	2	Fit Stiffeners 53	06/23/95.01:00P	06/23/95.03:00P	
1.1.2.51.3E	4	Weld Stiffeners 53	06/23/95.03:00P	06/26/95.10:00A	
1.1.2.51.3F	1	Inspect, Install End Caps 53	06/26/95.10:00A	06/26/95.11:00A	
1.1.2.51.3H	1	Move to Test Area 53	06/26/95.11:00A	06/26/95.12:00P	
1.1.2.51.3I	1	Pre-Clean & Black Light 53	06/26/95.01:00P	06/26/95.02:00P	
1.1.2.51.3J	30	Leak Test 53	06/26/95.02:00P	06/27/95.08:00P	
1.1.2.51.3M	1	Move to Post Test Storage 53	06/28/95.08:00A	06/28/95.09:00A	
1.1.2.51.3N	1	Clean, Dry & End Cap 53	06/28/95.09:00A	06/28/95.10:00A	
1.1.2.51.3P	1	Transport to Erection 53	07/04/95.04:00P	07/04/95.05:00P	
1.1.2.51.3Q	1	Set & Align 53	07/05/95.08:00A	07/05/95.09:00A	
1.1.2.51.3R	1	Set Clean Room, Purge & Fit 53	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.51.3S	2	Weld Joint 53	07/05/95.10:00A	07/05/95.12:00P	
1.1.2.51.3T	2	Leak Test Joint 53	07/05/95.01:00P	07/05/95.03:00P	
1.1.2.51.3U	2	Install Tube Supports 53	07/05/95.01:00P	07/05/95.03:00P	
1.1.2.51.3V	2	Remove Equip'mt, Clean & Cap 53	07/05/95.03:00P	07/05/95.05:00P	
1.1.2.51.4A	1	Unload,Rec/Insp Tube 54	06/20/95.11:00A	06/20/95.12:00P	
1.1.2.51.4B	1	Move to Stiff Fit Up Stat. 54	06/26/95.01:00P	06/26/95.02:00P	
1.1.2.51.4C	1	Set-up & Purge 54	06/26/95.02:00P	06/26/95.03:00P	
1.1.2.51.4D	2	Fit Stiffeners 54	06/26/95.03:00P	06/26/95.05:00P	
1.1.2.51.4E	4	Weld Stiffeners 54	06/27/95.08:00A	06/27/95.12:00P	
1.1.2.51.4F	1	Inspect, Install End Caps 54	06/27/95.01:00P	06/27/95.02:00P	
1.1.2.51.4H	1	Move to Test Area 54	06/28/95.09:00A	06/28/95.10:00A	
1.1.2.51.4I	1	Pre-Clean & Black Light 54	06/28/95.10:00A	06/28/95.11:00A	
1.1.2.51.4J	30	Leak Test 54	06/28/95.11:00A	06/29/95.05:00P	
1.1.2.51.4M	1	Move to Post Test Storage 54	06/30/95.08:00A	06/30/95.09:00A	
1.1.2.51.4N	1	Clean, Dry & End Cap 54	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.51.4P	1	Transport to Erection 54	07/06/95.02:00P	07/06/95.03:00P	
1.1.2.51.4Q	1	Set & Align 54	07/06/95.03:00P	07/06/95.04:00P	
1.1.2.51.4R	1	Set Clean Room, Purge & Fit 54	07/06/95.04:00P	07/06/95.05:00P	
1.1.2.51.4S	2	Weld Joint 54	07/07/95.08:00A	07/07/95.10:00A	
1.1.2.51.4T	2	Leak Test Joint 54	07/07/95.10:00A	07/07/95.12:00P	
1.1.2.51.4U	2	Install Tube Supports 540	07/07/95.10:00A	07/07/95.12:00P	
1.1.2.51.4V	2	Remove Equip'mt, Clean & Cap 54	07/07/95.01:00P	07/07/95.03:00P	
1.1.2.51.5A	1	Unload,Rec/Insp Tube 55	06/20/95.01:00P	06/20/95.02:00P	
1.1.2.51.5B	1	Move to Stiff Fit Up Stat. 55	06/28/95.10:00A	06/28/95.11:00A	
1.1.2.51.5C	1	Set-up & Purge 55	06/28/95.11:00A	06/28/95.12:00P	
1.1.2.51.5D	1	F/W Pump Port Reinf. 55	06/28/95.01:00P	06/28/95.02:00P	
1.1.2.51.5E	2	Fit Stiffeners 55	06/28/95.02:00P	06/28/95.04:00P	
1.1.2.51.5F	4	Weld Stiffeners 55	06/28/95.04:00P	06/29/95.11:00A	
1.1.2.51.5G	1	Move to P.Port Stat. 55	06/29/95.11:00A	06/29/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.51.5H	1	Setup & Bore 10" Inlet 55	06/29/95.01:00P	06/29/95.02:00P	
1.1.2.51.5I	2	Purge/F/W Pump Port 55	06/29/95.02:00P	06/29/95.04:00P	
1.1.2.51.5J	1	Inspect, Install End Caps 55	06/29/95.04:00P	06/29/95.05:00P	
1.1.2.51.5L	1	Move to Test Area 55	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.51.5M	1	Pre-Clean & Black Light 55	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.51.5N	30	Leak Test 55	06/30/95.11:00A	07/01/95.05:00P	
1.1.2.51.5Q	1	Move to Post Test Storage 55	07/03/95.08:00A	07/03/95.09:00A	
1.1.2.51.5R	1	Clean, Dry & End Cap 55	07/03/95.09:00A	07/03/95.10:00A	
1.1.2.51.5T	1	Transport to Erection 55	07/10/95.11:00A	07/10/95.12:00P	
1.1.2.51.5U	1	Set & Align 55	07/10/95.01:00P	07/10/95.02:00P	
1.1.2.51.5V	1	Set Clean Room, Purge & Fit 55	07/10/95.02:00P	07/10/95.03:00P	
1.1.2.51.5W	2	Weld Joint 55	07/10/95.03:00P	07/10/95.05:00P	
1.1.2.51.5X	2	Leak Test Joint 55	07/11/95.08:00A	07/11/95.10:00A	
1.1.2.51.5Y	2	Install Tube Supports 55	07/11/95.08:00A	07/11/95.10:00A	
1.1.2.51.5Z	2	Remove Equip'mt, Clean & Cap 55	07/11/95.10:00A	07/11/95.12:00P	
1.1.2.51.B1A	1	Unload,Rec/Insp Tube B51	06/20/95.08:00A	06/20/95.09:00A	
1.1.2.51.B1B	1	Move to Stiff Fit Up Stat. B51	06/20/95.09:00A	06/20/95.10:00A	
1.1.2.51.B1C	1	Set-up & Purge B51	06/20/95.10:00A	06/20/95.11:00A	
1.1.2.51.B1D	2	Fit Stiffeners B51	06/20/95.11:00A	06/20/95.02:00P	
1.1.2.51.B1E	4	Weld Stiffeners B51	06/20/95.02:00P	06/21/95.09:00A	
1.1.2.51.B1F	1	Move to Exp.Bellows Stat. B51	06/21/95.09:00A	06/21/95.10:00A	
1.1.2.51.B1G	3	Fit,Purge,Weld Exp. Bellows B51	06/21/95.10:00A	06/21/95.02:00P	
1.1.2.51.B1H	1	Inspect, Install End Caps B51	06/21/95.02:00P	06/21/95.03:00P	
1.1.2.51.B1J	1	Move to Test Area B51	06/21/95.03:00P	06/21/95.04:00P	
1.1.2.51.B1K	1	Pre-Clean & Black Light B51	06/21/95.04:00P	06/21/95.05:00P	
1.1.2.51.B1L	30	Leak Test B51	06/21/95.05:00P	06/22/95.11:00P	
1.1.2.51.B1O	1	Move to Post Test Storage B51	06/23/95.08:00A	06/23/95.09:00A	
1.1.2.51.B1P	1	Clean, Dry & End Cap B51	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.51.B1R	1	Transport to Erection B51	06/28/95.01:00P	06/28/95.02:00P	
1.1.2.51.B1S	1	Set & Align B51	06/28/95.02:00P	06/28/95.03:00P	
1.1.2.51.B1T	1	Set Clean Room, Purge & Fit B51	06/28/95.03:00P	06/28/95.04:00P	
1.1.2.51.B1U	2	Weld Joint B51	06/28/95.04:00P	06/29/95.09:00A	
1.1.2.51.B1V	2	Leak Test Joint B51	06/29/95.09:00A	06/29/95.11:00A	
1.1.2.51.B1W	2	Install Tube Supports B51	06/29/95.09:00A	06/29/95.11:00A	
1.1.2.51.B1X	2	Remove Equip'mt, Clean & Cap B51	06/29/95.11:00A	06/29/95.02:00P	
1.1.2.51.B2A	1	Unload,Rec/Insp Tube B52	06/20/95.09:00A	06/20/95.10:00A	
1.1.2.51.B2B	1	Move to Stiff Fit Up Stat. B52	06/21/95.10:00A	06/21/95.11:00A	
1.1.2.51.B2C	1	Set-up & Purge B52	06/21/95.11:00A	06/21/95.12:00P	
1.1.2.51.B2D	2	Fit Stiffeners B52	06/21/95.01:00P	06/21/95.03:00P	
1.1.2.51.B2E	4	Weld Stiffeners B52	06/21/95.03:00P	06/22/95.10:00A	
1.1.2.51.B2F	1	Move to Exp.Bellows Stat. B52	06/22/95.10:00A	06/22/95.11:00A	
1.1.2.51.B2G	3	Fit,Purge,Weld Exp. Bellows B52	06/22/95.11:00A	06/22/95.03:00P	
1.1.2.51.B2H	1	Inspect, Install End Caps B52	06/22/95.03:00P	06/22/95.04:00P	
1.1.2.51.B2J	1	Move to Test Area B52	06/23/95.09:00A	06/23/95.10:00A	
1.1.2.51.B2K	1	Pre-Clean & Black Light B52	06/23/95.10:00A	06/23/95.11:00A	
1.1.2.51.B2L	30	Leak Test B52	06/23/95.11:00A	06/24/95.05:00P	
1.1.2.51.B2O	1	Move to Post Test Storage B52	06/26/95.08:00A	06/26/95.09:00A	
1.1.2.51.B2P	1	Clean, Dry & End Cap B52	06/26/95.09:00A	06/26/95.10:00A	
1.1.2.51.B2R	1	Transport to Erection B52	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.51.B2S	1	Set & Align B52	06/30/95.11:00A	06/30/95.12:00P	
1.1.2.51.B2T	1	Set Clean Room, Purge & Fit B52	06/30/95.01:00P	06/30/95.02:00P	
1.1.2.51.B2U	2	Weld Joint B52	06/30/95.02:00P	06/30/95.04:00P	
1.1.2.51.B2V	2	Leak Test Joint B52	06/30/95.04:00P	07/03/95.09:00A	
1.1.2.51.B2W	2	Install Tube SupportsB52	06/30/95.04:00P	07/03/95.09:00A	
1.1.2.51.B2X	2	Remove Equip'mt, Clean & Cap B52	07/03/95.09:00A	07/03/95.11:00A	
1.1.2.51.B3A	1	Unload,Rec/Insp Tube B53	06/20/95.10:00A	06/20/95.11:00A	
1.1.2.51.B3B	1	Move to Stiff Fit Up Stat. B53	06/22/95.11:00A	06/22/95.12:00P	
1.1.2.51.B3C	1	Set-up & Purge B53	06/22/95.01:00P	06/22/95.02:00P	
1.1.2.51.B3D	2	Fit Stiffeners B53	06/22/95.02:00P	06/22/95.04:00P	
1.1.2.51.B3E	4	Weld Stiffeners B53	06/22/95.04:00P	06/23/95.11:00A	
1.1.2.51.B3F	1	Move to Exp.Bellows Stat. B53	06/23/95.11:00A	06/23/95.12:00P	
1.1.2.51.B3G	3	Fit,Purge,Weld Exp. Bellows B53	06/23/95.01:00P	06/23/95.04:00P	
1.1.2.51.B3H	1	Inspect, Install End Caps B53	06/23/95.04:00P	06/23/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.51.B3J	1	Move to Test Area B53	06/26/95.09:00A	06/26/95.10:00A	
1.1.2.51.B3K	1	Pre-Clean & Black Light B53	06/26/95.10:00A	06/26/95.11:00A	
1.1.2.51.B3L	30	Leak Test B53	06/26/95.11:00A	06/27/95.05:00P	
1.1.2.51.B3O	1	Move to Post Test Storage B53	06/28/95.08:00A	06/28/95.09:00A	
1.1.2.51.B3P	1	Clean, Dry & End Cap B53	06/28/95.09:00A	06/28/95.10:00A	
1.1.2.51.B3R	1	Transport to Erection B53	07/04/95.08:00A	07/04/95.09:00A	
1.1.2.51.B3S	1	Set & Align B53	07/04/95.09:00A	07/04/95.10:00A	
1.1.2.51.B3T	1	Set Clean Room, Purge & Fit B53	07/04/95.10:00A	07/04/95.11:00A	
1.1.2.51.B3U	2	Weld Joint B53	07/04/95.11:00A	07/04/95.02:00P	
1.1.2.51.B3V	2	Leak Test Joint B53	07/04/95.02:00P	07/04/95.04:00P	
1.1.2.51.B3W	2	Install Tube Supports B53	07/04/95.02:00P	07/04/95.04:00P	
1.1.2.51.B3X	2	Remove Equip'mt, Clean & Cap B53	07/04/95.04:00P	07/05/95.09:00A	
1.1.2.51.B4A	1	Unload,Rec/Insp Tube B54	06/20/95.11:00A	06/20/95.12:00P	
1.1.2.51.B4B	1	Move to Stiff Fit Up Stat. B54	06/23/95.01:00P	06/23/95.02:00P	
1.1.2.51.B4C	1	Set-up & Purge B54	06/23/95.02:00P	06/23/95.03:00P	
1.1.2.51.B4D	2	Fit Stiffeners B54	06/23/95.03:00P	06/23/95.05:00P	
1.1.2.51.B4E	4	Weld Stiffeners B54	06/26/95.08:00A	06/26/95.12:00P	
1.1.2.51.B4F	1	Move to Exp.Bellows Stat. B54	06/26/95.01:00P	06/26/95.02:00P	
1.1.2.51.B4G	3	Fit,Purge,Weld Exp. Bellows B54	06/26/95.02:00P	06/26/95.05:00P	
1.1.2.51.B4H	1	Inspect, Install End Caps B54	06/27/95.08:00A	06/27/95.09:00A	
1.1.2.51.B4J	1	Move to Test Area B54	06/28/95.09:00A	06/28/95.10:00A	
1.1.2.51.B4K	1	Pre-Clean & Black Light B54	06/28/95.10:00A	06/28/95.11:00A	
1.1.2.51.B4L	30	Leak Test B54	06/28/95.11:00A	06/29/95.05:00P	
1.1.2.51.B4O	1	Move to Post Test Storage B54	06/30/95.08:00A	06/30/95.09:00A	
1.1.2.51.B4P	1	Clean, Dry & End Cap B54	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.51.B4R	1	Transport to Erection B54	07/05/95.03:00P	07/05/95.04:00P	
1.1.2.51.B4S	1	Set & Align B54	07/05/95.04:00P	07/05/95.05:00P	
1.1.2.51.B4T	1	Set Clean Room, Purge & Fit B54	07/06/95.08:00A	07/06/95.09:00A	
1.1.2.51.B4U	2	Weld Joint B54	07/06/95.09:00A	07/06/95.11:00A	
1.1.2.51.B4V	2	Leak Test Joint B54	07/06/95.11:00A	07/06/95.02:00P	
1.1.2.51.B4W	2	Install Tube Supports 54	07/06/95.11:00A	07/06/95.02:00P	
1.1.2.51.B4X	2	Remove Equip'mt, Clean & Cap B54	07/06/95.02:00P	07/06/95.04:00P	
1.1.2.51.B5A	1	Unload,Rec/Insp Tube B55	06/20/95.01:00P	06/20/95.02:00P	
1.1.2.51.B5B	1	Move to Stiff Fit Up Stat. B55	06/26/95.02:00P	06/26/95.03:00P	
1.1.2.51.B5C	1	Set-up & Purge B55	06/26/95.03:00P	06/26/95.04:00P	
1.1.2.51.B5D	2	Fit Stiffeners B55	06/26/95.04:00P	06/27/95.09:00A	
1.1.2.51.B5E	4	Weld Stiffeners B55	06/27/95.09:00A	06/27/95.02:00P	
1.1.2.51.B5F	1	Move to Exp.Bellows Stat. B55	06/28/95.10:00A	06/28/95.11:00A	
1.1.2.51.B5G	3	Fit,Purge,Weld Exp. Bellows B55	06/28/95.11:00A	06/28/95.03:00P	
1.1.2.51.B5H	1	Inspect, Install End Caps B55	06/28/95.03:00P	06/28/95.04:00P	
1.1.2.51.B5J	1	Move to Test Area B55	06/30/95.09:00A	06/30/95.10:00A	
1.1.2.51.B5K	1	Pre-Clean & Black Light B55	06/30/95.10:00A	06/30/95.11:00A	
1.1.2.51.B5L	30	Leak Test B55	06/30/95.11:00A	07/01/95.05:00P	
1.1.2.51.B5O	1	Move to Post Test Storage B55	07/03/95.08:00A	07/03/95.09:00A	
1.1.2.51.B5P	1	Clean, Dry & End Cap B55	07/03/95.09:00A	07/03/95.10:00A	
1.1.2.51.B5R	1	Transport to Erection B55	07/07/95.01:00P	07/07/95.02:00P	
1.1.2.51.B5S	1	Set & Align B55	07/07/95.02:00P	07/07/95.03:00P	
1.1.2.51.B5T	1	Set Clean Room, Purge & Fit B55	07/07/95.03:00P	07/07/95.04:00P	
1.1.2.51.B5U	2	Weld Joint B55	07/07/95.04:00P	07/10/95.09:00A	
1.1.2.51.B5V	2	Leak Test Joint B55	07/10/95.09:00A	07/10/95.11:00A	
1.1.2.51.B5W	2	Install Tube Supports B55	07/10/95.09:00A	07/10/95.11:00A	
1.1.2.51.B5X	2	Remove Equip'mt, Clean & Cap B55	07/10/95.11:00A	07/10/95.02:00P	
1.1.2.56	117	Cans 56-60	07/03/95.04:00P	07/24/95.12:00P	
1.1.2.56.1A	1	Unload,Rec/Insp Tube 56	07/04/95.08:00A	07/04/95.09:00A	
1.1.2.56.1B	1	Move to Stiff Fit Up Stat. 65	07/04/95.09:00A	07/04/95.10:00A	
1.1.2.56.1C	1	Set-up & Purge 56	07/04/95.10:00A	07/04/95.11:00A	
1.1.2.56.1D	2	Fit Stiffeners 56	07/04/95.11:00A	07/04/95.02:00P	
1.1.2.56.1E	4	Weld Stiffeners 56	07/04/95.02:00P	07/05/95.09:00A	
1.1.2.56.1F	1	Inspect, Install End Caps 56	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.56.1H	1	Move to Test Area 56	07/05/95.10:00A	07/05/95.11:00A	
1.1.2.56.1I	1	Pre-Clean & Black Light 56	07/05/95.11:00A	07/05/95.12:00P	
1.1.2.56.1J	30	Leak Test 56	07/05/95.12:00P	07/06/95.06:00P	
1.1.2.56.1M	1	Move to Post Test Storage56	07/07/95.08:00A	07/07/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.56.1N	1	Clean, Dry & End Cap 56	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.56.1P	1	Transport to Erection 56	07/12/95.11:00A	07/12/95.12:00P	
1.1.2.56.1Q	1	Set & Align 56	07/12/95.01:00P	07/12/95.02:00P	
1.1.2.56.1R	1	Set Clean Room, Purge & Fit 56	07/12/95.02:00P	07/12/95.03:00P	
1.1.2.56.1S	2	Weld Joint 56	07/12/95.03:00P	07/12/95.05:00P	
1.1.2.56.1T	2	Leak Test Joint 56	07/13/95.08:00A	07/13/95.10:00A	
1.1.2.56.1U	2	Install Tube Supports 56	07/13/95.08:00A	07/13/95.10:00A	
1.1.2.56.1V	2	Remove Equip'mt, Clean & Cap 56	07/13/95.10:00A	07/13/95.12:00P	
1.1.2.56.2A	1	Unload,Rec. & Insp 57	07/04/95.09:00A	07/04/95.10:00A	
1.1.2.56.2B	1	Move to Stiff Fit Up Stat. 57	07/05/95.11:00A	07/05/95.12:00P	
1.1.2.56.2C	1	Set-up & Purge 57	07/05/95.01:00P	07/05/95.02:00P	
1.1.2.56.2D	2	Fit Stiffeners 57	07/05/95.02:00P	07/05/95.04:00P	
1.1.2.56.2E	4	Weld Stiffeners 57	07/05/95.04:00P	07/06/95.11:00A	
1.1.2.56.2F	1	Inspect, Install End Caps 57	07/06/95.11:00A	07/06/95.12:00P	
1.1.2.56.2H	1	Move to Test Area 57	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.56.2I	1	Pre-Clean & Black Light 57	07/07/95.10:00A	07/07/95.11:00A	
1.1.2.56.2J	30	Leak Test 57	07/07/95.11:00A	07/08/95.05:00P	
1.1.2.56.2M	1	Move to Post Test Storage 57	07/10/95.08:00A	07/10/95.09:00A	
1.1.2.56.2N	1	Clean, Dry & End Cap 57	07/10/95.09:00A	07/10/95.10:00A	
1.1.2.56.2P	1	Transport to Erection 57	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.56.2Q	1	Set & Align 57	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.56.2R	1	Set Clean Room, Purge & Fit 57	07/14/95.11:00A	07/14/95.12:00P	
1.1.2.56.2S	2	Weld Joint 57	07/14/95.01:00P	07/14/95.03:00P	
1.1.2.56.2T	2	Leak Test Joint 57	07/14/95.03:00P	07/14/95.05:00P	
1.1.2.56.2U	2	Install Tube Supports 57	07/14/95.03:00P	07/14/95.05:00P	
1.1.2.56.2V	2	Remove Equip'mt, Clean & Cap 57	07/17/95.08:00A	07/17/95.10:00A	
1.1.2.56.3A	1	Unload,Rec/Insp Tube 58	07/04/95.10:00A	07/04/95.11:00A	
1.1.2.56.3B	1	Move to Stiff Fit Up Stat. 58	07/07/95.10:00A	07/07/95.11:00A	
1.1.2.56.3C	1	Set-up & Purge 58	07/07/95.11:00A	07/07/95.12:00P	
1.1.2.56.3D	2	Fit Stiffeners 58	07/07/95.01:00P	07/07/95.03:00P	
1.1.2.56.3E	4	Weld Stiffeners 58	07/07/95.03:00P	07/10/95.10:00A	
1.1.2.56.3F	1	Inspect, Install End Caps 58	07/10/95.10:00A	07/10/95.11:00A	
1.1.2.56.3H	1	Move to Test Area 58	07/10/95.11:00A	07/10/95.12:00P	
1.1.2.56.3I	1	Pre-Clean & Black Light 58	07/10/95.01:00P	07/10/95.02:00P	
1.1.2.56.3J	30	Leak Test 58	07/10/95.02:00P	07/11/95.08:00P	
1.1.2.56.3M	1	Move to Post Test Storage 58	07/12/95.08:00A	07/12/95.09:00A	
1.1.2.56.3N	1	Clean, Dry & End Cap 58	07/12/95.09:00A	07/12/95.10:00A	
1.1.2.56.3P	1	Transport to Erection 58	07/17/95.04:00P	07/17/95.05:00P	
1.1.2.56.3Q	1	Set & Align 58	07/18/95.08:00A	07/18/95.09:00A	
1.1.2.56.3R	1	Set Clean Room, Purge & Fit 58	07/18/95.09:00A	07/18/95.10:00A	
1.1.2.56.3S	2	Weld Joint 58	07/18/95.10:00A	07/18/95.12:00P	
1.1.2.56.3T	2	Leak Test Joint 58	07/18/95.01:00P	07/18/95.03:00P	
1.1.2.56.3U	2	Install Tube Supports 58	07/18/95.01:00P	07/18/95.03:00P	
1.1.2.56.3V	2	Remove Equip'mt, Clean & Cap 58	07/18/95.03:00P	07/18/95.05:00P	
1.1.2.56.4A	1	Unload,Rec/Insp Tube 59	07/04/95.11:00A	07/04/95.12:00P	
1.1.2.56.4B	1	Move to Stiff Fit Up Stat. 59	07/10/95.01:00P	07/10/95.02:00P	
1.1.2.56.4C	1	Set-up & Purge 59	07/10/95.02:00P	07/10/95.03:00P	
1.1.2.56.4D	2	Fit Stiffeners 59	07/10/95.03:00P	07/10/95.05:00P	
1.1.2.56.4E	4	Weld Stiffeners 59	07/11/95.08:00A	07/11/95.12:00P	
1.1.2.56.4F	1	Inspect, Install End Caps 59	07/11/95.01:00P	07/11/95.02:00P	
1.1.2.56.4H	1	Move to Test Area 59	07/12/95.09:00A	07/12/95.10:00A	
1.1.2.56.4I	1	Pre-Clean & Black Light 59	07/12/95.10:00A	07/12/95.11:00A	
1.1.2.56.4J	30	Leak Test 59	07/12/95.11:00A	07/13/95.05:00P	
1.1.2.56.4M	1	Move to Post Test Storage 59	07/14/95.08:00A	07/14/95.09:00A	
1.1.2.56.4N	1	Clean, Dry & End Cap 59	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.56.4P	1	Transport to Erection 59	07/19/95.02:00P	07/19/95.03:00P	
1.1.2.56.4Q	1	Set & Align 59	07/19/95.03:00P	07/19/95.04:00P	
1.1.2.56.4R	1	Set Clean Room, Purge & Fit 59	07/19/95.04:00P	07/19/95.05:00P	
1.1.2.56.4S	2	Weld Joint 59	07/20/95.08:00A	07/20/95.10:00A	
1.1.2.56.4T	2	Leak Test Joint 59	07/20/95.10:00A	07/20/95.12:00P	
1.1.2.56.4U	2	Install Tube Supports 59	07/20/95.10:00A	07/20/95.12:00P	
1.1.2.56.4V	2	Remove Equip'mt, Clean & Cap 59	07/20/95.01:00P	07/20/95.03:00P	
1.1.2.56.5A	1	Unload,Rec/Insp Tube 62	07/04/95.01:00P	07/04/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.56.5B	1	Move to Stiff Fit Up Stat. 60	07/12/95.10:00A	07/12/95.11:00A	
1.1.2.56.5C	1	Set-up & Purge 60	07/12/95.11:00A	07/12/95.12:00P	
1.1.2.56.5D	1	F/W Pump Port Reinf. 60	07/12/95.01:00P	07/12/95.02:00P	
1.1.2.56.5E	2	Fit Stiffeners 60	07/12/95.02:00P	07/12/95.04:00P	
1.1.2.56.5F	4	Weld Stiffeners 60	07/12/95.04:00P	07/13/95.11:00A	
1.1.2.56.5G	1	Move to P.Port Stat. 60	07/13/95.11:00A	07/13/95.12:00P	
1.1.2.56.5H	1	Setup & Bore 10" Inlet 60	07/13/95.01:00P	07/13/95.02:00P	
1.1.2.56.5I	2	Purge/F/W Pump Port 60	07/13/95.02:00P	07/13/95.04:00P	
1.1.2.56.5J	1	Inspect, Install End Caps 60	07/13/95.04:00P	07/13/95.05:00P	
1.1.2.56.5L	1	Move to Test Area 60	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.56.5M	1	Pre-Clean & Black Light 60	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.56.5N	30	Leak Test 60	07/14/95.11:00A	07/15/95.05:00P	
1.1.2.56.5Q	1	Move to Post Test Storage 60	07/17/95.08:00A	07/17/95.09:00A	
1.1.2.56.5R	1	Clean, Dry & End Cap 60	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.56.5T	1	Transport to Erection 60	07/21/95.11:00A	07/21/95.12:00P	
1.1.2.56.5U	1	Set & Align 60	07/21/95.01:00P	07/21/95.02:00P	
1.1.2.56.5V	1	Set Clean Room, Purge & Fit 60	07/21/95.02:00P	07/21/95.03:00P	
1.1.2.56.5W	2	Weld Joint 60	07/21/95.03:00P	07/21/95.05:00P	
1.1.2.56.5X	2	Leak Test Joint 60	07/24/95.08:00A	07/24/95.10:00A	
1.1.2.56.5Y	2	Install Tube Supports 60	07/24/95.08:00A	07/24/95.10:00A	
1.1.2.56.5Z	2	Remove Equip'mt, Clean & Cap 60	07/24/95.10:00A	07/24/95.12:00P	
1.1.2.56.B1A	1	Unload,Rec/Insp Tube B56	07/04/95.08:00A	07/04/95.09:00A	
1.1.2.56.B1B	1	Move to Stiff Fit Up Stat. B56	07/04/95.09:00A	07/04/95.10:00A	
1.1.2.56.B1C	1	Set-up & Purge B56	07/04/95.10:00A	07/04/95.11:00A	
1.1.2.56.B1D	2	Fit Stiffeners B56	07/04/95.11:00A	07/04/95.02:00P	
1.1.2.56.B1E	4	Weld Stiffeners B56	07/04/95.02:00P	07/05/95.09:00A	
1.1.2.56.B1F	1	Move to Exp.Bellows Stat. B56	07/05/95.09:00A	07/05/95.10:00A	
1.1.2.56.B1G	3	Fit,Purge,Weld Exp. Bellows B56	07/05/95.10:00A	07/05/95.02:00P	
1.1.2.56.B1H	1	Inspect, Install End Caps B56	07/05/95.02:00P	07/05/95.03:00P	
1.1.2.56.B1J	1	Move to Test Area B565	07/05/95.03:00P	07/05/95.04:00P	
1.1.2.56.B1K	1	Pre-Clean & Black Light B56	07/05/95.04:00P	07/05/95.05:00P	
1.1.2.56.B1L	30	Leak Test B56	07/05/95.05:00P	07/06/95.11:00P	
1.1.2.56.B1O	1	Move to Post Test Storage B56	07/07/95.08:00A	07/07/95.09:00A	
1.1.2.56.B1P	1	Clean, Dry & End Cap B56	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.56.B1R	1	Transport to Erection B56	07/11/95.01:00P	07/11/95.02:00P	
1.1.2.56.B1S	1	Set & Align B56	07/11/95.02:00P	07/11/95.03:00P	
1.1.2.56.B1T	1	Set Clean Room, Purge & Fit B56	07/11/95.03:00P	07/11/95.04:00P	
1.1.2.56.B1U	2	Weld Joint B56	07/11/95.04:00P	07/12/95.09:00A	
1.1.2.56.B1V	2	Leak Test Joint B56	07/12/95.09:00A	07/12/95.11:00A	
1.1.2.56.B1W	2	Install Tube Supports B56	07/12/95.09:00A	07/12/95.11:00A	
1.1.2.56.B1X	2	Remove Equip'mt, Clean & Cap B56	07/12/95.11:00A	07/12/95.02:00P	
1.1.2.56.B2A	1	Unload,Rec/Insp Tube B57	07/04/95.09:00A	07/04/95.10:00A	
1.1.2.56.B2B	1	Move to Stiff Fit Up Stat. B57	07/05/95.10:00A	07/05/95.11:00A	
1.1.2.56.B2C	1	Set-up & Purge B57	07/05/95.11:00A	07/05/95.12:00P	
1.1.2.56.B2D	2	Fit Stiffeners B57	07/05/95.01:00P	07/05/95.03:00P	
1.1.2.56.B2E	4	Weld Stiffeners B57	07/05/95.03:00P	07/06/95.10:00A	
1.1.2.56.B2F	1	Move to Exp.Bellows Stat. B57	07/06/95.10:00A	07/06/95.11:00A	
1.1.2.56.B2G	3	Fit,Purge,Weld Exp. Bellows B57	07/06/95.11:00A	07/06/95.03:00P	
1.1.2.56.B2H	1	Inspect, Install End Caps B57	07/06/95.03:00P	07/06/95.04:00P	
1.1.2.56.B2J	1	Move to Test Area B57	07/07/95.09:00A	07/07/95.10:00A	
1.1.2.56.B2K	1	Pre-Clean & Black Light B57	07/07/95.10:00A	07/07/95.11:00A	
1.1.2.56.B2L	30	Leak Test B57	07/07/95.11:00A	07/08/95.05:00P	
1.1.2.56.B2O	1	Move to Post Test Storage B57	07/10/95.08:00A	07/10/95.09:00A	
1.1.2.56.B2P	1	Clean, Dry & End Cap B57	07/10/95.09:00A	07/10/95.10:00A	
1.1.2.56.B2R	1	Transport to Erection B57	07/13/95.10:00A	07/13/95.11:00A	
1.1.2.56.B2S	1	Set & Align B57	07/13/95.11:00A	07/13/95.12:00P	
1.1.2.56.B2T	1	Set Clean Room, Purge & Fit B57	07/13/95.01:00P	07/13/95.02:00P	
1.1.2.56.B2U	2	Weld Joint B57	07/13/95.02:00P	07/13/95.04:00P	
1.1.2.56.B2V	2	Leak Test Joint B57	07/13/95.04:00P	07/14/95.09:00A	
1.1.2.56.B2W	2	Install Tube Supports B57	07/13/95.04:00P	07/14/95.09:00A	
1.1.2.56.B2X	2	Remove Equip'mt, Clean & Cap B58	07/14/95.09:00A	07/14/95.11:00A	
1.1.2.56.B3A	1	Unload,Rec/Insp Tube B58	07/04/95.10:00A	07/04/95.11:00A	
1.1.2.56.B3B	1	Move to Stiff Fit Up Stat. B58	07/06/95.11:00A	07/06/95.12:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.56.B3C	1	Set-up & Purge B58	07/06/95.01:00P	07/06/95.02:00P	
1.1.2.56.B3D	2	Fit Stiffeners B58	07/06/95.02:00P	07/06/95.04:00P	
1.1.2.56.B3E	4	Weld Stiffeners B58	07/06/95.04:00P	07/07/95.11:00A	
1.1.2.56.B3F	1	Move to Exp.Bellows Stat. B58	07/07/95.11:00A	07/07/95.12:00P	
1.1.2.56.B3G	3	Fit,Purge,Weld Exp. Bellows B58	07/07/95.01:00P	07/07/95.04:00P	
1.1.2.56.B3H	1	Inspect, Install End Caps B58	07/07/95.04:00P	07/07/95.05:00P	
1.1.2.56.B3J	1	Move to Test Area B58	07/10/95.09:00A	07/10/95.10:00A	
1.1.2.56.B3K	1	Pre-Clean & Black Light B58	07/10/95.10:00A	07/10/95.11:00A	
1.1.2.56.B3L	30	Leak Test B58	07/10/95.11:00A	07/11/95.05:00P	
1.1.2.56.B3O	1	Move to Post Test Storage B58	07/12/95.08:00A	07/12/95.09:00A	
1.1.2.56.B3P	1	Clean, Dry & End Cap B58	07/12/95.09:00A	07/12/95.10:00A	
1.1.2.56.B3R	1	Transport to Erection B58	07/17/95.08:00A	07/17/95.09:00A	
1.1.2.56.B3S	1	Set & Align B58	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.56.B3T	1	Set Clean Room, Purge & Fit B58	07/17/95.10:00A	07/17/95.11:00A	
1.1.2.56.B3U	2	Weld Joint B58	07/17/95.11:00A	07/17/95.02:00P	
1.1.2.56.B3V	2	Leak Test Joint B58	07/17/95.02:00P	07/17/95.04:00P	
1.1.2.56.B3W	2	Install Tube Supports 58	07/17/95.02:00P	07/17/95.04:00P	
1.1.2.56.B3X	2	Remove Equip'mt, Clean & Cap B58	07/17/95.04:00P	07/18/95.09:00A	
1.1.2.56.B4A	1	Unload,Rec/Insp Tube B59	07/04/95.11:00A	07/04/95.12:00P	
1.1.2.56.B4B	1	Move to Stiff Fit Up Stat. B59	07/07/95.01:00P	07/07/95.02:00P	
1.1.2.56.B4C	1	Set-up & Purge B59	07/07/95.02:00P	07/07/95.03:00P	
1.1.2.56.B4D	2	Fit Stiffeners B59	07/07/95.03:00P	07/07/95.05:00P	
1.1.2.56.B4E	4	Weld Stiffeners B59	07/10/95.08:00A	07/10/95.12:00P	
1.1.2.56.B4F	1	Move to Exp.Bellows Stat. B59	07/10/95.01:00P	07/10/95.02:00P	
1.1.2.56.B4G	3	Fit,Purge,Weld Exp. Bellows B59	07/10/95.02:00P	07/10/95.05:00P	
1.1.2.56.B4H	1	Inspect, Install End Caps B59	07/11/95.08:00A	07/11/95.09:00A	
1.1.2.56.B4J	1	Move to Test Area B59	07/12/95.09:00A	07/12/95.10:00A	
1.1.2.56.B4K	1	Pre-Clean & Black Light B59	07/12/95.10:00A	07/12/95.11:00A	
1.1.2.56.B4L	30	Leak Test B59	07/12/95.11:00A	07/13/95.05:00P	
1.1.2.56.B4O	1	Move to Post Test Storage B59	07/14/95.08:00A	07/14/95.09:00A	
1.1.2.56.B4P	1	Clean, Dry & End Cap B59	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.56.B4R	1	Transport to Erection B59	07/18/95.03:00P	07/18/95.04:00P	
1.1.2.56.B4S	1	Set & Align B59	07/18/95.04:00P	07/18/95.05:00P	
1.1.2.56.B4T	1	Set Clean Room, Purge & Fit B59	07/19/95.08:00A	07/19/95.09:00A	
1.1.2.56.B4U	2	Weld Joint B59	07/19/95.09:00A	07/19/95.11:00A	
1.1.2.56.B4V	2	Leak Test Joint B59	07/19/95.11:00A	07/19/95.02:00P	
1.1.2.56.B4W	2	Install Tube Supports B59	07/19/95.11:00A	07/19/95.02:00P	
1.1.2.56.B4X	2	Remove Equip'mt, Clean & Cap B59	07/19/95.02:00P	07/19/95.04:00P	
1.1.2.56.B5A	1	Unload,Rec/Insp Tube B60	07/04/95.01:00P	07/04/95.02:00P	
1.1.2.56.B5B	1	Move to Stiff Fit Up Stat. B60	07/10/95.02:00P	07/10/95.03:00P	
1.1.2.56.B5C	1	Set-up & Purge B60	07/10/95.03:00P	07/10/95.04:00P	
1.1.2.56.B5D	2	Fit Stiffeners B60	07/10/95.04:00P	07/11/95.09:00A	
1.1.2.56.B5E	4	Weld Stiffeners B60	07/11/95.09:00A	07/11/95.02:00P	
1.1.2.56.B5F	1	Move to Exp.Bellows Stat. B60	07/12/95.10:00A	07/12/95.11:00A	
1.1.2.56.B5G	3	Fit,Purge,Weld Exp. Bellows B60	07/12/95.11:00A	07/12/95.03:00P	
1.1.2.56.B5H	1	Inspect, Install End Caps B60	07/12/95.03:00P	07/12/95.04:00P	
1.1.2.56.B5J	1	Move to Test Area B60	07/14/95.09:00A	07/14/95.10:00A	
1.1.2.56.B5K	1	Pre-Clean & Black Light B60	07/14/95.10:00A	07/14/95.11:00A	
1.1.2.56.B5L	30	Leak Test B60	07/14/95.11:00A	07/15/95.05:00P	
1.1.2.56.B5O	1	Move to Post Test Storage B60	07/17/95.08:00A	07/17/95.09:00A	
1.1.2.56.B5P	1	Clean, Dry & End Cap B60	07/17/95.09:00A	07/17/95.10:00A	
1.1.2.56.B5R	1	Transport to Erection B60	07/20/95.01:00P	07/20/95.02:00P	
1.1.2.56.B5S	1	Set & Align B60	07/20/95.02:00P	07/20/95.03:00P	
1.1.2.56.B5T	1	Set Clean Room, Purge & Fit B60	07/20/95.03:00P	07/20/95.04:00P	
1.1.2.56.B5U	2	Weld Joint B60	07/20/95.04:00P	07/21/95.09:00A	
1.1.2.56.B5V	2	Leak Test Joint B60	07/21/95.09:00A	07/21/95.11:00A	
1.1.2.56.B5W	2	Install Tube Supports B60	07/21/95.09:00A	07/21/95.11:00A	
1.1.2.56.B5X	2	Remove Equip'mt, Clean & Cap B60	07/21/95.11:00A	07/21/95.02:00P	
1.1.2.61	109	Cans 61-65	07/17/95.04:00P	08/04/95.12:00P	
1.1.2.61.1A	1	Unload,Rec/Insp Tube 61	07/18/95.08:00A	07/18/95.09:00A	
1.1.2.61.1B	1	Move to Stiff Fit Up Stat. 61	07/18/95.09:00A	07/18/95.10:00A	
1.1.2.61.1C	1	Set-up & Purge 61	07/18/95.10:00A	07/18/95.11:00A	
1.1.2.61.1D	2	Fit Stiffeners 61	07/18/95.11:00A	07/18/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.61.1E	4	Weld Stiffeners 61	07/18/95.02:00P	07/19/95.09:00A	
1.1.2.61.1F	1	Inspect, Install End Caps 61	07/19/95.09:00A	07/19/95.10:00A	
1.1.2.61.1H	1	Move to Test Area 61	07/19/95.10:00A	07/19/95.11:00A	
1.1.2.61.1I	1	Pre-Clean & Black Light 61	07/19/95.11:00A	07/19/95.12:00P	
1.1.2.61.1J	30	Leak Test 61	07/19/95.12:00P	07/20/95.06:00P	
1.1.2.61.1M	1	Move to Post Test Storage 61	07/21/95.08:00A	07/21/95.09:00A	
1.1.2.61.1N	1	Clean, Dry & End Cap 61	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.61.1P	1	Transport to Erection 61	07/25/95.11:00A	07/25/95.12:00P	
1.1.2.61.1Q	1	Set & Align 61	07/25/95.01:00P	07/25/95.02:00P	
1.1.2.61.1R	1	Set Clean Room, Purge & Fit 61	07/25/95.02:00P	07/25/95.03:00P	
1.1.2.61.1S	2	Weld Joint 61	07/25/95.03:00P	07/25/95.05:00P	
1.1.2.61.1T	2	Leak Test Joint 61	07/26/95.08:00A	07/26/95.10:00A	
1.1.2.61.1U	2	Install Tube Supports 61	07/26/95.08:00A	07/26/95.10:00A	
1.1.2.61.1V	2	Remove Equip'mt, Clean & Cap 61	07/26/95.10:00A	07/26/95.12:00P	
1.1.2.61.2A	1	Unload,Rec. & Inspect 62	07/18/95.09:00A	07/18/95.10:00A	
1.1.2.61.2B	1	Move to Stiff Fit Up Stat. 62	07/19/95.11:00A	07/19/95.12:00P	
1.1.2.61.2C	1	Set-up & Purge 62	07/19/95.01:00P	07/19/95.02:00P	
1.1.2.61.2D	2	Fit Stiffeners 62	07/19/95.02:00P	07/19/95.04:00P	
1.1.2.61.2E	4	Weld Stiffeners 62	07/19/95.04:00P	07/20/95.11:00A	
1.1.2.61.2F	1	Inspect, Install End Caps 62	07/20/95.11:00A	07/20/95.12:00P	
1.1.2.61.2H	1	Move to Test Area 62	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.61.2I	1	Pre-Clean & Black Light 62	07/21/95.10:00A	07/21/95.11:00A	
1.1.2.61.2J	30	Leak Test 62	07/21/95.11:00A	07/22/95.05:00P	
1.1.2.61.2M	1	Move to Post Test Storage 62	07/24/95.08:00A	07/24/95.09:00A	
1.1.2.61.2N	1	Clean, Dry & End Cap 62	07/24/95.09:00A	07/24/95.10:00A	
1.1.2.61.2P	1	Transport to Erection 62	07/27/95.09:00A	07/27/95.10:00A	
1.1.2.61.2Q	1	Set & Align 62	07/27/95.10:00A	07/27/95.11:00A	
1.1.2.61.2R	1	Set Clean Room, Purge & Fit 62	07/27/95.11:00A	07/27/95.12:00P	
1.1.2.61.2S	2	Weld Joint 62	07/27/95.01:00P	07/27/95.03:00P	
1.1.2.61.2T	2	Leak Test Joint 62	07/27/95.03:00P	07/27/95.05:00P	
1.1.2.61.2U	2	Install Tube Supports 62	07/27/95.03:00P	07/27/95.05:00P	
1.1.2.61.2V	2	Remove Equip'mt, Clean & Cap 62	07/28/95.08:00A	07/28/95.10:00A	
1.1.2.61.3A	1	Unload,Rec/Insp Tube 63	07/18/95.10:00A	07/18/95.11:00A	
1.1.2.61.3B	1	Move to Stiff Fit Up Stat. 63	07/21/95.10:00A	07/21/95.11:00A	
1.1.2.61.3C	1	Set-up & Purge 63	07/21/95.11:00A	07/21/95.12:00P	
1.1.2.61.3D	2	Fit Stiffeners 63	07/21/95.01:00P	07/21/95.03:00P	
1.1.2.61.3E	4	Weld Stiffeners 63	07/21/95.03:00P	07/24/95.10:00A	
1.1.2.61.3F	1	Inspect, Install End Caps 63	07/24/95.10:00A	07/24/95.11:00A	
1.1.2.61.3H	1	Move to Test Area 63	07/24/95.11:00A	07/24/95.12:00P	
1.1.2.61.3I	1	Pre-Clean & Black Light 63	07/24/95.01:00P	07/24/95.02:00P	
1.1.2.61.3J	30	Leak Test 63	07/24/95.02:00P	07/25/95.08:00P	
1.1.2.61.3M	1	Move to Post Test Storage 63	07/26/95.08:00A	07/26/95.09:00A	
1.1.2.61.3N	1	Clean, Dry & End Cap 63	07/26/95.09:00A	07/26/95.10:00A	
1.1.2.61.3P	1	Transport to Erection 63	07/28/95.04:00P	07/28/95.05:00P	
1.1.2.61.3Q	1	Set & Align 63	07/31/95.08:00A	07/31/95.09:00A	
1.1.2.61.3R	1	Set Clean Room, Purge & Fit 63	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.61.3S	2	Weld Joint 63	07/31/95.10:00A	07/31/95.12:00P	
1.1.2.61.3T	2	Leak Test Joint 63	07/31/95.01:00P	07/31/95.03:00P	
1.1.2.61.3U	2	Install Tube Supports 63	07/31/95.01:00P	07/31/95.03:00P	
1.1.2.61.3V	2	Remove Equip'mt, Clean & Cap 63	07/31/95.03:00P	07/31/95.05:00P	
1.1.2.61.4A	1	Unload,Rec/Insp Tube 64	07/18/95.11:00A	07/18/95.12:00P	
1.1.2.61.4B	1	Move to Stiff Fit Up Stat. 64	07/24/95.01:00P	07/24/95.02:00P	
1.1.2.61.4C	1	Set-up & Purge 64	07/24/95.02:00P	07/24/95.03:00P	
1.1.2.61.4D	2	Fit Stiffeners 64	07/24/95.03:00P	07/24/95.05:00P	
1.1.2.61.4E	4	Weld Stiffeners 64	07/25/95.08:00A	07/25/95.12:00P	
1.1.2.61.4F	1	Inspect, Install End Caps 64	07/25/95.01:00P	07/25/95.02:00P	
1.1.2.61.4H	1	Move to Test Area 64	07/26/95.09:00A	07/26/95.10:00A	
1.1.2.61.4I	1	Pre-Clean & Black Light 64	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.61.4J	30	Leak Test 64	07/26/95.11:00A	07/27/95.05:00P	
1.1.2.61.4M	1	Move to Post Test Storage 64	07/28/95.08:00A	07/28/95.09:00A	
1.1.2.61.4N	1	Clean, Dry & End Cap 64	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.61.4P	1	Transport to Erection 64	08/01/95.02:00P	08/01/95.03:00P	
1.1.2.61.4Q	1	Set & Align 64	08/01/95.03:00P	08/01/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.61.4R	1	Set Clean Room, Purge & Fit 64	08/01/95.04:00P	08/01/95.05:00P	
1.1.2.61.4S	2	Weld Joint 64	08/02/95.08:00A	08/02/95.10:00A	
1.1.2.61.4T	2	Leak Test Joint 64	08/02/95.10:00A	08/02/95.12:00P	
1.1.2.61.4U	2	Install Tube Supports 64	08/02/95.10:00A	08/02/95.12:00P	
1.1.2.61.4V	2	Remove Equip'mt, Clean & Cap 64	08/02/95.01:00P	08/02/95.03:00P	
1.1.2.61.5A	1	Unload,Rec/Insp Tube 6	07/18/95.01:00P	07/18/95.02:00P	
1.1.2.61.5B	1	Move to Stiff Fit Up Stat. 65	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.61.5C	1	Set-up & Purge 65	07/26/95.11:00A	07/26/95.12:00P	
1.1.2.61.5D	1	F/W Pump Port Reinf. 65	07/26/95.01:00P	07/26/95.02:00P	
1.1.2.61.5E	2	Fit Stiffeners 65	07/26/95.02:00P	07/26/95.04:00P	
1.1.2.61.5F	4	Weld Stiffeners 65	07/26/95.04:00P	07/27/95.11:00A	
1.1.2.61.5G	1	Move to P.Port Stat.65	07/27/95.11:00A	07/27/95.12:00P	
1.1.2.61.5H	1	Setup & Bore 10" Inlet 65	07/27/95.01:00P	07/27/95.02:00P	
1.1.2.61.5I	2	Purge/F/W Pump Port 65	07/27/95.02:00P	07/27/95.04:00P	
1.1.2.61.5J	1	Inspect, Install End Caps 65	07/27/95.04:00P	07/27/95.05:00P	
1.1.2.61.5L	1	Move to Test Area 65	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.61.5M	1	Pre-Clean & Black Light 65	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.61.5N	30	Leak Test 65	07/28/95.11:00A	07/29/95.05:00P	
1.1.2.61.5Q	1	Move to Post Test Storage 65	07/31/95.08:00A	07/31/95.09:00A	
1.1.2.61.5R	1	Clean, Dry & End Cap 65	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.61.5T	1	Transport to Erection 65	08/03/95.11:00A	08/03/95.12:00P	
1.1.2.61.5U	1	Set & Align 65	08/03/95.01:00P	08/03/95.02:00P	
1.1.2.61.5V	1	Set Clean Room, Purge & Fit 65	08/03/95.02:00P	08/03/95.03:00P	
1.1.2.61.5W	2	Weld Joint 65	08/03/95.03:00P	08/03/95.05:00P	
1.1.2.61.5X	2	Leak Test Joint 65	08/04/95.08:00A	08/04/95.10:00A	
1.1.2.61.5Y	2	Install Tube Supports 65	08/04/95.08:00A	08/04/95.10:00A	
1.1.2.61.5Z	2	Remove Equip'mt, Clean & Cap 65	08/04/95.10:00A	08/04/95.12:00P	
1.1.2.61.B1A	1	Unload,Rec/Insp Tube B61	07/18/95.08:00A	07/18/95.09:00A	
1.1.2.61.B1B	1	Move to Stiff Fit Up Stat. B61	07/18/95.09:00A	07/18/95.10:00A	
1.1.2.61.B1C	1	Set-up & Purge B61	07/18/95.10:00A	07/18/95.11:00A	
1.1.2.61.B1D	2	Fit Stiffeners B61	07/18/95.11:00A	07/18/95.02:00P	
1.1.2.61.B1E	4	Weld Stiffeners B61	07/18/95.02:00P	07/19/95.09:00A	
1.1.2.61.B1F	1	Move to Exp.Bellows Stat. B61	07/19/95.09:00A	07/19/95.10:00A	
1.1.2.61.B1G	3	Fit,Purge,Weld Exp. Bellows B61	07/19/95.10:00A	07/19/95.02:00P	
1.1.2.61.B1H	1	Inspect, Install End Caps B61	07/19/95.02:00P	07/19/95.03:00P	
1.1.2.61.B1J	1	Move to Test Area B61	07/19/95.03:00P	07/19/95.04:00P	
1.1.2.61.B1K	1	Pre-Clean & Black Light B61	07/19/95.04:00P	07/19/95.05:00P	
1.1.2.61.B1L	30	Leak Test B61	07/19/95.05:00P	07/20/95.11:00P	
1.1.2.61.B1O	1	Move to Post Test Storage B61	07/21/95.08:00A	07/21/95.09:00A	
1.1.2.61.B1P	1	Clean, Dry & End Cap B61	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.61.B1R	1	Transport to Erection B61	07/24/95.01:00P	07/24/95.02:00P	
1.1.2.61.B1S	1	Set & Align B61	07/24/95.02:00P	07/24/95.03:00P	
1.1.2.61.B1T	1	Set Clean Room, Purge & Fit B61	07/24/95.03:00P	07/24/95.04:00P	
1.1.2.61.B1U	2	Weld Joint B61	07/24/95.04:00P	07/25/95.09:00A	
1.1.2.61.B1V	2	Leak Test Joint B61	07/25/95.09:00A	07/25/95.11:00A	
1.1.2.61.B1W	2	Install Tube Supports B6	07/25/95.09:00A	07/25/95.11:00A	
1.1.2.61.B1X	2	Remove Equip'mt, Clean & Cap B61	07/25/95.11:00A	07/25/95.02:00P	
1.1.2.61.B2A	1	Unload,Rec/Insp Tube B62	07/18/95.09:00A	07/18/95.10:00A	
1.1.2.61.B2B	1	Move to Stiff Fit Up Stat. B62	07/19/95.10:00A	07/19/95.11:00A	
1.1.2.61.B2C	1	Set-up & Purge B62	07/19/95.11:00A	07/19/95.12:00P	
1.1.2.61.B2D	2	Fit Stiffeners B62	07/19/95.01:00P	07/19/95.03:00P	
1.1.2.61.B2E	4	Weld Stiffeners B62	07/19/95.03:00P	07/20/95.10:00A	
1.1.2.61.B2F	1	Move to Exp.Bellows Stat. B62	07/20/95.10:00A	07/20/95.11:00A	
1.1.2.61.B2G	3	Fit,Purge,Weld Exp. Bellows B62	07/20/95.11:00A	07/20/95.03:00P	
1.1.2.61.B2H	1	Inspect, Install End Caps B62	07/20/95.03:00P	07/20/95.04:00P	
1.1.2.61.B2J	1	Move to Test Area B62	07/21/95.09:00A	07/21/95.10:00A	
1.1.2.61.B2K	1	Pre-Clean & Black Light B62	07/21/95.10:00A	07/21/95.11:00A	
1.1.2.61.B2L	30	Leak Test B62	07/21/95.11:00A	07/22/95.05:00P	
1.1.2.61.B2O	1	Move to Post Test Storage B62	07/24/95.08:00A	07/24/95.09:00A	
1.1.2.61.B2P	1	Clean, Dry & End Cap B62	07/24/95.09:00A	07/24/95.10:00A	
1.1.2.61.B2R	1	Transport to Erection B62	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.61.B2S	1	Set & Align B62	07/26/95.11:00A	07/26/95.12:00P	
1.1.2.61.B2T	1	Set Clean Room, Purge & Fit B62	07/26/95.01:00P	07/26/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.61.B2U	2	Weld Joint B62	07/26/95.02:00P	07/26/95.04:00P	
1.1.2.61.B2V	2	Leak Test Joint B62	07/26/95.04:00P	07/27/95.09:00A	
1.1.2.61.B2W	2	Install Tube Supports B62	07/26/95.04:00P	07/27/95.09:00A	
1.1.2.61.B2X	2	Remove Equip'mt, Clean & Cap B62	07/27/95.09:00A	07/27/95.11:00A	
1.1.2.61.B3A	1	Unload,Rec/Insp Tube B63	07/18/95.10:00A	07/18/95.11:00A	
1.1.2.61.B3B	1	Move to Stiff Fit Up Stat. B63	07/20/95.11:00A	07/20/95.12:00P	
1.1.2.61.B3C	1	Set-up & Purge B63	07/20/95.01:00P	07/20/95.02:00P	
1.1.2.61.B3D	2	Fit Stiffeners B63	07/20/95.02:00P	07/20/95.04:00P	
1.1.2.61.B3E	4	Weld Stiffeners B63	07/20/95.04:00P	07/21/95.11:00A	
1.1.2.61.B3F	1	Move to Exp.Bellows Stat. B63	07/21/95.11:00A	07/21/95.12:00P	
1.1.2.61.B3G	3	Fit,Purge,Weld Exp. Bellows B63	07/21/95.01:00P	07/21/95.04:00P	
1.1.2.61.B3H	1	Inspect, Install End Caps B63	07/21/95.04:00P	07/21/95.05:00P	
1.1.2.61.B3J	1	Move to Test Area B63	07/24/95.09:00A	07/24/95.10:00A	
1.1.2.61.B3K	1	Pre-Clean & Black Light B63	07/24/95.10:00A	07/24/95.11:00A	
1.1.2.61.B3L	30	Leak Test B63	07/24/95.11:00A	07/25/95.05:00P	
1.1.2.61.B3O	1	Move to Post Test Storage B63	07/26/95.08:00A	07/26/95.09:00A	
1.1.2.61.B3P	1	Clean, Dry & End Cap B63	07/26/95.09:00A	07/26/95.10:00A	
1.1.2.61.B3R	1	Transport to Erection B63	07/28/95.08:00A	07/28/95.09:00A	
1.1.2.61.B3S	1	Set & Align B63	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.61.B3T	1	Set Clean Room, Purge & Fit B63	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.61.B3U	2	Weld Joint B63	07/28/95.11:00A	07/28/95.02:00P	
1.1.2.61.B3V	2	Leak Test Joint B63	07/28/95.02:00P	07/28/95.04:00P	
1.1.2.61.B3W	2	Install Tube Supports B63	07/28/95.02:00P	07/28/95.04:00P	
1.1.2.61.B3X	2	Remove Equip'mt, Clean & Cap B63	07/28/95.04:00P	07/31/95.09:00A	
1.1.2.61.B4A	1	Unload,Rec/Insp Tube B64	07/18/95.11:00A	07/18/95.12:00P	
1.1.2.61.B4B	1	Move to Stiff Fit Up Stat. B64	07/21/95.01:00P	07/21/95.02:00P	
1.1.2.61.B4C	1	Set-up & Purge B64	07/21/95.02:00P	07/21/95.03:00P	
1.1.2.61.B4D	2	Fit Stiffeners B64	07/21/95.03:00P	07/21/95.05:00P	
1.1.2.61.B4E	4	Weld Stiffeners B64	07/24/95.08:00A	07/24/95.12:00P	
1.1.2.61.B4F	1	Move to Exp.Bellows Stat. B64	07/24/95.01:00P	07/24/95.02:00P	
1.1.2.61.B4G	3	Fit,Purge,Weld Exp. Bellows B64	07/24/95.02:00P	07/24/95.05:00P	
1.1.2.61.B4H	1	Inspect, Install End Caps B64	07/25/95.08:00A	07/25/95.09:00A	
1.1.2.61.B4J	1	Move to Test Area B64	07/26/95.09:00A	07/26/95.10:00A	
1.1.2.61.B4K	1	Pre-Clean & Black Light B64	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.61.B4L	30	Leak Test B64	07/26/95.11:00A	07/27/95.05:00P	
1.1.2.61.B4O	1	Move to Post Test Storage B64	07/28/95.08:00A	07/28/95.09:00A	
1.1.2.61.B4P	1	Clean, Dry & End Cap B64	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.61.B4R	1	Transport to Erection B64	07/31/95.03:00P	07/31/95.04:00P	
1.1.2.61.B4S	1	Set & Align B64	07/31/95.04:00P	07/31/95.05:00P	
1.1.2.61.B4T	1	Set Clean Room, Purge & Fit B64	08/01/95.08:00A	08/01/95.09:00A	
1.1.2.61.B4U	2	Weld Joint B64	08/01/95.09:00A	08/01/95.11:00A	
1.1.2.61.B4V	2	Leak Test Joint B64	08/01/95.11:00A	08/01/95.02:00P	
1.1.2.61.B4W	2	Install Tube Supports B64	08/01/95.11:00A	08/01/95.02:00P	
1.1.2.61.B4X	2	Remove Equip'mt, Clean & Cap B64	08/01/95.02:00P	08/01/95.04:00P	
1.1.2.61.B5A	1	Unload,Rec/Insp Tube B65	07/18/95.01:00P	07/18/95.02:00P	
1.1.2.61.B5B	1	Move to Stiff Fit Up Stat. B65	07/24/95.02:00P	07/24/95.03:00P	
1.1.2.61.B5C	1	Set-up & Purge B65	07/24/95.03:00P	07/24/95.04:00P	
1.1.2.61.B5D	2	Fit Stiffeners B65	07/24/95.04:00P	07/25/95.09:00A	
1.1.2.61.B5E	4	Weld Stiffeners B65	07/25/95.09:00A	07/25/95.02:00P	
1.1.2.61.B5F	1	Move to Exp.Bellows Stat. B65	07/26/95.10:00A	07/26/95.11:00A	
1.1.2.61.B5G	3	Fit,Purge,Weld Exp. Bellows B65	07/26/95.11:00A	07/26/95.03:00P	
1.1.2.61.B5H	1	Inspect, Install End Caps B65	07/26/95.03:00P	07/26/95.04:00P	
1.1.2.61.B5J	1	Move to Test Area B65	07/28/95.09:00A	07/28/95.10:00A	
1.1.2.61.B5K	1	Pre-Clean & Black Light B65	07/28/95.10:00A	07/28/95.11:00A	
1.1.2.61.B5L	30	Leak Test B65	07/28/95.11:00A	07/29/95.05:00P	
1.1.2.61.B5O	1	Move to Post Test Storage B65	07/31/95.08:00A	07/31/95.09:00A	
1.1.2.61.B5P	1	Clean, Dry & End Cap B65	07/31/95.09:00A	07/31/95.10:00A	
1.1.2.61.B5R	1	Transport to Erection B65	08/02/95.01:00P	08/02/95.02:00P	
1.1.2.61.B5S	1	Set & Align B65	08/02/95.02:00P	08/02/95.03:00P	
1.1.2.61.B5T	1	Set Clean Room, Purge & Fit B65	08/02/95.03:00P	08/02/95.04:00P	
1.1.2.61.B5U	2	Weld Joint B65	08/02/95.04:00P	08/03/95.09:00A	
1.1.2.61.B5V	2	Leak Test Joint B65	08/03/95.09:00A	08/03/95.11:00A	
1.1.2.61.B5W	2	Install Tube Supports B65	08/03/95.09:00A	08/03/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.61.B5X	2	Remove Equip'mt, Clean & Cap B65	08/03/95.11:00A	08/03/95.02:00P	
1.1.2.66	101	Cans 66-70	07/31/95.04:00P	08/17/95.12:00P	
1.1.2.66.1A	1	Unload,Rec/Insp Tube 66	08/01/95.08:00A	08/01/95.09:00A	
1.1.2.66.1B	1	Move to Stiff Fit Up Stat. 666	08/01/95.09:00A	08/01/95.10:00A	
1.1.2.66.1C	1	Set-up & Purge 66	08/01/95.10:00A	08/01/95.11:00A	
1.1.2.66.1D	2	Fit Stiffeners 66	08/01/95.11:00A	08/01/95.02:00P	
1.1.2.66.1E	4	Weld Stiffeners 66	08/01/95.02:00P	08/02/95.09:00A	
1.1.2.66.1F	1	Inspect, Install End Caps 66	08/02/95.09:00A	08/02/95.10:00A	
1.1.2.66.1H	1	Move to Test Area 66	08/02/95.10:00A	08/02/95.11:00A	
1.1.2.66.1I	1	Pre-Clean & Black Light 66	08/02/95.11:00A	08/02/95.12:00P	
1.1.2.66.1J	30	Leak Test 66	08/02/95.12:00P	08/03/95.06:00P	
1.1.2.66.1M	1	Move to Post Test Storage 66	08/04/95.08:00A	08/04/95.09:00A	
1.1.2.66.1N	1	Clean, Dry & End Cap 66	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.66.1P	1	Transport to Erection 66	08/07/95.11:00A	08/07/95.12:00P	
1.1.2.66.1Q	1	Set & Align 66	08/07/95.01:00P	08/07/95.02:00P	
1.1.2.66.1R	1	Set Clean Room, Purge & Fit 66	08/07/95.02:00P	08/07/95.03:00P	
1.1.2.66.1S	2	Weld Joint 66	08/07/95.03:00P	08/07/95.05:00P	
1.1.2.66.1T	2	Leak Test Joint 66	08/08/95.08:00A	08/08/95.10:00A	
1.1.2.66.1U	2	Install Tube Supports 66	08/08/95.08:00A	08/08/95.10:00A	
1.1.2.66.1V	2	Remove Equip'mt, Clean & Cap 66	08/08/95.10:00A	08/08/95.12:00P	
1.1.2.66.2A	1	Unload,Rec. & Inspect 67	08/01/95.09:00A	08/01/95.10:00A	
1.1.2.66.2B	1	Move to Stiff Fit Up Stat. 67	08/02/95.11:00A	08/02/95.12:00P	
1.1.2.66.2C	1	Set-up & Purge 676	08/02/95.01:00P	08/02/95.02:00P	
1.1.2.66.2D	2	Fit Stiffeners 67	08/02/95.02:00P	08/02/95.04:00P	
1.1.2.66.2E	4	Weld Stiffeners 67	08/02/95.04:00P	08/03/95.11:00A	
1.1.2.66.2F	1	Inspect, Install End Caps 67	08/03/95.11:00A	08/03/95.12:00P	
1.1.2.66.2H	1	Move to Test Area 67	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.66.2I	1	Pre-Clean & Black Light 67	08/04/95.10:00A	08/04/95.11:00A	
1.1.2.66.2J	30	Leak Test 67	08/04/95.11:00A	08/05/95.05:00P	
1.1.2.66.2M	1	Move to Post Test Storage 67	08/07/95.08:00A	08/07/95.09:00A	
1.1.2.66.2N	1	Clean, Dry & End Cap 67	08/07/95.09:00A	08/07/95.10:00A	
1.1.2.66.2P	1	Transport to Erection 67	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.66.2Q	1	Set & Align 67	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.66.2R	1	Set Clean Room, Purge & Fit 67	08/09/95.11:00A	08/09/95.12:00P	
1.1.2.66.2S	2	Weld Joint 67	08/09/95.01:00P	08/09/95.03:00P	
1.1.2.66.2T	2	Leak Test Joint 67	08/09/95.03:00P	08/09/95.05:00P	
1.1.2.66.2U	2	Install Tube Supports 67	08/09/95.03:00P	08/09/95.05:00P	
1.1.2.66.2V	2	Remove Equip'mt, Clean & Cap 67	08/10/95.08:00A	08/10/95.10:00A	
1.1.2.66.3A	1	Unload,Rec/Insp Tube 68	08/01/95.10:00A	08/01/95.11:00A	
1.1.2.66.3B	1	Move to Stiff Fit Up Stat. 68	08/04/95.10:00A	08/04/95.11:00A	
1.1.2.66.3C	1	Set-up & Purge 68	08/04/95.11:00A	08/04/95.12:00P	
1.1.2.66.3D	2	Fit Stiffeners 68	08/04/95.01:00P	08/04/95.03:00P	
1.1.2.66.3E	4	Weld Stiffeners 68	08/04/95.03:00P	08/07/95.10:00A	
1.1.2.66.3F	1	Inspect, Install End Caps 68	08/07/95.10:00A	08/07/95.11:00A	
1.1.2.66.3H	1	Move to Test Area 68	08/07/95.11:00A	08/07/95.12:00P	
1.1.2.66.3I	1	Pre-Clean & Black Light 68	08/07/95.01:00P	08/07/95.02:00P	
1.1.2.66.3J	30	Leak Test 68	08/07/95.02:00P	08/08/95.08:00P	
1.1.2.66.3M	1	Move to Post Test Storage 68	08/09/95.08:00A	08/09/95.09:00A	
1.1.2.66.3N	1	Clean, Dry & End Cap 68	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.66.3P	1	Transport to Erection 68	08/10/95.04:00P	08/10/95.05:00P	
1.1.2.66.3Q	1	Set & Align 68	08/11/95.08:00A	08/11/95.09:00A	
1.1.2.66.3R	1	Set Clean Room, Purge & Fit 68	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.66.3S	2	Weld Joint 68	08/11/95.10:00A	08/11/95.12:00P	
1.1.2.66.3T	2	Leak Test Joint 68	08/11/95.01:00P	08/11/95.03:00P	
1.1.2.66.3U	2	Install Tube Supports 68	08/11/95.01:00P	08/11/95.03:00P	
1.1.2.66.3V	2	Remove Equip'mt, Clean & Cap 68	08/11/95.03:00P	08/11/95.05:00P	
1.1.2.66.4A	1	Unload,Rec/Insp Tube 69	08/01/95.11:00A	08/01/95.12:00P	
1.1.2.66.4B	1	Move to Stiff Fit Up Stat. 688	08/07/95.01:00P	08/07/95.02:00P	
1.1.2.66.4C	1	Set-up & Purge 69	08/07/95.02:00P	08/07/95.03:00P	
1.1.2.66.4D	2	Fit Stiffeners 69	08/07/95.03:00P	08/07/95.05:00P	
1.1.2.66.4E	4	Weld Stiffeners 69	08/08/95.08:00A	08/08/95.12:00P	
1.1.2.66.4F	1	Inspect, Install End Caps 69	08/08/95.01:00P	08/08/95.02:00P	
1.1.2.66.4H	1	Move to Test Area 69	08/09/95.09:00A	08/09/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.66.4I	1	Pre-Clean & Black Light 69	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.66.4J	30	Leak Test 69	08/09/95.11:00A	08/10/95.05:00P	
1.1.2.66.4M	1	Move to Post Test Storage 69	08/11/95.08:00A	08/11/95.09:00A	
1.1.2.66.4N	1	Clean, Dry & End Cap 69	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.66.4P	1	Transport to Erection 69	08/14/95.02:00P	08/14/95.03:00P	
1.1.2.66.4Q	1	Set & Align 69	08/14/95.03:00P	08/14/95.04:00P	
1.1.2.66.4R	1	Set Clean Room, Purge & Fit 69	08/14/95.04:00P	08/14/95.05:00P	
1.1.2.66.4S	2	Weld Joint 69	08/15/95.08:00A	08/15/95.10:00A	
1.1.2.66.4T	2	Leak Test Joint 69	08/15/95.10:00A	08/15/95.12:00P	
1.1.2.66.4U	2	Install Tube Supports 69	08/15/95.10:00A	08/15/95.12:00P	
1.1.2.66.4V	2	Remove Equip'mt, Clean & Cap 69	08/15/95.01:00P	08/15/95.03:00P	
1.1.2.66.5A	1	Unload,Rec/Insp Tube 70	08/01/95.01:00P	08/01/95.02:00P	
1.1.2.66.5B	1	Move to Stiff Fit Up Stat. 70	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.66.5C	1	Set-up & Purge 70	08/09/95.11:00A	08/09/95.12:00P	
1.1.2.66.5D	1	F/W Pump Port Reinf. 70	08/09/95.01:00P	08/09/95.02:00P	
1.1.2.66.5E	2	Fit Stiffeners 700	08/09/95.02:00P	08/09/95.04:00P	
1.1.2.66.5F	4	Weld Stiffeners 70	08/09/95.04:00P	08/10/95.11:00A	
1.1.2.66.5G	1	Move to P.Port Stat.70	08/10/95.11:00A	08/10/95.12:00P	
1.1.2.66.5H	1	Setup & Bore 10" Inlet 70	08/10/95.01:00P	08/10/95.02:00P	
1.1.2.66.5I	2	Purge/F/W Pump Port 70	08/10/95.02:00P	08/10/95.04:00P	
1.1.2.66.5J	1	Inspect, Install End Caps 70	08/10/95.04:00P	08/10/95.05:00P	
1.1.2.66.5L	1	Move to Test Area 70	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.66.5M	1	Pre-Clean & Black Light 70	08/11/95.10:00A	08/11/95.11:00A	
1.1.2.66.5N	30	Leak Test 70	08/11/95.11:00A	08/12/95.05:00P	
1.1.2.66.5O	1	Move to Post Test Storage 70	08/14/95.08:00A	08/14/95.09:00A	
1.1.2.66.5R	1	Clean, Dry & End Cap 70	08/14/95.09:00A	08/14/95.10:00A	
1.1.2.66.5T	1	Transport to Erection 70	08/16/95.11:00A	08/16/95.12:00P	
1.1.2.66.5U	1	Set & Align 70	08/16/95.01:00P	08/16/95.02:00P	
1.1.2.66.5V	1	Set Clean Room, Purge & Fit 70	08/16/95.02:00P	08/16/95.03:00P	
1.1.2.66.5W	2	Weld Joint 70	08/16/95.03:00P	08/16/95.05:00P	
1.1.2.66.5X	2	Leak Test Joint 70	08/17/95.08:00A	08/17/95.10:00A	
1.1.2.66.5Y	2	Install Tube Supports 70	08/17/95.08:00A	08/17/95.10:00A	
1.1.2.66.5Z	2	Remove Equip'mt, Clean & Cap 70	08/17/95.10:00A	08/17/95.12:00P	
1.1.2.66.B1A	1	Unload,Rec/Insp Tube B66	08/01/95.08:00A	08/01/95.09:00A	
1.1.2.66.B1B	1	Move to Stiff Fit Up Stat. B66	08/01/95.09:00A	08/01/95.10:00A	
1.1.2.66.B1C	1	Set-up & Purge B66	08/01/95.10:00A	08/01/95.11:00A	
1.1.2.66.B1D	2	Fit Stiffeners B66	08/01/95.11:00A	08/01/95.02:00P	
1.1.2.66.B1E	4	Weld Stiffeners B66	08/01/95.02:00P	08/02/95.09:00A	
1.1.2.66.B1F	1	Move to Exp.Bellows Stat. B66	08/02/95.09:00A	08/02/95.10:00A	
1.1.2.66.B1G	3	Fit,Purge,Weld Exp. Bellows B66	08/02/95.10:00A	08/02/95.02:00P	
1.1.2.66.B1H	1	Inspect, Install End Caps B66	08/02/95.02:00P	08/02/95.03:00P	
1.1.2.66.B1J	1	Move to Test Area B66	08/02/95.03:00P	08/02/95.04:00P	
1.1.2.66.B1K	1	Pre-Clean & Black Light B66	08/02/95.04:00P	08/02/95.05:00P	
1.1.2.66.B1L	30	Leak Test B66	08/02/95.05:00P	08/03/95.11:00P	
1.1.2.66.B1O	1	Move to Post Test Storage B66	08/04/95.08:00A	08/04/95.09:00A	
1.1.2.66.B1P	1	Clean, Dry & End Cap B66	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.66.B1R	1	Transport to Erection B66	08/04/95.01:00P	08/04/95.02:00P	
1.1.2.66.B1S	1	Set & Align B66	08/04/95.02:00P	08/04/95.03:00P	
1.1.2.66.B1T	1	Set Clean Room, Purge & Fit B66	08/04/95.03:00P	08/04/95.04:00P	
1.1.2.66.B1U	2	Weld Joint B66	08/04/95.04:00P	08/07/95.09:00A	
1.1.2.66.B1V	2	Leak Test Joint B66	08/07/95.09:00A	08/07/95.11:00A	
1.1.2.66.B1W	2	Install Tube Supports B66	08/07/95.09:00A	08/07/95.11:00A	
1.1.2.66.B1X	2	Remove Equip'mt, Clean & Cap B66	08/07/95.11:00A	08/07/95.02:00P	
1.1.2.66.B2A	1	Unload,Rec/Insp Tube B67	08/01/95.09:00A	08/01/95.10:00A	
1.1.2.66.B2B	1	Move to Stiff Fit Up Stat. B67	08/02/95.10:00A	08/02/95.11:00A	
1.1.2.66.B2C	1	Set-up & Purge B67	08/02/95.11:00A	08/02/95.12:00P	
1.1.2.66.B2D	2	Fit Stiffeners B67	08/02/95.01:00P	08/02/95.03:00P	
1.1.2.66.B2E	4	Weld Stiffeners B67	08/02/95.03:00P	08/03/95.10:00A	
1.1.2.66.B2F	1	Move to Exp.Bellows Stat. B67	08/03/95.10:00A	08/03/95.11:00A	
1.1.2.66.B2G	3	Fit,Purge,Weld Exp. Bellows B67	08/03/95.11:00A	08/03/95.03:00P	
1.1.2.66.B2H	1	Inspect, Install End Caps B67	08/03/95.03:00P	08/03/95.04:00P	
1.1.2.66.B2J	1	Move to Test Area B67	08/04/95.09:00A	08/04/95.10:00A	
1.1.2.66.B2K	1	Pre-Clean & Black Light B67	08/04/95.10:00A	08/04/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.66.B2L	30	Leak Test B67	08/04/95.11:00A	08/05/95.05:00P	
1.1.2.66.B2O	1	Move to Post Test Storage B67	08/07/95.08:00A	08/07/95.09:00A	
1.1.2.66.B2P	1	Clean, Dry & End Cap B67	08/07/95.09:00A	08/07/95.10:00A	
1.1.2.66.B2R	1	Transport to Erection B67	08/08/95.10:00A	08/08/95.11:00A	
1.1.2.66.B2S	1	Set & Align B67	08/08/95.11:00A	08/08/95.12:00P	
1.1.2.66.B2T	1	Set Clean Room, Purge & Fit B67	08/08/95.01:00P	08/08/95.02:00P	
1.1.2.66.B2U	2	Weld Joint B67	08/08/95.02:00P	08/08/95.04:00P	
1.1.2.66.B2V	2	Leak Test Joint B67	08/08/95.04:00P	08/09/95.09:00A	
1.1.2.66.B2W	2	Install Tube SupportsB67	08/08/95.04:00P	08/09/95.09:00A	
1.1.2.66.B2X	2	Remove Equip'mt, Clean & Cap B67	08/09/95.09:00A	08/09/95.11:00A	
1.1.2.66.B3A	1	Unload,Rec/Insp Tube B68	08/01/95.10:00A	08/01/95.11:00A	
1.1.2.66.B3B	1	Move to Stiff Fit Up Stat. B68	08/03/95.11:00A	08/03/95.12:00P	
1.1.2.66.B3C	1	Set-up & Purge B68	08/03/95.01:00P	08/03/95.02:00P	
1.1.2.66.B3D	2	Fit Stiffeners B68	08/03/95.02:00P	08/03/95.04:00P	
1.1.2.66.B3E	4	Weld Stiffeners B68	08/03/95.04:00P	08/04/95.11:00A	
1.1.2.66.B3F	1	Move to Exp.Bellows Stat. B68	08/04/95.11:00A	08/04/95.12:00P	
1.1.2.66.B3G	3	Fit,Purge,Weld Exp. Bellows B68	08/04/95.01:00P	08/04/95.04:00P	
1.1.2.66.B3H	1	Inspect, Install End Caps B68	08/04/95.04:00P	08/04/95.05:00P	
1.1.2.66.B3J	1	Move to Test Area B68	08/07/95.09:00A	08/07/95.10:00A	
1.1.2.66.B3K	1	Pre-Clean & Black Light B68	08/07/95.10:00A	08/07/95.11:00A	
1.1.2.66.B3L	30	Leak Test B68	08/07/95.11:00A	08/08/95.05:00P	
1.1.2.66.B3O	1	Move to Post Test Storage B68	08/09/95.08:00A	08/09/95.09:00A	
1.1.2.66.B3P	1	Clean, Dry & End Cap B68	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.66.B3R	1	Transport to Erection B68	08/10/95.08:00A	08/10/95.09:00A	
1.1.2.66.B3S	1	Set & Align B68	08/10/95.09:00A	08/10/95.10:00A	
1.1.2.66.B3T	1	Set Clean Room, Purge & Fit B68	08/10/95.10:00A	08/10/95.11:00A	
1.1.2.66.B3U	2	Weld Joint B68	08/10/95.11:00A	08/10/95.02:00P	
1.1.2.66.B3V	2	Leak Test Joint B68	08/10/95.02:00P	08/10/95.04:00P	
1.1.2.66.B3W	2	Install Tube Supports B68	08/10/95.02:00P	08/10/95.04:00P	
1.1.2.66.B3X	2	Remove Equip'mt, Clean & Cap B686	08/10/95.04:00P	08/11/95.09:00A	
1.1.2.66.B4A	1	Unload,Rec/Insp Tube B69	08/01/95.11:00A	08/01/95.12:00P	
1.1.2.66.B4B	1	Move to Stiff Fit Up Stat. B69	08/04/95.01:00P	08/04/95.02:00P	
1.1.2.66.B4C	1	Set-up & Purge B69	08/04/95.02:00P	08/04/95.03:00P	
1.1.2.66.B4D	2	Fit Stiffeners B69	08/04/95.03:00P	08/04/95.05:00P	
1.1.2.66.B4E	4	Weld Stiffeners B69	08/07/95.08:00A	08/07/95.12:00P	
1.1.2.66.B4F	1	Move to Exp.Bellows Stat. B69	08/07/95.01:00P	08/07/95.02:00P	
1.1.2.66.B4G	3	Fit,Purge,Weld Exp. Bellows B69	08/07/95.02:00P	08/07/95.05:00P	
1.1.2.66.B4H	1	Inspect, Install End Caps B69	08/08/95.08:00A	08/08/95.09:00A	
1.1.2.66.B4J	1	Move to Test Area B69	08/09/95.09:00A	08/09/95.10:00A	
1.1.2.66.B4K	1	Pre-Clean & Black Light B69	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.66.B4L	30	Leak Test B69	08/09/95.11:00A	08/10/95.05:00P	
1.1.2.66.B4O	1	Move to Post Test Storage B69	08/11/95.08:00A	08/11/95.09:00A	
1.1.2.66.B4P	1	Clean, Dry & End Cap B69	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.66.B4R	1	Transport to Erection B69	08/11/95.03:00P	08/11/95.04:00P	
1.1.2.66.B4S	1	Set & Align B69	08/11/95.04:00P	08/11/95.05:00P	
1.1.2.66.B4T	1	Set Clean Room, Purge & Fit B69	08/14/95.08:00A	08/14/95.09:00A	
1.1.2.66.B4U	2	Weld Joint B69	08/14/95.09:00A	08/14/95.11:00A	
1.1.2.66.B4V	2	Leak Test Joint B69	08/14/95.11:00A	08/14/95.02:00P	
1.1.2.66.B4W	2	Install Tube Supports B69	08/14/95.11:00A	08/14/95.02:00P	
1.1.2.66.B4X	2	Remove Equip'mt, Clean & Cap B69	08/14/95.02:00P	08/14/95.04:00P	
1.1.2.66.B5A	1	Unload,Rec/Insp Tube B70	08/01/95.01:00P	08/01/95.02:00P	
1.1.2.66.B5B	1	Move to Stiff Fit Up Stat. B70	08/07/95.02:00P	08/07/95.03:00P	
1.1.2.66.B5C	1	Set-up & Purge B70	08/07/95.03:00P	08/07/95.04:00P	
1.1.2.66.B5D	2	Fit Stiffeners 70	08/07/95.04:00P	08/08/95.09:00A	
1.1.2.66.B5E	4	Weld Stiffeners B70	08/08/95.09:00A	08/08/95.02:00P	
1.1.2.66.B5F	1	Move to Exp.Bellows Stat. B70	08/09/95.10:00A	08/09/95.11:00A	
1.1.2.66.B5G	3	Fit,Purge,Weld Exp. Bellows B70	08/09/95.11:00A	08/09/95.03:00P	
1.1.2.66.B5H	1	Inspect, Install End Caps B707	08/09/95.03:00P	08/09/95.04:00P	
1.1.2.66.B5J	1	Move to Test Area B70	08/11/95.09:00A	08/11/95.10:00A	
1.1.2.66.B5K	1	Pre-Clean & Black Light B70	08/11/95.10:00A	08/11/95.11:00A	
1.1.2.66.B5L	30	Leak Test B70	08/11/95.11:00A	08/12/95.05:00P	
1.1.2.66.B5O	1	Move to Post Test Storage B70	08/14/95.08:00A	08/14/95.09:00A	
1.1.2.66.B5P	1	Clean, Dry & End Cap B70	08/14/95.09:00A	08/14/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.66.B5R	1	Transport to Erection B70	08/15/95.01:00P	08/15/95.02:00P	
1.1.2.66.B5S	1	Set & Align B70	08/15/95.02:00P	08/15/95.03:00P	
1.1.2.66.B5T	1	Set Clean Room, Purge & Fit B70	08/15/95.03:00P	08/15/95.04:00P	
1.1.2.66.B5U	2	Weld Joint B5	08/15/95.04:00P	08/16/95.09:00A	
1.1.2.66.B5V	2	Leak Test Joint B70	08/16/95.09:00A	08/16/95.11:00A	
1.1.2.66.B5W	2	Install Tube Supports B70	08/16/95.09:00A	08/16/95.11:00A	
1.1.2.66.B5X	2	Remove Equip'mt, Clean & Cap B70	08/16/95.11:00A	08/16/95.02:00P	
1.1.2.71	99	Cans 71-75	08/14/95.04:00P	08/31/95.10:00A	
1.1.2.71.1A	1	Unload,Rec/Insp Tube 71	08/15/95.08:00A	08/15/95.09:00A	
1.1.2.71.1B	1	Move to Stiff Fit Up Stat. 71	08/15/95.09:00A	08/15/95.10:00A	
1.1.2.71.1C	1	Set-up & Purge 71	08/15/95.10:00A	08/15/95.11:00A	
1.1.2.71.1D	2	Fit Stiffeners 71	08/15/95.11:00A	08/15/95.02:00P	
1.1.2.71.1E	4	Weld Stiffeners 71	08/15/95.02:00P	08/16/95.09:00A	
1.1.2.71.1F	1	Inspect, Install End Caps 71	08/16/95.09:00A	08/16/95.10:00A	
1.1.2.71.1H	1	Move to Test Area 71	08/16/95.10:00A	08/16/95.11:00A	
1.1.2.71.1I	1	Pre-Clean & Black Light 71	08/16/95.11:00A	08/16/95.12:00P	
1.1.2.71.1J	30	Leak Test 71	08/16/95.12:00P	08/17/95.06:00P	
1.1.2.71.1M	1	Move to Post Test Storage 71	08/18/95.08:00A	08/18/95.09:00A	
1.1.2.71.1N	1	Clean, Dry & End Cap 71	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.71.1P	1	Transport to Erection 71	08/21/95.09:00A	08/21/95.10:00A	
1.1.2.71.1Q	1	Set & Align 71	08/21/95.10:00A	08/21/95.11:00A	
1.1.2.71.1R	1	Set Clean Room, Purge & Fit 71	08/21/95.11:00A	08/21/95.12:00P	
1.1.2.71.1S	2	Weld Joint 71	08/21/95.01:00P	08/21/95.03:00P	
1.1.2.71.1T	2	Leak Test Joint 71	08/21/95.03:00P	08/21/95.05:00P	
1.1.2.71.1U	2	Install Tube Supports 71	08/21/95.03:00P	08/21/95.05:00P	
1.1.2.71.1V	2	Remove Equip'mt, Clean & Cap 71	08/22/95.08:00A	08/22/95.10:00A	
1.1.2.71.2A	1	Unload,Rec. & Insp 72	08/15/95.09:00A	08/15/95.10:00A	
1.1.2.71.2B	1	Move to Stiff Fit Up Stat. 72	08/16/95.11:00A	08/16/95.12:00P	
1.1.2.71.2C	1	Set-up & Purge 72	08/16/95.01:00P	08/16/95.02:00P	
1.1.2.71.2D	2	Fit Stiffeners 72	08/16/95.02:00P	08/16/95.04:00P	
1.1.2.71.2E	4	Weld Stiffeners 72	08/16/95.04:00P	08/17/95.11:00A	
1.1.2.71.2F	1	Inspect, Install End Caps 72	08/17/95.11:00A	08/17/95.12:00P	
1.1.2.71.2H	1	Move to Test Area 72	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.71.2I	1	Pre-Clean & Black Light 72	08/18/95.10:00A	08/18/95.11:00A	
1.1.2.71.2J	30	Leak Test 72	08/18/95.11:00A	08/19/95.05:00P	
1.1.2.71.2M	1	Move to Post Test Storage 72	08/21/95.08:00A	08/21/95.09:00A	
1.1.2.71.2N	1	Clean, Dry & End Cap 72	08/21/95.09:00A	08/21/95.10:00A	
1.1.2.71.2P	1	Transport to Erection 72	08/22/95.04:00P	08/22/95.05:00P	
1.1.2.71.2Q	1	Set & Align 72	08/23/95.08:00A	08/23/95.09:00A	
1.1.2.71.2R	1	Set Clean Room, Purge & Fit 72	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.71.2S	2	Weld Joint 72	08/23/95.10:00A	08/23/95.12:00P	
1.1.2.71.2T	2	Leak Test Joint 72	08/23/95.01:00P	08/23/95.03:00P	
1.1.2.71.2U	2	Install Tube Supports 72	08/23/95.01:00P	08/23/95.03:00P	
1.1.2.71.2V	2	Remove Equip'mt, Clean & Cap 72	08/23/95.03:00P	08/23/95.05:00P	
1.1.2.71.3A	1	Unload,Rec/Insp Tube 73	08/15/95.10:00A	08/15/95.11:00A	
1.1.2.71.3B	1	Move to Stiff Fit Up Stat. 73	08/18/95.10:00A	08/18/95.11:00A	
1.1.2.71.3C	1	Set-up & Purge 73	08/18/95.11:00A	08/18/95.12:00P	
1.1.2.71.3D	2	Fit Stiffeners 73	08/18/95.01:00P	08/18/95.03:00P	
1.1.2.71.3E	4	Weld Stiffeners 73	08/18/95.03:00P	08/21/95.10:00A	
1.1.2.71.3F	1	Inspect, Install End Caps 73	08/21/95.10:00A	08/21/95.11:00A	
1.1.2.71.3H	1	Move to Test Area 73	08/21/95.11:00A	08/21/95.12:00P	
1.1.2.71.3I	1	Pre-Clean & Black Light 73	08/21/95.01:00P	08/21/95.02:00P	
1.1.2.71.3J	30	Leak Test 73	08/21/95.02:00P	08/22/95.08:00P	
1.1.2.71.3M	1	Move to Post Test Storage 73	08/23/95.08:00A	08/23/95.09:00A	
1.1.2.71.3N	1	Clean, Dry & End Cap 73	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.71.3P	1	Transport to Erection 73	08/24/95.02:00P	08/24/95.03:00P	
1.1.2.71.3Q	1	Set & Align 73	08/24/95.03:00P	08/24/95.04:00P	
1.1.2.71.3R	1	Set Clean Room, Purge & Fit 73	08/24/95.04:00P	08/24/95.05:00P	
1.1.2.71.3S	2	Weld Joint 73	08/25/95.08:00A	08/25/95.10:00A	
1.1.2.71.3T	2	Leak Test Joint 73	08/25/95.10:00A	08/25/95.12:00P	
1.1.2.71.3U	2	Install Tube Supports 73	08/25/95.10:00A	08/25/95.12:00P	
1.1.2.71.3V	2	Remove Equip'mt, Clean & Cap 73	08/25/95.01:00P	08/25/95.03:00P	
1.1.2.71.4A	1	Unload,Rec/Insp Tube 74	08/15/95.11:00A	08/15/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.71.4B	1	Move to Stiff Fit Up Stat. 74	08/21/95.01:00P	08/21/95.02:00P	
1.1.2.71.4C	1	Set-up & Purge 74	08/21/95.02:00P	08/21/95.03:00P	
1.1.2.71.4D	2	Fit Stiffeners 74	08/21/95.03:00P	08/21/95.05:00P	
1.1.2.71.4E	4	Weld Stiffeners 74	08/22/95.08:00A	08/22/95.12:00P	
1.1.2.71.4F	1	Inspect, Install End Caps 74	08/22/95.01:00P	08/22/95.02:00P	
1.1.2.71.4H	1	Move to Test Area 74	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.71.4I	1	Pre-Clean & Black Light 74	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.71.4J	30	Leak Test 74	08/23/95.11:00A	08/24/95.05:00P	
1.1.2.71.4M	1	Move to Post Test Storage 74	08/25/95.08:00A	08/25/95.09:00A	
1.1.2.71.4N	1	Clean, Dry & End Cap 74	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.71.4P	1	Transport to Erection 74	08/28/95.11:00A	08/28/95.12:00P	
1.1.2.71.4Q	1	Set & Align 74	08/28/95.01:00P	08/28/95.02:00P	
1.1.2.71.4R	1	Set Clean Room, Purge & Fit 74	08/28/95.02:00P	08/28/95.03:00P	
1.1.2.71.4S	2	Weld Joint 7	08/28/95.03:00P	08/28/95.05:00P	
1.1.2.71.4T	2	Leak Test Joint 74	08/29/95.08:00A	08/29/95.10:00A	
1.1.2.71.4U	2	Install Tube Supports 74	08/29/95.08:00A	08/29/95.10:00A	
1.1.2.71.4V	2	Remove Equip'mt, Clean & Cap 74	08/29/95.10:00A	08/29/95.12:00P	
1.1.2.71.5A	1	Unload,Rec/Insp Tube 57	08/15/95.01:00P	08/15/95.02:00P	
1.1.2.71.5B	1	Move to Stiff Fit Up Stat. 75	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.71.5C	1	Set-up & Purge 75	08/23/95.11:00A	08/23/95.12:00P	
1.1.2.71.5D	1	F/W Pump Port Reinf. 75	08/23/95.01:00P	08/23/95.02:00P	
1.1.2.71.5E	2	Fit Stiffeners 75	08/23/95.02:00P	08/23/95.04:00P	
1.1.2.71.5F	4	Weld Stiffeners 75	08/23/95.04:00P	08/24/95.11:00A	
1.1.2.71.5G	1	Move to P.Port Stat. 75	08/24/95.11:00A	08/24/95.12:00P	
1.1.2.71.5H	1	Setup & Bore 10" Inlet 75	08/24/95.01:00P	08/24/95.02:00P	
1.1.2.71.5I	2	Purge/F/W Pump Port 75	08/24/95.02:00P	08/24/95.04:00P	
1.1.2.71.5J	1	Inspect, Install End Caps 75	08/24/95.04:00P	08/24/95.05:00P	
1.1.2.71.5L	1	Move to Test Area 75	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.71.5M	1	Pre-Clean & Black Light 75	08/25/95.10:00A	08/25/95.11:00A	
1.1.2.71.5N	30	Leak Test 75	08/25/95.11:00A	08/26/95.05:00P	
1.1.2.71.5Q	1	Move to Post Test Storage 75	08/28/95.08:00A	08/28/95.09:00A	
1.1.2.71.5R	1	Clean, Dry & End Cap 75	08/28/95.09:00A	08/28/95.10:00A	
1.1.2.71.5T	1	Transport to Erection 75	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.71.5U	1	Set & Align 75	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.71.5V	1	Set Clean Room, Purge & Fit 75	08/30/95.11:00A	08/30/95.12:00P	
1.1.2.71.5W	2	Weld Joint 75	08/30/95.01:00P	08/30/95.03:00P	
1.1.2.71.5X	2	Leak Test Joint 75	08/30/95.03:00P	08/30/95.05:00P	
1.1.2.71.5Y	2	Install Tube Supports 75	08/30/95.03:00P	08/30/95.05:00P	
1.1.2.71.5Z	2	Remove Equip'mt, Clean & Cap 75	08/31/95.08:00A	08/31/95.10:00A	
1.1.2.71.B1A	1	Unload,Rec/Insp Tube B71	08/15/95.08:00A	08/15/95.09:00A	
1.1.2.71.B1B	1	Move to Stiff Fit Up Stat. B71	08/15/95.09:00A	08/15/95.10:00A	
1.1.2.71.B1C	1	Set-up & Purge B71	08/15/95.10:00A	08/15/95.11:00A	
1.1.2.71.B1D	2	Fit Stiffeners B71	08/15/95.11:00A	08/15/95.02:00P	
1.1.2.71.B1E	4	Weld Stiffeners B71	08/15/95.02:00P	08/16/95.09:00A	
1.1.2.71.B1F	1	Move to Exp.Bellows Stat. B71	08/16/95.09:00A	08/16/95.10:00A	
1.1.2.71.B1G	3	Fit,Purge,Weld Exp. Bellows B71	08/16/95.10:00A	08/16/95.02:00P	
1.1.2.71.B1H	1	Inspect, Install End Caps B71	08/16/95.02:00P	08/16/95.03:00P	
1.1.2.71.B1J	1	Move to Test Area B71	08/16/95.03:00P	08/16/95.04:00P	
1.1.2.71.B1K	1	Pre-Clean & Black Light B71	08/16/95.04:00P	08/16/95.05:00P	
1.1.2.71.B1L	30	Leak Test B71	08/16/95.05:00P	08/17/95.11:00P	
1.1.2.71.B1O	1	Move to Post Test Storage B71	08/18/95.08:00A	08/18/95.09:00A	
1.1.2.71.B1P	1	Clean, Dry & End Cap B71	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.71.B1R	1	Transport to Erection B71	08/18/95.10:00A	08/18/95.11:00A	
1.1.2.71.B1S	1	Set & Align B71	08/18/95.11:00A	08/18/95.12:00P	
1.1.2.71.B1T	1	Set Clean Room, Purge & Fit B71	08/18/95.01:00P	08/18/95.02:00P	
1.1.2.71.B1U	2	Weld Joint B71	08/18/95.02:00P	08/18/95.04:00P	
1.1.2.71.B1V	2	Leak Test Joint B71	08/18/95.04:00P	08/21/95.09:00A	
1.1.2.71.B1W	2	Install Tube Supports B71	08/18/95.04:00P	08/21/95.09:00A	
1.1.2.71.B1X	2	Remove Equip'mt, Clean & Cap B71	08/21/95.09:00A	08/21/95.11:00A	
1.1.2.71.B2A	1	Unload,Rec/Insp Tube B72	08/15/95.09:00A	08/15/95.10:00A	
1.1.2.71.B2B	1	Move to Stiff Fit Up Stat. B72	08/16/95.10:00A	08/16/95.11:00A	
1.1.2.71.B2C	1	Set-up & Purge B72	08/16/95.11:00A	08/16/95.12:00P	
1.1.2.71.B2D	2	Fit Stiffeners B72	08/16/95.01:00P	08/16/95.03:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.71.B2E	4	Weld Stiffeners B72	08/16/95.03:00P	08/17/95.10:00A	
1.1.2.71.B2F	1	Move to Exp.Bellows Stat. B72	08/17/95.10:00A	08/17/95.11:00A	
1.1.2.71.B2G	3	Fit,Purge,Weld Exp. Bellows B72	08/17/95.11:00A	08/17/95.03:00P	
1.1.2.71.B2H	1	Inspect, Install End Caps B72	08/17/95.03:00P	08/17/95.04:00P	
1.1.2.71.B2J	1	Move to Test Area B72	08/18/95.09:00A	08/18/95.10:00A	
1.1.2.71.B2K	1	Pre-Clean & Black Light B72	08/18/95.10:00A	08/18/95.11:00A	
1.1.2.71.B2L	30	Leak Test B72	08/18/95.11:00A	08/19/95.05:00P	
1.1.2.71.B2O	1	Move to Post Test Storage B72	08/21/95.08:00A	08/21/95.09:00A	
1.1.2.71.B2P	1	Clean, Dry & End Cap B72	08/21/95.09:00A	08/21/95.10:00A	
1.1.2.71.B2R	1	Transport to Erection B72	08/22/95.08:00A	08/22/95.09:00A	
1.1.2.71.B2S	1	Set & Align B72	08/22/95.09:00A	08/22/95.10:00A	
1.1.2.71.B2T	1	Set Clean Room, Purge & Fit B72	08/22/95.10:00A	08/22/95.11:00A	
1.1.2.71.B2U	2	Weld Joint B72	08/22/95.11:00A	08/22/95.02:00P	
1.1.2.71.B2V	2	Leak Test Joint B72	08/22/95.02:00P	08/22/95.04:00P	
1.1.2.71.B2W	2	Install Tube Supports B72	08/22/95.02:00P	08/22/95.04:00P	
1.1.2.71.B2X	2	Remove Equip'mt, Clean & Cap B72	08/22/95.04:00P	08/23/95.09:00A	
1.1.2.71.B3A	1	Unload,Rec/Insp Tube B73	08/15/95.10:00A	08/15/95.11:00A	
1.1.2.71.B3B	1	Move to Stiff Fit Up Stat. B73	08/17/95.11:00A	08/17/95.12:00P	
1.1.2.71.B3C	1	Set-up & Purge B73	08/17/95.01:00P	08/17/95.02:00P	
1.1.2.71.B3D	2	Fit Stiffeners B73	08/17/95.02:00P	08/17/95.04:00P	
1.1.2.71.B3E	4	Weld Stiffeners B73	08/17/95.04:00P	08/18/95.11:00A	
1.1.2.71.B3F	1	Move to Exp.Bellows Stat. B73	08/18/95.11:00A	08/18/95.12:00P	
1.1.2.71.B3G	3	Fit,Purge,Weld Exp. Bellows B73	08/18/95.01:00P	08/18/95.04:00P	
1.1.2.71.B3H	1	Inspect, Install End Caps B73	08/18/95.04:00P	08/18/95.05:00P	
1.1.2.71.B3J	1	Move to Test Area B73	08/21/95.09:00A	08/21/95.10:00A	
1.1.2.71.B3K	1	Pre-Clean & Black Light B3	08/21/95.10:00A	08/21/95.11:00A	
1.1.2.71.B3L	30	Leak Test B3	08/21/95.11:00A	08/22/95.05:00P	
1.1.2.71.B3O	1	Move to Post Test Storage B73	08/23/95.08:00A	08/23/95.09:00A	
1.1.2.71.B3P	1	Clean, Dry & End Cap B73	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.71.B3R	1	Transport to Erection B73	08/23/95.03:00P	08/23/95.04:00P	
1.1.2.71.B3S	1	Set & Align B73	08/23/95.04:00P	08/23/95.05:00P	
1.1.2.71.B3T	1	Set Clean Room, Purge & Fit B73	08/24/95.08:00A	08/24/95.09:00A	
1.1.2.71.B3U	2	Weld Joint B73	08/24/95.09:00A	08/24/95.11:00A	
1.1.2.71.B3V	2	Leak Test Joint B73	08/24/95.11:00A	08/24/95.02:00P	
1.1.2.71.B3W	2	Install Tube Supports B73	08/24/95.11:00A	08/24/95.02:00P	
1.1.2.71.B3X	2	Remove Equip'mt, Clean & Cap B73	08/24/95.02:00P	08/24/95.04:00P	
1.1.2.71.B4A	1	Unload,Rec/Insp Tube B74	08/15/95.11:00A	08/15/95.12:00P	
1.1.2.71.B4B	1	Move to Stiff Fit Up Stat. B74	08/18/95.01:00P	08/18/95.02:00P	
1.1.2.71.B4C	1	Set-up & Purge B74	08/18/95.02:00P	08/18/95.03:00P	
1.1.2.71.B4D	2	Fit Stiffeners B74	08/18/95.03:00P	08/18/95.05:00P	
1.1.2.71.B4E	4	Weld Stiffeners B74	08/21/95.08:00A	08/21/95.12:00P	
1.1.2.71.B4F	1	Move to Exp.Bellows Stat. B74	08/21/95.01:00P	08/21/95.02:00P	
1.1.2.71.B4G	3	Fit,Purge,Weld Exp. Bellows B74	08/21/95.02:00P	08/21/95.05:00P	
1.1.2.71.B4H	1	Inspect, Install End Caps B74	08/22/95.08:00A	08/22/95.09:00A	
1.1.2.71.B4J	1	Move to Test Area B74	08/23/95.09:00A	08/23/95.10:00A	
1.1.2.71.B4K	1	Pre-Clean & Black Light B74	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.71.B4L	30	Leak Test B74	08/23/95.11:00A	08/24/95.05:00P	
1.1.2.71.B4O	1	Move to Post Test Storage B74	08/25/95.08:00A	08/25/95.09:00A	
1.1.2.71.B4P	1	Clean, Dry & End Cap B74	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.71.B4R	1	Transport to Erection B74	08/25/95.01:00P	08/25/95.02:00P	
1.1.2.71.B4S	1	Set & Align B74	08/25/95.02:00P	08/25/95.03:00P	
1.1.2.71.B4T	1	Set Clean Room, Purge & Fit B74	08/25/95.03:00P	08/25/95.04:00P	
1.1.2.71.B4U	2	Weld Joint B74	08/25/95.04:00P	08/28/95.09:00A	
1.1.2.71.B4V	2	Leak Test Joint B74	08/28/95.09:00A	08/28/95.11:00A	
1.1.2.71.B4W	2	Install Tube Supports B74	08/28/95.09:00A	08/28/95.11:00A	
1.1.2.71.B4X	2	Remove Equip'mt, Clean & Cap B74	08/28/95.11:00A	08/28/95.02:00P	
1.1.2.71.B5A	1	Unload,Rec/Insp Tube B75	08/15/95.01:00P	08/15/95.02:00P	
1.1.2.71.B5B	1	Move to Stiff Fit Up Stat. B75	08/21/95.02:00P	08/21/95.03:00P	
1.1.2.71.B5C	1	Set-up & Purge B75	08/21/95.03:00P	08/21/95.04:00P	
1.1.2.71.B5D	2	Fit Stiffeners B75	08/21/95.04:00P	08/22/95.09:00A	
1.1.2.71.B5E	4	Weld Stiffeners B75	08/22/95.09:00A	08/22/95.02:00P	
1.1.2.71.B5F	1	Move to Exp.Bellows Stat. B75	08/23/95.10:00A	08/23/95.11:00A	
1.1.2.71.B5G	3	Fit,Purge,Weld Exp. Bellows B75	08/23/95.11:00A	08/23/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.71.B5H	1	Inspect, Install End Caps B75	08/23/95.03:00P	08/23/95.04:00P	
1.1.2.71.B5J	1	Move to Test Area B75	08/25/95.09:00A	08/25/95.10:00A	
1.1.2.71.B5K	1	Pre-Clean & Black Light B75	08/25/95.10:00A	08/25/95.11:00A	
1.1.2.71.B5L	30	Leak Test B75	08/25/95.11:00A	08/26/95.05:00P	
1.1.2.71.B5O	1	Move to Post Test Storage B75	08/28/95.08:00A	08/28/95.09:00A	
1.1.2.71.B5P	1	Clean, Dry & End Cap B75	08/28/95.09:00A	08/28/95.10:00A	
1.1.2.71.B5R	1	Transport to Erection B75	08/29/95.10:00A	08/29/95.11:00A	
1.1.2.71.B5S	1	Set & Align B75	08/29/95.11:00A	08/29/95.12:00P	
1.1.2.71.B5T	1	Set Clean Room, Purge & Fit B75	08/29/95.01:00P	08/29/95.02:00P	
1.1.2.71.B5U	2	Weld Joint B75	08/29/95.02:00P	08/29/95.04:00P	
1.1.2.71.B5V	2	Leak Test Joint B75	08/29/95.04:00P	08/30/95.09:00A	
1.1.2.71.B5W	2	Install Tube Supports B75	08/29/95.04:00P	08/30/95.09:00A	
1.1.2.71.B5X	2	Remove Equip'mt, Clean & Cap B75	08/30/95.09:00A	08/30/95.11:00A	
1.1.2.76	99	Cans 76-80	08/28/95.04:00P	09/14/95.10:00A	
1.1.2.76.1A	1	Unload,Rec/Insp Tube 76	08/29/95.08:00A	08/29/95.09:00A	
1.1.2.76.1B	1	Move to Stiff Fit Up Stat. 76	08/29/95.09:00A	08/29/95.10:00A	
1.1.2.76.1C	1	Set-up & Purge 76	08/29/95.10:00A	08/29/95.11:00A	
1.1.2.76.1D	2	Fit Stiffeners 76	08/29/95.11:00A	08/29/95.02:00P	
1.1.2.76.1E	4	Weld Stiffeners 76	08/29/95.02:00P	08/30/95.09:00A	
1.1.2.76.1F	1	Inspect, Install End Caps 76	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.76.1H	1	Move to Test Area 76	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.76.1I	1	Pre-Clean & Black Light 76	08/30/95.11:00A	08/30/95.12:00P	
1.1.2.76.1J	30	Leak Test 76	08/30/95.12:00P	08/31/95.06:00P	
1.1.2.76.1M	1	Move to Post Test Storage 76	09/01/95.08:00A	09/01/95.09:00A	
1.1.2.76.1N	1	Clean, Dry & End Cap 76	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.76.1P	1	Transport to Erection 76	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.76.1Q	1	Set & Align 76	09/04/95.10:00A	09/04/95.11:00A	
1.1.2.76.1R	1	Set Clean Room, Purge & Fit 76	09/04/95.11:00A	09/04/95.12:00P	
1.1.2.76.1S	2	Weld Joint 76	09/04/95.01:00P	09/04/95.03:00P	
1.1.2.76.1T	2	Leak Test Joint 76	09/04/95.03:00P	09/04/95.05:00P	
1.1.2.76.1U	2	Install Tube Supports 76	09/04/95.03:00P	09/04/95.05:00P	
1.1.2.76.1V	2	Remove Equip'mt, Clean & Cap 76	09/05/95.08:00A	09/05/95.10:00A	
1.1.2.76.2A	1	Unload,Rec. & Inspect 77	08/29/95.09:00A	08/29/95.10:00A	
1.1.2.76.2B	1	Move to Stiff Fit Up Stat. 77	08/30/95.11:00A	08/30/95.12:00P	
1.1.2.76.2C	1	Set-up & Purge 77	08/30/95.01:00P	08/30/95.02:00P	
1.1.2.76.2D	2	Fit Stiffeners 77	08/30/95.02:00P	08/30/95.04:00P	
1.1.2.76.2E	4	Weld Stiffeners 77	08/30/95.04:00P	08/31/95.11:00A	
1.1.2.76.2F	1	Inspect, Install End Caps 77	08/31/95.11:00A	08/31/95.12:00P	
1.1.2.76.2H	1	Move to Test Area 77	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.76.2I	1	Pre-Clean & Black Light 77	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.76.2J	30	Leak Test 77	09/01/95.11:00A	09/02/95.05:00P	
1.1.2.76.2M	1	Move to Post Test Storage 77	09/04/95.08:00A	09/04/95.09:00A	
1.1.2.76.2N	1	Clean, Dry & End Cap 77	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.76.2P	1	Transport to Erection 77	09/05/95.04:00P	09/05/95.05:00P	
1.1.2.76.2Q	1	Set & Align 77	09/06/95.08:00A	09/06/95.09:00A	
1.1.2.76.2R	1	Set Clean Room, Purge & Fit 77	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.76.2S	2	Weld Joint 77	09/06/95.10:00A	09/06/95.12:00P	
1.1.2.76.2T	2	Leak Test Joint 77	09/06/95.01:00P	09/06/95.03:00P	
1.1.2.76.2U	2	Install Tube Supports 77	09/06/95.01:00P	09/06/95.03:00P	
1.1.2.76.2V	2	Remove Equip'mt, Clean & Cap 77	09/06/95.03:00P	09/06/95.05:00P	
1.1.2.76.3A	1	Unload,Rec/Insp Tube 78	08/29/95.10:00A	08/29/95.11:00A	
1.1.2.76.3B	1	Move to Stiff Fit Up Stat. 78	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.76.3C	1	Set-up & Purge 78	09/01/95.11:00A	09/01/95.12:00P	
1.1.2.76.3D	2	Fit Stiffeners 78	09/01/95.01:00P	09/01/95.03:00P	
1.1.2.76.3E	4	Weld Stiffeners 78	09/01/95.03:00P	09/04/95.10:00A	
1.1.2.76.3F	1	Inspect, Install End Caps 78	09/04/95.10:00A	09/04/95.11:00A	
1.1.2.76.3H	1	Move to Test Area 78	09/04/95.11:00A	09/04/95.12:00P	
1.1.2.76.3I	1	Pre-Clean & Black Light 78	09/04/95.01:00P	09/04/95.02:00P	
1.1.2.76.3J	30	Leak Test 78	09/04/95.02:00P	09/05/95.08:00P	
1.1.2.76.3M	1	Move to Post Test Storage 78	09/06/95.08:00A	09/06/95.09:00A	
1.1.2.76.3N	1	Clean, Dry & End Cap 78	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.76.3P	1	Transport to Erection 78	09/07/95.02:00P	09/07/95.03:00P	
1.1.2.76.3Q	1	Set & Align 78	09/07/95.03:00P	09/07/95.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.76.3R	1	Set Clean Room, Purge & Fit 78	09/07/95.04:00P	09/07/95.05:00P	
1.1.2.76.3S	2	Weld Joint 78	09/08/95.08:00A	09/08/95.10:00A	
1.1.2.76.3T	2	Leak Test Joint 78	09/08/95.10:00A	09/08/95.12:00P	
1.1.2.76.3U	2	Install Tube Supports 78	09/08/95.10:00A	09/08/95.12:00P	
1.1.2.76.3V	2	Remove Equip'mt, Clean & Cap 78	09/08/95.01:00P	09/08/95.03:00P	
1.1.2.76.4A	1	Unload,Rec/Insp Tube 790	08/29/95.11:00A	08/29/95.12:00P	
1.1.2.76.4B	1	Move to Stiff Fit Up Stat. 790	09/04/95.01:00P	09/04/95.02:00P	
1.1.2.76.4C	1	Set-up & Purge 79	09/04/95.02:00P	09/04/95.03:00P	
1.1.2.76.4D	2	Fit Stiffeners 79	09/04/95.03:00P	09/04/95.05:00P	
1.1.2.76.4E	4	Weld Stiffeners 79	09/05/95.08:00A	09/05/95.12:00P	
1.1.2.76.4F	1	Inspect, Install End Caps 79	09/05/95.01:00P	09/05/95.02:00P	
1.1.2.76.4H	1	Move to Test Area 79	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.76.4I	1	Pre-Clean & Black Light 79	09/06/95.10:00A	09/06/95.11:00A	
1.1.2.76.4J	30	Leak Test 79	09/06/95.11:00A	09/07/95.05:00P	
1.1.2.76.4M	1	Move to Post Test Storage 79	09/08/95.08:00A	09/08/95.09:00A	
1.1.2.76.4N	1	Clean, Dry & End Cap 79	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.76.4P	1	Transport to Erection 79	09/11/95.11:00A	09/11/95.12:00P	
1.1.2.76.4Q	1	Set & Align 79	09/11/95.01:00P	09/11/95.02:00P	
1.1.2.76.4R	1	Set Clean Room, Purge & Fit 79	09/11/95.02:00P	09/11/95.03:00P	
1.1.2.76.4S	2	Weld Joint 79	09/11/95.03:00P	09/11/95.05:00P	
1.1.2.76.4T	2	Leak Test Joint 79	09/12/95.08:00A	09/12/95.10:00A	
1.1.2.76.4U	2	Install Tube Supports 79	09/12/95.08:00A	09/12/95.10:00A	
1.1.2.76.4V	2	Remove Equip'mt, Clean & Cap 79	09/12/95.10:00A	09/12/95.12:00P	
1.1.2.76.5A	1	Unload,Rec/Insp Tube 79	08/29/95.01:00P	08/29/95.02:00P	
1.1.2.76.5B	1	Move to Stiff Fit Up Stat. 79	09/06/95.10:00A	09/06/95.11:00A	
1.1.2.76.5C	1	Set-up & Purge 80	09/06/95.11:00A	09/06/95.12:00P	
1.1.2.76.5D	1	F/W Pump Port Reinf. 80	09/06/95.01:00P	09/06/95.02:00P	
1.1.2.76.5E	2	Fit Stiffeners80	09/06/95.02:00P	09/06/95.04:00P	
1.1.2.76.5F	4	Weld Stiffeners 80	09/06/95.04:00P	09/07/95.11:00A	
1.1.2.76.5G	1	Move to P.Port Stat. 80	09/07/95.11:00A	09/07/95.12:00P	
1.1.2.76.5H	1	Setup & Bore 10" Inlet 80	09/07/95.01:00P	09/07/95.02:00P	
1.1.2.76.5I	2	Purge/F/W Pump Port 80	09/07/95.02:00P	09/07/95.04:00P	
1.1.2.76.5J	1	Inspect, Install End Caps 80	09/07/95.04:00P	09/07/95.05:00P	
1.1.2.76.5L	1	Move to Test Area 80	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.76.5M	1	Pre-Clean & Black Light 80	09/08/95.10:00A	09/08/95.11:00A	
1.1.2.76.5N	30	Leak Test 80	09/08/95.11:00A	09/09/95.05:00P	
1.1.2.76.5Q	1	Move to Post Test Storage 80	09/11/95.08:00A	09/11/95.09:00A	
1.1.2.76.5R	1	Clean, Dry & End Cap 80	09/11/95.09:00A	09/11/95.10:00A	
1.1.2.76.5T	1	Transport to Erection 80	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.76.5U	1	Set & Align 80	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.76.5V	1	Set Clean Room, Purge & Fit 80	09/13/95.11:00A	09/13/95.12:00P	
1.1.2.76.5W	2	Weld Joint 80	09/13/95.01:00P	09/13/95.03:00P	
1.1.2.76.5X	2	Leak Test Joint 80	09/13/95.03:00P	09/13/95.05:00P	
1.1.2.76.5Y	2	Install Tube Supports 80	09/13/95.03:00P	09/13/95.05:00P	
1.1.2.76.5Z	2	Remove Equip'mt, Clean & Cap 80	09/14/95.08:00A	09/14/95.10:00A	
1.1.2.76.B1A	1	Unload,Rec/Insp Tube B76	08/29/95.08:00A	08/29/95.09:00A	
1.1.2.76.B1B	1	Move to Stiff Fit Up Stat. B76	08/29/95.09:00A	08/29/95.10:00A	
1.1.2.76.B1C	1	Set-up & Purge B76	08/29/95.10:00A	08/29/95.11:00A	
1.1.2.76.B1D	2	Fit Stiffeners B76	08/29/95.11:00A	08/29/95.02:00P	
1.1.2.76.B1E	4	Weld Stiffeners B76	08/29/95.02:00P	08/30/95.09:00A	
1.1.2.76.B1F	1	Move to Exp.Bellows Stat. B76	08/30/95.09:00A	08/30/95.10:00A	
1.1.2.76.B1G	3	Fit,Purge,Weld Exp. Bellows B76	08/30/95.10:00A	08/30/95.02:00P	
1.1.2.76.B1H	1	Inspect, Install End Caps B76	08/30/95.02:00P	08/30/95.03:00P	
1.1.2.76.B1J	1	Move to Test Area B76	08/30/95.03:00P	08/30/95.04:00P	
1.1.2.76.B1K	1	Pre-Clean & Black Light B76	08/30/95.04:00P	08/30/95.05:00P	
1.1.2.76.B1L	30	Leak Test B76	08/30/95.05:00P	08/31/95.11:00P	
1.1.2.76.B1O	1	Move to Post Test Storage B76	09/01/95.08:00A	09/01/95.09:00A	
1.1.2.76.B1P	1	Clean, Dry & End Cap B76	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.76.B1R	1	Transport to Erection B76	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.76.B1S	1	Set & Align B76	09/01/95.11:00A	09/01/95.12:00P	
1.1.2.76.B1T	1	Set Clean Room, Purge & Fit B76	09/01/95.01:00P	09/01/95.02:00P	
1.1.2.76.B1U	2	Weld Joint B76	09/01/95.02:00P	09/01/95.04:00P	
1.1.2.76.B1V	2	Leak Test Joint B76	09/01/95.04:00P	09/04/95.09:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.76.B1W	2	Install Tube Supports B76	09/01/95.04:00P	09/04/95.09:00A	
1.1.2.76.B1X	2	Remove Equip'mt, Clean & Cap B76	09/04/95.09:00A	09/04/95.11:00A	
1.1.2.76.B2A	1	Unload,Rec/Insp Tube B77	08/29/95.09:00A	08/29/95.10:00A	
1.1.2.76.B2B	1	Move to Stiff Fit Up Stat. B77	08/30/95.10:00A	08/30/95.11:00A	
1.1.2.76.B2C	1	Set-up & Purge B77	08/30/95.11:00A	08/30/95.12:00P	
1.1.2.76.B2D	2	Fit Stiffeners B77	08/30/95.01:00P	08/30/95.03:00P	
1.1.2.76.B2E	4	Weld Stiffeners B77	08/30/95.03:00P	08/31/95.10:00A	
1.1.2.76.B2F	1	Move to Exp.Bellows Stat. B77	08/31/95.10:00A	08/31/95.11:00A	
1.1.2.76.B2G	3	Fit,Purge,Weld Exp. Bellows B77	08/31/95.11:00A	08/31/95.03:00P	
1.1.2.76.B2H	1	Inspect, Install End Caps B77	08/31/95.03:00P	08/31/95.04:00P	
1.1.2.76.B2J	1	Move to Test Area B77	09/01/95.09:00A	09/01/95.10:00A	
1.1.2.76.B2K	1	Pre-Clean & Black Light B77	09/01/95.10:00A	09/01/95.11:00A	
1.1.2.76.B2L	30	Leak Test B77	09/01/95.11:00A	09/02/95.05:00P	
1.1.2.76.B2O	1	Move to Post Test Storage B77	09/04/95.08:00A	09/04/95.09:00A	
1.1.2.76.B2P	1	Clean, Dry & End Cap B77	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.76.B2R	1	Transport to Erection B77	09/05/95.08:00A	09/05/95.09:00A	
1.1.2.76.B2S	1	Set & Align B77	09/05/95.09:00A	09/05/95.10:00A	
1.1.2.76.B2T	1	Set Clean Room, Purge & Fit B77	09/05/95.10:00A	09/05/95.11:00A	
1.1.2.76.B2U	2	Weld Joint B77	09/05/95.11:00A	09/05/95.02:00P	
1.1.2.76.B2V	2	Leak Test Joint B77	09/05/95.02:00P	09/05/95.04:00P	
1.1.2.76.B2W	2	Install Tube Supports B77	09/05/95.02:00P	09/05/95.04:00P	
1.1.2.76.B2X	2	Remove Equip'mt, Clean & Cap B77	09/05/95.04:00P	09/06/95.09:00A	
1.1.2.76.B3A	1	Unload,Rec/Insp Tube B78	08/29/95.10:00A	08/29/95.11:00A	
1.1.2.76.B3B	1	Move to Stiff Fit Up Stat. B78	08/31/95.11:00A	08/31/95.12:00P	
1.1.2.76.B3C	1	Set-up & Purge B78	08/31/95.01:00P	08/31/95.02:00P	
1.1.2.76.B3D	2	Fit Stiffeners B3	08/31/95.02:00P	08/31/95.04:00P	
1.1.2.76.B3E	4	Weld Stiffeners B3	08/31/95.04:00P	09/01/95.11:00A	
1.1.2.76.B3F	1	Move to Exp.Bellows Stat. B78	09/01/95.11:00A	09/01/95.12:00P	
1.1.2.76.B3G	3	Fit,Purge,Weld Exp. Bellows B78	09/01/95.01:00P	09/01/95.04:00P	
1.1.2.76.B3H	1	Inspect, Install End Caps B78	09/01/95.04:00P	09/01/95.05:00P	
1.1.2.76.B3J	1	Move to Test Area B78	09/04/95.09:00A	09/04/95.10:00A	
1.1.2.76.B3K	1	Pre-Clean & Black Light B78	09/04/95.10:00A	09/04/95.11:00A	
1.1.2.76.B3L	30	Leak Test B78	09/04/95.11:00A	09/05/95.05:00P	
1.1.2.76.B3O	1	Move to Post Test Storage B78	09/06/95.08:00A	09/06/95.09:00A	
1.1.2.76.B3P	1	Clean, Dry & End Cap B78	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.76.B3R	1	Transport to Erection B78	09/06/95.03:00P	09/06/95.04:00P	
1.1.2.76.B3S	1	Set & Align B78	09/06/95.04:00P	09/06/95.05:00P	
1.1.2.76.B3T	1	Set Clean Room, Purge & Fit B78	09/07/95.08:00A	09/07/95.09:00A	
1.1.2.76.B3U	2	Weld Joint B78	09/07/95.09:00A	09/07/95.11:00A	
1.1.2.76.B3V	2	Leak Test Joint B78	09/07/95.11:00A	09/07/95.02:00P	
1.1.2.76.B3W	2	Install Tube Supports B78	09/07/95.11:00A	09/07/95.02:00P	
1.1.2.76.B3X	2	Remove Equip'mt, Clean & Cap B78	09/07/95.02:00P	09/07/95.04:00P	
1.1.2.76.B4A	1	Unload,Rec/Insp Tube B79	08/29/95.11:00A	08/29/95.12:00P	
1.1.2.76.B4B	1	Move to Stiff Fit Up Stat. B79	09/01/95.01:00P	09/01/95.02:00P	
1.1.2.76.B4C	1	Set-up & Purge B79	09/01/95.02:00P	09/01/95.03:00P	
1.1.2.76.B4D	2	Fit Stiffeners B79	09/01/95.03:00P	09/01/95.05:00P	
1.1.2.76.B4E	4	Weld Stiffeners B79	09/04/95.08:00A	09/04/95.12:00P	
1.1.2.76.B4F	1	Move to Exp.Bellows Stat. B79	09/04/95.01:00P	09/04/95.02:00P	
1.1.2.76.B4G	3	Fit,Purge,Weld Exp. Bellows B79	09/04/95.02:00P	09/04/95.05:00P	
1.1.2.76.B4H	1	Inspect, Install End Caps B79	09/05/95.08:00A	09/05/95.09:00A	
1.1.2.76.B4J	1	Move to Test Area B79	09/06/95.09:00A	09/06/95.10:00A	
1.1.2.76.B4K	1	Pre-Clean & Black Light B79	09/06/95.10:00A	09/06/95.11:00A	
1.1.2.76.B4L	30	Leak Test B79	09/06/95.11:00A	09/07/95.05:00P	
1.1.2.76.B4O	1	Move to Post Test Storage B79	09/08/95.08:00A	09/08/95.09:00A	
1.1.2.76.B4P	1	Clean, Dry & End Cap B79	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.76.B4R	1	Transport to Erection B79	09/08/95.01:00P	09/08/95.02:00P	
1.1.2.76.B4S	1	Set & Align B4	09/08/95.02:00P	09/08/95.03:00P	
1.1.2.76.B4T	1	Set Clean Room, Purge & Fit B79	09/08/95.03:00P	09/08/95.04:00P	
1.1.2.76.B4U	2	Weld Joint B79	09/08/95.04:00P	09/11/95.09:00A	
1.1.2.76.B4V	2	Leak Test Joint B79	09/11/95.09:00A	09/11/95.11:00A	
1.1.2.76.B4W	2	Install Tube Supports B79	09/11/95.09:00A	09/11/95.11:00A	
1.1.2.76.B4X	2	Remove Equip'mt, Clean & Cap B79	09/11/95.11:00A	09/11/95.02:00P	
1.1.2.76.B5A	1	Unload,Rec/Insp Tube B80	08/29/95.01:00P	08/29/95.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.76.B5B	1	Move to Stiff Fit Up Stat. B80	09/04/95.02:00P	09/04/95.03:00P	
1.1.2.76.B5C	1	Set-up & Purge B80	09/04/95.03:00P	09/04/95.04:00P	
1.1.2.76.B5D	2	Fit Stiffeners B80	09/04/95.04:00P	09/05/95.09:00A	
1.1.2.76.B5E	4	Weld Stiffeners B80	09/05/95.09:00A	09/05/95.02:00P	
1.1.2.76.B5F	1	Move to Exp.Bellows Stat. B80	09/06/95.10:00A	09/06/95.11:00A	
1.1.2.76.B5G	3	Fit,Purge,Weld Exp. Bellows B80	09/06/95.11:00A	09/06/95.03:00P	
1.1.2.76.B5H	1	Inspect, Install End Caps B80	09/06/95.03:00P	09/06/95.04:00P	
1.1.2.76.B5J	1	Move to Test Area B80	09/08/95.09:00A	09/08/95.10:00A	
1.1.2.76.B5K	1	Pre-Clean & Black Light B80	09/08/95.10:00A	09/08/95.11:00A	
1.1.2.76.B5L	30	Leak Test B80	09/08/95.11:00A	09/09/95.05:00P	
1.1.2.76.B5O	1	Move to Post Test Storage B80	09/11/95.08:00A	09/11/95.09:00A	
1.1.2.76.B5P	1	Clean, Dry & End Cap B80	09/11/95.09:00A	09/11/95.10:00A	
1.1.2.76.B5R	1	Transport to Erection B80	09/12/95.10:00A	09/12/95.11:00A	
1.1.2.76.B5S	1	Set & Align B80	09/12/95.11:00A	09/12/95.12:00P	
1.1.2.76.B5T	1	Set Clean Room, Purge & Fit B80	09/12/95.01:00P	09/12/95.02:00P	
1.1.2.76.B5U	2	Weld Joint B80	09/12/95.02:00P	09/12/95.04:00P	
1.1.2.76.B5V	2	Leak Test Joint B80	09/12/95.04:00P	09/13/95.09:00A	
1.1.2.76.B5W	2	Install Tube Supports B80	09/12/95.04:00P	09/13/95.09:00A	
1.1.2.76.B5X	2	Remove Equip'mt, Clean & Cap B80	09/13/95.09:00A	09/13/95.11:00A	
1.1.2.81	99	Cans 81-85	09/11/95.04:00P	09/28/95.10:00A	
1.1.2.81.1A	1	Unload,Rec/Insp Tube 81	09/12/95.08:00A	09/12/95.09:00A	
1.1.2.81.1B	1	Move to Stiff Fit Up Stat. 81	09/12/95.09:00A	09/12/95.10:00A	
1.1.2.81.1C	1	Set-up & Purge 81	09/12/95.10:00A	09/12/95.11:00A	
1.1.2.81.1D	2	Fit Stiffeners 81	09/12/95.11:00A	09/12/95.02:00P	
1.1.2.81.1E	4	Weld Stiffeners 81	09/12/95.02:00P	09/13/95.09:00A	
1.1.2.81.1F	1	Inspect, Install End Caps 81	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.81.1H	1	Move to Test Area 81	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.81.1I	1	Pre-Clean & Black Light 81	09/13/95.11:00A	09/13/95.12:00P	
1.1.2.81.1J	30	Leak Test 81	09/13/95.12:00P	09/14/95.06:00P	
1.1.2.81.1M	1	Move to Post Test Storage 81	09/15/95.08:00A	09/15/95.09:00A	
1.1.2.81.1N	1	Clean, Dry & End Cap 81	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.81.1P	1	Transport to Erection 81	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.81.1Q	1	Set & Align 81	09/18/95.10:00A	09/18/95.11:00A	
1.1.2.81.1R	1	Set Clean Room, Purge & Fit 81	09/18/95.11:00A	09/18/95.12:00P	
1.1.2.81.1S	2	Weld Joint 81	09/18/95.01:00P	09/18/95.03:00P	
1.1.2.81.1T	2	Leak Test Joint 81	09/18/95.03:00P	09/18/95.05:00P	
1.1.2.81.1U	2	Install Tube Supports 81	09/18/95.03:00P	09/18/95.05:00P	
1.1.2.81.1V	2	Remove Equip'mt, Clean & Cap 81	09/19/95.08:00A	09/19/95.10:00A	
1.1.2.81.2A	1	Unload,Rec. & Insp 82	09/12/95.09:00A	09/12/95.10:00A	
1.1.2.81.2B	1	Move to Stiff Fit Up Stat. 82	09/13/95.11:00A	09/13/95.12:00P	
1.1.2.81.2C	1	Set-up & Purge 82	09/13/95.01:00P	09/13/95.02:00P	
1.1.2.81.2D	2	Fit Stiffeners 82	09/13/95.02:00P	09/13/95.04:00P	
1.1.2.81.2E	4	Weld Stiffeners 82	09/13/95.04:00P	09/14/95.11:00A	
1.1.2.81.2F	1	Inspect, Install End Caps 82	09/14/95.11:00A	09/14/95.12:00P	
1.1.2.81.2H	1	Move to Test Area 82	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.81.2I	1	Pre-Clean & Black Light 82	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.81.2J	30	Leak Test 82	09/15/95.11:00A	09/16/95.05:00P	
1.1.2.81.2M	1	Move to Post Test Storage 82	09/18/95.08:00A	09/18/95.09:00A	
1.1.2.81.2N	1	Clean, Dry & End Cap 82	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.81.2P	1	Transport to Erection 82	09/19/95.04:00P	09/19/95.05:00P	
1.1.2.81.2Q	1	Set & Align 82	09/20/95.08:00A	09/20/95.09:00A	
1.1.2.81.2R	1	Set Clean Room, Purge & Fit 82	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.81.2S	2	Weld Joint 82	09/20/95.10:00A	09/20/95.12:00P	
1.1.2.81.2T	2	Leak Test Joint 82	09/20/95.01:00P	09/20/95.03:00P	
1.1.2.81.2U	2	Install Tube Supports 82	09/20/95.01:00P	09/20/95.03:00P	
1.1.2.81.2V	2	Remove Equip'mt, Clean & Cap 82	09/20/95.03:00P	09/20/95.05:00P	
1.1.2.81.3A	1	Unload,Rec/Insp Tube 83	09/12/95.10:00A	09/12/95.11:00A	
1.1.2.81.3B	1	Move to Stiff Fit Up Stat. 83	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.81.3C	1	Set-up & Purge 83	09/15/95.11:00A	09/15/95.12:00P	
1.1.2.81.3D	2	Fit Stiffeners 83	09/15/95.01:00P	09/15/95.03:00P	
1.1.2.81.3E	4	Weld Stiffeners 83	09/15/95.03:00P	09/18/95.10:00A	
1.1.2.81.3F	1	Inspect, Install End Caps 83	09/18/95.10:00A	09/18/95.11:00A	
1.1.2.81.3H	1	Move to Test Area 83	09/18/95.11:00A	09/18/95.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.81.3I	1	Pre-Clean & Black Light 83	09/18/95.01:00P	09/18/95.02:00P	
1.1.2.81.3J	30	Leak Test 83	09/18/95.02:00P	09/19/95.08:00P	
1.1.2.81.3M	1	Move to Post Test Storage 83	09/20/95.08:00A	09/20/95.09:00A	
1.1.2.81.3N	1	Clean, Dry & End Cap 83	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.81.3P	1	Transport to Erection 83	09/21/95.02:00P	09/21/95.03:00P	
1.1.2.81.3Q	1	Set & Align 83	09/21/95.03:00P	09/21/95.04:00P	
1.1.2.81.3R	1	Set Clean Room, Purge & Fit 83	09/21/95.04:00P	09/21/95.05:00P	
1.1.2.81.3S	2	Weld Joint 83	09/22/95.08:00A	09/22/95.10:00A	
1.1.2.81.3T	2	Leak Test Joint 83	09/22/95.10:00A	09/22/95.12:00P	
1.1.2.81.3U	2	Install Tube Supports 83	09/22/95.10:00A	09/22/95.12:00P	
1.1.2.81.3V	2	Remove Equip'mt, Clean & Cap 83	09/22/95.01:00P	09/22/95.03:00P	
1.1.2.81.4A	1	Unload,Rec/Insp Tube 84	09/12/95.11:00A	09/12/95.12:00P	
1.1.2.81.4B	1	Move to Stiff Fit Up Stat. 84	09/18/95.01:00P	09/18/95.02:00P	
1.1.2.81.4C	1	Set-up & Purge 84	09/18/95.02:00P	09/18/95.03:00P	
1.1.2.81.4D	2	Fit Stiffeners 84	09/18/95.03:00P	09/18/95.05:00P	
1.1.2.81.4E	4	Weld Stiffeners 84	09/19/95.08:00A	09/19/95.12:00P	
1.1.2.81.4F	1	Inspect, Install End Caps 84	09/19/95.01:00P	09/19/95.02:00P	
1.1.2.81.4H	1	Move to Test Area 84	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.81.4I	1	Pre-Clean & Black Light 84	09/20/95.10:00A	09/20/95.11:00A	
1.1.2.81.4J	30	Leak Test 84	09/20/95.11:00A	09/21/95.05:00P	
1.1.2.81.4M	1	Move to Post Test Storage 84	09/22/95.08:00A	09/22/95.09:00A	
1.1.2.81.4N	1	Clean, Dry & End Cap 84	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.81.4P	1	Transport to Erection 84	09/25/95.11:00A	09/25/95.12:00P	
1.1.2.81.4Q	1	Set & Align 84	09/25/95.01:00P	09/25/95.02:00P	
1.1.2.81.4R	1	Set Clean Room, Purge & Fit 84	09/25/95.02:00P	09/25/95.03:00P	
1.1.2.81.4S	2	Weld Joint 84	09/25/95.03:00P	09/25/95.05:00P	
1.1.2.81.4T	2	Leak Test Joint 84	09/26/95.08:00A	09/26/95.10:00A	
1.1.2.81.4U	2	Install Tube Supports 84	09/26/95.08:00A	09/26/95.10:00A	
1.1.2.81.4V	2	Remove Equip'mt, Clean & Cap 84	09/26/95.10:00A	09/26/95.12:00P	
1.1.2.81.5A	1	Unload,Rec/Insp Tube 85	09/12/95.01:00P	09/12/95.02:00P	
1.1.2.81.5B	1	Move to Stiff Fit Up Stat. 85	09/20/95.10:00A	09/20/95.11:00A	
1.1.2.81.5C	1	Set-up & Purge 85	09/20/95.11:00A	09/20/95.12:00P	
1.1.2.81.5D	1	F/W Pump Port Reinf. 85	09/20/95.01:00P	09/20/95.02:00P	
1.1.2.81.5E	2	Fit Stiffeners 85	09/20/95.02:00P	09/20/95.04:00P	
1.1.2.81.5F	4	Weld Stiffeners 85	09/20/95.04:00P	09/21/95.11:00A	
1.1.2.81.5G	1	Move to P.Port Stat. 85	09/21/95.11:00A	09/21/95.12:00P	
1.1.2.81.5H	1	Setup & Bore 10" Inlet 85	09/21/95.01:00P	09/21/95.02:00P	
1.1.2.81.5I	2	Purge/F/W Pump Port 85	09/21/95.02:00P	09/21/95.04:00P	
1.1.2.81.5J	1	Inspect, Install End Caps 85	09/21/95.04:00P	09/21/95.05:00P	
1.1.2.81.5L	1	Move to Test Area 85	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.81.5M	1	Pre-Clean & Black Light 85	09/22/95.10:00A	09/22/95.11:00A	
1.1.2.81.5N	30	Leak Test 85	09/22/95.11:00A	09/23/95.05:00P	
1.1.2.81.5Q	1	Move to Post Test Storage 85	09/25/95.08:00A	09/25/95.09:00A	
1.1.2.81.5R	1	Clean, Dry & End Cap 85	09/25/95.09:00A	09/25/95.10:00A	
1.1.2.81.5T	1	Transport to Erection 85	09/27/95.09:00A	09/27/95.10:00A	
1.1.2.81.5U	1	Set & Align 85	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.81.5V	1	Set Clean Room, Purge & Fit 85	09/27/95.11:00A	09/27/95.12:00P	
1.1.2.81.5W	2	Weld Joint 85	09/27/95.01:00P	09/27/95.03:00P	
1.1.2.81.5X	2	Leak Test Joint 85	09/27/95.03:00P	09/27/95.05:00P	
1.1.2.81.5Y	2	Install Tube Supports 85	09/27/95.03:00P	09/27/95.05:00P	
1.1.2.81.5Z	2	Remove Equip'mt, Clean & Cap 85	09/28/95.08:00A	09/28/95.10:00A	
1.1.2.81.81A	1	Unload,Rec/Insp Tube B81	09/12/95.08:00A	09/12/95.09:00A	
1.1.2.81.81B	1	Move to Stiff Fit Up Stat. B81	09/12/95.09:00A	09/12/95.10:00A	
1.1.2.81.81C	1	Set-up & Purge B81	09/12/95.10:00A	09/12/95.11:00A	
1.1.2.81.81D	2	Fit Stiffeners B81	09/12/95.11:00A	09/12/95.02:00P	
1.1.2.81.81E	4	Weld Stiffeners B81	09/12/95.02:00P	09/13/95.09:00A	
1.1.2.81.81F	1	Move to Exp.Bellows Stat. B81	09/13/95.09:00A	09/13/95.10:00A	
1.1.2.81.81G	3	Fit,Purge,Weld Exp. Bellows B81	09/13/95.10:00A	09/13/95.02:00P	
1.1.2.81.81H	1	Inspect, Install End Caps B81	09/13/95.02:00P	09/13/95.03:00P	
1.1.2.81.81J	1	Move to Test Area B81	09/13/95.03:00P	09/13/95.04:00P	
1.1.2.81.81K	1	Pre-Clean & Black Light B81	09/13/95.04:00P	09/13/95.05:00P	
1.1.2.81.81L	30	Leak Test B81	09/13/95.05:00P	09/14/95.11:00P	
1.1.2.81.81O	1	Move to Post Test Storage B81	09/15/95.08:00A	09/15/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.81.B1P	1	Clean, Dry & End Cap B81	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.81.B1R	1	Transport to Erection B81	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.81.B1S	1	Set & Align B81	09/15/95.11:00A	09/15/95.12:00P	
1.1.2.81.B1T	1	Set Clean Room, Purge & Fit B1	09/15/95.01:00P	09/15/95.02:00P	
1.1.2.81.B1U	2	Weld Joint B81	09/15/95.02:00P	09/15/95.04:00P	
1.1.2.81.B1V	2	Leak Test Joint B81	09/15/95.04:00P	09/18/95.09:00A	
1.1.2.81.B1W	2	Install Tube Supports B81	09/15/95.04:00P	09/18/95.09:00A	
1.1.2.81.B1X	2	Remove Equip'mt, Clean & Cap B81	09/18/95.09:00A	09/18/95.11:00A	
1.1.2.81.B2A	1	Unload,Rec/Insp Tube B82	09/12/95.09:00A	09/12/95.10:00A	
1.1.2.81.B2B	1	Move to Stiff Fit Up Stat. B82	09/13/95.10:00A	09/13/95.11:00A	
1.1.2.81.B2C	1	Set-up & Purge B82	09/13/95.11:00A	09/13/95.12:00P	
1.1.2.81.B2D	2	Fit Stiffeners B82	09/13/95.01:00P	09/13/95.03:00P	
1.1.2.81.B2E	4	Weld Stiffeners B82	09/13/95.03:00P	09/14/95.10:00A	
1.1.2.81.B2F	1	Move to Exp.Bellows Stat. B82	09/14/95.10:00A	09/14/95.11:00A	
1.1.2.81.B2G	3	Fit,Purge,Weld Exp. Bellows B82	09/14/95.11:00A	09/14/95.03:00P	
1.1.2.81.B2H	1	Inspect, Install End Caps B82	09/14/95.03:00P	09/14/95.04:00P	
1.1.2.81.B2J	1	Move to Test Area B82	09/15/95.09:00A	09/15/95.10:00A	
1.1.2.81.B2K	1	Pre-Clean & Black Light B82	09/15/95.10:00A	09/15/95.11:00A	
1.1.2.81.B2L	30	Leak Test B82	09/15/95.11:00A	09/16/95.05:00P	
1.1.2.81.B2O	1	Move to Post Test Storage B82	09/18/95.08:00A	09/18/95.09:00A	
1.1.2.81.B2P	1	Clean, Dry & End Cap B82	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.81.B2R	1	Transport to Erection B82	09/19/95.08:00A	09/19/95.09:00A	
1.1.2.81.B2S	1	Set & Align B82	09/19/95.09:00A	09/19/95.10:00A	
1.1.2.81.B2T	1	Set Clean Room, Purge & Fit B82	09/19/95.10:00A	09/19/95.11:00A	
1.1.2.81.B2U	2	Weld Joint B82	09/19/95.11:00A	09/19/95.02:00P	
1.1.2.81.B2V	2	Leak Test Joint B82	09/19/95.02:00P	09/19/95.04:00P	
1.1.2.81.B2W	2	Install Tube SupportsB82	09/19/95.02:00P	09/19/95.04:00P	
1.1.2.81.B2X	2	Remove Equip'mt, Clean & Cap B82	09/19/95.04:00P	09/20/95.09:00A	
1.1.2.81.B3A	1	Unload,Rec/Insp Tube B83	09/12/95.10:00A	09/12/95.11:00A	
1.1.2.81.B3B	1	Move to Stiff Fit Up Stat. B83	09/14/95.11:00A	09/14/95.12:00P	
1.1.2.81.B3C	1	Set-up & Purge B83	09/14/95.01:00P	09/14/95.02:00P	
1.1.2.81.B3D	2	Fit Stiffeners B83	09/14/95.02:00P	09/14/95.04:00P	
1.1.2.81.B3E	4	Weld Stiffeners B83	09/14/95.04:00P	09/15/95.11:00A	
1.1.2.81.B3F	1	Move to Exp.Bellows Stat. B83	09/15/95.11:00A	09/15/95.12:00P	
1.1.2.81.B3G	3	Fit,Purge,Weld Exp. Bellows B83	09/15/95.01:00P	09/15/95.04:00P	
1.1.2.81.B3H	1	Inspect, Install End Caps B83	09/15/95.04:00P	09/15/95.05:00P	
1.1.2.81.B3J	1	Move to Test Area B83	09/18/95.09:00A	09/18/95.10:00A	
1.1.2.81.B3K	1	Pre-Clean & Black Light B83	09/18/95.10:00A	09/18/95.11:00A	
1.1.2.81.B3L	30	Leak Test B83	09/18/95.11:00A	09/19/95.05:00P	
1.1.2.81.B3O	1	Move to Post Test Storage B83	09/20/95.08:00A	09/20/95.09:00A	
1.1.2.81.B3P	1	Clean, Dry & End Cap B83	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.81.B3R	1	Transport to Erection B83	09/20/95.03:00P	09/20/95.04:00P	
1.1.2.81.B3S	1	Set & Align B83	09/20/95.04:00P	09/20/95.05:00P	
1.1.2.81.B3T	1	Set Clean Room, Purge & Fit B83	09/21/95.08:00A	09/21/95.09:00A	
1.1.2.81.B3U	2	Weld Joint B83	09/21/95.09:00A	09/21/95.11:00A	
1.1.2.81.B3V	2	Leak Test Joint B83	09/21/95.11:00A	09/21/95.02:00P	
1.1.2.81.B3W	2	Install Tube Supports B83	09/21/95.11:00A	09/21/95.02:00P	
1.1.2.81.B3X	2	Remove Equip'mt, Clean & Cap B83	09/21/95.02:00P	09/21/95.04:00P	
1.1.2.81.B4A	1	Unload,Rec/Insp Tube B84	09/12/95.11:00A	09/12/95.12:00P	
1.1.2.81.B4B	1	Move to Stiff Fit Up Stat. B84	09/15/95.01:00P	09/15/95.02:00P	
1.1.2.81.B4C	1	Set-up & Purge B84	09/15/95.02:00P	09/15/95.03:00P	
1.1.2.81.B4D	2	Fit Stiffeners B84	09/15/95.03:00P	09/15/95.05:00P	
1.1.2.81.B4E	4	Weld Stiffeners B84	09/18/95.08:00A	09/18/95.12:00P	
1.1.2.81.B4F	1	Move to Exp.Bellows Stat. B84	09/18/95.01:00P	09/18/95.02:00P	
1.1.2.81.B4G	3	Fit,Purge,Weld Exp. Bellows B84	09/18/95.02:00P	09/18/95.05:00P	
1.1.2.81.B4H	1	Inspect, Install End Caps B84	09/19/95.08:00A	09/19/95.09:00A	
1.1.2.81.B4J	1	Move to Test Area B84	09/20/95.09:00A	09/20/95.10:00A	
1.1.2.81.B4K	1	Pre-Clean & Black Light B84	09/20/95.10:00A	09/20/95.11:00A	
1.1.2.81.B4L	30	Leak Test B84	09/20/95.11:00A	09/21/95.05:00P	
1.1.2.81.B4O	1	Move to Post Test Storage B84	09/22/95.08:00A	09/22/95.09:00A	
1.1.2.81.B4P	1	Clean, Dry & End Cap B84	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.81.B4R	1	Transport to Erection B84	09/22/95.01:00P	09/22/95.02:00P	
1.1.2.81.B4S	1	Set & Align B84	09/22/95.02:00P	09/22/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.81.B4T	1	Set Clean Room, Purge & Fit B84	09/22/95.03:00P	09/22/95.04:00P	
1.1.2.81.B4U	2	Weld Joint B84	09/22/95.04:00P	09/25/95.09:00A	
1.1.2.81.B4V	2	Leak Test Joint B84	09/25/95.09:00A	09/25/95.11:00A	
1.1.2.81.B4W	2	Install Tube Supports B84	09/25/95.09:00A	09/25/95.11:00A	
1.1.2.81.B4X	2	Remove Equip'mt, Clean & Cap B84	09/25/95.11:00A	09/25/95.02:00P	
1.1.2.81.B5A	1	Unload,Rec/Insp Tube B85	09/12/95.01:00P	09/12/95.02:00P	
1.1.2.81.B5B	1	Move to Stiff Fit Up Stat. B85	09/18/95.02:00P	09/18/95.03:00P	
1.1.2.81.B5C	1	Set-up & Purge B85	09/18/95.03:00P	09/18/95.04:00P	
1.1.2.81.B5D	2	Fit Stiffeners B85	09/18/95.04:00P	09/19/95.09:00A	
1.1.2.81.B5E	4	Weld Stiffeners B85	09/19/95.09:00A	09/19/95.02:00P	
1.1.2.81.B5F	1	Move to Exp.Bellows Stat. B85	09/20/95.10:00A	09/20/95.11:00A	
1.1.2.81.B5G	3	Fit,Purge,Weld Exp. Bellows B85	09/20/95.11:00A	09/20/95.03:00P	
1.1.2.81.B5H	1	Inspect, Install End Caps B85	09/20/95.03:00P	09/20/95.04:00P	
1.1.2.81.B5J	1	Move to Test Area B85	09/22/95.09:00A	09/22/95.10:00A	
1.1.2.81.B5K	1	Pre-Clean & Black Light B85	09/22/95.10:00A	09/22/95.11:00A	
1.1.2.81.B5L	30	Leak Test B85	09/22/95.11:00A	09/23/95.05:00P	
1.1.2.81.B5O	1	Move to Post Test Storage B85	09/25/95.08:00A	09/25/95.09:00A	
1.1.2.81.B5P	1	Clean, Dry & End Cap B85	09/25/95.09:00A	09/25/95.10:00A	
1.1.2.81.B5R	1	Transport to Erection B85	09/26/95.10:00A	09/26/95.11:00A	
1.1.2.81.B5S	1	Set & Align B85	09/26/95.11:00A	09/26/95.12:00P	
1.1.2.81.B5T	1	Set Clean Room, Purge & Fit B85	09/26/95.01:00P	09/26/95.02:00P	
1.1.2.81.B5U	2	Weld Joint B85	09/26/95.02:00P	09/26/95.04:00P	
1.1.2.81.B5V	2	Leak Test Joint B85	09/26/95.04:00P	09/27/95.09:00A	
1.1.2.81.B5W	2	Install Tube Supports B85	09/26/95.04:00P	09/27/95.09:00A	
1.1.2.81.B5X	2	Remove Equip'mt, Clean & Cap B85	09/27/95.09:00A	09/27/95.11:00A	
1.1.2.86	99	Cans 86-90	09/25/95.04:00P	10/12/95.10:00A	
1.1.2.86.1A	1	Unload,Rec/Insp Tube 86	09/26/95.08:00A	09/26/95.09:00A	
1.1.2.86.1B	1	Move to Stiff Fit Up Stat. 86	09/26/95.09:00A	09/26/95.10:00A	
1.1.2.86.1C	1	Set-up & Purge 86	09/26/95.10:00A	09/26/95.11:00A	
1.1.2.86.1D	2	Fit Stiffeners 86	09/26/95.11:00A	09/26/95.02:00P	
1.1.2.86.1E	4	Weld Stiffeners 86	09/26/95.02:00P	09/27/95.09:00A	
1.1.2.86.1F	1	Inspect, Install End Caps 86	09/27/95.09:00A	09/27/95.10:00A	
1.1.2.86.1H	1	Move to Test Area 86	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.86.1I	1	Pre-Clean & Black Light 86	09/27/95.11:00A	09/27/95.12:00P	
1.1.2.86.1J	30	Leak Test 86	09/27/95.12:00P	09/28/95.06:00P	
1.1.2.86.1M	1	Move to Post Test Storage 86	09/29/95.08:00A	09/29/95.09:00A	
1.1.2.86.1N	1	Clean, Dry & End Cap 86	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.86.1P	1	Transport to Erection 86	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.86.1Q	1	Set & Align 86	10/02/95.10:00A	10/02/95.11:00A	
1.1.2.86.1R	1	Set Clean Room, Purge & Fit 86	10/02/95.11:00A	10/02/95.12:00P	
1.1.2.86.1S	2	Weld Joint 86	10/02/95.01:00P	10/02/95.03:00P	
1.1.2.86.1T	2	Leak Test Joint 86	10/02/95.03:00P	10/02/95.05:00P	
1.1.2.86.1U	2	Install Tube Supports 86	10/02/95.03:00P	10/02/95.05:00P	
1.1.2.86.1V	2	Remove Equip'mt, Clean & Cap 86	10/03/95.08:00A	10/03/95.10:00A	
1.1.2.86.2A	1	Unload,Rec. & Inspect 87	09/26/95.09:00A	09/26/95.10:00A	
1.1.2.86.2B	1	Move to Stiff Fit Up Stat. 87	09/27/95.11:00A	09/27/95.12:00P	
1.1.2.86.2C	1	Set-up & Purge 87	09/27/95.01:00P	09/27/95.02:00P	
1.1.2.86.2D	2	Fit Stiffeners 87	09/27/95.02:00P	09/27/95.04:00P	
1.1.2.86.2E	4	Weld Stiffeners 87	09/27/95.04:00P	09/28/95.11:00A	
1.1.2.86.2F	1	Inspect, Install End Caps 87	09/28/95.11:00A	09/28/95.12:00P	
1.1.2.86.2H	1	Move to Test Area 87	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.86.2I	1	Pre-Clean & Black Light 87	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.86.2J	30	Leak Test 87	09/29/95.11:00A	09/30/95.05:00P	
1.1.2.86.2M	1	Move to Post Test Storage 87	10/02/95.08:00A	10/02/95.09:00A	
1.1.2.86.2N	1	Clean, Dry & End Cap 87	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.86.2P	1	Transport to Erection 87	10/03/95.04:00P	10/03/95.05:00P	
1.1.2.86.2Q	1	Set & Align 87	10/04/95.08:00A	10/04/95.09:00A	
1.1.2.86.2R	1	Set Clean Room, Purge & Fit 87	10/04/95.09:00A	10/04/95.10:00A	
1.1.2.86.2S	2	Weld Joint 87	10/04/95.10:00A	10/04/95.12:00P	
1.1.2.86.2T	2	Leak Test Joint 87	10/04/95.01:00P	10/04/95.03:00P	
1.1.2.86.2U	2	Install Tube Supports 87	10/04/95.01:00P	10/04/95.03:00P	
1.1.2.86.2V	2	Remove Equip'mt, Clean & Cap 87	10/04/95.03:00P	10/04/95.05:00P	
1.1.2.86.3A	1	Unload,Rec/Insp Tube 88	09/26/95.10:00A	09/26/95.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.86.3B	1	Move to Stiff Fit Up Stat. 88	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.86.3C	1	Set-up & Purge 88	09/29/95.11:00A	09/29/95.12:00P	
1.1.2.86.3D	2	Fit Stiffeners 88	09/29/95.01:00P	09/29/95.03:00P	
1.1.2.86.3E	4	Weld Stiffeners 88	09/29/95.03:00P	10/02/95.10:00A	
1.1.2.86.3F	1	Inspect, Install End Caps 88	10/02/95.10:00A	10/02/95.11:00A	
1.1.2.86.3H	1	Move to Test Area 88	10/02/95.11:00A	10/02/95.12:00P	
1.1.2.86.3I	1	Pre-Clean & Black Light 88	10/02/95.01:00P	10/02/95.02:00P	
1.1.2.86.3J	30	Leak Test 88	10/02/95.02:00P	10/03/95.08:00P	
1.1.2.86.3M	1	Move to Post Test Storage 88	10/04/95.08:00A	10/04/95.09:00A	
1.1.2.86.3N	1	Clean, Dry & End Cap 88	10/04/95.09:00A	10/04/95.10:00A	
1.1.2.86.3P	1	Transport to Erection 88	10/05/95.02:00P	10/05/95.03:00P	
1.1.2.86.3Q	1	Set & Align 88	10/05/95.03:00P	10/05/95.04:00P	
1.1.2.86.3R	1	Set Clean Room, Purge & Fit 88	10/05/95.04:00P	10/05/95.05:00P	
1.1.2.86.3S	2	Weld Joint 88	10/06/95.08:00A	10/06/95.10:00A	
1.1.2.86.3T	2	Leak Test Joint 88	10/06/95.10:00A	10/06/95.12:00P	
1.1.2.86.3U	2	Install Tube Supports 88	10/06/95.10:00A	10/06/95.12:00P	
1.1.2.86.3V	2	Remove Equip'mt, Clean & Cap 88	10/06/95.01:00P	10/06/95.03:00P	
1.1.2.86.4A	1	Unload,Rec/Insp Tube 89	09/26/95.11:00A	09/26/95.12:00P	
1.1.2.86.4B	1	Move to Stiff Fit Up Stat. 89	10/02/95.01:00P	10/02/95.02:00P	
1.1.2.86.4C	1	Set-up & Purge 89	10/02/95.02:00P	10/02/95.03:00P	
1.1.2.86.4D	2	Fit Stiffeners 89	10/02/95.03:00P	10/02/95.05:00P	
1.1.2.86.4E	4	Weld Stiffeners 89	10/03/95.08:00A	10/03/95.12:00P	
1.1.2.86.4F	1	Inspect, Install End Caps 89	10/03/95.01:00P	10/03/95.02:00P	
1.1.2.86.4H	1	Move to Test Area 89	10/04/95.09:00A	10/04/95.10:00A	
1.1.2.86.4I	1	Pre-Clean & Black Light 89	10/04/95.10:00A	10/04/95.11:00A	
1.1.2.86.4J	30	Leak Test 89	10/04/95.11:00A	10/05/95.05:00P	
1.1.2.86.4M	1	Move to Post Test Storage 89	10/06/95.08:00A	10/06/95.09:00A	
1.1.2.86.4N	1	Clean, Dry & End Cap 89	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.86.4P	1	Transport to Erection 89	10/09/95.11:00A	10/09/95.12:00P	
1.1.2.86.4Q	1	Set & Align 89	10/09/95.01:00P	10/09/95.02:00P	
1.1.2.86.4R	1	Set Clean Room, Purge & Fit 89	10/09/95.02:00P	10/09/95.03:00P	
1.1.2.86.4S	2	Weld Joint 89	10/09/95.03:00P	10/09/95.05:00P	
1.1.2.86.4T	2	Leak Test Joint 89	10/10/95.08:00A	10/10/95.10:00A	
1.1.2.86.4U	2	Install Tube Supports 89	10/10/95.08:00A	10/10/95.10:00A	
1.1.2.86.4V	2	Remove Equip'mt, Clean & Cap 89	10/10/95.10:00A	10/10/95.12:00P	
1.1.2.86.5A	1	Unload,Rec/Insp Tube 90	09/26/95.01:00P	09/26/95.02:00P	
1.1.2.86.5B	1	Move to Stiff Fit Up Stat. 90	10/04/95.10:00A	10/04/95.11:00A	
1.1.2.86.5C	1	Set-up & Purge 90	10/04/95.11:00A	10/04/95.12:00P	
1.1.2.86.5D	1	F/W Pump Port Reinf. 90	10/04/95.01:00P	10/04/95.02:00P	
1.1.2.86.5E	2	Fit Stiffeners 90	10/04/95.02:00P	10/04/95.04:00P	
1.1.2.86.5F	4	Weld Stiffeners 90	10/04/95.04:00P	10/05/95.11:00A	
1.1.2.86.5G	1	Move to P.Port Stat. 90	10/05/95.11:00A	10/05/95.12:00P	
1.1.2.86.5H	1	Setup & Bore 10" Inlet 90	10/05/95.01:00P	10/05/95.02:00P	
1.1.2.86.5I	2	Purge/F/W Pump Port 90	10/05/95.02:00P	10/05/95.04:00P	
1.1.2.86.5J	1	Inspect, Install End Caps 90	10/05/95.04:00P	10/05/95.05:00P	
1.1.2.86.5L	1	Move to Test Area 90	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.86.5M	1	Pre-Clean & Black Light 90	10/06/95.10:00A	10/06/95.11:00A	
1.1.2.86.5N	30	Leak Test 90	10/06/95.11:00A	10/07/95.05:00P	
1.1.2.86.5Q	1	Move to Post Test Storage 90	10/09/95.08:00A	10/09/95.09:00A	
1.1.2.86.5R	1	Clean, Dry & End Cap 90	10/09/95.09:00A	10/09/95.10:00A	
1.1.2.86.5T	1	Transport to Erection 90	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.86.5U	1	Set & Align 90	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.86.5V	1	Set Clean Room, Purge & Fit 90	10/11/95.11:00A	10/11/95.12:00P	
1.1.2.86.5W	2	Weld Joint 90	10/11/95.01:00P	10/11/95.03:00P	
1.1.2.86.5X	2	Leak Test Joint 900	10/11/95.03:00P	10/11/95.05:00P	
1.1.2.86.5Y	2	Install Tube Supports 90	10/11/95.03:00P	10/11/95.05:00P	
1.1.2.86.5Z	2	Remove Equip'mt, Clean & Cap 90	10/12/95.08:00A	10/12/95.10:00A	
1.1.2.86.81A	1	Unload,Rec/Insp Tube B86	09/26/95.08:00A	09/26/95.09:00A	
1.1.2.86.81B	1	Move to Stiff Fit Up Stat. B86	09/26/95.09:00A	09/26/95.10:00A	
1.1.2.86.81C	1	Set-up & Purge B86	09/26/95.10:00A	09/26/95.11:00A	
1.1.2.86.81D	2	Fit Stiffeners B86	09/26/95.11:00A	09/26/95.02:00P	
1.1.2.86.81E	4	Weld Stiffeners B86	09/26/95.02:00P	09/27/95.09:00A	
1.1.2.86.81F	1	Move to Exp.Bellows Stat. B86	09/27/95.09:00A	09/27/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.86.B1G	3	Fit,Purge,Weld Exp. Bellows B86	09/27/95.10:00A	09/27/95.02:00P	
1.1.2.86.B1H	1	Inspect, Install End Caps B86	09/27/95.02:00P	09/27/95.03:00P	
1.1.2.86.B1J	1	Move to Test Area B86	09/27/95.03:00P	09/27/95.04:00P	
1.1.2.86.B1K	1	Pre-Clean & Black Light B86	09/27/95.04:00P	09/27/95.05:00P	
1.1.2.86.B1L	30	Leak Test B86	09/27/95.05:00P	09/28/95.11:00P	
1.1.2.86.B1O	1	Move to Post Test Storage B86	09/29/95.08:00A	09/29/95.09:00A	
1.1.2.86.B1P	1	Clean, Dry & End Cap B86	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.86.B1R	1	Transport to Erection B86	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.86.B1S	1	Set & Align B86	09/29/95.11:00A	09/29/95.12:00P	
1.1.2.86.B1T	1	Set Clean Room, Purge & Fit B86	09/29/95.01:00P	09/29/95.02:00P	
1.1.2.86.B1U	2	Weld Joint B86	09/29/95.02:00P	09/29/95.04:00P	
1.1.2.86.B1V	2	Leak Test Joint B86	09/29/95.04:00P	10/02/95.09:00A	
1.1.2.86.B1W	2	Install Tube Supports B86	09/29/95.04:00P	10/02/95.09:00A	
1.1.2.86.B1X	2	Remove Equip'mt, Clean & Cap B86	10/02/95.09:00A	10/02/95.11:00A	
1.1.2.86.B2A	1	Unload,Rec/Insp Tube B87	09/26/95.09:00A	09/26/95.10:00A	
1.1.2.86.B2B	1	Move to Stiff Fit Up Stat. B87	09/27/95.10:00A	09/27/95.11:00A	
1.1.2.86.B2C	1	Set-up & Purge B87	09/27/95.11:00A	09/27/95.12:00P	
1.1.2.86.B2D	2	Fit Stiffeners B87	09/27/95.01:00P	09/27/95.03:00P	
1.1.2.86.B2E	4	Weld Stiffeners B87	09/27/95.03:00P	09/28/95.10:00A	
1.1.2.86.B2F	1	Move to Exp.Bellows Stat. B87	09/28/95.10:00A	09/28/95.11:00A	
1.1.2.86.B2G	3	Fit,Purge,Weld Exp. Bellows B87	09/28/95.11:00A	09/28/95.03:00P	
1.1.2.86.B2H	1	Inspect, Install End Caps B87	09/28/95.03:00P	09/28/95.04:00P	
1.1.2.86.B2J	1	Move to Test Area B87	09/29/95.09:00A	09/29/95.10:00A	
1.1.2.86.B2K	1	Pre-Clean & Black Light B87	09/29/95.10:00A	09/29/95.11:00A	
1.1.2.86.B2L	30	Leak Test B87	09/29/95.11:00A	09/30/95.05:00P	
1.1.2.86.B2O	1	Move to Post Test Storage B87	10/02/95.08:00A	10/02/95.09:00A	
1.1.2.86.B2P	1	Clean, Dry & End Cap B87	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.86.B2R	1	Transport to Erection B87	10/03/95.08:00A	10/03/95.09:00A	
1.1.2.86.B2S	1	Set & Align B87	10/03/95.09:00A	10/03/95.10:00A	
1.1.2.86.B2T	1	Set Clean Room, Purge & Fit B87	10/03/95.10:00A	10/03/95.11:00A	
1.1.2.86.B2U	2	Weld Joint B87	10/03/95.11:00A	10/03/95.02:00P	
1.1.2.86.B2V	2	Leak Test Joint B87	10/03/95.02:00P	10/03/95.04:00P	
1.1.2.86.B2W	2	Install Tube SupportsB87	10/03/95.02:00P	10/03/95.04:00P	
1.1.2.86.B2X	2	Remove Equip'mt, Clean & Cap B87	10/03/95.04:00P	10/04/95.09:00A	
1.1.2.86.B3A	1	Unload,Rec/Insp Tube B88	09/26/95.10:00A	09/26/95.11:00A	
1.1.2.86.B3B	1	Move to Stiff Fit Up Stat. B88	09/28/95.11:00A	09/28/95.12:00P	
1.1.2.86.B3C	1	Set-up & Purge B88	09/28/95.01:00P	09/28/95.02:00P	
1.1.2.86.B3D	2	Fit Stiffeners B88	09/28/95.02:00P	09/28/95.04:00P	
1.1.2.86.B3E	4	Weld Stiffeners B88	09/28/95.04:00P	09/29/95.11:00A	
1.1.2.86.B3F	1	Move to Exp.Bellows Stat. B88	09/29/95.11:00A	09/29/95.12:00P	
1.1.2.86.B3G	3	Fit,Purge,Weld Exp. Bellows B88	09/29/95.01:00P	09/29/95.04:00P	
1.1.2.86.B3H	1	Inspect, Install End Caps B88	09/29/95.04:00P	09/29/95.05:00P	
1.1.2.86.B3J	1	Move to Test Area B88	10/02/95.09:00A	10/02/95.10:00A	
1.1.2.86.B3K	1	Pre-Clean & Black Light B88	10/02/95.10:00A	10/02/95.11:00A	
1.1.2.86.B3L	30	Leak Test B88	10/02/95.11:00A	10/03/95.05:00P	
1.1.2.86.B3O	1	Move to Post Test Storage B88	10/04/95.08:00A	10/04/95.09:00A	
1.1.2.86.B3P	1	Clean, Dry & End Cap B88	10/04/95.09:00A	10/04/95.10:00A	
1.1.2.86.B3R	1	Transport to Erection B88	10/04/95.03:00P	10/04/95.04:00P	
1.1.2.86.B3S	1	Set & Align B88	10/04/95.04:00P	10/04/95.05:00P	
1.1.2.86.B3T	1	Set Clean Room, Purge & Fit B88	10/05/95.08:00A	10/05/95.09:00A	
1.1.2.86.B3U	2	Weld Joint B88	10/05/95.09:00A	10/05/95.11:00A	
1.1.2.86.B3V	2	Leak Test Joint B88	10/05/95.11:00A	10/05/95.02:00P	
1.1.2.86.B3W	2	Install Tube Supports B88	10/05/95.11:00A	10/05/95.02:00P	
1.1.2.86.B3X	2	Remove Equip'mt, Clean & Cap B88	10/05/95.02:00P	10/05/95.04:00P	
1.1.2.86.B4A	1	Unload,Rec/Insp Tube B89	09/26/95.11:00A	09/26/95.12:00P	
1.1.2.86.B4B	1	Move to Stiff Fit Up Stat. B89	09/29/95.01:00P	09/29/95.02:00P	
1.1.2.86.B4C	1	Set-up & Purge B89	09/29/95.02:00P	09/29/95.03:00P	
1.1.2.86.B4D	2	Fit Stiffeners B89	09/29/95.03:00P	09/29/95.05:00P	
1.1.2.86.B4E	4	Weld Stiffeners B89	10/02/95.08:00A	10/02/95.12:00P	
1.1.2.86.B4F	1	Move to Exp.Bellows Stat. B89	10/02/95.01:00P	10/02/95.02:00P	
1.1.2.86.B4G	3	Fit,Purge,Weld Exp. Bellows B89	10/02/95.02:00P	10/02/95.05:00P	
1.1.2.86.B4H	1	Inspect, Install End Caps B89	10/03/95.08:00A	10/03/95.09:00A	
1.1.2.86.B4J	1	Move to Test Area B89	10/04/95.09:00A	10/04/95.10:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:15MAR94

PROJECT:LIGOA

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.86.B4K	1	Pre-Clean & Black Light B89	10/04/95.10:00A	10/04/95.11:00A	
1.1.2.86.B4L	30	Leak Test B89	10/04/95.11:00A	10/05/95.05:00P	
1.1.2.86.B4O	1	Move to Post Test Storage B89	10/06/95.08:00A	10/06/95.09:00A	
1.1.2.86.B4P	1	Clean, Dry & End Cap B89	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.86.B4R	1	Transport to Erection B89	10/06/95.01:00P	10/06/95.02:00P	
1.1.2.86.B4S	1	Set & Align B89	10/06/95.02:00P	10/06/95.03:00P	
1.1.2.86.B4T	1	Set Clean Room, Purge & Fit B89	10/06/95.03:00P	10/06/95.04:00P	
1.1.2.86.B4U	2	Weld Joint B89	10/06/95.04:00P	10/09/95.09:00A	
1.1.2.86.B4V	2	Leak Test Joint B89	10/09/95.09:00A	10/09/95.11:00A	
1.1.2.86.B4W	2	Install Tube Supports B89	10/09/95.09:00A	10/09/95.11:00A	
1.1.2.86.B4X	2	Remove Equip'mt, Clean & Cap B89	10/09/95.11:00A	10/09/95.02:00P	
1.1.2.86.B5A	1	Unload,Rec/Insp Tube B90	09/26/95.01:00P	09/26/95.02:00P	
1.1.2.86.B5B	1	Move to Stiff Fit Up Stat. B90	10/02/95.02:00P	10/02/95.03:00P	
1.1.2.86.B5C	1	Set-up & Purge B90	10/02/95.03:00P	10/02/95.04:00P	
1.1.2.86.B5D	2	Fit Stiffeners B90	10/02/95.04:00P	10/03/95.09:00A	
1.1.2.86.B5E	4	Weld Stiffeners B90	10/03/95.09:00A	10/03/95.02:00P	
1.1.2.86.B5F	1	Move to Exp.Bellows Stat. B90	10/04/95.10:00A	10/04/95.11:00A	
1.1.2.86.B5G	3	Fit,Purge,Weld Exp. Bellows B90	10/04/95.11:00A	10/04/95.03:00P	
1.1.2.86.B5H	1	Inspect, Install End Caps B90	10/04/95.03:00P	10/04/95.04:00P	
1.1.2.86.B5J	1	Move to Test Area B90	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.86.B5K	1	Pre-Clean & Black Light B90	10/06/95.10:00A	10/06/95.11:00A	
1.1.2.86.B5L	30	Leak Test B90	10/06/95.11:00A	10/07/95.05:00P	
1.1.2.86.B5O	1	Move to Post Test Storage B90	10/09/95.08:00A	10/09/95.09:00A	
1.1.2.86.B5P	1	Clean, Dry & End Cap B90	10/09/95.09:00A	10/09/95.10:00A	
1.1.2.86.B5R	1	Transport to Erection B90	10/10/95.10:00A	10/10/95.11:00A	
1.1.2.86.B5S	1	Set & Align B90	10/10/95.11:00A	10/10/95.12:00P	
1.1.2.86.B5T	1	Set Clean Room, Purge & Fit B90	10/10/95.01:00P	10/10/95.02:00P	
1.1.2.86.B5U	2	Weld Joint B90	10/10/95.02:00P	10/10/95.04:00P	
1.1.2.86.B5V	2	Leak Test Joint 90	10/10/95.04:00P	10/11/95.09:00A	
1.1.2.86.B5W	2	Install Tube Supports B90	10/10/95.04:00P	10/11/95.09:00A	
1.1.2.86.B5X	2	Remove Equip'mt, Clean & Cap B90	10/11/95.09:00A	10/11/95.11:00A	
1.1.2.91	131	Cans 91-95	10/02/95.04:00P	10/25/95.10:00A	
1.1.2.91.1A	1	Unload,Rec/Insp Tube 91	10/03/95.08:00A	10/03/95.09:00A	
1.1.2.91.1B	1	Move to Stiff Fit Up Stat. 91	10/03/95.09:00A	10/03/95.10:00A	
1.1.2.91.1C	1	Set-up & Purge 91	10/03/95.10:00A	10/03/95.11:00A	
1.1.2.91.1D	2	Fit Stiffeners 91	10/03/95.11:00A	10/03/95.02:00P	
1.1.2.91.1E	4	Weld Stiffeners 91	10/03/95.02:00P	10/04/95.09:00A	
1.1.2.91.1F	1	Inspect, Install End Caps 91	10/04/95.09:00A	10/04/95.10:00A	
1.1.2.91.1H	1	Move to Test Area 91	10/04/95.10:00A	10/04/95.11:00A	
1.1.2.91.1I	1	Pre-Clean & Black Light 91	10/04/95.11:00A	10/04/95.12:00P	
1.1.2.91.1J	30	Leak Test 91	10/04/95.12:00P	10/05/95.06:00P	
1.1.2.91.1M	1	Move to Post Test Storage91	10/06/95.08:00A	10/06/95.09:00A	
1.1.2.91.1N	1	Clean, Dry & End Cap 91	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.91.1P	1	Transport to Erection 91	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.91.1Q	1	Set & Align 91	10/13/95.10:00A	10/13/95.11:00A	
1.1.2.91.1R	1	Set Clean Room, Purge & Fit 91	10/13/95.11:00A	10/13/95.12:00P	
1.1.2.91.1S	2	Weld Joint 9	10/13/95.01:00P	10/13/95.03:00P	
1.1.2.91.1T	2	Leak Test Joint 91	10/13/95.03:00P	10/13/95.05:00P	
1.1.2.91.1U	2	Install Tube Supports 91	10/13/95.03:00P	10/13/95.05:00P	
1.1.2.91.1V	2	Remove Equip'mt, Clean & Cap 91	10/16/95.08:00A	10/16/95.10:00A	
1.1.2.91.2A	1	Unload,Rec. & Inspect 92	10/03/95.09:00A	10/03/95.10:00A	
1.1.2.91.2B	1	Move to Stiff Fit Up Stat. 92	10/04/95.11:00A	10/04/95.12:00P	
1.1.2.91.2C	1	Set-up & Purge 92	10/04/95.01:00P	10/04/95.02:00P	
1.1.2.91.2D	2	Fit Stiffeners 92	10/04/95.02:00P	10/04/95.04:00P	
1.1.2.91.2E	4	Weld Stiffeners 92	10/04/95.04:00P	10/05/95.11:00A	
1.1.2.91.2F	1	Inspect, Install End Caps 92	10/05/95.11:00A	10/05/95.12:00P	
1.1.2.91.2H	1	Move to Test Area 92	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.91.2I	1	Pre-Clean & Black Light 92	10/06/95.10:00A	10/06/95.11:00A	
1.1.2.91.2J	30	Leak Test 92	10/06/95.11:00A	10/07/95.05:00P	
1.1.2.91.2M	1	Move to Post Test Storage 92	10/09/95.08:00A	10/09/95.09:00A	
1.1.2.91.2N	1	Clean, Dry & End Cap 92	10/09/95.09:00A	10/09/95.10:00A	
1.1.2.91.2P	1	Transport to Erection 92	10/16/95.04:00P	10/16/95.05:00P	
1.1.2.91.2Q	1	Set & Align 92	10/17/95.08:00A	10/17/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.91.2R	1	Set Clean Room, Purge & Fit 92	10/17/95.09:00A	10/17/95.10:00A	
1.1.2.91.2S	2	Weld Joint 92	10/17/95.10:00A	10/17/95.12:00P	
1.1.2.91.2T	2	Leak Test Joint 92	10/17/95.01:00P	10/17/95.03:00P	
1.1.2.91.2U	2	Install Tube Supports 92	10/17/95.01:00P	10/17/95.03:00P	
1.1.2.91.2V	2	Remove Equip'mt, Clean & Cap 92	10/17/95.03:00P	10/17/95.05:00P	
1.1.2.91.3A	1	Unload,Rec/Insp Tube 93	10/03/95.10:00A	10/03/95.11:00A	
1.1.2.91.3B	1	Move to Stiff Fit Up Stat. 93	10/06/95.10:00A	10/06/95.11:00A	
1.1.2.91.3C	1	Set-up & Purge 93	10/06/95.11:00A	10/06/95.12:00P	
1.1.2.91.3D	2	Fit Stiffeners 93	10/06/95.01:00P	10/06/95.03:00P	
1.1.2.91.3E	4	Weld Stiffeners 93	10/06/95.03:00P	10/09/95.10:00A	
1.1.2.91.3F	1	Inspect, Install End Caps 93	10/09/95.10:00A	10/09/95.11:00A	
1.1.2.91.3H	1	Move to Test Area 93	10/09/95.11:00A	10/09/95.12:00P	
1.1.2.91.3I	1	Pre-Clean & Black Light 93	10/09/95.01:00P	10/09/95.02:00P	
1.1.2.91.3J	30	Leak Test 93	10/09/95.02:00P	10/10/95.08:00P	
1.1.2.91.3M	1	Move to Post Test Storage 93	10/11/95.08:00A	10/11/95.09:00A	
1.1.2.91.3N	1	Clean, Dry & End Cap 93	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.91.3P	1	Transport to Erection 93	10/18/95.02:00P	10/18/95.03:00P	
1.1.2.91.3Q	1	Set & Align 93	10/18/95.03:00P	10/18/95.04:00P	
1.1.2.91.3R	1	Set Clean Room, Purge & Fit 93	10/18/95.04:00P	10/18/95.05:00P	
1.1.2.91.3S	2	Weld Joint 93	10/19/95.08:00A	10/19/95.10:00A	
1.1.2.91.3T	2	Leak Test Joint 93	10/19/95.10:00A	10/19/95.12:00P	
1.1.2.91.3U	2	Install Tube Supports 93	10/19/95.10:00A	10/19/95.12:00P	
1.1.2.91.3V	2	Remove Equip'mt, Clean & Cap 93	10/19/95.01:00P	10/19/95.03:00P	
1.1.2.91.4A	1	Unload,Rec/Insp Tube 94	10/03/95.11:00A	10/03/95.12:00P	
1.1.2.91.4B	1	Move to Stiff Fit Up Stat. 94	10/09/95.01:00P	10/09/95.02:00P	
1.1.2.91.4C	1	Set-up & Purge 94	10/09/95.02:00P	10/09/95.03:00P	
1.1.2.91.4D	2	Fit Stiffeners 94	10/09/95.03:00P	10/09/95.05:00P	
1.1.2.91.4E	4	Weld Stiffeners 94	10/10/95.08:00A	10/10/95.12:00P	
1.1.2.91.4F	1	Inspect, Install End Caps 94	10/10/95.01:00P	10/10/95.02:00P	
1.1.2.91.4H	1	Move to Test Area 94	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.91.4I	1	Pre-Clean & Black Light 94	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.91.4J	30	Leak Test 94	10/11/95.11:00A	10/12/95.05:00P	
1.1.2.91.4M	1	Move to Post Test Storage 94	10/13/95.08:00A	10/13/95.09:00A	
1.1.2.91.4N	1	Clean, Dry & End Cap 94	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.91.4P	1	Transport to Erection 94	10/20/95.11:00A	10/20/95.12:00P	
1.1.2.91.4Q	1	Set & Align 94	10/20/95.01:00P	10/20/95.02:00P	
1.1.2.91.4R	1	Set Clean Room, Purge & Fit 94	10/20/95.02:00P	10/20/95.03:00P	
1.1.2.91.4S	2	Weld Joint 94	10/20/95.03:00P	10/20/95.05:00P	
1.1.2.91.4T	2	Leak Test Joint 94	10/23/95.08:00A	10/23/95.10:00A	
1.1.2.91.4U	2	Install Tube Supports 94	10/23/95.08:00A	10/23/95.10:00A	
1.1.2.91.4V	2	Remove Equip'mt, Clean & Cap 94	10/23/95.10:00A	10/23/95.12:00P	
1.1.2.91.5A	1	Unload,Rec/Insp Tube 95	10/03/95.01:00P	10/03/95.02:00P	
1.1.2.91.5B	1	Move to Stiff Fit Up Stat. 95	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.91.5C	1	Set-up & Purge 95	10/11/95.11:00A	10/11/95.12:00P	
1.1.2.91.5D	1	F/W Pump Port Reinf. 95	10/11/95.01:00P	10/11/95.02:00P	
1.1.2.91.5E	2	Fit Stiffeners 95	10/11/95.02:00P	10/11/95.04:00P	
1.1.2.91.5F	4	Weld Stiffeners 95	10/11/95.04:00P	10/12/95.11:00A	
1.1.2.91.5G	1	Move to P.Port Stat. 95	10/12/95.11:00A	10/12/95.12:00P	
1.1.2.91.5H	1	Setup & Bore 10" Inlet 95	10/12/95.01:00P	10/12/95.02:00P	
1.1.2.91.5I	2	Purge/F/W Pump Port 5	10/12/95.02:00P	10/12/95.04:00P	
1.1.2.91.5J	1	Inspect, Install End Caps 5	10/12/95.04:00P	10/12/95.05:00P	
1.1.2.91.5L	1	Move to Test Area 95	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.91.5M	1	Pre-Clean & Black Light 95	10/13/95.10:00A	10/13/95.11:00A	
1.1.2.91.5N	30	Leak Test 95	10/13/95.11:00A	10/14/95.05:00P	
1.1.2.91.5Q	1	Move to Post Test Storage 95	10/16/95.08:00A	10/16/95.09:00A	
1.1.2.91.5R	1	Clean, Dry & End Cap 95	10/16/95.09:00A	10/16/95.10:00A	
1.1.2.91.5T	1	Transport to Erection 95	10/24/95.09:00A	10/24/95.10:00A	
1.1.2.91.5U	1	Set & Align 9	10/24/95.10:00A	10/24/95.11:00A	
1.1.2.91.5V	1	Set Clean Room, Purge & Fit 95	10/24/95.11:00A	10/24/95.12:00P	
1.1.2.91.5W	2	Weld Joint 95	10/24/95.01:00P	10/24/95.03:00P	
1.1.2.91.5X	2	Leak Test Joint 95	10/24/95.03:00P	10/24/95.05:00P	
1.1.2.91.5Y	2	Install Tube Supports 95	10/24/95.03:00P	10/24/95.05:00P	
1.1.2.91.5Z	2	Remove Equip'mt, Clean & Cap95	10/25/95.08:00A	10/25/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.91.B1A	1	Unload,Rec/Insp Tube B91	10/03/95.08:00A	10/03/95.09:00A	
1.1.2.91.B1B	1	Move to Stiff Fit Up Stat. B91	10/03/95.09:00A	10/03/95.10:00A	
1.1.2.91.B1C	1	Set-up & Purge B91	10/03/95.10:00A	10/03/95.11:00A	
1.1.2.91.B1D	2	Fit Stiffeners B91	10/03/95.11:00A	10/03/95.02:00P	
1.1.2.91.B1E	4	Weld Stiffeners B91	10/03/95.02:00P	10/04/95.09:00A	
1.1.2.91.B1F	1	Move to Exp.Bellows Stat. B91	10/04/95.09:00A	10/04/95.10:00A	
1.1.2.91.B1G	3	Fit,Purge,Weld Exp. Bellows B91	10/04/95.10:00A	10/04/95.02:00P	
1.1.2.91.B1H	1	Inspect, Install End Caps B91	10/04/95.02:00P	10/04/95.03:00P	
1.1.2.91.B1J	1	Move to Test Area B91	10/04/95.03:00P	10/04/95.04:00P	
1.1.2.91.B1K	1	Pre-Clean & Black Light B91	10/04/95.04:00P	10/04/95.05:00P	
1.1.2.91.B1L	30	Leak Test B91	10/04/95.05:00P	10/05/95.11:00P	
1.1.2.91.B1O	1	Move to Post Test Storage B91	10/06/95.08:00A	10/06/95.09:00A	
1.1.2.91.B1P	1	Clean, Dry & End Cap B91	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.91.B1R	1	Transport to Erection B91	10/12/95.10:00A	10/12/95.11:00A	
1.1.2.91.B1S	1	Set & Align B91	10/12/95.11:00A	10/12/95.12:00P	
1.1.2.91.B1T	1	Set Clean Room, Purge & Fit B91	10/12/95.01:00P	10/12/95.02:00P	
1.1.2.91.B1U	2	Weld Joint B91	10/12/95.02:00P	10/12/95.04:00P	
1.1.2.91.B1V	2	Leak Test Joint B91	10/12/95.04:00P	10/13/95.09:00A	
1.1.2.91.B1W	2	Install Tube Supports B91	10/12/95.04:00P	10/13/95.09:00A	
1.1.2.91.B1X	2	Remove Equip'mt, Clean & Cap B91	10/13/95.09:00A	10/13/95.11:00A	
1.1.2.91.B2A	1	Unload,Rec/Insp Tube B92	10/03/95.09:00A	10/03/95.10:00A	
1.1.2.91.B2B	1	Move to Stiff Fit Up Stat. B92	10/04/95.10:00A	10/04/95.11:00A	
1.1.2.91.B2C	1	Set-up & Purge B92	10/04/95.11:00A	10/04/95.12:00P	
1.1.2.91.B2D	2	Fit Stiffeners B92	10/04/95.01:00P	10/04/95.03:00P	
1.1.2.91.B2E	4	Weld Stiffeners B92	10/04/95.03:00P	10/05/95.10:00A	
1.1.2.91.B2F	1	Move to Exp.Bellows Stat. B92	10/05/95.10:00A	10/05/95.11:00A	
1.1.2.91.B2G	3	Fit,Purge,Weld Exp. Bellows B92	10/05/95.11:00A	10/05/95.03:00P	
1.1.2.91.B2H	1	Inspect, Install End Caps B92	10/05/95.03:00P	10/05/95.04:00P	
1.1.2.91.B2J	1	Move to Test Area B92	10/06/95.09:00A	10/06/95.10:00A	
1.1.2.91.B2K	1	Pre-Clean & Black Light B92	10/06/95.10:00A	10/06/95.11:00A	
1.1.2.91.B2L	30	Leak Test B92	10/06/95.11:00A	10/07/95.05:00P	
1.1.2.91.B2O	1	Move to Post Test Storage B92	10/09/95.08:00A	10/09/95.09:00A	
1.1.2.91.B2P	1	Clean, Dry & End Cap B92	10/09/95.09:00A	10/09/95.10:00A	
1.1.2.91.B2R	1	Transport to Erection B92	10/16/95.08:00A	10/16/95.09:00A	
1.1.2.91.B2S	1	Set & Align B92	10/16/95.09:00A	10/16/95.10:00A	
1.1.2.91.B2T	1	Set Clean Room, Purge & Fit B92	10/16/95.10:00A	10/16/95.11:00A	
1.1.2.91.B2U	2	Weld Joint B92	10/16/95.11:00A	10/16/95.02:00P	
1.1.2.91.B2V	2	Leak Test Joint B92	10/16/95.02:00P	10/16/95.04:00P	
1.1.2.91.B2W	2	Install Tube SupportsB92	10/16/95.02:00P	10/16/95.04:00P	
1.1.2.91.B2X	2	Remove Equip'mt, Clean & Cap B92	10/16/95.04:00P	10/17/95.09:00A	
1.1.2.91.B3A	1	Unload,Rec/Insp Tube B93	10/03/95.10:00A	10/03/95.11:00A	
1.1.2.91.B3B	1	Move to Stiff Fit Up Stat. B93	10/05/95.11:00A	10/05/95.12:00P	
1.1.2.91.B3C	1	Set-up & Purge B9	10/05/95.01:00P	10/05/95.02:00P	
1.1.2.91.B3D	2	Fit Stiffeners B93	10/05/95.02:00P	10/05/95.04:00P	
1.1.2.91.B3E	4	Weld Stiffeners B9	10/05/95.04:00P	10/06/95.11:00A	
1.1.2.91.B3F	1	Move to Exp.Bellows Stat. B93	10/06/95.11:00A	10/06/95.12:00P	
1.1.2.91.B3G	3	Fit,Purge,Weld Exp. Bellows B93	10/06/95.01:00P	10/06/95.04:00P	
1.1.2.91.B3H	1	Inspect, Install End Caps B93	10/06/95.04:00P	10/06/95.05:00P	
1.1.2.91.B3J	1	Move to Test Area B93	10/09/95.09:00A	10/09/95.10:00A	
1.1.2.91.B3K	1	Pre-Clean & Black Light B93	10/09/95.10:00A	10/09/95.11:00A	
1.1.2.91.B3L	30	Leak Test B93	10/09/95.11:00A	10/10/95.05:00P	
1.1.2.91.B3O	1	Move to Post Test Storage B93	10/11/95.08:00A	10/11/95.09:00A	
1.1.2.91.B3P	1	Clean, Dry & End Cap B93	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.91.B3R	1	Transport to Erection B93	10/17/95.03:00P	10/17/95.04:00P	
1.1.2.91.B3S	1	Set & Align B93	10/17/95.04:00P	10/17/95.05:00P	
1.1.2.91.B3T	1	Set Clean Room, Purge & Fit B93	10/18/95.08:00A	10/18/95.09:00A	
1.1.2.91.B3U	2	Weld Joint B93	10/18/95.09:00A	10/18/95.11:00A	
1.1.2.91.B3V	2	Leak Test Joint B93	10/18/95.11:00A	10/18/95.02:00P	
1.1.2.91.B3W	2	Install Tube Supports B9	10/18/95.11:00A	10/18/95.02:00P	
1.1.2.91.B3X	2	Remove Equip'mt, Clean & Cap B93	10/18/95.02:00P	10/18/95.04:00P	
1.1.2.91.B4A	1	Unload,Rec/Insp Tube B94	10/03/95.11:00A	10/03/95.12:00P	
1.1.2.91.B4B	1	Move to Stiff Fit Up Stat. B94	10/06/95.01:00P	10/06/95.02:00P	
1.1.2.91.B4C	1	Set-up & Purge B94	10/06/95.02:00P	10/06/95.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.91.B4D	2	Fit Stiffeners B94	10/06/95.03:00P	10/06/95.05:00P	
1.1.2.91.B4E	4	Weld Stiffeners B94	10/09/95.08:00A	10/09/95.12:00P	
1.1.2.91.B4F	1	Move to Exp.Bellows Stat. B94	10/09/95.01:00P	10/09/95.02:00P	
1.1.2.91.B4G	3	Fit,Purge,Weld Exp. Bellows B94	10/09/95.02:00P	10/09/95.05:00P	
1.1.2.91.B4H	1	Inspect, Install End Caps B94	10/10/95.08:00A	10/10/95.09:00A	
1.1.2.91.B4J	1	Move to Test Area B94	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.91.B4K	1	Pre-Clean & Black Light B94	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.91.B4L	30	Leak Test B9	10/11/95.11:00A	10/12/95.05:00P	
1.1.2.91.B4O	1	Move to Post Test Storage B94	10/13/95.08:00A	10/13/95.09:00A	
1.1.2.91.B4P	1	Clean, Dry & End Cap B94	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.91.B4R	1	Transport to Erection B94	10/19/95.01:00P	10/19/95.02:00P	
1.1.2.91.B4S	1	Set & Align B94	10/19/95.02:00P	10/19/95.03:00P	
1.1.2.91.B4T	1	Set Clean Room, Purge & Fit B94	10/19/95.03:00P	10/19/95.04:00P	
1.1.2.91.B4U	2	Weld Joint B94	10/19/95.04:00P	10/20/95.09:00A	
1.1.2.91.B4V	2	Leak Test Joint B94	10/20/95.09:00A	10/20/95.11:00A	
1.1.2.91.B4W	2	Install Tube Supports B94	10/20/95.09:00A	10/20/95.11:00A	
1.1.2.91.B4X	2	Remove Equip'mt, Clean & Cap B94	10/20/95.11:00A	10/20/95.02:00P	
1.1.2.91.B5A	1	Unload,Rec/Insp Tube B95	10/03/95.01:00P	10/03/95.02:00P	
1.1.2.91.B5B	1	Move to Stiff Fit Up Stat. B95	10/09/95.02:00P	10/09/95.03:00P	
1.1.2.91.B5C	1	Set-up & Purge B95	10/09/95.03:00P	10/09/95.04:00P	
1.1.2.91.B5D	2	Fit Stiffeners B95	10/09/95.04:00P	10/10/95.09:00A	
1.1.2.91.B5E	4	Weld Stiffeners B95	10/10/95.09:00A	10/10/95.02:00P	
1.1.2.91.B5F	1	Move to Exp.Bellows Stat. B95	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.91.B5G	3	Fit,Purge,Weld Exp. Bellows B95	10/11/95.11:00A	10/11/95.03:00P	
1.1.2.91.B5H	1	Inspect, Install End Caps B95	10/11/95.03:00P	10/11/95.04:00P	
1.1.2.91.B5J	1	Move to Test Area B95	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.91.B5K	1	Pre-Clean & Black Light B95	10/13/95.10:00A	10/13/95.11:00A	
1.1.2.91.B5L	30	Leak Test B95	10/13/95.11:00A	10/14/95.05:00P	
1.1.2.91.B5O	1	Move to Post Test Storage B95	10/16/95.08:00A	10/16/95.09:00A	
1.1.2.91.B5P	1	Clean, Dry & End Cap B95	10/16/95.09:00A	10/16/95.10:00A	
1.1.2.91.B5R	1	Transport to Erection B95	10/23/95.10:00A	10/23/95.11:00A	
1.1.2.91.B5S	1	Set & Align B95	10/23/95.11:00A	10/23/95.12:00P	
1.1.2.91.B5T	1	Set Clean Room, Purge & Fit B95	10/23/95.01:00P	10/23/95.02:00P	
1.1.2.91.B5U	2	Weld Joint B95	10/23/95.02:00P	10/23/95.04:00P	
1.1.2.91.B5V	2	Leak Test Joint B95	10/23/95.04:00P	10/24/95.09:00A	
1.1.2.91.B5W	2	Install Tube Supports B95	10/23/95.04:00P	10/24/95.09:00A	
1.1.2.91.B5X	2	Remove Equip'mt, Clean & Cap B95	10/24/95.09:00A	10/24/95.11:00A	
1.1.2.96	135	Cans 96-98	10/09/95.04:00P	11/01/95.03:00P	
1.1.2.96.1A	1	Unload,Rec/Insp Tube 96	10/10/95.08:00A	10/10/95.09:00A	
1.1.2.96.1B	1	Move to Stiff Fit Up Stat. 96	10/10/95.09:00A	10/10/95.10:00A	
1.1.2.96.1C	1	Set-up & Purge 96	10/10/95.10:00A	10/10/95.11:00A	
1.1.2.96.1D	2	Fit Stiffeners 96	10/10/95.11:00A	10/10/95.02:00P	
1.1.2.96.1E	4	Weld Stiffeners 96	10/10/95.02:00P	10/11/95.09:00A	
1.1.2.96.1F	1	Inspect, Install End Caps 96	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.96.1H	1	Move to Test Area 96	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.96.1I	1	Pre-Clean & Black Light 96	10/11/95.11:00A	10/11/95.12:00P	
1.1.2.96.1J	30	Leak Test 96	10/11/95.12:00P	10/12/95.06:00P	
1.1.2.96.1M	1	Move to Post Test Storage 96	10/13/95.08:00A	10/13/95.09:00A	
1.1.2.96.1N	1	Clean, Dry & End Cap 96	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.96.1P	1	Transport to Erection 96	10/26/95.09:00A	10/26/95.10:00A	
1.1.2.96.1Q	1	Set & Align 96	10/26/95.10:00A	10/26/95.11:00A	
1.1.2.96.1R	1	Set Clean Room, Purge & Fit 96	10/26/95.11:00A	10/26/95.12:00P	
1.1.2.96.1S	2	Weld Joint 96	10/26/95.01:00P	10/26/95.03:00P	
1.1.2.96.1T	2	Leak Test Joint 96	10/26/95.03:00P	10/26/95.05:00P	
1.1.2.96.1U	2	Install Tube Supports 96	10/26/95.03:00P	10/26/95.05:00P	
1.1.2.96.1V	2	Remove Equip'mt, Clean & Cap 96	10/27/95.08:00A	10/27/95.10:00A	
1.1.2.96.2A	1	Unload,Rec. & Insp 97	10/10/95.09:00A	10/10/95.10:00A	
1.1.2.96.2B	1	Move to Stiff Fit Up Stat. 97	10/11/95.11:00A	10/11/95.12:00P	
1.1.2.96.2C	1	Set-up & Purge 97	10/11/95.01:00P	10/11/95.02:00P	
1.1.2.96.2D	2	Fit Stiffeners 97	10/11/95.02:00P	10/11/95.04:00P	
1.1.2.96.2E	4	Weld Stiffeners 97	10/11/95.04:00P	10/12/95.11:00A	
1.1.2.96.2F	1	Inspect, Install End Caps 97	10/12/95.11:00A	10/12/95.12:00P	
1.1.2.96.2H	1	Move to Test Area 97	10/13/95.09:00A	10/13/95.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.96.2I	1	Pre-Clean & Black Light 97	10/13/95.10:00A	10/13/95.11:00A	
1.1.2.96.2J	30	Leak Test 97	10/13/95.11:00A	10/14/95.05:00P	
1.1.2.96.2M	1	Move to Post Test Storage 97	10/16/95.08:00A	10/16/95.09:00A	
1.1.2.96.2N	1	Clean, Dry & End Cap 97	10/16/95.09:00A	10/16/95.10:00A	
1.1.2.96.2P	1	Transport to Erection 97	10/27/95.04:00P	10/27/95.05:00P	
1.1.2.96.2Q	1	Set & Align 97	10/30/95.08:00A	10/30/95.09:00A	
1.1.2.96.2R	1	Set Clean Room, Purge & Fit 97	10/30/95.09:00A	10/30/95.10:00A	
1.1.2.96.2S	2	Weld Joint 97	10/30/95.10:00A	10/30/95.12:00P	
1.1.2.96.2T	2	Leak Test Joint 97	10/30/95.01:00P	10/30/95.03:00P	
1.1.2.96.2U	2	Install Tube Supports 97	10/30/95.01:00P	10/30/95.03:00P	
1.1.2.96.2V	2	Remove Equip'mt, Clean & Cap 97	10/30/95.03:00P	10/30/95.05:00P	
1.1.2.96.3A	1	Unload,Rec/Insp Tube 98	10/10/95.10:00A	10/10/95.11:00A	
1.1.2.96.3B	1	Move to Stiff Fit Up Stat. 98	10/13/95.10:00A	10/13/95.11:00A	
1.1.2.96.3C	1	Set-up & Purge 98	10/13/95.11:00A	10/13/95.12:00P	
1.1.2.96.3D	2	Fit Stiffeners 98	10/13/95.01:00P	10/13/95.03:00P	
1.1.2.96.3E	4	Weld Stiffeners 98	10/13/95.03:00P	10/16/95.10:00A	
1.1.2.96.3F	1	Inspect, Install End Caps 98	10/16/95.10:00A	10/16/95.11:00A	
1.1.2.96.3H	1	Move to Test Area 98	10/16/95.11:00A	10/16/95.12:00P	
1.1.2.96.3I	1	Pre-Clean & Black Light 98	10/16/95.01:00P	10/16/95.02:00P	
1.1.2.96.3J	30	Leak Test 98	10/16/95.02:00P	10/17/95.08:00P	
1.1.2.96.3M	1	Move to Post Test Storage 98	10/18/95.08:00A	10/18/95.09:00A	
1.1.2.96.3N	1	Clean, Dry & End Cap 98	10/18/95.09:00A	10/18/95.10:00A	
1.1.2.96.3P	1	Transport to Erection 98	10/31/95.02:00P	10/31/95.03:00P	
1.1.2.96.3Q	1	Set & Align 98	10/31/95.03:00P	10/31/95.04:00P	
1.1.2.96.3R	1	Set Clean Room, Purge & Fit 98	10/31/95.04:00P	10/31/95.05:00P	
1.1.2.96.3S	2	Weld Joint 98	11/01/95.08:00A	11/01/95.10:00A	
1.1.2.96.3T	2	Leak Test Joint 98	11/01/95.10:00A	11/01/95.12:00P	
1.1.2.96.3U	2	Install Tube Supports 98	11/01/95.10:00A	11/01/95.12:00P	
1.1.2.96.3V	2	Remove Equip'mt, Clean & Cap 98	11/01/95.01:00P	11/01/95.03:00P	
1.1.2.96.B1A	1	Unload,Rec/Insp Tube B96	10/10/95.08:00A	10/10/95.09:00A	
1.1.2.96.B1B	1	Move to Stiff Fit Up Stat. B96	10/10/95.09:00A	10/10/95.10:00A	
1.1.2.96.B1C	1	Set-up & Purge B96	10/10/95.10:00A	10/10/95.11:00A	
1.1.2.96.B1D	2	Fit Stiffeners B96	10/10/95.11:00A	10/10/95.02:00P	
1.1.2.96.B1E	4	Weld Stiffeners B96	10/10/95.02:00P	10/11/95.09:00A	
1.1.2.96.B1F	1	Move to Exp.Bellows Stat. B96	10/11/95.09:00A	10/11/95.10:00A	
1.1.2.96.B1G	3	Fit,Purge,Weld Exp. Bellows B96	10/11/95.10:00A	10/11/95.02:00P	
1.1.2.96.B1H	1	Inspect, Install End Caps B96	10/11/95.02:00P	10/11/95.03:00P	
1.1.2.96.B1J	1	Move to Test Area B96	10/11/95.03:00P	10/11/95.04:00P	
1.1.2.96.B1K	1	Pre-Clean & Black Light B96	10/11/95.04:00P	10/11/95.05:00P	
1.1.2.96.B1L	30	Leak Test B96	10/11/95.05:00P	10/12/95.11:00P	
1.1.2.96.B1O	1	Move to Post Test Storage B96	10/13/95.08:00A	10/13/95.09:00A	
1.1.2.96.B1P	1	Clean, Dry & End Cap B96	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.96.B1R	1	Transport to Erection B96	10/25/95.10:00A	10/25/95.11:00A	
1.1.2.96.B1S	1	Set & Align B96	10/25/95.11:00A	10/25/95.12:00P	
1.1.2.96.B1T	1	Set Clean Room, Purge & Fit B96	10/25/95.01:00P	10/25/95.02:00P	
1.1.2.96.B1U	2	Weld Joint B96	10/25/95.02:00P	10/25/95.04:00P	
1.1.2.96.B1V	2	Leak Test Joint B96	10/25/95.04:00P	10/26/95.09:00A	
1.1.2.96.B1W	2	Install Tube Supports B96	10/25/95.04:00P	10/26/95.09:00A	
1.1.2.96.B1X	2	Remove Equip'mt, Clean & Cap B96	10/26/95.09:00A	10/26/95.11:00A	
1.1.2.96.B2A	1	Unload,Rec/Insp Tube B97	10/10/95.09:00A	10/10/95.10:00A	
1.1.2.96.B2B	1	Move to Stiff Fit Up Stat. B97	10/11/95.10:00A	10/11/95.11:00A	
1.1.2.96.B2C	1	Set-up & Purge B97	10/11/95.11:00A	10/11/95.12:00P	
1.1.2.96.B2D	2	Fit Stiffeners B97	10/11/95.01:00P	10/11/95.03:00P	
1.1.2.96.B2E	4	Weld Stiffeners B97	10/11/95.03:00P	10/12/95.10:00A	
1.1.2.96.B2F	1	Move to Exp.Bellows Stat. B97	10/12/95.10:00A	10/12/95.11:00A	
1.1.2.96.B2G	3	Fit,Purge,Weld Exp. Bellows B97	10/12/95.11:00A	10/12/95.03:00P	
1.1.2.96.B2H	1	Inspect, Install End Caps B97	10/12/95.03:00P	10/12/95.04:00P	
1.1.2.96.B2J	1	Move to Test Area B97	10/13/95.09:00A	10/13/95.10:00A	
1.1.2.96.B2K	1	Pre-Clean & Black Light B97	10/13/95.10:00A	10/13/95.11:00A	
1.1.2.96.B2L	30	Leak Test B97	10/13/95.11:00A	10/14/95.05:00P	
1.1.2.96.B2O	1	Move to Post Test Storage B97	10/16/95.08:00A	10/16/95.09:00A	
1.1.2.96.B2P	1	Clean, Dry & End Cap B97	10/16/95.09:00A	10/16/95.10:00A	
1.1.2.96.B2R	1	Transport to Erection B97	10/27/95.08:00A	10/27/95.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.2.96.B2S	1	Set & Align B97	10/27/95.09:00A	10/27/95.10:00A	
1.1.2.96.B2T	1	Set Clean Room, Purge & Fit B97	10/27/95.10:00A	10/27/95.11:00A	
1.1.2.96.B2U	2	Weld Joint B97	10/27/95.11:00A	10/27/95.02:00P	
1.1.2.96.B2V	2	Leak Test Joint B97	10/27/95.02:00P	10/27/95.04:00P	
1.1.2.96.B2W	2	Install Tube SupportsB97	10/27/95.02:00P	10/27/95.04:00P	
1.1.2.96.B2X	2	Remove Equip'mt, Clean & Cap B97	10/27/95.04:00P	10/30/95.09:00A	
1.1.2.96.B3A	1	Unload,Rec/Insp Tube B98	10/10/95.10:00A	10/10/95.11:00A	
1.1.2.96.B3B	1	Move to Stiff Fit Up Stat. B98	10/12/95.11:00A	10/12/95.12:00P	
1.1.2.96.B3C	1	Set-up & Purge B98	10/12/95.01:00P	10/12/95.02:00P	
1.1.2.96.B3D	2	Fit Stiffeners B98	10/12/95.02:00P	10/12/95.04:00P	
1.1.2.96.B3E	4	Weld Stiffeners B98	10/12/95.04:00P	10/13/95.11:00A	
1.1.2.96.B3F	1	Move to Exp.Bellows Stat. B98	10/13/95.11:00A	10/13/95.12:00P	
1.1.2.96.B3G	3	Fit,Purge,Weld Exp. Bellows 98	10/13/95.01:00P	10/13/95.04:00P	
1.1.2.96.B3H	1	Inspect, Install End Caps B98	10/13/95.04:00P	10/13/95.05:00P	
1.1.2.96.B3J	1	Move to Test Area B98	10/16/95.09:00A	10/16/95.10:00A	
1.1.2.96.B3K	1	Pre-Clean & Black Light B98	10/16/95.10:00A	10/16/95.11:00A	
1.1.2.96.B3L	30	Leak Test B98	10/16/95.11:00A	10/17/95.05:00P	
1.1.2.96.B3O	1	Move to Post Test Storage B98	10/18/95.08:00A	10/18/95.09:00A	
1.1.2.96.B3P	1	Clean, Dry & End Cap B98	10/18/95.09:00A	10/18/95.10:00A	
1.1.2.96.B3R	1	Transport to Erection B98	10/30/95.03:00P	10/30/95.04:00P	
1.1.2.96.B3S	1	Set & Align B98	10/30/95.04:00P	10/30/95.05:00P	
1.1.2.96.B3T	1	Set Clean Room, Purge & Fit B98	10/31/95.08:00A	10/31/95.09:00A	
1.1.2.96.B3U	2	Weld Joint B98	10/31/95.09:00A	10/31/95.11:00A	
1.1.2.96.B3V	2	Leak Test Joint B98	10/31/95.11:00A	10/31/95.02:00P	
1.1.2.96.B3W	2	Install Tube Supports B98	10/31/95.11:00A	10/31/95.02:00P	
1.1.2.96.B3X	2	Remove Equip'mt, Clean & Cap B98	10/31/95.02:00P	10/31/95.04:00P	
1.1.3	1256	Module Inspect & Test	06/29/95.02:00P	02/05/96.02:00P	
1.1.3.01	120	Final Align Leg 1 Mod.1	06/29/95.02:00P	07/20/95.02:00P	
1.1.3.02	120	Final Alignment Leg 1 Mod.2	07/20/95.02:00P	08/10/95.02:00P	
1.1.3.03	480	Leak Test Leg 1 Mod 1	07/20/95.02:00P	08/09/95.02:00P	
1.1.3.04	480	Leak Test Leg 1 Mod 2	08/10/95.02:00P	08/30/95.02:00P	
1.1.3.05	480	Bake Out Leg 1 Mod 1	08/09/95.02:00P	08/29/95.02:00P	
1.1.3.07	120	Final Alignment Leg 2 Mod.1	10/31/95.02:00P	11/21/95.02:00P	
1.1.3.08	120	Final Alignment Leg 2 Mod.2	11/21/95.02:00P	12/12/95.02:00P	
1.1.3.09	480	Leak Test Leg 2 Mod 1	11/21/95.02:00P	12/11/95.02:00P	
1.1.3.10	480	Leak Test Leg 2 Mod 2	12/12/95.02:00P	01/01/96.02:00P	
1.1.3.11	480	Bake Out Leg 2 Mod.1	12/11/95.02:00P	12/31/95.02:00P	
1.1.3.12	360	Final Leak Test Leg 2	01/21/96.02:00P	02/05/96.02:00P	
1.1.3.14	480	Bake Out Leg 1 Mod.2	08/30/95.02:00P	09/19/95.02:00P	
1.1.3.15	480	Bake Out Leg 2 Mod 2	01/01/96.02:00P	01/21/96.02:00P	
1.1.3.6	360	Final Leak Test Leg 1	09/19/95.02:00P	10/04/95.02:00P	
1.1.4	2081	Tube Cans	10/10/94.04:00P	10/09/95.05:00P	
1.1.4.1	400	Order Tube Material	10/11/94.08:00A	12/19/94.05:00P	
1.1.4.M000	40	Manufacture 4 Make Up Pieces	12/20/94.08:00A	12/26/94.05:00P	
1.1.4.M001	40	Manufacture Leg 1 Cans 1-5	12/27/94.08:00A	01/02/95.05:00P	
1.1.4.M006	40	Manufacture Leg 1 Cans 6-10	01/10/95.08:00A	01/16/95.05:00P	
1.1.4.M011	40	Manufacture Leg 1 Cans 11-15	01/24/95.08:00A	01/30/95.05:00P	
1.1.4.M016	40	Manufacture Leg 1 Cans 16-20	02/07/95.08:00A	02/13/95.05:00P	
1.1.4.M021	40	Manufacture Leg 1 Cans 21-25	02/21/95.08:00A	02/27/95.05:00P	
1.1.4.M026	40	Manufacture Leg 1 Cans 26-30	03/07/95.08:00A	03/13/95.05:00P	
1.1.4.M031	40	Manufacture Leg 1 Cans 31-35	03/21/95.08:00A	03/27/95.05:00P	
1.1.4.M036	40	Manufacture Leg 1 Cans 36-40	04/04/95.08:00A	04/10/95.05:00P	
1.1.4.M041	40	Manufacture Leg 1 Cans 41-45	04/18/95.08:00A	04/24/95.05:00P	
1.1.4.M046	40	Manufacture Leg 1 Cans 46-50	01/03/95.08:00A	01/09/95.05:00P	
1.1.4.M051	40	Manufacture Leg 1 Cans 51-55	01/17/95.08:00A	01/23/95.05:00P	
1.1.4.M056	40	Manufacture Leg 1 Cans 56-60	01/31/95.08:00A	02/06/95.05:00P	
1.1.4.M061	40	Manufacture Leg 1 Cans 61-65	02/14/95.08:00A	02/20/95.05:00P	
1.1.4.M066	40	Manufacture Leg 1 Cans 66-70	02/28/95.08:00A	03/06/95.05:00P	
1.1.4.M071	40	Manufacture Leg 1 Cans 71-75	03/14/95.08:00A	03/20/95.05:00P	
1.1.4.M076	40	Manufacture Leg 1 Cans 76-80	03/28/95.08:00A	04/03/95.05:00P	
1.1.4.M081	40	Manufacture Leg 1 Cans 81-85	04/11/95.08:00A	04/17/95.05:00P	
1.1.4.M086	40	Manufacture Leg 1 Cans 86-90	04/25/95.08:00A	05/01/95.05:00P	
1.1.4.M091	40	Manufacture Leg 1 Cans 91-95	05/02/95.08:00A	05/08/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.4.M096	40	Manufacture Leg 1 Cans 96-98	05/09/95.08:00A	05/15/95.05:00P	
1.1.4.M101	40	Manufacture Leg 2 Cans 1-5	05/16/95.08:00A	05/22/95.05:00P	
1.1.4.M106	40	Manufacture Leg 2 Cans 6-10	05/30/95.08:00A	06/05/95.05:00P	
1.1.4.M111	40	Manufacture Leg 2 Cans 11-15	06/13/95.08:00A	06/19/95.05:00P	
1.1.4.M116	40	Manufacture Leg 2 Cans 16-20	06/27/95.08:00A	07/03/95.05:00P	
1.1.4.M121	40	Manufacture Leg 2 Cans 21-25	07/11/95.08:00A	07/17/95.05:00P	
1.1.4.M126	40	Manufacture Leg 2 Cans 26-30	07/25/95.08:00A	07/31/95.05:00P	
1.1.4.M131	40	Manufacture Leg 2 Cans 31-35	08/08/95.08:00A	08/14/95.05:00P	
1.1.4.M136	40	Manufacture Leg 2 Cans 36-40	08/22/95.08:00A	08/28/95.05:00P	
1.1.4.M141	40	Manufacture Leg 2 Cans 41-45	09/05/95.08:00A	09/11/95.05:00P	
1.1.4.M146	40	Manufacture Leg 2 Cans 46-50	05/23/95.08:00A	05/29/95.05:00P	
1.1.4.M151	40	Manufacture Leg 2 Cans 51-55	06/06/95.08:00A	06/12/95.05:00P	
1.1.4.M156	40	Manufacture Leg 2 Cans 56-60	06/20/95.08:00A	06/26/95.05:00P	
1.1.4.M161	40	Manufacture Leg 2 Cans 61-65	07/04/95.08:00A	07/10/95.05:00P	
1.1.4.M166	40	Manufacture Leg 2 Cans 66-70	07/18/95.08:00A	07/24/95.05:00P	
1.1.4.M171	40	Manufacture Leg 2 Cans 71-75	08/01/95.08:00A	08/07/95.05:00P	
1.1.4.M176	40	Manufacture Leg 2 Cans 76-80	08/15/95.08:00A	08/21/95.05:00P	
1.1.4.M181	40	Manufacture Leg 2 Cans 81-85	08/29/95.08:00A	09/04/95.05:00P	
1.1.4.M186	40	Manufacture Leg 2 Cans 86-90	09/12/95.08:00A	09/18/95.05:00P	
1.1.4.M191	40	Manufacture Leg 2 Cans 91-95	09/19/95.08:00A	09/25/95.05:00P	
1.1.4.M196	40	Manufacture Leg 2 Cans 96-98	09/26/95.08:00A	10/02/95.05:00P	
1.1.4.T000	40	Transport 4 Make Up Pieces to Site	12/27/94.08:00A	01/02/95.05:00P	
1.1.4.T001	40	Transport to Site Leg 1 Cans 01-05	01/03/95.08:00A	01/09/95.05:00P	
1.1.4.T006	40	Transport to Site Leg 1 Cans 6-10	01/17/95.08:00A	01/23/95.05:00P	
1.1.4.T011	40	Transport to Site Leg 1 Cans 11-15	01/31/95.08:00A	02/06/95.05:00P	
1.1.4.T016	40	Transport to Site Leg 1 Cans 16-20	02/14/95.08:00A	02/20/95.05:00P	
1.1.4.T021	40	Transport to Site Leg 1 Cans 21-25	02/28/95.08:00A	03/06/95.05:00P	
1.1.4.T026	40	Transport to Site Leg 1 Cans 26-30	03/14/95.08:00A	03/20/95.05:00P	
1.1.4.T031	40	Transport to Site Leg 1 Cans 31-35	03/28/95.08:00A	04/03/95.05:00P	
1.1.4.T036	40	Transport to Site Leg 1 Cans 36-40	04/11/95.08:00A	04/17/95.05:00P	
1.1.4.T041	40	Transport to Site Leg 1 Cans 41-45	04/25/95.08:00A	05/01/95.05:00P	
1.1.4.T046	40	Transport to Site Leg 1 Cans 46-50	01/10/95.08:00A	01/16/95.05:00P	
1.1.4.T051	40	Transport to Site Leg 1 Cans 51-55	01/24/95.08:00A	01/30/95.05:00P	
1.1.4.T056	40	Transport to Site Leg 1 Cans 56-60	02/07/95.08:00A	02/13/95.05:00P	
1.1.4.T061	40	Transport to Site Leg 1 Cans 61-65	02/21/95.08:00A	02/27/95.05:00P	
1.1.4.T066	40	Transport to Site Leg 1 Cans 66-70	03/07/95.08:00A	03/13/95.05:00P	
1.1.4.T071	40	Transport to Site Leg 1 Cans 71-75	03/21/95.08:00A	03/27/95.05:00P	
1.1.4.T076	40	Transport to Site Leg 1 Cans 76-80	04/04/95.08:00A	04/10/95.05:00P	
1.1.4.T081	40	Transport to Site Leg 1 Cans 81-85	04/18/95.08:00A	04/24/95.05:00P	
1.1.4.T086	40	Transport to Site Leg 1 Cans 86-90	05/02/95.08:00A	05/08/95.05:00P	
1.1.4.T091	40	Transport to Site Leg 1 Cans 91-95	05/09/95.08:00A	05/15/95.05:00P	
1.1.4.T096	40	Transport to Site Leg 1 Cans 96-98	05/16/95.08:00A	05/22/95.05:00P	
1.1.4.T101	40	Transport to Site Leg 2 Cans 01-05	05/23/95.08:00A	05/29/95.05:00P	
1.1.4.T106	40	Transport to Site Leg 2 Cans 06-10	06/06/95.08:00A	06/12/95.05:00P	
1.1.4.T111	40	Transport to Site Leg 2 Cans 11-15	06/20/95.08:00A	06/26/95.05:00P	
1.1.4.T116	40	Transport to Site Leg 2 Cans 16-20	07/04/95.08:00A	07/10/95.05:00P	
1.1.4.T121	40	Transport to Site Leg 2 Cans 21-25	07/18/95.08:00A	07/24/95.05:00P	
1.1.4.T126	40	Transport to Site Leg 2 Cans 26-30	08/01/95.08:00A	08/07/95.05:00P	
1.1.4.T131	40	Transport to Site Leg 2 Cans 31-35	08/15/95.08:00A	08/21/95.05:00P	
1.1.4.T136	40	Transport to Site Leg 2 Cans 36-40	08/29/95.08:00A	09/04/95.05:00P	
1.1.4.T141	40	Transport to Site Leg 2 Cans 41-45	09/12/95.08:00A	09/18/95.05:00P	
1.1.4.T146	40	Transport to Site Leg 2 Cans 46-50	05/30/95.08:00A	06/05/95.05:00P	
1.1.4.T151	40	Transport to Site Leg 2 Cans 51-55	06/13/95.08:00A	06/19/95.05:00P	
1.1.4.T156	40	Transport to Site Leg 2 Cans 56-60	06/27/95.08:00A	07/03/95.05:00P	
1.1.4.T161	40	Transport to Site Leg 2 Cans 61-65	07/11/95.08:00A	07/17/95.05:00P	
1.1.4.T166	40	Transport to Site Leg 2 Cans 66-70	07/25/95.08:00A	07/31/95.05:00P	
1.1.4.T171	40	Transport to Site Leg 2 Cans 71-75	08/08/95.08:00A	08/14/95.05:00P	
1.1.4.T176	40	Transport to Site Leg 2 Cans 76-80	08/22/95.08:00A	08/28/95.05:00P	
1.1.4.T181	40	Transport to Site Leg 2 Cans 81-85	09/05/95.08:00A	09/11/95.05:00P	
1.1.4.T186	40	Transport to Site Leg 2 Cans 86-90	09/19/95.08:00A	09/25/95.05:00P	
1.1.4.T191	40	Transport to Site Leg 2 Cans 91-95	09/26/95.08:00A	10/02/95.05:00P	
1.1.4.T196	40	Transport to Site Leg 2 Cans 91-96	10/03/95.08:00A	10/09/95.05:00P	
1.5	2805	General	10/03/94.08:00A	02/05/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.5.1	8	CBI Notice to Proceed	10/03/94.08:00A	10/03/94.05:00P	
1.1.5.2	0	Project Management	10/03/94.08:00A	09/30/94.05:00P	
1.1.5.3	40	Award Tube Manufacture	10/04/94.08:00A	10/10/94.05:00P	
1.1.5.4	40	Award Expansion Bellows Manufg.	10/04/94.08:00A	10/10/94.05:00P	
1.1.5.5	40	Award Pump Port Manufacture	10/04/94.08:00A	10/10/94.05:00P	
1.1.5.6	40	Award Stiffeners Manufacture	10/04/94.08:00A	10/10/94.05:00P	
1.1.5.7	160	Project Team Mobilize	10/04/94.08:00A	10/31/94.05:00P	
1.1.5.8	40	Award Support Manufacture	10/04/94.08:00A	10/10/94.05:00P	
1.1.5.9	0	Handford Site Complete	02/05/96.02:00P	02/05/96.02:00P	
1.1.6	801	Mobilization	10/03/94.04:00P	02/20/95.05:00P	
1.1.6.01	0	Rec Site ER Dwgs.	10/04/94.08:00A	10/03/94.05:00P	
1.1.6.02	120	RFQ ER Bldg.	10/04/94.08:00A	10/24/94.05:00P	
1.1.6.03	80	Eval.& Award Site Bldg.	10/25/94.08:00A	11/07/94.05:00P	
1.1.6.04	320	Del & Fab. Bldg.	11/08/94.08:00A	01/02/95.05:00P	
1.1.6.05	240	Erect ER Bldgs.	01/10/95.08:00A	02/20/95.05:00P	
1.1.6.06	80	Eval.& Award Site Civil	10/25/94.08:00A	11/07/94.05:00P	
1.1.6.07	120	Mobilize Civil Sub.	11/08/94.08:00A	11/28/94.05:00P	
1.1.6.08	240	Perform Site Civil	11/29/94.08:00A	01/09/95.05:00P	
1.1.6.10	40	Set-Up Clean Equip.	12/01/94.08:00A	12/07/94.05:00P	
1.1.6.11	96	Ship Clean Equip	11/15/94.08:00A	11/30/94.05:00P	
1.1.6.12	240	Procure/Fab Clean Eq.	10/04/94.08:00A	11/14/94.05:00P	
1.1.6.13	200	Procure/Fab Test Hoods	10/11/94.08:00A	11/14/94.05:00P	
1.1.6.14	80	Set-Up Test Equip.	01/10/95.08:00A	01/23/95.05:00P	
1.1.6.15	40	Ship Test Equip	01/03/95.08:00A	01/09/95.05:00P	
1.1.6.16	480	Manufacturing/Deliver Vac.Pumps	10/11/94.08:00A	01/02/95.05:00P	
1.1.6.19	40	Bid & Order Vac Pumps	10/04/94.08:00A	10/10/94.05:00P	
1.1.6.20	160	Fab Vac Shack	10/04/94.08:00A	10/31/94.05:00P	
1.1.6.21	80	Set-Up Vac Shack	01/10/95.08:00A	01/23/95.05:00P	
1.1.6.22	80	Ship Vac Shack	12/27/94.08:00A	01/09/95.05:00P	
1.1.6.24	40	Comm.Clean Room	12/20/94.08:00A	12/26/94.05:00P	
1.1.6.25	80	Ship Clean Room	12/06/94.08:00A	12/19/94.05:00P	
1.1.6.26	320	Fab Clean Room	10/11/94.08:00A	12/05/94.05:00P	
1.1.6.28	40	RFQ/Award Clean Room	10/04/94.08:00A	10/10/94.05:00P	
1.1.6.29	400	Procure/Fab Equip	10/04/94.08:00A	12/12/94.05:00P	
1.1.6.30	120	Set-Up Fab Equip.	01/16/95.09:00A	02/06/95.09:00A	
1.1.6.31	80	Ship Fab Equip	12/13/94.08:00A	12/26/94.05:00P	
1.1.6.32	480	Procure Vac Shack Eq.	10/04/94.08:00A	12/26/94.05:00P	
1.1.6.33	160	Fab Weld Shack	11/08/94.08:00A	12/05/94.05:00P	
1.1.6.34	40	Proc. & Specs. Weld Shack	10/04/94.08:00A	10/10/94.05:00P	
1.1.6.35	160	Procure Weld Shack Eq.	10/11/94.08:00A	11/07/94.05:00P	
1.1.6.36	40	Set-Up Weld Shack	12/20/94.08:00A	12/26/94.05:00P	
1.1.6.37	80	Ship Weld Shack	12/06/94.08:00A	12/19/94.05:00P	
1.1.6.9	120	RFQ Site Civil	10/04/94.08:00A	10/24/94.05:00P	
1.1.7	1640	Expansion Bellows	10/03/94.08:00A	07/14/95.05:00P	
1.1.7.001	400	Mill Order Material & Bake Out	10/11/94.08:00A	12/19/94.05:00P	
1.1.7.002	60	Manuf. Bellows	12/20/94.08:00A	12/29/94.12:00P	
1.1.7.M001	40	Manuf. 1-5	10/03/94.08:00A	10/07/94.05:00P	
1.1.7.M006	40	Manuf. 6-10	10/10/94.08:00A	10/14/94.05:00P	
1.1.7.M011	40	Manuf. 11-15	10/17/94.08:00A	10/21/94.05:00P	
1.1.7.M016	40	Manuf. 16-20	10/24/94.08:00A	10/28/94.05:00P	
1.1.7.M021	40	Manuf. 21-25	10/31/94.08:00A	11/04/94.05:00P	
1.1.7.M026	40	Manuf. 26-30	11/07/94.08:00A	11/11/94.05:00P	
1.1.7.M031	40	Manuf. 31-35	11/14/94.08:00A	11/18/94.05:00P	
1.1.7.M036	40	Manuf. 36-40	11/21/94.08:00A	11/25/94.05:00P	
1.1.7.M041	40	Manuf. 41-45	11/28/94.08:00A	12/02/94.05:00P	
1.1.7.M046	40	Manuf. 46-50	12/05/94.08:00A	12/09/94.05:00P	
1.1.7.M051	40	Manuf. 51-55	12/12/94.08:00A	12/16/94.05:00P	
1.1.7.M056	40	Manuf. 56-60	12/19/94.08:00A	12/23/94.05:00P	
1.1.7.M061	40	Manuf. 61-65	12/26/94.08:00A	12/30/94.05:00P	
1.1.7.M066	40	Manuf. 66-70	01/02/95.08:00A	01/06/95.05:00P	
1.1.7.M071	40	Manuf. 71-75	01/09/95.08:00A	01/13/95.05:00P	
1.1.7.M076	40	Manuf. 76-80	01/16/95.08:00A	01/20/95.05:00P	
1.1.7.M081	40	Manuf. 81-85	01/23/95.08:00A	01/27/95.05:00P	

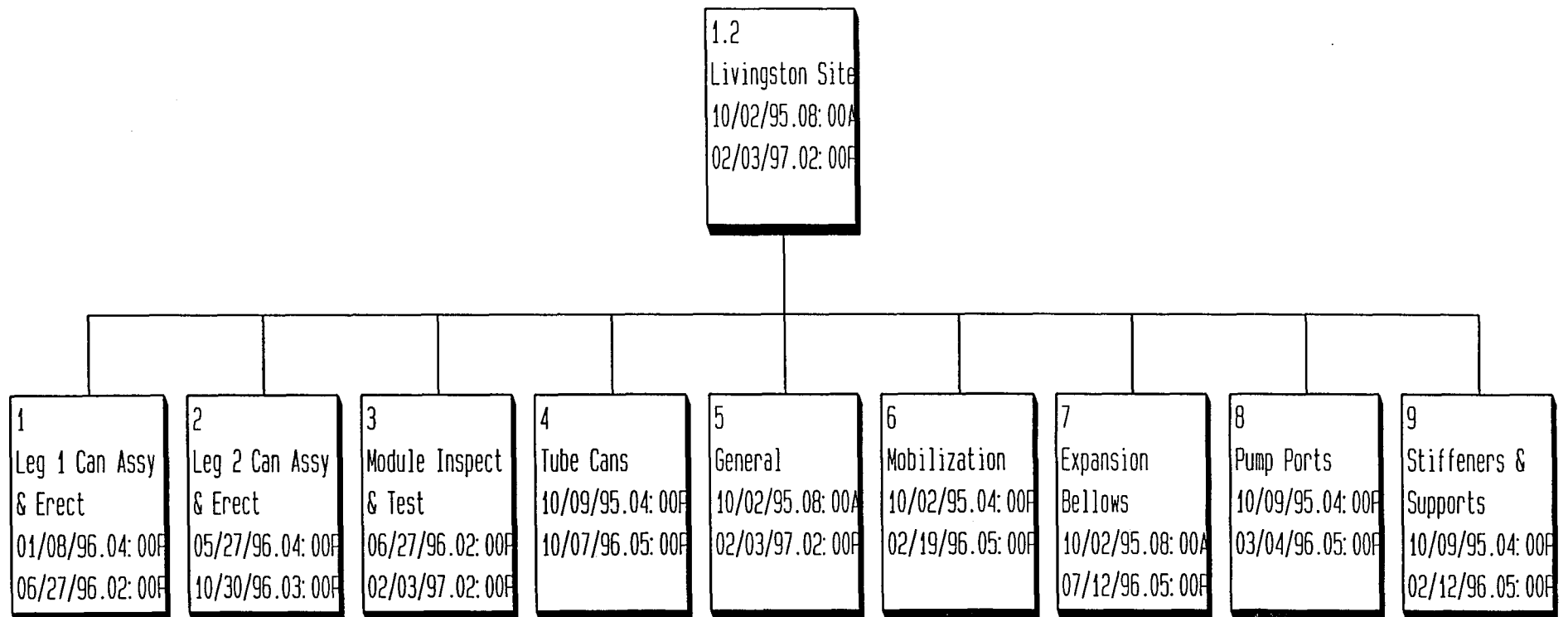
Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.7.M086	40	Manuf. 86-90	01/30/95.08:00A	02/03/95.05:00P	
1.1.7.M091	40	Manuf. 91-90	02/06/95.08:00A	02/10/95.05:00P	
1.1.7.M096	40	Manuf. 96-100	02/13/95.08:00A	02/17/95.05:00P	
1.1.7.M101	40	Manuf. 1-5	02/20/95.08:00A	02/24/95.05:00P	
1.1.7.M106	40	Manuf. 6-10	02/27/95.08:00A	03/03/95.05:00P	
1.1.7.M111	40	Manuf. 11-15	03/06/95.08:00A	03/10/95.05:00P	
1.1.7.M116	40	Manuf. 16-20	03/13/95.08:00A	03/17/95.05:00P	
1.1.7.M121	40	Manuf. 21-25	03/20/95.08:00A	03/24/95.05:00P	
1.1.7.M126	40	Manuf. 26-30	03/27/95.08:00A	03/31/95.05:00P	
1.1.7.M131	40	Manuf. 31-35	04/03/95.08:00A	04/07/95.05:00P	
1.1.7.M136	40	Manuf. 36-40	04/10/95.08:00A	04/14/95.05:00P	
1.1.7.M141	40	Manuf. 41-45	04/17/95.08:00A	04/21/95.05:00P	
1.1.7.M146	40	Manuf. 46-50	04/24/95.08:00A	04/28/95.05:00P	
1.1.7.M151	40	Manuf. 51-55	05/01/95.08:00A	05/05/95.05:00P	
1.1.7.M156	40	Manuf. 56-60	05/08/95.08:00A	05/12/95.05:00P	
1.1.7.M161	40	Manuf. 61-65	05/15/95.08:00A	05/19/95.05:00P	
1.1.7.M166	40	Manuf. 66-70	05/22/95.08:00A	05/26/95.05:00P	
1.1.7.M171	40	Manuf. 71-75	05/29/95.08:00A	06/02/95.05:00P	
1.1.7.M176	40	Manuf. 76-80	06/05/95.08:00A	06/09/95.05:00P	
1.1.7.M181	40	Manuf. 81-85	06/12/95.08:00A	06/16/95.05:00P	
1.1.7.M186	40	Manuf. 86-90	06/19/95.08:00A	06/23/95.05:00P	
1.1.7.M191	40	Manuf. 91-95	06/26/95.08:00A	06/30/95.05:00P	
1.1.7.M196	40	Manuf. 96-100	07/03/95.08:00A	07/07/95.05:00P	
1.1.7.T001	40	Ship to Site 1-5	10/10/94.08:00A	10/14/94.05:00P	
1.1.7.T006	40	Ship to Site 6-10	10/17/94.08:00A	10/21/94.05:00P	
1.1.7.T011	40	Ship to Site 11-15	10/24/94.08:00A	10/28/94.05:00P	
1.1.7.T016	40	Ship to Site 16-20	10/31/94.08:00A	11/04/94.05:00P	
1.1.7.T021	40	Ship to Site 21-25	11/07/94.08:00A	11/11/94.05:00P	
1.1.7.T026	40	Ship to Site 26-30	11/14/94.08:00A	11/18/94.05:00P	
1.1.7.T031	40	Ship to Site 31-35	11/21/94.08:00A	11/25/94.05:00P	
1.1.7.T036	40	Ship to Site 36-40	11/28/94.08:00A	12/02/94.05:00P	
1.1.7.T041	40	Ship to Site 41-45	12/05/94.08:00A	12/09/94.05:00P	
1.1.7.T046	40	Ship to Site 46-50	12/12/94.08:00A	12/16/94.05:00P	
1.1.7.T051	40	Ship to Site 51-55	12/19/94.08:00A	12/23/94.05:00P	
1.1.7.T056	40	Ship to Site 56-60	12/26/94.08:00A	12/30/94.05:00P	
1.1.7.T061	40	Ship to Site 61-65	01/02/95.08:00A	01/06/95.05:00P	
1.1.7.T066	40	Ship to Site 66-70	01/09/95.08:00A	01/13/95.05:00P	
1.1.7.T071	40	Ship to Site 71-75	01/16/95.08:00A	01/20/95.05:00P	
1.1.7.T076	40	Ship to Site 76-80	01/23/95.08:00A	01/27/95.05:00P	
1.1.7.T081	40	Ship to Site 81-85	01/30/95.08:00A	02/03/95.05:00P	
1.1.7.T086	40	Ship to Site 86-90	02/06/95.08:00A	02/10/95.05:00P	
1.1.7.T091	40	Ship to Site 91-95	02/13/95.08:00A	02/17/95.05:00P	
1.1.7.T096	40	Ship to Site 96-100	02/20/95.08:00A	02/24/95.05:00P	
1.1.7.T101	40	Ship to Site 1-5	02/27/95.08:00A	03/03/95.05:00P	
1.1.7.T106	40	Ship to Site 6-10	03/06/95.08:00A	03/10/95.05:00P	
1.1.7.T111	40	Ship to Site 11-15	03/13/95.08:00A	03/17/95.05:00P	
1.1.7.T116	40	Ship to Site 16-20	03/20/95.08:00A	03/24/95.05:00P	
1.1.7.T121	40	Ship to Site 21-25	03/27/95.08:00A	03/31/95.05:00P	
1.1.7.T126	40	Ship to Site 26-30	04/03/95.08:00A	04/07/95.05:00P	
1.1.7.T131	40	Ship to Site 31-35	04/10/95.08:00A	04/14/95.05:00P	
1.1.7.T136	40	Ship to Site 36-40	04/17/95.08:00A	04/21/95.05:00P	
1.1.7.T141	40	Ship to Site 41-45	04/24/95.08:00A	04/28/95.05:00P	
1.1.7.T146	40	Ship to Site 46-50	05/01/95.08:00A	05/05/95.05:00P	
1.1.7.T151	40	Ship to Site 51-55	05/08/95.08:00A	05/12/95.05:00P	
1.1.7.T156	40	Ship to Site 56-60	05/15/95.08:00A	05/19/95.05:00P	
1.1.7.T161	40	Ship to Site 61-65	05/22/95.08:00A	05/26/95.05:00P	
1.1.7.T166	40	Ship to Site 66-70	05/29/95.08:00A	06/02/95.05:00P	
1.1.7.T171	40	Ship to Site 71-75	06/05/95.08:00A	06/09/95.05:00P	
1.1.7.T176	40	Ship to Site 76-80	06/12/95.08:00A	06/16/95.05:00P	
1.1.7.T181	40	Ship to Site 81-85	06/19/95.08:00A	06/23/95.05:00P	
1.1.7.T186	40	Ship to Site 86-90	06/26/95.08:00A	06/30/95.05:00P	
1.1.7.T191	40	Ship to Site 91-95	07/03/95.08:00A	07/07/95.05:00P	
1.1.7.T196	40	Ship to Site 96-100	07/10/95.08:00A	07/14/95.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.1.8	841	Pump Ports	10/10/94.04:00P	03/06/95.05:00P	
1.1.8.1	400	Mill Order Pump Port Material	10/11/94.08:00A	12/19/94.05:00P	
1.1.8.2	400	Manuf. Pump Ports	12/20/94.08:00A	02/27/95.05:00P	
1.1.8.3	40	Ship P. Ports to Site	02/28/95.08:00A	03/06/95.05:00P	
1.1.9	721	Stiffeners & Supports	10/10/94.04:00P	02/13/95.05:00P	
1.1.9.1	400	Mill Order Material	10/11/94.08:00A	12/19/94.05:00P	
1.1.9.2	280	Manuf. Stiffeners	12/20/94.08:00A	02/06/95.05:00P	
1.1.9.3	40	Ship to Site	02/07/95.08:00A	02/13/95.05:00P	
1.1.9.4	400	Mill Order Support Mat'l	10/11/94.08:00A	12/19/94.05:00P	
1.1.9.5	160	Manufacture Supports	12/20/94.08:00A	01/16/95.05:00P	
1.1.9.6	40	Ship Supports to Site	01/17/95.08:00A	01/23/95.05:00P	

LIGO BEAM TUBE MODULE CONSTRUCTION

Chicago Bridge & Iron

March 15, 1994



hours

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1	2805	LIGO PROJECT	10/02/95.08:00A	02/03/97.02:00P	
1.2	2805	Livingston Site	10/02/95.08:00A	02/03/97.02:00P	
1.2.1	982	Leg 1 Can Assy & Erect	01/08/96.04:00P	06/27/96.02:00P	
1.2.1.01	348	Cans 1-5 & Make Up Pieces	01/08/96.04:00P	03/08/96.11:00A	
1.2.1.01.01	1	Recieve Inspect Make-Up Pieces	01/30/96.08:00A	01/30/96.09:00A	
1.2.1.01.02	8	Erect Leg 1 1st Make Up Piece	01/30/96.09:00A	01/31/96.09:00A	
1.2.1.01.03	8	Erect Leg 1 2nd Make up Piece	01/31/96.09:00A	02/01/96.09:00A	
1.2.1.01.04	8	Erect Leg 2 1st Make Up Piece	02/01/96.09:00A	02/02/96.09:00A	
1.2.1.01.05	8	Erect Leg 2 2nd Make-up Piece	02/02/96.09:00A	02/05/96.09:00A	
1.2.1.01.1A	1	Unload,Rec/Insp Tube 1	01/09/96.08:00A	01/09/96.09:00A	
1.2.1.01.1B	1	Move to Stiff Fit Up Stat. 1	01/09/96.09:00A	01/09/96.10:00A	
1.2.1.01.1C	1	Set-up & Purge 1	01/09/96.10:00A	01/09/96.11:00A	
1.2.1.01.1D	2	Fit Stiffeners 1	02/13/96.08:00A	02/13/96.10:00A	
1.2.1.01.1E	4	Weld Stiffeners 1	02/13/96.10:00A	02/13/96.03:00P	
1.2.1.01.1F	1	Inspect, Install End Caps 1	02/13/96.03:00P	02/13/96.04:00P	
1.2.1.01.1H	1	Move to Test Area 1	02/13/96.04:00P	02/13/96.05:00P	
1.2.1.01.1I	1	Pre-Clean & Black Light 1	02/14/96.08:00A	02/14/96.09:00A	
1.2.1.01.1J	30	Leak Test 1	02/14/96.09:00A	02/15/96.03:00P	
1.2.1.01.1M	1	Move to Post Test Storage 1	02/15/96.03:00P	02/15/96.04:00P	
1.2.1.01.1N	1	Clean, Dry & End Cap 1	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.01.1P	1	Transport to Erection 1	02/19/96.10:00A	02/19/96.11:00A	
1.2.1.01.1Q	1	Set & Align 1	02/19/96.11:00A	02/19/96.12:00P	
1.2.1.01.1R	1	Set Clean Room, Purge & Fit 1	02/19/96.01:00P	02/19/96.02:00P	
1.2.1.01.1S	2	Weld Joint 1	02/19/96.02:00P	02/19/96.04:00P	
1.2.1.01.1T	2	Leak Test Joint 1	02/19/96.04:00P	02/20/96.09:00A	
1.2.1.01.1U	2	Install Tube Supports 1	02/19/96.04:00P	02/20/96.09:00A	
1.2.1.01.1V	2	Remove Equip'mt, Clean & Cap 1	02/20/96.09:00A	02/20/96.11:00A	
1.2.1.01.2A	1	Unload,Rec. & Inspect 2	01/09/96.09:00A	01/09/96.10:00A	
1.2.1.01.2B	1	Move to Stiff Fit Up Stat. 2	02/14/96.08:00A	02/14/96.09:00A	
1.2.1.01.2C	1	Set-up & Purge 2	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.01.2D	2	Fit Stiffeners 2	02/14/96.10:00A	02/14/96.12:00P	
1.2.1.01.2E	4	Weld Stiffeners 2	02/14/96.01:00P	02/14/96.05:00P	
1.2.1.01.2F	1	Inspect, Install End Caps 2	02/15/96.08:00A	02/15/96.09:00A	
1.2.1.01.2H	1	Move to Test Area 2	02/15/96.04:00P	02/15/96.05:00P	
1.2.1.01.2I	1	Pre-Clean & Black Light 2	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.01.2J	30	Leak Test 2	02/16/96.09:00A	02/17/96.03:00P	
1.2.1.01.2M	1	Move to Post Test Storage 2	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.01.2N	1	Clean, Dry & End Cap 2	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.01.2P	1	Transport to Erection 2	02/21/96.08:00A	02/21/96.09:00A	
1.2.1.01.2Q	1	Set & Align 2	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.01.2R	1	Set Clean Room, Purge & Fit 2	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.01.2S	2	Weld Joint 2	02/21/96.11:00A	02/21/96.02:00P	
1.2.1.01.2T	2	Leak Test Joint 2	02/21/96.02:00P	02/21/96.04:00P	
1.2.1.01.2U	2	Install Tube Supports 2	02/21/96.02:00P	02/21/96.04:00P	
1.2.1.01.2V	2	Remove Equip'mt, Clean & Cap 2	02/21/96.04:00P	02/22/96.09:00A	
1.2.1.01.3A	1	Unload,Rec/Insp Tube 3	01/09/96.10:00A	01/09/96.11:00A	
1.2.1.01.3B	1	Move to Stiff Fit Up Stat. 3	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.01.3C	1	Set-up & Purge 3	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.01.3D	2	Fit Stiffeners 3	02/16/96.10:00A	02/16/96.12:00P	
1.2.1.01.3E	4	Weld Stiffeners 3	02/16/96.01:00P	02/16/96.05:00P	
1.2.1.01.3F	1	Inspect, Install End Caps 3	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.01.3H	1	Move to Test Area 3	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.01.3I	1	Pre-Clean & Black Light 3	02/19/96.10:00A	02/19/96.11:00A	
1.2.1.01.3J	30	Leak Test 3	02/19/96.11:00A	02/20/96.05:00P	
1.2.1.01.3M	1	Move to Post Test Storage 3	02/21/96.08:00A	02/21/96.09:00A	
1.2.1.01.3N	1	Clean, Dry & End Cap 3	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.01.3P	1	Transport to Erection 3	02/22/96.03:00P	02/22/96.04:00P	
1.2.1.01.3Q	1	Set & Align 3	02/22/96.04:00P	02/22/96.05:00P	
1.2.1.01.3R	1	Set Clean Room, Purge & Fit 3	02/23/96.08:00A	02/23/96.09:00A	
1.2.1.01.3S	2	Weld Joint 3	02/23/96.09:00A	02/23/96.11:00A	
1.2.1.01.3T	2	Leak Test Joint 3	02/23/96.11:00A	02/23/96.02:00P	
1.2.1.01.3U	2	Install Tube Supports 3	02/23/96.11:00A	02/23/96.02:00P	
1.2.1.01.3V	2	Remove Equip'mt, Clean & Cap 3	02/23/96.02:00P	02/23/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.01.4A	1	Unload,Rec/Insp Tube 4	01/09/96.11:00A	01/09/96.12:00P	
1.2.1.01.4B	1	Move to Stiff Fit Up Stat. 4	02/19/96.10:00A	02/19/96.11:00A	
1.2.1.01.4C	1	Set-up & Purge 4	02/19/96.11:00A	02/19/96.12:00P	
1.2.1.01.4D	2	Fit Stiffeners 4	02/19/96.01:00P	02/19/96.03:00P	
1.2.1.01.4E	4	Weld Stiffeners 4	02/19/96.03:00P	02/20/96.10:00A	
1.2.1.01.4F	1	Inspect, Install End Caps 4	02/20/96.10:00A	02/20/96.11:00A	
1.2.1.01.4H	1	Move to Test Area 4	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.01.4I	1	Pre-Clean & Black Light 4	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.01.4J	30	Leak Test 4	02/21/96.11:00A	02/22/96.05:00P	
1.2.1.01.4M	1	Move to Post Test Storage 4	02/23/96.08:00A	02/23/96.09:00A	
1.2.1.01.4N	1	Clean, Dry & End Cap 4	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.01.4P	1	Transport to Erection 4	02/26/96.01:00P	02/26/96.02:00P	
1.2.1.01.4Q	1	Set & Align 4	02/26/96.02:00P	02/26/96.03:00P	
1.2.1.01.4R	1	Set Clean Room, Purge & Fit 4	02/26/96.03:00P	02/26/96.04:00P	
1.2.1.01.4S	2	Weld Joint 4	02/26/96.04:00P	02/27/96.09:00A	
1.2.1.01.4T	2	Leak Test Joint 4	02/27/96.09:00A	02/27/96.11:00A	
1.2.1.01.4U	2	Install Tube Supports 4	02/27/96.09:00A	02/27/96.11:00A	
1.2.1.01.4V	2	Remove Equip'mt, Clean & Cap 4	02/27/96.11:00A	02/27/96.02:00P	
1.2.1.01.5A	1	Unload,Rec/Insp Tube 5	01/09/96.01:00P	01/09/96.02:00P	
1.2.1.01.5B	1	Move to Stiff Fit Up Stat. 5	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.01.5C	1	Set-up & Purge 5	02/21/96.11:00A	02/21/96.12:00P	
1.2.1.01.5D	1	F/W Pump Port Reinf. 5	02/21/96.01:00P	02/21/96.02:00P	
1.2.1.01.5E	2	Fit Stiffeners 5	02/21/96.02:00P	02/21/96.04:00P	
1.2.1.01.5F	4	Weld Stiffeners 5	02/21/96.04:00P	02/22/96.11:00A	
1.2.1.01.5G	1	Move to P.Port Stat.	02/22/96.11:00A	02/22/96.12:00P	
1.2.1.01.5H	1	Setup & Bore 10" Inlet 5	02/22/96.01:00P	02/22/96.02:00P	
1.2.1.01.5I	2	Purge/F/W Pump Port 5	03/05/96.08:00A	03/05/96.10:00A	
1.2.1.01.5J	1	Inspect, Install End Caps 5	03/05/96.10:00A	03/05/96.11:00A	
1.2.1.01.5L	1	Move to Test Area 5	03/05/96.11:00A	03/05/96.12:00P	
1.2.1.01.5M	1	Pre-Clean & Black Light 5	03/05/96.01:00P	03/05/96.02:00P	
1.2.1.01.5N	30	Leak Test 5	03/05/96.02:00P	03/06/96.08:00P	
1.2.1.01.5Q	1	Move to Post Test Storage 5	03/07/96.08:00A	03/07/96.09:00A	
1.2.1.01.5R	1	Clean, Dry & End Cap 5	03/07/96.09:00A	03/07/96.10:00A	
1.2.1.01.5T	1	Transport to Erection 5	03/07/96.10:00A	03/07/96.11:00A	
1.2.1.01.5U	1	Set & Align 5	03/07/96.11:00A	03/07/96.12:00P	
1.2.1.01.5V	1	Set Clean Room, Purge & Fit 5	03/07/96.01:00P	03/07/96.02:00P	
1.2.1.01.5W	2	Weld Joint 5	03/07/96.02:00P	03/07/96.04:00P	
1.2.1.01.5X	2	Leak Test Joint 5	03/07/96.04:00P	03/08/96.09:00A	
1.2.1.01.5Y	2	Install Tube Supports 5	03/07/96.04:00P	03/08/96.09:00A	
1.2.1.01.5Z	2	Remove Equip'mt, Clean & Cap 5	03/08/96.09:00A	03/08/96.11:00A	
1.2.1.01.B1A	1	Unload,Rec/Insp Tube B1	01/09/96.08:00A	01/09/96.09:00A	
1.2.1.01.B1B	1	Move to Stiff Fit Up Stat. B1	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.01.B1C	1	Set-up & Purge B1	02/05/96.10:00A	02/05/96.11:00A	
1.2.1.01.B1D	2	Fit Stiffeners B1	02/05/96.11:00A	02/05/96.02:00P	
1.2.1.01.B1E	4	Weld Stiffeners B1	02/05/96.02:00P	02/06/96.09:00A	
1.2.1.01.B1F	1	Move to Exp.Bellows Stat. B1	02/06/96.09:00A	02/06/96.10:00A	
1.2.1.01.B1G	3	Fit,Purge,Weld Exp. Bellows B1	02/06/96.10:00A	02/06/96.02:00P	
1.2.1.01.B1H	1	Inspect, Install End Caps B1	02/06/96.02:00P	02/06/96.03:00P	
1.2.1.01.B1J	1	Move to Test Area B1	02/06/96.03:00P	02/06/96.04:00P	
1.2.1.01.B1K	1	Pre-Clean & Black Light B1	02/06/96.04:00P	02/06/96.05:00P	
1.2.1.01.B1L	30	Leak Test B1	02/06/96.05:00P	02/07/96.11:00P	
1.2.1.01.B1O	1	Move to Post Test Storage B1	02/08/96.08:00A	02/08/96.09:00A	
1.2.1.01.B1P	1	Clean, Dry & End Cap B1	02/08/96.09:00A	02/08/96.10:00A	
1.2.1.01.B1R	1	Transport to Erection B1	02/08/96.10:00A	02/08/96.11:00A	
1.2.1.01.B1S	1	Set & Align B1	02/08/96.11:00A	02/08/96.12:00P	
1.2.1.01.B1T	1	Set Clean Room, Purge & Fit B1	02/08/96.01:00P	02/08/96.02:00P	
1.2.1.01.B1U	2	Weld Joint B1	02/08/96.02:00P	02/08/96.04:00P	
1.2.1.01.B1V	2	Leak Test Joint B1	02/08/96.04:00P	02/09/96.09:00A	
1.2.1.01.B1W	2	Install Tube Supports B1	02/08/96.04:00P	02/09/96.09:00A	
1.2.1.01.B1X	2	Remove Equip'mt, Clean & Cap B1	02/09/96.09:00A	02/09/96.11:00A	
1.2.1.01.B2A	1	Unload,Rec/Insp Tube B2	01/09/96.09:00A	01/09/96.10:00A	
1.2.1.01.B2B	1	Move to Stiff Fit Up Stat. B2	02/06/96.10:00A	02/06/96.11:00A	
1.2.1.01.B2C	1	Set-up & Purge B2	02/06/96.11:00A	02/06/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.01.B2D	2	Fit Stiffeners B2	02/06/96.01:00P	02/06/96.03:00P	
1.2.1.01.B2E	4	Weld Stiffeners B2	02/06/96.03:00P	02/07/96.10:00A	
1.2.1.01.B2F	1	Move to Exp.Bellows Stat. B2	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.01.B2G	3	Fit,Purge,Weld Exp. Bellows B2	02/07/96.11:00A	02/07/96.03:00P	
1.2.1.01.B2H	1	Inspect, Install End Caps B2	02/07/96.03:00P	02/07/96.04:00P	
1.2.1.01.B2J	1	Move to Test Area B2	02/08/96.09:00A	02/08/96.10:00A	
1.2.1.01.B2K	1	Pre-Clean & Black Light B2	02/08/96.10:00A	02/08/96.11:00A	
1.2.1.01.B2L	30	Leak Test B2	02/08/96.11:00A	02/09/96.05:00P	
1.2.1.01.B2O	1	Move to Post Test Storage B2	02/12/96.08:00A	02/12/96.09:00A	
1.2.1.01.B2P	1	Clean, Dry & End Cap B2	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.01.B2R	1	Transport to Erection B2	02/20/96.09:00A	02/20/96.10:00A	
1.2.1.01.B2S	1	Set & Align B2	02/20/96.10:00A	02/20/96.11:00A	
1.2.1.01.B2T	1	Set Clean Room, Purge & Fit B2	02/20/96.11:00A	02/20/96.12:00P	
1.2.1.01.B2U	2	Weld Joint B2	02/20/96.01:00P	02/20/96.03:00P	
1.2.1.01.B2V	2	Leak Test Joint B2	02/20/96.03:00P	02/20/96.05:00P	
1.2.1.01.B2W	2	Install Tube Supports B2	02/20/96.03:00P	02/20/96.05:00P	
1.2.1.01.B2X	2	Remove Equip'mt, Clean & Cap B2	02/21/96.08:00A	02/21/96.10:00A	
1.2.1.01.B3A	1	Unload,Rec/Insp Tube B3	01/09/96.10:00A	01/09/96.11:00A	
1.2.1.01.B3B	1	Move to Stiff Fit Up Stat. B3	02/07/96.11:00A	02/07/96.12:00P	
1.2.1.01.B3C	1	Set-up & Purge B3	02/07/96.01:00P	02/07/96.02:00P	
1.2.1.01.B3D	2	Fit Stiffeners B3	02/07/96.02:00P	02/07/96.04:00P	
1.2.1.01.B3E	4	Weld Stiffeners B3	02/07/96.04:00P	02/08/96.11:00A	
1.2.1.01.B3F	1	Move to Exp.Bellows Stat. B3	02/08/96.11:00A	02/08/96.12:00P	
1.2.1.01.B3G	3	Fit,Purge,Weld Exp. Bellows B3	02/08/96.01:00P	02/08/96.04:00P	
1.2.1.01.B3H	1	Inspect, Install End Caps B3	02/08/96.04:00P	02/08/96.05:00P	
1.2.1.01.B3J	1	Move to Test Area B3	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.01.B3K	1	Pre-Clean & Black Light B3	02/12/96.10:00A	02/12/96.11:00A	
1.2.1.01.B3L	30	Leak Test B3	02/12/96.11:00A	02/13/96.05:00P	
1.2.1.01.B3O	1	Move to Post Test Storage B3	02/14/96.08:00A	02/14/96.09:00A	
1.2.1.01.B3P	1	Clean, Dry & End Cap B3	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.01.B3R	1	Transport to Erection B3	02/21/96.04:00P	02/21/96.05:00P	
1.2.1.01.B3S	1	Set & Align B3	02/22/96.08:00A	02/22/96.09:00A	
1.2.1.01.B3T	1	Set Clean Room, Purge & Fit B3	02/22/96.09:00A	02/22/96.10:00A	
1.2.1.01.B3U	2	Weld Joint B3	02/22/96.10:00A	02/22/96.12:00P	
1.2.1.01.B3V	2	Leak Test Joint B3	02/22/96.01:00P	02/22/96.03:00P	
1.2.1.01.B3W	2	Install Tube Supports B3	02/22/96.01:00P	02/22/96.03:00P	
1.2.1.01.B3X	2	Remove Equip'mt, Clean & Cap B3	02/22/96.03:00P	02/22/96.05:00P	
1.2.1.01.B4A	1	Unload,Rec/Insp Tube B4	01/09/96.11:00A	01/09/96.12:00P	
1.2.1.01.B4B	1	Move to Stiff Fit Up Stat. B4	02/08/96.01:00P	02/08/96.02:00P	
1.2.1.01.B4C	1	Set-up & Purge B4	02/08/96.02:00P	02/08/96.03:00P	
1.2.1.01.B4D	2	Fit Stiffeners B4	02/08/96.03:00P	02/08/96.05:00P	
1.2.1.01.B4E	4	Weld Stiffeners B4	02/09/96.08:00A	02/09/96.12:00P	
1.2.1.01.B4F	1	Move to Exp.Bellows Stat. B4	02/12/96.10:00A	02/12/96.11:00A	
1.2.1.01.B4G	3	Fit,Purge,Weld Exp. Bellows B4	02/12/96.11:00A	02/12/96.03:00P	
1.2.1.01.B4H	1	Inspect, Install End Caps B4	02/12/96.03:00P	02/12/96.04:00P	
1.2.1.01.B4J	1	Move to Test Area B4	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.01.B4K	1	Pre-Clean & Black Light B4	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.01.B4L	30	Leak Test B4	02/14/96.11:00A	02/15/96.05:00P	
1.2.1.01.B4O	1	Move to Post Test Storage B4	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.01.B4P	1	Clean, Dry & End Cap B4	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.01.B4R	1	Transport to Erection B4	02/23/96.02:00P	02/23/96.03:00P	
1.2.1.01.B4S	1	Set & Align B4	02/23/96.03:00P	02/23/96.04:00P	
1.2.1.01.B4T	1	Set Clean Room, Purge & Fit B4	02/23/96.04:00P	02/23/96.05:00P	
1.2.1.01.B4U	2	Weld Joint B4	02/26/96.08:00A	02/26/96.10:00A	
1.2.1.01.B4V	2	Leak Test Joint B4	02/26/96.10:00A	02/26/96.12:00P	
1.2.1.01.B4W	2	Install Tube Supports B4	02/26/96.10:00A	02/26/96.12:00P	
1.2.1.01.B4X	2	Remove Equip'mt, Clean & Cap B4	02/26/96.01:00P	02/26/96.03:00P	
1.2.1.01.B5A	1	Unload,Rec/Insp Tube B5	01/09/96.01:00P	01/09/96.02:00P	
1.2.1.01.B5B	1	Move to Stiff Fit Up Stat. B5	02/12/96.11:00A	02/12/96.12:00P	
1.2.1.01.B5C	1	Set-up & Purge B5	02/12/96.01:00P	02/12/96.02:00P	
1.2.1.01.B5D	2	Fit Stiffeners B5	02/12/96.02:00P	02/12/96.04:00P	
1.2.1.01.B5E	4	Weld Stiffeners B5	02/12/96.04:00P	02/13/96.11:00A	
1.2.1.01.B5F	1	Move to Exp.Bellows Stat. B5	02/14/96.10:00A	02/14/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.01.B5G	3	Fit,Purge,Weld Exp. Bellows B5	02/14/96.11:00A	02/14/96.03:00P	
1.2.1.01.B5H	1	Inspect, Install End Caps B5	02/14/96.03:00P	02/14/96.04:00P	
1.2.1.01.B5J	1	Move to Test Area B5	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.01.B5K	1	Pre-Clean & Black Light B5	02/16/96.10:00A	02/16/96.11:00A	
1.2.1.01.B5L	30	Leak Test B5	02/16/96.11:00A	02/17/96.05:00P	
1.2.1.01.B5O	1	Move to Post Test Storage B5	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.01.B5P	1	Clean, Dry & End Cap B5	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.01.B5R	1	Transport to Erection B5	02/27/96.11:00A	02/27/96.12:00P	
1.2.1.01.B5S	1	Set & Align B5	02/27/96.01:00P	02/27/96.02:00P	
1.2.1.01.B5T	1	Set Clean Room, Purge & Fit B5	02/27/96.02:00P	02/27/96.03:00P	
1.2.1.01.B5U	2	Weld Joint B5	02/27/96.03:00P	02/27/96.05:00P	
1.2.1.01.B5V	2	Leak Test Joint B5	02/28/96.08:00A	02/28/96.10:00A	
1.2.1.01.B5W	2	Install Tube Supports B5	02/28/96.08:00A	02/28/96.10:00A	
1.2.1.01.B5X	2	Remove Equip'mt, Clean & Cap B5	02/28/96.10:00A	02/28/96.12:00P	
1.2.1.06	340	Cans 6-10	01/22/96.04:00P	03/21/96.11:00A	
1.2.1.06.1A	1	Unload,Rec/Insp Tube 6	01/23/96.08:00A	01/23/96.09:00A	
1.2.1.06.1B	1	Move to Stiff Fit Up Stat. 6	01/23/96.09:00A	01/23/96.10:00A	
1.2.1.06.1C	1	Set-up & Purge 6	01/23/96.10:00A	01/23/96.11:00A	
1.2.1.06.1D	2	Fit Stiffeners 6	01/23/96.11:00A	01/23/96.02:00P	
1.2.1.06.1E	4	Weld Stiffeners 6	01/23/96.02:00P	01/24/96.09:00A	
1.2.1.06.1F	1	Inspect, Install End Caps 6	01/24/96.09:00A	01/24/96.10:00A	
1.2.1.06.1H	1	Move to Test Area 6	01/24/96.10:00A	01/24/96.11:00A	
1.2.1.06.1I	1	Pre-Clean & Black Light 6	01/24/96.11:00A	01/24/96.12:00P	
1.2.1.06.1J	30	Leak Test 6	01/24/96.12:00P	01/25/96.06:00P	
1.2.1.06.1M	1	Move to Post Test Storage 6	01/26/96.08:00A	01/26/96.09:00A	
1.2.1.06.1N	1	Clean, Dry & End Cap 6	01/26/96.09:00A	01/26/96.10:00A	
1.2.1.06.1P	1	Transport to Erection 6	03/11/96.10:00A	03/11/96.11:00A	
1.2.1.06.1Q	1	Set & Align 6	03/11/96.11:00A	03/11/96.12:00P	
1.2.1.06.1R	1	Set Clean Room, Purge & Fit 6	03/11/96.01:00P	03/11/96.02:00P	
1.2.1.06.1S	2	Weld Joint 6	03/11/96.02:00P	03/11/96.04:00P	
1.2.1.06.1T	2	Leak Test Joint 6	03/11/96.04:00P	03/12/96.09:00A	
1.2.1.06.1U	2	Install Tube Supports 6	03/11/96.04:00P	03/12/96.09:00A	
1.2.1.06.1V	2	Remove Equip'mt, Clean & Cap 6	03/12/96.09:00A	03/12/96.11:00A	
1.2.1.06.2A	1	Unload,Rec. & Inspect 7	01/23/96.09:00A	01/23/96.10:00A	
1.2.1.06.2B	1	Move to Stiff Fit Up Stat. 7	01/24/96.11:00A	01/24/96.12:00P	
1.2.1.06.2C	1	Set-up & Purge 7	01/24/96.01:00P	01/24/96.02:00P	
1.2.1.06.2D	2	Fit Stiffeners 7	01/24/96.02:00P	01/24/96.04:00P	
1.2.1.06.2E	4	Weld Stiffeners 7	01/24/96.04:00P	01/25/96.11:00A	
1.2.1.06.2F	1	Inspect, Install End Caps 7	01/25/96.11:00A	01/25/96.12:00P	
1.2.1.06.2H	1	Move to Test Area 7	01/26/96.09:00A	01/26/96.10:00A	
1.2.1.06.2I	1	Pre-Clean & Black Light 7	01/26/96.10:00A	01/26/96.11:00A	
1.2.1.06.2J	30	Leak Test 7	01/26/96.11:00A	01/27/96.05:00P	
1.2.1.06.2M	1	Move to Post Test Storage 7	01/29/96.08:00A	01/29/96.09:00A	
1.2.1.06.2N	1	Clean, Dry & End Cap 7	01/29/96.09:00A	01/29/96.10:00A	
1.2.1.06.2P	1	Transport to Erection 7	03/13/96.08:00A	03/13/96.09:00A	
1.2.1.06.2Q	1	Set & Align 7	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.06.2R	1	Set Clean Room, Purge & Fit 7	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.06.2S	2	Weld Joint 7	03/13/96.11:00A	03/13/96.02:00P	
1.2.1.06.2T	2	Leak Test Joint 7	03/13/96.02:00P	03/13/96.04:00P	
1.2.1.06.2U	2	Install Tube Supports 7	03/13/96.02:00P	03/13/96.04:00P	
1.2.1.06.2V	2	Remove Equip'mt, Clean & Cap 7	03/13/96.04:00P	03/14/96.09:00A	
1.2.1.06.3A	1	Unload,Rec/Insp Tube 8	01/23/96.10:00A	01/23/96.11:00A	
1.2.1.06.3B	1	Move to Stiff Fit Up Stat. 8	01/26/96.10:00A	01/26/96.11:00A	
1.2.1.06.3C	1	Set-up & Purge 8	01/26/96.11:00A	01/26/96.12:00P	
1.2.1.06.3D	2	Fit Stiffeners 8	01/26/96.01:00P	01/26/96.03:00P	
1.2.1.06.3E	4	Weld Stiffeners 8	01/26/96.03:00P	01/29/96.10:00A	
1.2.1.06.3F	1	Inspect, Install End Caps 8	01/29/96.10:00A	01/29/96.11:00A	
1.2.1.06.3H	1	Move to Test Area 8	01/29/96.11:00A	01/29/96.12:00P	
1.2.1.06.3I	1	Pre-Clean & Black Light 8	01/29/96.01:00P	01/29/96.02:00P	
1.2.1.06.3J	30	Leak Test 8	01/29/96.02:00P	01/30/96.08:00P	
1.2.1.06.3M	1	Move to Post Test Storage 8	01/31/96.08:00A	01/31/96.09:00A	
1.2.1.06.3N	1	Clean, Dry & End Cap 8	01/31/96.09:00A	01/31/96.10:00A	
1.2.1.06.3P	1	Transport to Erection 8	03/14/96.03:00P	03/14/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.06.3Q	1	Set & Align 8	03/14/96.04:00P	03/14/96.05:00P	
1.2.1.06.3R	1	Set Clean Room, Purge & Fit 8	03/15/96.08:00A	03/15/96.09:00A	
1.2.1.06.3S	2	Weld Joint 8	03/15/96.09:00A	03/15/96.11:00A	
1.2.1.06.3T	2	Leak Test Joint 8	03/15/96.11:00A	03/15/96.02:00P	
1.2.1.06.3U	2	Install Tube Supports 8	03/15/96.11:00A	03/15/96.02:00P	
1.2.1.06.3V	2	Remove Equip'mt, Clean & Cap 8	03/15/96.02:00P	03/15/96.04:00P	
1.2.1.06.4A	1	Unload,Rec/Insp Tube 10	01/23/96.11:00A	01/23/96.12:00P	
1.2.1.06.4B	1	Move to Stiff Fit Up Stat. 10	01/29/96.01:00P	01/29/96.02:00P	
1.2.1.06.4C	1	Set-up & Purge 10	01/29/96.02:00P	01/29/96.03:00P	
1.2.1.06.4D	2	Fit Stiffeners 10	01/29/96.03:00P	01/29/96.05:00P	
1.2.1.06.4E	4	Weld Stiffeners 10	01/30/96.08:00A	01/30/96.12:00P	
1.2.1.06.4F	1	Inspect, Install End Caps 10	01/30/96.01:00P	01/30/96.02:00P	
1.2.1.06.4H	1	Move to Test Area 10	01/31/96.09:00A	01/31/96.10:00A	
1.2.1.06.4I	1	Pre-Clean & Black Light 10	01/31/96.10:00A	01/31/96.11:00A	
1.2.1.06.4J	30	Leak Test10	01/31/96.11:00A	02/01/96.05:00P	
1.2.1.06.4M	1	Move to Post Test Storage 10	02/02/96.08:00A	02/02/96.09:00A	
1.2.1.06.4N	1	Clean, Dry & End Cap 10	02/02/96.09:00A	02/02/96.10:00A	
1.2.1.06.4P	1	Transport to Erection 10	03/18/96.01:00P	03/18/96.02:00P	
1.2.1.06.4Q	1	Set & Align 10	03/18/96.02:00P	03/18/96.03:00P	
1.2.1.06.4R	1	Set Clean Room, Purge & Fit 10	03/18/96.03:00P	03/18/96.04:00P	
1.2.1.06.4S	2	Weld Joint 10	03/18/96.04:00P	03/19/96.09:00A	
1.2.1.06.4T	2	Leak Test Joint 10	03/19/96.09:00A	03/19/96.11:00A	
1.2.1.06.4U	2	Install Tube Supports 10	03/19/96.09:00A	03/19/96.11:00A	
1.2.1.06.4V	2	Remove Equip'mt, Clean & Cap 10	03/19/96.11:00A	03/19/96.02:00P	
1.2.1.06.5A	1	Unload,Rec/Insp Tube 10	01/23/96.01:00P	01/23/96.02:00P	
1.2.1.06.5B	1	Move to Stiff Fit Up Stat. 10	01/31/96.10:00A	01/31/96.11:00A	
1.2.1.06.5C	1	Set-up & Purge 10	01/31/96.11:00A	01/31/96.12:00P	
1.2.1.06.5D	1	F/W Pump Port Reinf. 10	01/31/96.01:00P	01/31/96.02:00P	
1.2.1.06.5E	2	Fit Stiffeners 10	01/31/96.02:00P	01/31/96.04:00P	
1.2.1.06.5F	4	Weld Stiffeners 10	01/31/96.04:00P	02/01/96.11:00A	
1.2.1.06.5G	1	Move to P.Port Stat.10	02/01/96.11:00A	02/01/96.12:00P	
1.2.1.06.5H	1	Setup & Bore 10" Inlet 10	02/01/96.01:00P	02/01/96.02:00P	
1.2.1.06.5I	2	Purge/F/W Pump Port 10	02/01/96.02:00P	02/01/96.04:00P	
1.2.1.06.5J	1	Inspect, Install End Caps 10	02/01/96.04:00P	02/01/96.05:00P	
1.2.1.06.5L	1	Move to Test Area 10	02/02/96.09:00A	02/02/96.10:00A	
1.2.1.06.5M	1	Pre-Clean & Black Light 10	02/02/96.10:00A	02/02/96.11:00A	
1.2.1.06.5N	30	Leak Test 10	02/02/96.11:00A	02/03/96.05:00P	
1.2.1.06.5Q	1	Move to Post Test Storage 10	02/05/96.08:00A	02/05/96.09:00A	
1.2.1.06.5R	1	Clean, Dry & End Cap 10	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.06.5T	1	Transport to Erection 10	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.06.5U	1	Set & Align 10	03/20/96.11:00A	03/20/96.12:00P	
1.2.1.06.5V	1	Set Clean Room, Purge & Fit 10	03/20/96.01:00P	03/20/96.02:00P	
1.2.1.06.5W	2	Weld Joint 10	03/20/96.02:00P	03/20/96.04:00P	
1.2.1.06.5X	2	Leak Test Joint 10	03/20/96.04:00P	03/21/96.09:00A	
1.2.1.06.5Y	2	Install Tube Supports 10	03/20/96.04:00P	03/21/96.09:00A	
1.2.1.06.5Z	2	Remove Equip'mt, Clean & Cap 10	03/21/96.09:00A	03/21/96.11:00A	
1.2.1.06.B1A	1	Unload,Rec/Insp Tube B6	01/23/96.09:00A	01/23/96.10:00A	
1.2.1.06.B1B	1	Move to Stiff Fit Up Stat. B6	01/23/96.10:00A	01/23/96.11:00A	
1.2.1.06.B1C	1	Set-up & Purge B6	01/23/96.11:00A	01/23/96.12:00P	
1.2.1.06.B1D	2	Fit Stiffeners B6	01/23/96.01:00P	01/23/96.03:00P	
1.2.1.06.B1E	4	Weld Stiffeners B6	01/23/96.03:00P	01/24/96.10:00A	
1.2.1.06.B1F	1	Move to Exp.Bellows Stat. B6	01/24/96.10:00A	01/24/96.11:00A	
1.2.1.06.B1G	3	Fit,Purge,Weld Exp. Bellows B6	01/24/96.11:00A	01/24/96.03:00P	
1.2.1.06.B1H	1	Inspect, Install End Caps B6	01/24/96.03:00P	01/24/96.04:00P	
1.2.1.06.B1J	1	Move to Test Area B6	01/24/96.04:00P	01/24/96.05:00P	
1.2.1.06.B1K	1	Pre-Clean & Black Light B6	01/25/96.08:00A	01/25/96.09:00A	
1.2.1.06.B1L	30	Leak Test B6	01/25/96.09:00A	01/26/96.03:00P	
1.2.1.06.B1O	1	Move to Post Test Storage B6	01/26/96.03:00P	01/26/96.04:00P	
1.2.1.06.B1P	1	Clean, Dry & End Cap B6	01/26/96.04:00P	01/26/96.05:00P	
1.2.1.06.B1R	1	Transport to Erection B6	03/08/96.11:00A	03/08/96.12:00P	
1.2.1.06.B1S	1	Set & Align B6	03/08/96.01:00P	03/08/96.02:00P	
1.2.1.06.B1T	1	Set Clean Room, Purge & Fit B6	03/08/96.02:00P	03/08/96.03:00P	
1.2.1.06.B1U	2	Weld Joint B6	03/08/96.03:00P	03/08/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.06.B1V	2	Leak Test Joint B6	03/11/96.08:00A	03/11/96.10:00A	
1.2.1.06.B1W	2	Install Tube Supports B6	03/11/96.08:00A	03/11/96.10:00A	
1.2.1.06.B1X	2	Remove Equip'mt, Clean & Cap B6	03/11/96.10:00A	03/11/96.12:00P	
1.2.1.06.B2A	1	Unload,Rec/Insp Tube B7	01/23/96.10:00A	01/23/96.11:00A	
1.2.1.06.B2B	1	Move to Stiff Fit Up Stat. B7	01/24/96.11:00A	01/24/96.12:00P	
1.2.1.06.B2C	1	Set-up & Purge B7	01/24/96.01:00P	01/24/96.02:00P	
1.2.1.06.B2D	2	Fit Stiffeners B7	01/24/96.02:00P	01/24/96.04:00P	
1.2.1.06.B2E	4	Weld Stiffeners B7	01/24/96.04:00P	01/25/96.11:00A	
1.2.1.06.B2F	1	Move to Exp.Bellows Stat. B7	01/25/96.11:00A	01/25/96.12:00P	
1.2.1.06.B2G	3	Fit,Purge,Weld Exp. Bellows B7	01/25/96.01:00P	01/25/96.04:00P	
1.2.1.06.B2H	1	Inspect, Install End Caps B7	01/25/96.04:00P	01/25/96.05:00P	
1.2.1.06.B2J	1	Move to Test Area B7	01/26/96.04:00P	01/26/96.05:00P	
1.2.1.06.B2K	1	Pre-Clean & Black Light B7	01/29/96.08:00A	01/29/96.09:00A	
1.2.1.06.B2L	30	Leak Test B7	01/29/96.09:00A	01/30/96.03:00P	
1.2.1.06.B2O	1	Move to Post Test Storage B7	01/30/96.03:00P	01/30/96.04:00P	
1.2.1.06.B2P	1	Clean, Dry & End Cap B7	01/30/96.04:00P	01/30/96.05:00P	
1.2.1.06.B2R	1	Transport to Erection B7	03/12/96.09:00A	03/12/96.10:00A	
1.2.1.06.B2S	1	Set & Align B7	03/12/96.10:00A	03/12/96.11:00A	
1.2.1.06.B2T	1	Set Clean Room, Purge & Fit B7	03/12/96.11:00A	03/12/96.12:00P	
1.2.1.06.B2U	2	Weld Joint B7	03/12/96.01:00P	03/12/96.03:00P	
1.2.1.06.B2V	2	Leak Test Joint B7	03/12/96.03:00P	03/12/96.05:00P	
1.2.1.06.B2W	2	Install Tube SupportsB7	03/12/96.03:00P	03/12/96.05:00P	
1.2.1.06.B2X	2	Remove Equip'mt, Clean & Cap B7	03/13/96.08:00A	03/13/96.10:00A	
1.2.1.06.B3A	1	Unload,Rec/Insp Tube B8	01/23/96.11:00A	01/23/96.12:00P	
1.2.1.06.B3B	1	Move to Stiff Fit Up Stat. B8	01/25/96.01:00P	01/25/96.02:00P	
1.2.1.06.B3C	1	Set-up & Purge B8	01/25/96.02:00P	01/25/96.03:00P	
1.2.1.06.B3D	2	Fit Stiffeners B8	01/25/96.03:00P	01/25/96.05:00P	
1.2.1.06.B3E	4	Weld Stiffeners B8	01/26/96.08:00A	01/26/96.12:00P	
1.2.1.06.B3F	1	Move to Exp.Bellows Stat. B8	01/29/96.08:00A	01/29/96.09:00A	
1.2.1.06.B3G	3	Fit,Purge,Weld Exp. Bellows B8	01/29/96.09:00A	01/29/96.12:00P	
1.2.1.06.B3H	1	Inspect, Install End Caps B8	01/29/96.01:00P	01/29/96.02:00P	
1.2.1.06.B3J	1	Move to Test Area B8	01/30/96.04:00P	01/30/96.05:00P	
1.2.1.06.B3K	1	Pre-Clean & Black Light B8	01/31/96.08:00A	01/31/96.09:00A	
1.2.1.06.B3L	30	Leak Test B8	01/31/96.09:00A	02/01/96.03:00P	
1.2.1.06.B3O	1	Move to Post Test Storage B8	02/01/96.03:00P	02/01/96.04:00P	
1.2.1.06.B3P	1	Clean, Dry & End Cap B8	02/01/96.04:00P	02/01/96.05:00P	
1.2.1.06.B3R	1	Transport to Erection B8	03/13/96.04:00P	03/13/96.05:00P	
1.2.1.06.B3S	1	Set & Align B8	03/14/96.08:00A	03/14/96.09:00A	
1.2.1.06.B3T	1	Set Clean Room, Purge & Fit B8	03/14/96.09:00A	03/14/96.10:00A	
1.2.1.06.B3U	2	Weld Joint B8	03/14/96.10:00A	03/14/96.12:00P	
1.2.1.06.B3V	2	Leak Test Joint B8	03/14/96.01:00P	03/14/96.03:00P	
1.2.1.06.B3W	2	Install Tube Supports B8	03/14/96.01:00P	03/14/96.03:00P	
1.2.1.06.B3X	2	Remove Equip'mt, Clean & Cap B8	03/14/96.03:00P	03/14/96.05:00P	
1.2.1.06.B4A	1	Unload,Rec/Insp Tube B9	01/23/96.01:00P	01/23/96.02:00P	
1.2.1.06.B4B	1	Move to Stiff Fit Up Stat. B9	01/29/96.09:00A	01/29/96.10:00A	
1.2.1.06.B4C	1	Set-up & Purge B9	01/29/96.10:00A	01/29/96.11:00A	
1.2.1.06.B4D	2	Fit Stiffeners B9	01/29/96.11:00A	01/29/96.02:00P	
1.2.1.06.B4E	4	Weld Stiffeners B9	01/29/96.02:00P	01/30/96.09:00A	
1.2.1.06.B4F	1	Move to Exp.Bellows Stat. B9	01/31/96.08:00A	01/31/96.09:00A	
1.2.1.06.B4G	3	Fit,Purge,Weld Exp. Bellows B9	01/31/96.09:00A	01/31/96.12:00P	
1.2.1.06.B4H	1	Inspect, Install End Caps B9	01/31/96.01:00P	01/31/96.02:00P	
1.2.1.06.B4J	1	Move to Test Area B9	02/01/96.04:00P	02/01/96.05:00P	
1.2.1.06.B4K	1	Pre-Clean & Black Light B9	02/02/96.08:00A	02/02/96.09:00A	
1.2.1.06.B4L	30	Leak Test B9	02/02/96.09:00A	02/03/96.03:00P	
1.2.1.06.B4O	1	Move to Post Test Storage B9	02/05/96.08:00A	02/05/96.09:00A	
1.2.1.06.B4P	1	Clean, Dry & End Cap B9	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.06.B4R	1	Transport to Erection B9	03/15/96.02:00P	03/15/96.03:00P	
1.2.1.06.B4S	1	Set & Align B9	03/15/96.03:00P	03/15/96.04:00P	
1.2.1.06.B4T	1	Set Clean Room, Purge & Fit B9	03/15/96.04:00P	03/15/96.05:00P	
1.2.1.06.B4U	2	Weld Joint B9	03/18/96.08:00A	03/18/96.10:00A	
1.2.1.06.B4V	2	Leak Test Joint B9	03/18/96.10:00A	03/18/96.12:00P	
1.2.1.06.B4W	2	Install Tube Supports B9	03/18/96.10:00A	03/18/96.12:00P	
1.2.1.06.B4X	2	Remove Equip'mt, Clean & Cap B9	03/18/96.01:00P	03/18/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.06.B5A	1	Unload,Rec/Insp Tube B10	01/23/96.02:00P	01/23/96.03:00P	
1.2.1.06.B5B	1	Move to Stiff Fit Up Stat. B10	01/31/96.09:00A	01/31/96.10:00A	
1.2.1.06.B5C	1	Set-up & Purge B10	01/31/96.10:00A	01/31/96.11:00A	
1.2.1.06.B5D	2	Fit Stiffeners B10	01/31/96.11:00A	01/31/96.02:00P	
1.2.1.06.B5E	4	Weld Stiffeners B10	01/31/96.02:00P	02/01/96.09:00A	
1.2.1.06.B5F	1	Move to Exp.Bellows Stat. B10	02/02/96.08:00A	02/02/96.09:00A	
1.2.1.06.B5G	3	Fit,Purge,Weld Exp. Bellows B10	02/02/96.09:00A	02/02/96.12:00P	
1.2.1.06.B5H	1	Inspect, Install End Caps B10	02/02/96.01:00P	02/02/96.02:00P	
1.2.1.06.B5J	1	Move to Test Area B10	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.06.B5K	1	Pre-Clean & Black Light B10	02/05/96.10:00A	02/05/96.11:00A	
1.2.1.06.B5L	30	Leak Test B10	02/05/96.11:00A	02/06/96.05:00P	
1.2.1.06.B5O	1	Move to Post Test Storage B10	02/07/96.08:00A	02/07/96.09:00A	
1.2.1.06.B5P	1	Clean, Dry & End Cap B10	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.06.B5R	1	Transport to Erection B10	03/19/96.11:00A	03/19/96.12:00P	
1.2.1.06.B5S	1	Set & Align B10	03/19/96.01:00P	03/19/96.02:00P	
1.2.1.06.B5T	1	Set Clean Room, Purge & Fit B10	03/19/96.02:00P	03/19/96.03:00P	
1.2.1.06.B5U	2	Weld Joint B10	03/19/96.03:00P	03/19/96.05:00P	
1.2.1.06.B5V	2	Leak Test Joint B10	03/20/96.08:00A	03/20/96.10:00A	
1.2.1.06.B5W	2	Install Tube Supports B10	03/20/96.08:00A	03/20/96.10:00A	
1.2.1.06.B5X	2	Remove Equip'mt, Clean & Cap B10	03/20/96.10:00A	03/20/96.12:00P	
1.2.1.11	332	Cans 11-15	02/05/96.04:00P	04/03/96.11:00A	
1.2.1.11.1A	1	Unload,Rec/Insp Tube 11	02/06/96.08:00A	02/06/96.09:00A	
1.2.1.11.1B	1	Move to Stiff Fit Up Stat. 11	02/06/96.09:00A	02/06/96.10:00A	
1.2.1.11.1C	1	Set-up & Purge 11	02/06/96.10:00A	02/06/96.11:00A	
1.2.1.11.1D	2	Fit Stiffeners 11	02/06/96.11:00A	02/06/96.02:00P	
1.2.1.11.1E	4	Weld Stiffeners 11	02/06/96.02:00P	02/07/96.09:00A	
1.2.1.11.1F	1	Inspect, Install End Caps 11	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.11.1H	1	Move to Test Area 1 1	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.11.1I	1	Pre-Clean & Black Light 11	02/07/96.11:00A	02/07/96.12:00P	
1.2.1.11.1J	30	Leak Test 11	02/07/96.12:00P	02/08/96.06:00P	
1.2.1.11.1M	1	Move to Post Test Storage 1 1	02/09/96.08:00A	02/09/96.09:00A	
1.2.1.11.1N	1	Clean, Dry & End Cap 11	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.11.1P	1	Transport to Erection 11	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.11.1Q	1	Set & Align 11	03/22/96.11:00A	03/22/96.12:00P	
1.2.1.11.1R	1	Set Clean Room, Purge & Fit 11	03/22/96.01:00P	03/22/96.02:00P	
1.2.1.11.1S	2	Weld Joint 11	03/22/96.02:00P	03/22/96.04:00P	
1.2.1.11.1T	2	Leak Test Joint 11	03/22/96.04:00P	03/25/96.09:00A	
1.2.1.11.1U	2	Install Tube Supports 11	03/22/96.04:00P	03/25/96.09:00A	
1.2.1.11.1V	2	Remove Equip'mt, Clean & Cap 11	03/25/96.09:00A	03/25/96.11:00A	
1.2.1.11.2A	1	Unload,Rec. & Inspect 12	02/06/96.09:00A	02/06/96.10:00A	
1.2.1.11.2B	1	Move to Stiff Fit Up Stat. 12	02/07/96.11:00A	02/07/96.12:00P	
1.2.1.11.2C	1	Set-up & Purge 12	02/07/96.01:00P	02/07/96.02:00P	
1.2.1.11.2D	2	Fit Stiffeners 12	02/07/96.02:00P	02/07/96.04:00P	
1.2.1.11.2E	4	Weld Stiffeners 12	02/07/96.04:00P	02/08/96.11:00A	
1.2.1.11.2F	1	Inspect, Install End Caps 12	02/08/96.11:00A	02/08/96.12:00P	
1.2.1.11.2H	1	Move to Test Area 12	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.11.2I	1	Pre-Clean & Black Light 12	02/09/96.10:00A	02/09/96.11:00A	
1.2.1.11.2J	30	Leak Test 12	02/09/96.11:00A	02/10/96.05:00P	
1.2.1.11.2M	1	Move to Post Test Storage 12	02/12/96.08:00A	02/12/96.09:00A	
1.2.1.11.2N	1	Clean, Dry & End Cap 12	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.11.2P	1	Transport to Erection 12	03/26/96.08:00A	03/26/96.09:00A	
1.2.1.11.2Q	1	Set & Align 12	03/26/96.09:00A	03/26/96.10:00A	
1.2.1.11.2R	1	Set Clean Room, Purge & Fit 12	03/26/96.10:00A	03/26/96.11:00A	
1.2.1.11.2S	2	Weld Joint 12	03/26/96.11:00A	03/26/96.02:00P	
1.2.1.11.2T	2	Leak Test Joint 12	03/26/96.02:00P	03/26/96.04:00P	
1.2.1.11.2U	2	Install Tube Supports 12	03/26/96.02:00P	03/26/96.04:00P	
1.2.1.11.2V	2	Remove Equip'mt, Clean & Cap 12	03/26/96.04:00P	03/27/96.09:00A	
1.2.1.11.3A	1	Unload,Rec/Insp Tube 13	02/06/96.10:00A	02/06/96.11:00A	
1.2.1.11.3B	1	Move to Stiff Fit Up Stat. 13	02/09/96.10:00A	02/09/96.11:00A	
1.2.1.11.3C	1	Set-up & Purge 13	02/09/96.11:00A	02/09/96.12:00P	
1.2.1.11.3D	2	Fit Stiffeners 13	02/09/96.01:00P	02/09/96.03:00P	
1.2.1.11.3E	4	Weld Stiffeners 13	02/09/96.03:00P	02/12/96.10:00A	
1.2.1.11.3F	1	Inspect, Install End Caps 13	02/12/96.10:00A	02/12/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.11.3H	1	Move to Test Area 13	02/12/96.11:00A	02/12/96.12:00P	
1.2.1.11.3I	1	Pre-Clean & Black Light 13	02/12/96.01:00P	02/12/96.02:00P	
1.2.1.11.3J	30	Leak Test 13	02/12/96.02:00P	02/13/96.08:00P	
1.2.1.11.3M	1	Move to Post Test Storage 13	02/14/96.08:00A	02/14/96.09:00A	
1.2.1.11.3N	1	Clean, Dry & End Cap 13	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.11.3P	1	Transport to Erection 13	03/27/96.03:00P	03/27/96.04:00P	
1.2.1.11.3Q	1	Set & Align 13	03/27/96.04:00P	03/27/96.05:00P	
1.2.1.11.3R	1	Set Clean Room, Purge & Fit 13	03/28/96.08:00A	03/28/96.09:00A	
1.2.1.11.3S	2	Weld Joint 13	03/28/96.09:00A	03/28/96.11:00A	
1.2.1.11.3T	2	Leak Test Joint 13	03/28/96.11:00A	03/28/96.02:00P	
1.2.1.11.3U	2	Install Tube Supports 13	03/28/96.11:00A	03/28/96.02:00P	
1.2.1.11.3V	2	Remove Equip'mt, Clean & Cap 13	03/28/96.02:00P	03/28/96.04:00P	
1.2.1.11.4A	1	Unload,Rec/Insp Tube 14	02/06/96.11:00A	02/06/96.12:00P	
1.2.1.11.4B	1	Move to Stiff Fit Up Stat.14	02/12/96.01:00P	02/12/96.02:00P	
1.2.1.11.4C	1	Set-up & Purge 14	02/12/96.02:00P	02/12/96.03:00P	
1.2.1.11.4D	2	Fit Stiffeners 14	02/12/96.03:00P	02/12/96.05:00P	
1.2.1.11.4E	4	Weld Stiffeners 14	02/13/96.08:00A	02/13/96.12:00P	
1.2.1.11.4F	1	Inspect, Install End Caps 14	02/13/96.01:00P	02/13/96.02:00P	
1.2.1.11.4H	1	Move to Test Area 14	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.11.4I	1	Pre-Clean & Black Light 14	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.11.4J	30	Leak Test 14	02/14/96.11:00A	02/15/96.05:00P	
1.2.1.11.4M	1	Move to Post Test Storage 14	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.11.4N	1	Clean, Dry & End Cap 14	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.11.4P	1	Transport to Erection 14	03/29/96.01:00P	03/29/96.02:00P	
1.2.1.11.4Q	1	Set & Align 14	03/29/96.02:00P	03/29/96.03:00P	
1.2.1.11.4R	1	Set Clean Room, Purge & Fit 14	03/29/96.03:00P	03/29/96.04:00P	
1.2.1.11.4S	2	Weld Joint14	03/29/96.04:00P	04/01/96.09:00A	
1.2.1.11.4T	2	Leak Test Joint 4	04/01/96.09:00A	04/01/96.11:00A	
1.2.1.11.4U	2	Install Tube Supports 14	04/01/96.09:00A	04/01/96.11:00A	
1.2.1.11.4V	2	Remove Equip'mt, Clean & Cap 14	04/01/96.11:00A	04/01/96.02:00P	
1.2.1.11.5A	1	Unload,Rec/Insp Tube 1	02/06/96.01:00P	02/06/96.02:00P	
1.2.1.11.5B	1	Move to Stiff Fit Up Stat. 15	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.11.5C	1	Set-up & Purge 15	02/14/96.11:00A	02/14/96.12:00P	
1.2.1.11.5D	1	F/W Pump Port Reinf. 15	02/14/96.01:00P	02/14/96.02:00P	
1.2.1.11.5E	2	Fit Stiffeners 15	02/14/96.02:00P	02/14/96.04:00P	
1.2.1.11.5F	4	Weld Stiffeners15	02/14/96.04:00P	02/15/96.11:00A	
1.2.1.11.5G	1	Move to P.Port Stat. 15	02/15/96.11:00A	02/15/96.12:00P	
1.2.1.11.5H	1	Setup & Bore 10" Inlet15	02/15/96.01:00P	02/15/96.02:00P	
1.2.1.11.5I	2	Purge/F/W Pump Port 15	02/15/96.02:00P	02/15/96.04:00P	
1.2.1.11.5J	1	Inspect, Install End Caps 15	02/15/96.04:00P	02/15/96.05:00P	
1.2.1.11.5L	1	Move to Test Area 115	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.11.5M	1	Pre-Clean & Black Light 15	02/16/96.10:00A	02/16/96.11:00A	
1.2.1.11.5N	30	Leak Test 15	02/16/96.11:00A	02/17/96.05:00P	
1.2.1.11.5Q	1	Move to Post Test Storage 15	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.11.5R	1	Clean, Dry & End Cap 15	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.11.5T	1	Transport to Erection 15	04/02/96.10:00A	04/02/96.11:00A	
1.2.1.11.5U	1	Set & Align 15	04/02/96.11:00A	04/02/96.12:00P	
1.2.1.11.5V	1	Set Clean Room, Purge & Fit 15	04/02/96.01:00P	04/02/96.02:00P	
1.2.1.11.5W	2	Weld Joint 15	04/02/96.02:00P	04/02/96.04:00P	
1.2.1.11.5X	2	Leak Test Joint 15	04/02/96.04:00P	04/03/96.09:00A	
1.2.1.11.5Y	2	Install Tube Supports 15	04/02/96.04:00P	04/03/96.09:00A	
1.2.1.11.5Z	2	Remove Equip'mt, Clean & Cap 15	04/03/96.09:00A	04/03/96.11:00A	
1.2.1.11.B1A	1	Unload,Rec/Insp Tube B11	02/06/96.08:00A	02/06/96.09:00A	
1.2.1.11.B1B	1	Move to Stiff Fit Up Stat. B11	02/06/96.09:00A	02/06/96.10:00A	
1.2.1.11.B1C	1	Set-up & Purge B11	02/06/96.10:00A	02/06/96.11:00A	
1.2.1.11.B1D	2	Fit Stiffeners B11	02/06/96.11:00A	02/06/96.02:00P	
1.2.1.11.B1E	4	Weld Stiffeners B11	02/06/96.02:00P	02/07/96.09:00A	
1.2.1.11.B1F	1	Move to Exp.Bellows Stat. B11	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.11.B1G	3	Fit,Purge,Weld Exp. Bellows B11	02/07/96.10:00A	02/07/96.02:00P	
1.2.1.11.B1H	1	Inspect, Install End Caps B11	02/07/96.02:00P	02/07/96.03:00P	
1.2.1.11.B1J	1	Move to Test Area B11	02/07/96.03:00P	02/07/96.04:00P	
1.2.1.11.B1K	1	Pre-Clean & Black Light B11	02/07/96.04:00P	02/07/96.05:00P	
1.2.1.11.B1L	30	Leak Test B11	02/07/96.05:00P	02/08/96.11:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.11.B10	1	Move to Post Test Storage B11	02/09/96.08:00A	02/09/96.09:00A	
1.2.1.11.B1P	1	Clean, Dry & End Cap B11	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.11.B1R	1	Transport to Erection B11	03/21/96.11:00A	03/21/96.12:00P	
1.2.1.11.B1S	1	Set & Align B11	03/21/96.01:00P	03/21/96.02:00P	
1.2.1.11.B1T	1	Set Clean Room, Purge & Fit B11	03/21/96.02:00P	03/21/96.03:00P	
1.2.1.11.B1U	2	Weld Joint B11	03/21/96.03:00P	03/21/96.05:00P	
1.2.1.11.B1V	2	Leak Test Joint B11	03/22/96.08:00A	03/22/96.10:00A	
1.2.1.11.B1W	2	Install Tube Supports B11	03/22/96.08:00A	03/22/96.10:00A	
1.2.1.11.B1X	2	Remove Equip'mt, Clean & Cap B11	03/22/96.10:00A	03/22/96.12:00P	
1.2.1.11.B2A	1	Unload,Rec/Insp Tube B12	02/06/96.09:00A	02/06/96.10:00A	
1.2.1.11.B2B	1	Move to Stiff Fit Up Stat. B12	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.11.B2C	1	Set-up & Purge B12	02/07/96.11:00A	02/07/96.12:00P	
1.2.1.11.B2D	2	Fit Stiffeners B12	02/07/96.01:00P	02/07/96.03:00P	
1.2.1.11.B2E	4	Weld Stiffeners B12	02/07/96.03:00P	02/08/96.10:00A	
1.2.1.11.B2F	1	Move to Exp.Bellows Stat. B12	02/08/96.10:00A	02/08/96.11:00A	
1.2.1.11.B2G	3	Fit,Purge,Weld Exp. Bellows B12	02/08/96.11:00A	02/08/96.03:00P	
1.2.1.11.B2H	1	Inspect, Install End Caps B12	02/08/96.03:00P	02/08/96.04:00P	
1.2.1.11.B2J	1	Move to Test Area B12	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.11.B2K	1	Pre-Clean & Black Light B12	02/09/96.10:00A	02/09/96.11:00A	
1.2.1.11.B2L	30	Leak Test B12	02/09/96.11:00A	02/10/96.05:00P	
1.2.1.11.B2O	1	Move to Post Test Storage B12	02/12/96.08:00A	02/12/96.09:00A	
1.2.1.11.B2P	1	Clean, Dry & End Cap B12	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.11.B2R	1	Transport to Erection B12	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.11.B2S	1	Set & Align B12	03/25/96.10:00A	03/25/96.11:00A	
1.2.1.11.B2T	1	Set Clean Room, Purge & Fit B12	03/25/96.11:00A	03/25/96.12:00P	
1.2.1.11.B2U	2	Weld Joint B12	03/25/96.01:00P	03/25/96.03:00P	
1.2.1.11.B2V	2	Leak Test Joint B12	03/25/96.03:00P	03/25/96.05:00P	
1.2.1.11.B2W	2	Install Tube SupportsB12	03/25/96.03:00P	03/25/96.05:00P	
1.2.1.11.B2X	2	Remove Equip'mt, Clean & Cap B12	03/26/96.08:00A	03/26/96.10:00A	
1.2.1.11.B3A	1	Unload,Rec/Insp Tube B13	02/06/96.10:00A	02/06/96.11:00A	
1.2.1.11.B3B	1	Move to Stiff Fit Up Stat. B13	02/08/96.11:00A	02/08/96.12:00P	
1.2.1.11.B3C	1	Set-up & Purge B13	02/08/96.01:00P	02/08/96.02:00P	
1.2.1.11.B3D	2	Fit Stiffeners B3	02/08/96.02:00P	02/08/96.04:00P	
1.2.1.11.B3E	4	Weld Stiffeners B3	02/08/96.04:00P	02/09/96.11:00A	
1.2.1.11.B3F	1	Move to Exp.Bellows Stat. B13	02/09/96.11:00A	02/09/96.12:00P	
1.2.1.11.B3G	3	Fit,Purge,Weld Exp. Bellows B13	02/09/96.01:00P	02/09/96.04:00P	
1.2.1.11.B3H	1	Inspect, Install End Caps B13	02/09/96.04:00P	02/09/96.05:00P	
1.2.1.11.B3J	1	Move to Test Area B13	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.11.B3K	1	Pre-Clean & Black Light B13	02/12/96.10:00A	02/12/96.11:00A	
1.2.1.11.B3L	30	Leak Test B13	02/12/96.11:00A	02/13/96.05:00P	
1.2.1.11.B3O	1	Move to Post Test Storage B13	02/14/96.08:00A	02/14/96.09:00A	
1.2.1.11.B3P	1	Clean, Dry & End Cap B13	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.11.B3R	1	Transport to Erection B13	03/26/96.04:00P	03/26/96.05:00P	
1.2.1.11.B3S	1	Set & Align B13	03/27/96.08:00A	03/27/96.09:00A	
1.2.1.11.B3T	1	Set Clean Room, Purge & Fit B13	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.11.B3U	2	Weld Joint B13	03/27/96.10:00A	03/27/96.12:00P	
1.2.1.11.B3V	2	Leak Test Joint B13	03/27/96.01:00P	03/27/96.03:00P	
1.2.1.11.B3W	2	Install Tube Supports B13	03/27/96.01:00P	03/27/96.03:00P	
1.2.1.11.B3X	2	Remove Equip'mt, Clean & Cap B13	03/27/96.03:00P	03/27/96.05:00P	
1.2.1.11.B4A	1	Unload,Rec/Insp Tube B14	02/06/96.11:00A	02/06/96.12:00P	
1.2.1.11.B4B	1	Move to Stiff Fit Up Stat. B14	02/09/96.01:00P	02/09/96.02:00P	
1.2.1.11.B4C	1	Set-up & Purge B14	02/09/96.02:00P	02/09/96.03:00P	
1.2.1.11.B4D	2	Fit Stiffeners B14	02/09/96.03:00P	02/09/96.05:00P	
1.2.1.11.B4E	4	Weld Stiffeners B14	02/12/96.08:00A	02/12/96.12:00P	
1.2.1.11.B4F	1	Move to Exp.Bellows Stat. B14	02/12/96.01:00P	02/12/96.02:00P	
1.2.1.11.B4G	3	Fit,Purge,Weld Exp. Bellows B14	02/12/96.02:00P	02/12/96.05:00P	
1.2.1.11.B4H	1	Inspect, Install End Caps B14	02/13/96.08:00A	02/13/96.09:00A	
1.2.1.11.B4J	1	Move to Test Area B14	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.11.B4K	1	Pre-Clean & Black Light B14	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.11.B4L	30	Leak Test B14	02/14/96.11:00A	02/15/96.05:00P	
1.2.1.11.B4O	1	Move to Post Test Storage B14	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.11.B4P	1	Clean, Dry & End Cap B14	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.11.B4R	1	Transport to Erection B14	03/28/96.02:00P	03/28/96.03:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.11.B4S	1	Set & Align B14	03/28/96.03:00P	03/28/96.04:00P	
1.2.1.11.B4T	1	Set Clean Room, Purge & Fit B14	03/28/96.04:00P	03/28/96.05:00P	
1.2.1.11.B4U	2	Weld Joint B14	03/29/96.08:00A	03/29/96.10:00A	
1.2.1.11.B4V	2	Leak Test Joint B14	03/29/96.10:00A	03/29/96.12:00P	
1.2.1.11.B4W	2	Install Tube Supports B14	03/29/96.10:00A	03/29/96.12:00P	
1.2.1.11.B4X	2	Remove Equip'mt, Clean & Cap B14	03/29/96.01:00P	03/29/96.03:00P	
1.2.1.11.B5A	1	Unload,Rec/Insp Tube B15	02/06/96.01:00P	02/06/96.02:00P	
1.2.1.11.B5B	1	Move to Stiff Fit Up Stat. B15	02/12/96.02:00P	02/12/96.03:00P	
1.2.1.11.B5C	1	Set-up & Purge B15	02/12/96.03:00P	02/12/96.04:00P	
1.2.1.11.B5D	2	Fit Stiffeners B15	02/12/96.04:00P	02/13/96.09:00A	
1.2.1.11.B5E	4	Weld Stiffeners B15	02/13/96.09:00A	02/13/96.02:00P	
1.2.1.11.B5F	1	Move to Exp.Bellows Stat. B15	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.11.B5G	3	Fit,Purge,Weld Exp. Bellows B15	02/14/96.11:00A	02/14/96.03:00P	
1.2.1.11.B5H	1	Inspect, Install End Caps B15	02/14/96.03:00P	02/14/96.04:00P	
1.2.1.11.B5J	1	Move to Test Area B15	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.11.B5K	1	Pre-Clean & Black Light B15	02/16/96.10:00A	02/16/96.11:00A	
1.2.1.11.B5L	30	Leak Test B15	02/16/96.11:00A	02/17/96.05:00P	
1.2.1.11.B5O	1	Move to Post Test Storage B15	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.11.B5P	1	Clean, Dry & End Cap B15	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.11.B5R	1	Transport to Erection B15	04/01/96.11:00A	04/01/96.12:00P	
1.2.1.11.B5S	1	Set & Align B15	04/01/96.01:00P	04/01/96.02:00P	
1.2.1.11.B5T	1	Set Clean Room, Purge & Fit B15	04/01/96.02:00P	04/01/96.03:00P	
1.2.1.11.B5U	2	Weld Joint B15	04/01/96.03:00P	04/01/96.05:00P	
1.2.1.11.B5V	2	Leak Test Joint B15	04/02/96.08:00A	04/02/96.10:00A	
1.2.1.11.B5W	2	Install Tube Supports B15	04/02/96.08:00A	04/02/96.10:00A	
1.2.1.11.B5X	2	Remove Equip'mt, Clean & Cap B15	04/02/96.10:00A	04/02/96.12:00P	
1.2.1.16	324	Cans 16-20	02/19/96.04:00P	04/16/96.11:00A	
1.2.1.16.1A	1	Unload,Rec/Insp Tube 16	02/20/96.08:00A	02/20/96.09:00A	
1.2.1.16.1B	1	Move to Stiff Fit Up Stat. 16	02/20/96.09:00A	02/20/96.10:00A	
1.2.1.16.1C	1	Set-up & Purge 16	02/20/96.10:00A	02/20/96.11:00A	
1.2.1.16.1D	2	Fit Stiffeners 16	02/20/96.11:00A	02/20/96.02:00P	
1.2.1.16.1E	4	Weld Stiffeners 16	02/20/96.02:00P	02/21/96.09:00A	
1.2.1.16.1F	1	Inspect, Install End Caps 16	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.16.1H	1	Move to Test Area 16	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.16.1I	1	Pre-Clean & Black Light 16	02/21/96.11:00A	02/21/96.12:00P	
1.2.1.16.1J	30	Leak Test 16	02/21/96.12:00P	02/22/96.06:00P	
1.2.1.16.1M	1	Move to Post Test Storage 16	02/23/96.08:00A	02/23/96.09:00A	
1.2.1.16.1N	1	Clean, Dry & End Cap 16	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.16.1P	1	Transport to Erection 16	04/04/96.10:00A	04/04/96.11:00A	
1.2.1.16.1Q	1	Set & Align 16	04/04/96.11:00A	04/04/96.12:00P	
1.2.1.16.1R	1	Set Clean Room, Purge & Fit 16	04/04/96.01:00P	04/04/96.02:00P	
1.2.1.16.1S	2	Weld Joint 16	04/04/96.02:00P	04/04/96.04:00P	
1.2.1.16.1T	2	Leak Test Joint 16	04/04/96.04:00P	04/05/96.09:00A	
1.2.1.16.1U	2	Install Tube Supports 16	04/04/96.04:00P	04/05/96.09:00A	
1.2.1.16.1V	2	Remove Equip'mt, Clean & Cap 16	04/05/96.09:00A	04/05/96.11:00A	
1.2.1.16.2A	1	Unload,Rec. & Inspect 17	02/20/96.09:00A	02/20/96.10:00A	
1.2.1.16.2B	1	Move to Stiff Fit Up Stat. 17	02/21/96.11:00A	02/21/96.12:00P	
1.2.1.16.2C	1	Set-up & Purge 17	02/21/96.01:00P	02/21/96.02:00P	
1.2.1.16.2D	2	Fit Stiffeners 17	02/21/96.02:00P	02/21/96.04:00P	
1.2.1.16.2E	4	Weld Stiffeners 17	02/21/96.04:00P	02/22/96.11:00A	
1.2.1.16.2F	1	Inspect, Install End Caps 17	02/22/96.11:00A	02/22/96.12:00P	
1.2.1.16.2H	1	Move to Test Area 17	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.16.2I	1	Pre-Clean & Black Light 17	02/23/96.10:00A	02/23/96.11:00A	
1.2.1.16.2J	30	Leak Test 17	02/23/96.11:00A	02/24/96.05:00P	
1.2.1.16.2M	1	Move to Post Test Storage 17	02/26/96.08:00A	02/26/96.09:00A	
1.2.1.16.2N	1	Clean, Dry & End Cap 17	02/26/96.09:00A	02/26/96.10:00A	
1.2.1.16.2P	1	Transport to Erection 17	04/08/96.08:00A	04/08/96.09:00A	
1.2.1.16.2Q	1	Set & Align 17	04/08/96.09:00A	04/08/96.10:00A	
1.2.1.16.2R	1	Set Clean Room, Purge & Fit 17	04/08/96.10:00A	04/08/96.11:00A	
1.2.1.16.2S	2	Weld Joint 17	04/08/96.11:00A	04/08/96.02:00P	
1.2.1.16.2T	2	Leak Test Joint 17	04/08/96.02:00P	04/08/96.04:00P	
1.2.1.16.2U	2	Install Tube Supports 17	04/08/96.02:00P	04/08/96.04:00P	
1.2.1.16.2V	2	Remove Equip'mt, Clean & Cap 17	04/08/96.04:00P	04/09/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.16.3A	1	Unload,Rec/Insp Tube 18	02/20/96.10:00A	02/20/96.11:00A	
1.2.1.16.3B	1	Move to Stiff Fit Up Stat. 18	02/23/96.10:00A	02/23/96.11:00A	
1.2.1.16.3C	1	Set-up & Purge 18	02/23/96.11:00A	02/23/96.12:00P	
1.2.1.16.3D	2	Fit Stiffeners 18	02/23/96.01:00P	02/23/96.03:00P	
1.2.1.16.3E	4	Weld Stiffeners 18	02/23/96.03:00P	02/26/96.10:00A	
1.2.1.16.3F	1	Inspect, Install End Caps 18	02/26/96.10:00A	02/26/96.11:00A	
1.2.1.16.3H	1	Move to Test Area 18	02/26/96.11:00A	02/26/96.12:00P	
1.2.1.16.3I	1	Pre-Clean & Black Light 18	02/26/96.01:00P	02/26/96.02:00P	
1.2.1.16.3J	30	Leak Test 18	02/26/96.02:00P	02/27/96.08:00P	
1.2.1.16.3M	1	Move to Post Test Storage 18	02/28/96.08:00A	02/28/96.09:00A	
1.2.1.16.3N	1	Clean, Dry & End Cap 18	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.16.3P	1	Transport to Erection 18	04/09/96.03:00P	04/09/96.04:00P	
1.2.1.16.3Q	1	Set & Align 18	04/09/96.04:00P	04/09/96.05:00P	
1.2.1.16.3R	1	Set Clean Room, Purge & Fit 18	04/10/96.08:00A	04/10/96.09:00A	
1.2.1.16.3S	2	Weld Joint 18	04/10/96.09:00A	04/10/96.11:00A	
1.2.1.16.3T	2	Leak Test Joint 18	04/10/96.11:00A	04/10/96.02:00P	
1.2.1.16.3U	2	Install Tube Supports 18	04/10/96.11:00A	04/10/96.02:00P	
1.2.1.16.3V	2	Remove Equip'mt, Clean & Cap 18	04/10/96.02:00P	04/10/96.04:00P	
1.2.1.16.4A	1	Unload,Rec/Insp Tube 19	02/20/96.11:00A	02/20/96.12:00P	
1.2.1.16.4B	1	Move to Stiff Fit Up Stat. 19	02/26/96.01:00P	02/26/96.02:00P	
1.2.1.16.4C	1	Set-up & Purge 19	02/26/96.02:00P	02/26/96.03:00P	
1.2.1.16.4D	2	Fit Stiffeners 19	02/26/96.03:00P	02/26/96.05:00P	
1.2.1.16.4E	4	Weld Stiffeners 19	02/27/96.08:00A	02/27/96.12:00P	
1.2.1.16.4F	1	Inspect, Install End Caps 19	02/27/96.01:00P	02/27/96.02:00P	
1.2.1.16.4H	1	Move to Test Area 19	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.16.4I	1	Pre-Clean & Black Light 19	02/28/96.10:00A	02/28/96.11:00A	
1.2.1.16.4J	30	Leak Test 19	02/28/96.11:00A	02/29/96.05:00P	
1.2.1.16.4M	1	Move to Post Test Storage 19	03/01/96.08:00A	03/01/96.09:00A	
1.2.1.16.4N	1	Clean, Dry & End Cap 19	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.16.4P	1	Transport to Erection 19	04/11/96.01:00P	04/11/96.02:00P	
1.2.1.16.4Q	1	Set & Align 19	04/11/96.02:00P	04/11/96.03:00P	
1.2.1.16.4R	1	Set Clean Room, Purge & Fit 19	04/11/96.03:00P	04/11/96.04:00P	
1.2.1.16.4S	2	Weld Joint 19	04/11/96.04:00P	04/12/96.09:00A	
1.2.1.16.4T	2	Leak Test Joint 19	04/12/96.09:00A	04/12/96.11:00A	
1.2.1.16.4U	2	Install Tube Supports 19	04/12/96.09:00A	04/12/96.11:00A	
1.2.1.16.4V	2	Remove Equip'mt, Clean & Cap 19	04/12/96.11:00A	04/12/96.02:00P	
1.2.1.16.5A	1	Unload,Rec/Insp Tube 20	02/20/96.01:00P	02/20/96.02:00P	
1.2.1.16.5B	1	Move to Stiff Fit Up Stat. 20	02/28/96.10:00A	02/28/96.11:00A	
1.2.1.16.5C	1	Set-up & Purge 20	02/28/96.11:00A	02/28/96.12:00P	
1.2.1.16.5D	1	F/W Pump Port Reinf. 20	02/28/96.01:00P	02/28/96.02:00P	
1.2.1.16.5E	2	Fit Stiffeners 20	02/28/96.02:00P	02/28/96.04:00P	
1.2.1.16.5F	4	Weld Stiffeners 20	02/28/96.04:00P	02/29/96.11:00A	
1.2.1.16.5G	1	Move to P.Port Stat. 20	02/29/96.11:00A	02/29/96.12:00P	
1.2.1.16.5H	1	Setup & Bore 10" Inlet 20	02/29/96.01:00P	02/29/96.02:00P	
1.2.1.16.5I	2	Purge/F/W Pump Port 20	02/29/96.02:00P	02/29/96.04:00P	
1.2.1.16.5J	1	Inspect, Install End Caps 20	02/29/96.04:00P	02/29/96.05:00P	
1.2.1.16.5L	1	Move to Test Area 20	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.16.5M	1	Pre-Clean & Black Light 20	03/01/96.10:00A	03/01/96.11:00A	
1.2.1.16.5N	30	Leak Test 20	03/01/96.11:00A	03/02/96.05:00P	
1.2.1.16.5Q	1	Move to Post Test Storage 20	03/04/96.08:00A	03/04/96.09:00A	
1.2.1.16.5R	1	Clean, Dry & End Cap 20	03/04/96.09:00A	03/04/96.10:00A	
1.2.1.16.5T	1	Transport to Erection 20	04/15/96.10:00A	04/15/96.11:00A	
1.2.1.16.5U	1	Set & Align 20	04/15/96.11:00A	04/15/96.12:00P	
1.2.1.16.5V	1	Set Clean Room, Purge & Fit 20	04/15/96.01:00P	04/15/96.02:00P	
1.2.1.16.5W	2	Weld Joint 20	04/15/96.02:00P	04/15/96.04:00P	
1.2.1.16.5X	2	Leak Test Joint 20	04/15/96.04:00P	04/16/96.09:00A	
1.2.1.16.5Y	2	Install Tube Supports 20	04/15/96.04:00P	04/16/96.09:00A	
1.2.1.16.5Z	2	Remove Equip'mt, Clean & Cap 20	04/16/96.09:00A	04/16/96.11:00A	
1.2.1.16.B1A	1	Unload,Rec/Insp Tube B15	02/20/96.08:00A	02/20/96.09:00A	
1.2.1.16.B1B	1	Move to Stiff Fit Up Stat. B16	02/20/96.09:00A	02/20/96.10:00A	
1.2.1.16.B1C	1	Set-up & Purge B16	02/20/96.10:00A	02/20/96.11:00A	
1.2.1.16.B1D	2	Fit Stiffeners B6	02/20/96.11:00A	02/20/96.02:00P	
1.2.1.16.B1E	4	Weld Stiffeners B16	02/20/96.02:00P	02/21/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.16.B1F	1	Move to Exp.Bellows Stat. B16	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.16.B1G	3	Fit,Purge,Weld Exp. Bellows B16	02/21/96.10:00A	02/21/96.02:00P	
1.2.1.16.B1H	1	Inspect, Install End Caps B16	02/21/96.02:00P	02/21/96.03:00P	
1.2.1.16.B1J	1	Move to Test Area B16	02/21/96.03:00P	02/21/96.04:00P	
1.2.1.16.B1K	1	Pre-Clean & Black Light B16	02/21/96.04:00P	02/21/96.05:00P	
1.2.1.16.B1L	30	Leak Test B16	02/21/96.05:00P	02/22/96.11:00P	
1.2.1.16.B1O	1	Move to Post Test Storage B16	02/23/96.08:00A	02/23/96.09:00A	
1.2.1.16.B1P	1	Clean, Dry & End Cap B16	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.16.B1R	1	Transport to Erection B16	04/03/96.11:00A	04/03/96.12:00P	
1.2.1.16.B1S	1	Set & Align B16	04/03/96.01:00P	04/03/96.02:00P	
1.2.1.16.B1T	1	Set Clean Room, Purge & Fit B16	04/03/96.02:00P	04/03/96.03:00P	
1.2.1.16.B1U	2	Weld Joint B16	04/03/96.03:00P	04/03/96.05:00P	
1.2.1.16.B1V	2	Leak Test Joint B16	04/04/96.08:00A	04/04/96.10:00A	
1.2.1.16.B1W	2	Install Tube Supports B16	04/04/96.08:00A	04/04/96.10:00A	
1.2.1.16.B1X	2	Remove Equip'mt, Clean & Cap B16	04/04/96.10:00A	04/04/96.12:00P	
1.2.1.16.B2A	1	Unload,Rec/Insp Tube B17	02/20/96.09:00A	02/20/96.10:00A	
1.2.1.16.B2B	1	Move to Stiff Fit Up Stat. B17	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.16.B2C	1	Set-up & Purge B17	02/21/96.11:00A	02/21/96.12:00P	
1.2.1.16.B2D	2	Fit Stiffeners B17	02/21/96.01:00P	02/21/96.03:00P	
1.2.1.16.B2E	4	Weld Stiffeners B17	02/21/96.03:00P	02/22/96.10:00A	
1.2.1.16.B2F	1	Move to Exp.Bellows Stat. B17	02/22/96.10:00A	02/22/96.11:00A	
1.2.1.16.B2G	3	Fit,Purge,Weld Exp. Bellows B17	02/22/96.11:00A	02/22/96.03:00P	
1.2.1.16.B2H	1	Inspect, Install End Caps B17	02/22/96.03:00P	02/22/96.04:00P	
1.2.1.16.B2J	1	Move to Test Area B17	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.16.B2K	1	Pre-Clean & Black Light B17	02/23/96.10:00A	02/23/96.11:00A	
1.2.1.16.B2L	30	Leak Test B17	02/23/96.11:00A	02/24/96.05:00P	
1.2.1.16.B2O	1	Move to Post Test Storage B17	02/26/96.08:00A	02/26/96.09:00A	
1.2.1.16.B2P	1	Clean, Dry & End Cap B17	02/26/96.09:00A	02/26/96.10:00A	
1.2.1.16.B2R	1	Transport to Erection B17	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.16.B2S	1	Set & Align B17	04/05/96.10:00A	04/05/96.11:00A	
1.2.1.16.B2T	1	Set Clean Room, Purge & Fit B17	04/05/96.11:00A	04/05/96.12:00P	
1.2.1.16.B2U	2	Weld Joint B17	04/05/96.01:00P	04/05/96.03:00P	
1.2.1.16.B2V	2	Leak Test Joint B17	04/05/96.03:00P	04/05/96.05:00P	
1.2.1.16.B2W	2	Install Tube Supports B17	04/05/96.03:00P	04/05/96.05:00P	
1.2.1.16.B2X	2	Remove Equip'mt, Clean & Cap B17	04/08/96.08:00A	04/08/96.10:00A	
1.2.1.16.B3A	1	Unload,Rec/Insp Tube B18	02/20/96.10:00A	02/20/96.11:00A	
1.2.1.16.B3B	1	Move to Stiff Fit Up Stat. B18	02/22/96.11:00A	02/22/96.12:00P	
1.2.1.16.B3C	1	Set-up & Purge B18	02/22/96.01:00P	02/22/96.02:00P	
1.2.1.16.B3D	2	Fit Stiffeners B18	02/22/96.02:00P	02/22/96.04:00P	
1.2.1.16.B3E	4	Weld Stiffeners B18	02/22/96.04:00P	02/23/96.11:00A	
1.2.1.16.B3F	1	Move to Exp.Bellows Stat. B18	02/23/96.11:00A	02/23/96.12:00P	
1.2.1.16.B3G	3	Fit,Purge,Weld Exp. Bellows B18	02/23/96.01:00P	02/23/96.04:00P	
1.2.1.16.B3H	1	Inspect, Install End Caps B18	02/23/96.04:00P	02/23/96.05:00P	
1.2.1.16.B3J	1	Move to Test Area B18	02/26/96.09:00A	02/26/96.10:00A	
1.2.1.16.B3K	1	Pre-Clean & Black Light B18	02/26/96.10:00A	02/26/96.11:00A	
1.2.1.16.B3L	30	Leak Test B18	02/26/96.11:00A	02/27/96.05:00P	
1.2.1.16.B3O	1	Move to Post Test Storage B18	02/28/96.08:00A	02/28/96.09:00A	
1.2.1.16.B3P	1	Clean, Dry & End Cap B18	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.16.B3R	1	Transport to Erection B18	04/08/96.04:00P	04/08/96.05:00P	
1.2.1.16.B3S	1	Set & Align B18	04/09/96.08:00A	04/09/96.09:00A	
1.2.1.16.B3T	1	Set Clean Room, Purge & Fit B18	04/09/96.09:00A	04/09/96.10:00A	
1.2.1.16.B3U	2	Weld Joint B18	04/09/96.10:00A	04/09/96.12:00P	
1.2.1.16.B3V	2	Leak Test Joint B18	04/09/96.01:00P	04/09/96.03:00P	
1.2.1.16.B3W	2	Install Tube Supports B18	04/09/96.01:00P	04/09/96.03:00P	
1.2.1.16.B3X	2	Remove Equip'mt, Clean & Cap B18	04/09/96.03:00P	04/09/96.05:00P	
1.2.1.16.B4A	1	Unload,Rec/Insp Tube B19	02/20/96.11:00A	02/20/96.12:00P	
1.2.1.16.B4B	1	Move to Stiff Fit Up Stat. B19	02/23/96.01:00P	02/23/96.02:00P	
1.2.1.16.B4C	1	Set-up & Purge B19	02/23/96.02:00P	02/23/96.03:00P	
1.2.1.16.B4D	2	Fit Stiffeners B19	02/23/96.03:00P	02/23/96.05:00P	
1.2.1.16.B4E	4	Weld Stiffeners B19	02/26/96.08:00A	02/26/96.12:00P	
1.2.1.16.B4F	1	Move to Exp.Bellows Stat. B19	02/26/96.01:00P	02/26/96.02:00P	
1.2.1.16.B4G	3	Fit,Purge,Weld Exp. Bellows B19	02/26/96.02:00P	02/26/96.05:00P	
1.2.1.16.B4H	1	Inspect, Install End Caps B19	02/27/96.08:00A	02/27/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.16.B4J	1	Move to Test Area B19	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.16.B4K	1	Pre-Clean & Black Light B19	02/28/96.10:00A	02/28/96.11:00A	
1.2.1.16.B4L	30	Leak Test B19	02/28/96.11:00A	02/29/96.05:00P	
1.2.1.16.B4O	1	Move to Post Test Storage B19	03/01/96.08:00A	03/01/96.09:00A	
1.2.1.16.B4P	1	Clean, Dry & End Cap B19	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.16.B4R	1	Transport to Erection B19	04/10/96.02:00P	04/10/96.03:00P	
1.2.1.16.B4S	1	Set & Align B19	04/10/96.03:00P	04/10/96.04:00P	
1.2.1.16.B4T	1	Set Clean Room, Purge & Fit B19	04/10/96.04:00P	04/10/96.05:00P	
1.2.1.16.B4U	2	Weld Joint B19	04/11/96.08:00A	04/11/96.10:00A	
1.2.1.16.B4V	2	Leak Test Joint B19	04/11/96.10:00A	04/11/96.12:00P	
1.2.1.16.B4W	2	Install Tube Supports B19	04/11/96.10:00A	04/11/96.12:00P	
1.2.1.16.B4X	2	Remove Equip'mt, Clean & Cap B19	04/11/96.01:00P	04/11/96.03:00P	
1.2.1.16.B5A	1	Unload,Rec/Insp Tube B19	02/20/96.01:00P	02/20/96.02:00P	
1.2.1.16.B5B	1	Move to Stiff Fit Up Stat. B19	02/26/96.02:00P	02/26/96.03:00P	
1.2.1.16.B5C	1	Set-up & Purge B20	02/26/96.03:00P	02/26/96.04:00P	
1.2.1.16.B5D	2	Fit Stiffeners B20	02/26/96.04:00P	02/27/96.09:00A	
1.2.1.16.B5E	4	Weld Stiffeners B20	02/27/96.09:00A	02/27/96.02:00P	
1.2.1.16.B5F	1	Move to Exp.Bellows Stat. B20	02/28/96.10:00A	02/28/96.11:00A	
1.2.1.16.B5G	3	Fit,Purge,Weld Exp. Bellows B20	02/28/96.11:00A	02/28/96.03:00P	
1.2.1.16.B5H	1	Inspect, Install End Caps B20	02/28/96.03:00P	02/28/96.04:00P	
1.2.1.16.B5J	1	Move to Test Area B20	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.16.B5K	1	Pre-Clean & Black Light B20	03/01/96.10:00A	03/01/96.11:00A	
1.2.1.16.B5L	30	Leak Test B20	03/01/96.11:00A	03/02/96.05:00P	
1.2.1.16.B5O	1	Move to Post Test Storage B20	03/04/96.08:00A	03/04/96.09:00A	
1.2.1.16.B5P	1	Clean, Dry & End Cap B20	03/04/96.09:00A	03/04/96.10:00A	
1.2.1.16.B5R	1	Transport to Erection B20	04/12/96.11:00A	04/12/96.12:00P	
1.2.1.16.B5S	1	Set & Align B20	04/12/96.01:00P	04/12/96.02:00P	
1.2.1.16.B5T	1	Set Clean Room, Purge & Fit B20	04/12/96.02:00P	04/12/96.03:00P	
1.2.1.16.B5U	2	Weld Joint B20	04/12/96.03:00P	04/12/96.05:00P	
1.2.1.16.B5V	2	Leak Test Joint B20	04/15/96.08:00A	04/15/96.10:00A	
1.2.1.16.B5W	2	Install Tube Supports B20	04/15/96.08:00A	04/15/96.10:00A	
1.2.1.16.B5X	2	Remove Equip'mt, Clean & Cap B20	04/15/96.10:00A	04/15/96.12:00P	
1.2.1.21	316	Cans 21-25	03/04/96.04:00P	04/29/96.11:00A	
1.2.1.21.1A	1	Unload,Rec/Insp Tube 21	03/05/96.08:00A	03/05/96.09:00A	
1.2.1.21.1B	1	Move to Stiff Fit Up Stat. 21	03/05/96.09:00A	03/05/96.10:00A	
1.2.1.21.1C	1	Set-up & Purge 21	03/05/96.10:00A	03/05/96.11:00A	
1.2.1.21.1D	2	Fit Stiffeners 21	03/05/96.11:00A	03/05/96.02:00P	
1.2.1.21.1E	4	Weld Stiffeners 21	03/05/96.02:00P	03/06/96.09:00A	
1.2.1.21.1F	1	Inspect, Install End Caps 21	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.21.1H	1	Move to Test Area 21	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.21.1I	1	Pre-Clean & Black Light 21	03/06/96.11:00A	03/06/96.12:00P	
1.2.1.21.1J	30	Leak Test 21	03/06/96.12:00P	03/07/96.06:00P	
1.2.1.21.1M	1	Move to Post Test Storage 21	03/08/96.08:00A	03/08/96.09:00A	
1.2.1.21.1N	1	Clean, Dry & End Cap 21	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.21.1P	1	Transport to Erection 21	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.21.1Q	1	Set & Align 21	04/17/96.11:00A	04/17/96.12:00P	
1.2.1.21.1R	1	Set Clean Room, Purge & Fit 21	04/17/96.01:00P	04/17/96.02:00P	
1.2.1.21.1S	2	Weld Joint 21	04/17/96.02:00P	04/17/96.04:00P	
1.2.1.21.1T	2	Leak Test Joint 21	04/17/96.04:00P	04/18/96.09:00A	
1.2.1.21.1U	2	Install Tube Supports 21	04/17/96.04:00P	04/18/96.09:00A	
1.2.1.21.1V	2	Remove Equip'mt, Clean & Cap 21	04/18/96.09:00A	04/18/96.11:00A	
1.2.1.21.2A	1	Unload,Rec. & Inspect 22	03/05/96.09:00A	03/05/96.10:00A	
1.2.1.21.2B	1	Move to Stiff Fit Up Stat. 22	03/06/96.11:00A	03/06/96.12:00P	
1.2.1.21.2C	1	Set-up & Purge 22	03/06/96.01:00P	03/06/96.02:00P	
1.2.1.21.2D	2	Fit Stiffeners 22	03/06/96.02:00P	03/06/96.04:00P	
1.2.1.21.2E	4	Weld Stiffeners 22	03/06/96.04:00P	03/07/96.11:00A	
1.2.1.21.2F	1	Inspect, Install End Caps 22	03/07/96.11:00A	03/07/96.12:00P	
1.2.1.21.2H	1	Move to Test Area 22	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.21.2I	1	Pre-Clean & Black Light 22	03/08/96.10:00A	03/08/96.11:00A	
1.2.1.21.2J	30	Leak Test 22	03/08/96.11:00A	03/09/96.05:00P	
1.2.1.21.2M	1	Move to Post Test Storage 22	03/11/96.08:00A	03/11/96.09:00A	
1.2.1.21.2N	1	Clean, Dry & End Cap 22	03/11/96.09:00A	03/11/96.10:00A	
1.2.1.21.2P	1	Transport to Erection 22	04/19/96.08:00A	04/19/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.21.2Q	1	Set & Align 22	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.21.2R	1	Set Clean Room, Purge & Fit 22	04/19/96.10:00A	04/19/96.11:00A	
1.2.1.21.2S	2	Weld Joint 22	04/19/96.11:00A	04/19/96.02:00P	
1.2.1.21.2T	2	Leak Test Joint 22	04/19/96.02:00P	04/19/96.04:00P	
1.2.1.21.2U	2	Install Tube Supports 22	04/19/96.02:00P	04/19/96.04:00P	
1.2.1.21.2V	2	Remove Equip'mt, Clean & Cap 22	04/19/96.04:00P	04/22/96.09:00A	
1.2.1.21.3A	1	Unload,Rec/Insp Tube 23	03/05/96.10:00A	03/05/96.11:00A	
1.2.1.21.3B	1	Move to Stiff Fit Up Stat. 23	03/08/96.10:00A	03/08/96.11:00A	
1.2.1.21.3C	1	Set-up & Purge 23	03/08/96.11:00A	03/08/96.12:00P	
1.2.1.21.3D	2	Fit Stiffeners 23	03/08/96.01:00P	03/08/96.03:00P	
1.2.1.21.3E	4	Weld Stiffeners 23	03/08/96.03:00P	03/11/96.10:00A	
1.2.1.21.3F	1	Inspect, Install End Caps 23	03/11/96.10:00A	03/11/96.11:00A	
1.2.1.21.3H	1	Move to Test Area 23	03/11/96.11:00A	03/11/96.12:00P	
1.2.1.21.3I	1	Pre-Clean & Black Light 23	03/11/96.01:00P	03/11/96.02:00P	
1.2.1.21.3J	30	Leak Test 23	03/11/96.02:00P	03/12/96.08:00P	
1.2.1.21.3M	1	Move to Post Test Storage 23	03/13/96.08:00A	03/13/96.09:00A	
1.2.1.21.3N	1	Clean, Dry & End Cap 23	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.21.3P	1	Transport to Erection 23	04/22/96.03:00P	04/22/96.04:00P	
1.2.1.21.3Q	1	Set & Align 23	04/22/96.04:00P	04/22/96.05:00P	
1.2.1.21.3R	1	Set Clean Room, Purge & Fit 23	04/23/96.08:00A	04/23/96.09:00A	
1.2.1.21.3S	2	Weld Joint 23	04/23/96.09:00A	04/23/96.11:00A	
1.2.1.21.3T	2	Leak Test Joint 23	04/23/96.11:00A	04/23/96.02:00P	
1.2.1.21.3U	2	Install Tube Supports 23	04/23/96.11:00A	04/23/96.02:00P	
1.2.1.21.3V	2	Remove Equip'mt, Clean & Cap 23	04/23/96.02:00P	04/23/96.04:00P	
1.2.1.21.4A	1	Unload,Rec/Insp Tube 24	03/05/96.11:00A	03/05/96.12:00P	
1.2.1.21.4B	1	Move to Stiff Fit Up Stat. 24	03/11/96.01:00P	03/11/96.02:00P	
1.2.1.21.4C	1	Set-up & Purge 24	03/11/96.02:00P	03/11/96.03:00P	
1.2.1.21.4D	2	Fit Stiffeners 24	03/11/96.03:00P	03/11/96.05:00P	
1.2.1.21.4E	4	Weld Stiffeners 24	03/12/96.08:00A	03/12/96.12:00P	
1.2.1.21.4F	1	Inspect, Install End Caps 24	03/12/96.01:00P	03/12/96.02:00P	
1.2.1.21.4H	1	Move to Test Area 24	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.21.4I	1	Pre-Clean & Black Light 24	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.21.4J	30	Leak Test 24	03/13/96.11:00A	03/14/96.05:00P	
1.2.1.21.4M	1	Move to Post Test Storage 24	03/15/96.08:00A	03/15/96.09:00A	
1.2.1.21.4N	1	Clean, Dry & End Cap 24	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.21.4P	1	Transport to Erection 24	04/24/96.01:00P	04/24/96.02:00P	
1.2.1.21.4Q	1	Set & Align 24	04/24/96.02:00P	04/24/96.03:00P	
1.2.1.21.4R	1	Set Clean Room, Purge & Fit 24	04/24/96.03:00P	04/24/96.04:00P	
1.2.1.21.4S	2	Weld Joint 24	04/24/96.04:00P	04/25/96.09:00A	
1.2.1.21.4T	2	Leak Test Joint 24	04/25/96.09:00A	04/25/96.11:00A	
1.2.1.21.4U	2	Install Tube Supports 24	04/25/96.09:00A	04/25/96.11:00A	
1.2.1.21.4V	2	Remove Equip'mt, Clean & Cap 24	04/25/96.11:00A	04/25/96.02:00P	
1.2.1.21.5A	1	Unload,Rec/Insp Tube 25	03/05/96.01:00P	03/05/96.02:00P	
1.2.1.21.5B	1	Move to Stiff Fit Up Stat. 25	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.21.5C	1	Set-up & Purge 25	03/13/96.11:00A	03/13/96.12:00P	
1.2.1.21.5D	1	F/W Pump Port Reinf. 25	03/13/96.01:00P	03/13/96.02:00P	
1.2.1.21.5E	2	Fit Stiffeners 25	03/13/96.02:00P	03/13/96.04:00P	
1.2.1.21.5F	4	Weld Stiffeners 25	03/13/96.04:00P	03/14/96.11:00A	
1.2.1.21.5G	1	Move to P.Port Stat.25	03/14/96.11:00A	03/14/96.12:00P	
1.2.1.21.5H	1	Setup & Bore 10" Inlet 25	03/14/96.01:00P	03/14/96.02:00P	
1.2.1.21.5I	2	Purge/F/W Pump Port 25	03/14/96.02:00P	03/14/96.04:00P	
1.2.1.21.5J	1	Inspect, Install End Caps 25	03/14/96.04:00P	03/14/96.05:00P	
1.2.1.21.5L	1	Move to Test Area 25	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.21.5M	1	Pre-Clean & Black Light 25	03/15/96.10:00A	03/15/96.11:00A	
1.2.1.21.5N	30	Leak Test 25	03/15/96.11:00A	03/16/96.05:00P	
1.2.1.21.5Q	1	Move to Post Test Storage 25	03/18/96.08:00A	03/18/96.09:00A	
1.2.1.21.5R	1	Clean, Dry & End Cap 25	03/18/96.09:00A	03/18/96.10:00A	
1.2.1.21.5T	1	Transport to Erection 25	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.21.5U	1	Set & Align 25	04/26/96.11:00A	04/26/96.12:00P	
1.2.1.21.5V	1	Set Clean Room, Purge & Fit 25	04/26/96.01:00P	04/26/96.02:00P	
1.2.1.21.5W	2	Weld Joint 25	04/26/96.02:00P	04/26/96.04:00P	
1.2.1.21.5X	2	Leak Test Joint 25	04/26/96.04:00P	04/29/96.09:00A	
1.2.1.21.5Y	2	Install Tube Supports 25	04/26/96.04:00P	04/29/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.21.5Z	2	Remove Equip'mt, Clean & Cap 25	04/29/96.09:00A	04/29/96.11:00A	
1.2.1.21.B1A	1	Unload,Rec/Insp Tube B21	03/05/96.08:00A	03/05/96.09:00A	
1.2.1.21.B1B	1	Move to Stiff Fit Up Stat. B21	03/05/96.09:00A	03/05/96.10:00A	
1.2.1.21.B1C	1	Set-up & Purge B21	03/05/96.10:00A	03/05/96.11:00A	
1.2.1.21.B1D	2	Fit Stiffeners B21	03/05/96.11:00A	03/05/96.02:00P	
1.2.1.21.B1E	4	Weld Stiffeners B21	03/05/96.02:00P	03/06/96.09:00A	
1.2.1.21.B1F	1	Move to Exp.Bellows Stat. B21	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.21.B1G	3	Fit,Purge,Weld Exp. Bellows B21	03/06/96.10:00A	03/06/96.02:00P	
1.2.1.21.B1H	1	Inspect, Install End Caps B21	03/06/96.02:00P	03/06/96.03:00P	
1.2.1.21.B1J	1	Move to Test Area B21	03/06/96.03:00P	03/06/96.04:00P	
1.2.1.21.B1K	1	Pre-Clean & Black Light B21	03/06/96.04:00P	03/06/96.05:00P	
1.2.1.21.B1L	30	Leak Test B21	03/06/96.05:00P	03/07/96.11:00P	
1.2.1.21.B1O	1	Move to Post Test Storage B21	03/08/96.08:00A	03/08/96.09:00A	
1.2.1.21.B1P	1	Clean, Dry & End Cap B21	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.21.B1R	1	Transport to Erection 21	04/16/96.11:00A	04/16/96.12:00P	
1.2.1.21.B1S	1	Set & Align B21	04/16/96.01:00P	04/16/96.02:00P	
1.2.1.21.B1T	1	Set Clean Room, Purge & Fit B21	04/16/96.02:00P	04/16/96.03:00P	
1.2.1.21.B1U	2	Weld Joint B21	04/16/96.03:00P	04/16/96.05:00P	
1.2.1.21.B1V	2	Leak Test Joint B21	04/17/96.08:00A	04/17/96.10:00A	
1.2.1.21.B1W	2	Install Tube Supports B21	04/17/96.08:00A	04/17/96.10:00A	
1.2.1.21.B1X	2	Remove Equip'mt, Clean & Cap B21	04/17/96.10:00A	04/17/96.12:00P	
1.2.1.21.B2A	1	Unload,Rec/Insp Tube B22	03/05/96.09:00A	03/05/96.10:00A	
1.2.1.21.B2B	1	Move to Stiff Fit Up Stat. B22	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.21.B2C	1	Set-up & Purge B22	03/06/96.11:00A	03/06/96.12:00P	
1.2.1.21.B2D	2	Fit Stiffeners B22	03/06/96.01:00P	03/06/96.03:00P	
1.2.1.21.B2E	4	Weld Stiffeners B22	03/06/96.03:00P	03/07/96.10:00A	
1.2.1.21.B2F	1	Move to Exp.Bellows Stat. B22	03/07/96.10:00A	03/07/96.11:00A	
1.2.1.21.B2G	3	Fit,Purge,Weld Exp. Bellows B22	03/07/96.11:00A	03/07/96.03:00P	
1.2.1.21.B2H	1	Inspect, Install End Caps B22	03/07/96.03:00P	03/07/96.04:00P	
1.2.1.21.B2J	1	Move to Test Area B2	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.21.B2K	1	Pre-Clean & Black Light B22	03/08/96.10:00A	03/08/96.11:00A	
1.2.1.21.B2L	30	Leak Test B22	03/08/96.11:00A	03/09/96.05:00P	
1.2.1.21.B2O	1	Move to Post Test Storage B22	03/11/96.08:00A	03/11/96.09:00A	
1.2.1.21.B2P	1	Clean, Dry & End Cap B22	03/11/96.09:00A	03/11/96.10:00A	
1.2.1.21.B2R	1	Transport to Erection B22	04/18/96.09:00A	04/18/96.10:00A	
1.2.1.21.B2S	1	Set & Align B22	04/18/96.10:00A	04/18/96.11:00A	
1.2.1.21.B2T	1	Set Clean Room, Purge & Fit B22	04/18/96.11:00A	04/18/96.12:00P	
1.2.1.21.B2U	2	Weld Joint B22	04/18/96.01:00P	04/18/96.03:00P	
1.2.1.21.B2V	2	Leak Test Joint B22	04/18/96.03:00P	04/18/96.05:00P	
1.2.1.21.B2W	2	Install Tube SupportsB22	04/18/96.03:00P	04/18/96.05:00P	
1.2.1.21.B2X	2	Remove Equip'mt, Clean & Cap B22	04/19/96.08:00A	04/19/96.10:00A	
1.2.1.21.B3A	1	Unload,Rec/Insp Tube B23	03/05/96.10:00A	03/05/96.11:00A	
1.2.1.21.B3B	1	Move to Stiff Fit Up Stat. B23	03/07/96.11:00A	03/07/96.12:00P	
1.2.1.21.B3C	1	Set-up & Purge B23	03/07/96.01:00P	03/07/96.02:00P	
1.2.1.21.B3D	2	Fit Stiffeners B23	03/07/96.02:00P	03/07/96.04:00P	
1.2.1.21.B3E	4	Weld Stiffeners B23	03/07/96.04:00P	03/08/96.11:00A	
1.2.1.21.B3F	1	Move to Exp.Bellows Stat. 23	03/08/96.11:00A	03/08/96.12:00P	
1.2.1.21.B3G	3	Fit,Purge,Weld Exp. Bellows B23	03/08/96.01:00P	03/08/96.04:00P	
1.2.1.21.B3H	1	Inspect, Install End Caps B23	03/08/96.04:00P	03/08/96.05:00P	
1.2.1.21.B3J	1	Move to Test Area B23	03/11/96.09:00A	03/11/96.10:00A	
1.2.1.21.B3K	1	Pre-Clean & Black Light B23	03/11/96.10:00A	03/11/96.11:00A	
1.2.1.21.B3L	30	Leak Test B23	03/11/96.11:00A	03/12/96.05:00P	
1.2.1.21.B3O	1	Move to Post Test Storage B23	03/13/96.08:00A	03/13/96.09:00A	
1.2.1.21.B3P	1	Clean, Dry & End Cap B23	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.21.B3R	1	Transport to Erection B23	04/19/96.04:00P	04/19/96.05:00P	
1.2.1.21.B3S	1	Set & Align B23	04/22/96.08:00A	04/22/96.09:00A	
1.2.1.21.B3T	1	Set Clean Room, Purge & Fit B23	04/22/96.09:00A	04/22/96.10:00A	
1.2.1.21.B3U	2	Weld Joint B23	04/22/96.10:00A	04/22/96.12:00P	
1.2.1.21.B3V	2	Leak Test Joint B23	04/22/96.01:00P	04/22/96.03:00P	
1.2.1.21.B3W	2	Install Tube Supports B23	04/22/96.01:00P	04/22/96.03:00P	
1.2.1.21.B3X	2	Remove Equip'mt, Clean & Cap B23	04/22/96.03:00P	04/22/96.05:00P	
1.2.1.21.B4A	1	Unload,Rec/Insp Tube B2	03/05/96.11:00A	03/05/96.12:00P	
1.2.1.21.B4B	1	Move to Stiff Fit Up Stat. B24	03/08/96.01:00P	03/08/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.21.B4C	1	Set-up & Purge B24	03/08/96.02:00P	03/08/96.03:00P	
1.2.1.21.B4D	2	Fit Stiffeners B2	03/08/96.03:00P	03/08/96.05:00P	
1.2.1.21.B4E	4	Weld Stiffeners B24	03/11/96.08:00A	03/11/96.12:00P	
1.2.1.21.B4F	1	Move to Exp.Bellows Stat. B24	03/11/96.01:00P	03/11/96.02:00P	
1.2.1.21.B4G	3	Fit,Purge,Weld Exp. Bellows B24	03/11/96.02:00P	03/11/96.05:00P	
1.2.1.21.B4H	1	Inspect, Install End Caps B24	03/12/96.08:00A	03/12/96.09:00A	
1.2.1.21.B4J	1	Move to Test Area B224	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.21.B4K	1	Pre-Clean & Black Light B24	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.21.B4L	30	Leak Test B24	03/13/96.11:00A	03/14/96.05:00P	
1.2.1.21.B4O	1	Move to Post Test Storage B24	03/15/96.08:00A	03/15/96.09:00A	
1.2.1.21.B4P	1	Clean, Dry & End Cap B24	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.21.B4R	1	Transport to Erection B24	04/23/96.02:00P	04/23/96.03:00P	
1.2.1.21.B4S	1	Set & Align B24	04/23/96.03:00P	04/23/96.04:00P	
1.2.1.21.B4T	1	Set Clean Room, Purge & Fit B24	04/23/96.04:00P	04/23/96.05:00P	
1.2.1.21.B4U	2	Weld Joint B24	04/24/96.08:00A	04/24/96.10:00A	
1.2.1.21.B4V	2	Leak Test Joint B24	04/24/96.10:00A	04/24/96.12:00P	
1.2.1.21.B4W	2	Install Tube Supports B24	04/24/96.10:00A	04/24/96.12:00P	
1.2.1.21.B4X	2	Remove Equip'mt, Clean & Cap B24	04/24/96.01:00P	04/24/96.03:00P	
1.2.1.21.B5A	1	Unload,Rec/Insp Tube B2	03/05/96.01:00P	03/05/96.02:00P	
1.2.1.21.B5B	1	Move to Stiff Fit Up Stat. B25	03/11/96.02:00P	03/11/96.03:00P	
1.2.1.21.B5C	1	Set-up & Purge B25	03/11/96.03:00P	03/11/96.04:00P	
1.2.1.21.B5D	2	Fit Stiffeners B25	03/11/96.04:00P	03/12/96.09:00A	
1.2.1.21.B5E	4	Weld Stiffeners B25	03/12/96.09:00A	03/12/96.02:00P	
1.2.1.21.B5F	1	Move to Exp.Bellows Stat. B25	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.21.B5G	3	Fit,Purge,Weld Exp. Bellows B25	03/13/96.11:00A	03/13/96.03:00P	
1.2.1.21.B5H	1	Inspect, Install End Caps B25	03/13/96.03:00P	03/13/96.04:00P	
1.2.1.21.B5J	1	Move to Test Area B25	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.21.B5K	1	Pre-Clean & Black Light B25	03/15/96.10:00A	03/15/96.11:00A	
1.2.1.21.B5L	30	Leak Test B25	03/15/96.11:00A	03/16/96.05:00P	
1.2.1.21.B5O	1	Move to Post Test Storage B25	03/18/96.08:00A	03/18/96.09:00A	
1.2.1.21.B5P	1	Clean, Dry & End Cap B25	03/18/96.09:00A	03/18/96.10:00A	
1.2.1.21.B5R	1	Transport to Erection B25	04/25/96.11:00A	04/25/96.12:00P	
1.2.1.21.B5S	1	Set & Align B25	04/25/96.01:00P	04/25/96.02:00P	
1.2.1.21.B5T	1	Set Clean Room, Purge & Fit B25	04/25/96.02:00P	04/25/96.03:00P	
1.2.1.21.B5U	2	Weld Joint B25	04/25/96.03:00P	04/25/96.05:00P	
1.2.1.21.B5V	2	Leak Test Joint B25	04/26/96.08:00A	04/26/96.10:00A	
1.2.1.21.B5W	2	Install Tube Supports 25	04/26/96.08:00A	04/26/96.10:00A	
1.2.1.21.B5X	2	Remove Equip'mt, Clean & Cap B25	04/26/96.10:00A	04/26/96.12:00P	
1.2.1.26	308	Cans 26-30	03/18/96.04:00P	05/10/96.11:00A	
1.2.1.26.1A	1	Unload,Rec/Insp Tube 26	03/19/96.08:00A	03/19/96.09:00A	
1.2.1.26.1B	1	Move to Stiff Fit Up Stat. 26	03/19/96.09:00A	03/19/96.10:00A	
1.2.1.26.1C	1	Set-up & Purge 26	03/19/96.10:00A	03/19/96.11:00A	
1.2.1.26.1D	2	Fit Stiffeners 26	03/19/96.11:00A	03/19/96.02:00P	
1.2.1.26.1E	4	Weld Stiffeners 26	03/19/96.02:00P	03/20/96.09:00A	
1.2.1.26.1F	1	Inspect, Install End Caps 26	03/20/96.09:00A	03/20/96.10:00A	
1.2.1.26.1H	1	Move to Test Area 26	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.26.1I	1	Pre-Clean & Black Light 26	03/20/96.11:00A	03/20/96.12:00P	
1.2.1.26.1J	30	Leak Test 26	03/20/96.12:00P	03/21/96.06:00P	
1.2.1.26.1M	1	Move to Post Test Storage 26	03/22/96.08:00A	03/22/96.09:00A	
1.2.1.26.1N	1	Clean, Dry & End Cap 26	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.26.1P	1	Transport to Erection 26	04/30/96.10:00A	04/30/96.11:00A	
1.2.1.26.1Q	1	Set & Align 26	04/30/96.11:00A	04/30/96.12:00P	
1.2.1.26.1R	1	Set Clean Room, Purge & Fit 26	04/30/96.01:00P	04/30/96.02:00P	
1.2.1.26.1S	2	Weld Joint 26	04/30/96.02:00P	04/30/96.04:00P	
1.2.1.26.1T	2	Leak Test Joint 26	04/30/96.04:00P	05/01/96.09:00A	
1.2.1.26.1U	2	Install Tube Supports 26	04/30/96.04:00P	05/01/96.09:00A	
1.2.1.26.1V	2	Remove Equip'mt, Clean & Cap 26	05/01/96.09:00A	05/01/96.11:00A	
1.2.1.26.2A	1	Unload,Rec. & Inspect 27	03/19/96.09:00A	03/19/96.10:00A	
1.2.1.26.2B	1	Move to Stiff Fit Up Stat. 27	03/20/96.11:00A	03/20/96.12:00P	
1.2.1.26.2C	1	Set-up & Purge 27	03/20/96.01:00P	03/20/96.02:00P	
1.2.1.26.2D	2	Fit Stiffeners 27	03/20/96.02:00P	03/20/96.04:00P	
1.2.1.26.2E	4	Weld Stiffeners 27	03/20/96.04:00P	03/21/96.11:00A	
1.2.1.26.2F	1	Inspect, Install End Caps 27	03/21/96.11:00A	03/21/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.26.2H	1	Move to Test Area 27	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.26.2I	1	Pre-Clean & Black Light 27	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.26.2J	30	Leak Test 27	03/22/96.11:00A	03/23/96.05:00P	
1.2.1.26.2M	1	Move to Post Test Storage 27	03/25/96.08:00A	03/25/96.09:00A	
1.2.1.26.2N	1	Clean, Dry & End Cap 27	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.26.2P	1	Transport to Erection 27	05/02/96.08:00A	05/02/96.09:00A	
1.2.1.26.2Q	1	Set & Align 27	05/02/96.09:00A	05/02/96.10:00A	
1.2.1.26.2R	1	Set Clean Room, Purge & Fit 27	05/02/96.10:00A	05/02/96.11:00A	
1.2.1.26.2S	2	Weld Joint 27	05/02/96.11:00A	05/02/96.02:00P	
1.2.1.26.2T	2	Leak Test Joint 27	05/02/96.02:00P	05/02/96.04:00P	
1.2.1.26.2U	2	Install Tube Supports 27	05/02/96.02:00P	05/02/96.04:00P	
1.2.1.26.2V	2	Remove Equip'mt, Clean & Cap 27	05/02/96.04:00P	05/03/96.09:00A	
1.2.1.26.3A	1	Unload,Rec/Insp Tube 28	03/19/96.10:00A	03/19/96.11:00A	
1.2.1.26.3B	1	Move to Stiff Fit Up Stat. 28	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.26.3C	1	Set-up & Purge 28	03/22/96.11:00A	03/22/96.12:00P	
1.2.1.26.3D	2	Fit Stiffeners 28	03/22/96.01:00P	03/22/96.03:00P	
1.2.1.26.3E	4	Weld Stiffeners 28	03/22/96.03:00P	03/25/96.10:00A	
1.2.1.26.3F	1	Inspect, Install End Caps 28	03/25/96.10:00A	03/25/96.11:00A	
1.2.1.26.3H	1	Move to Test Area 28	03/25/96.11:00A	03/25/96.12:00P	
1.2.1.26.3I	1	Pre-Clean & Black Light 28	03/25/96.01:00P	03/25/96.02:00P	
1.2.1.26.3J	30	Leak Test 28	03/25/96.02:00P	03/26/96.08:00P	
1.2.1.26.3M	1	Move to Post Test Storage 28	03/27/96.08:00A	03/27/96.09:00A	
1.2.1.26.3N	1	Clean, Dry & End Cap 28	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.26.3P	1	Transport to Erection 28	05/03/96.03:00P	05/03/96.04:00P	
1.2.1.26.3Q	1	Set & Align 28	05/03/96.04:00P	05/03/96.05:00P	
1.2.1.26.3R	1	Set Clean Room, Purge & Fit 28	05/06/96.08:00A	05/06/96.09:00A	
1.2.1.26.3S	2	Weld Joint 28	05/06/96.09:00A	05/06/96.11:00A	
1.2.1.26.3T	2	Leak Test Joint 28	05/06/96.11:00A	05/06/96.02:00P	
1.2.1.26.3U	2	Install Tube Supports 28	05/06/96.11:00A	05/06/96.02:00P	
1.2.1.26.3V	2	Remove Equip'mt, Clean & Cap 28	05/06/96.02:00P	05/06/96.04:00P	
1.2.1.26.4A	1	Unload,Rec/Insp Tube 29	03/19/96.11:00A	03/19/96.12:00P	
1.2.1.26.4B	1	Move to Stiff Fit Up Stat. 29	03/25/96.01:00P	03/25/96.02:00P	
1.2.1.26.4C	1	Set-up & Purge 29	03/25/96.02:00P	03/25/96.03:00P	
1.2.1.26.4D	2	Fit Stiffeners 29	03/25/96.03:00P	03/25/96.05:00P	
1.2.1.26.4E	4	Weld Stiffeners 29	03/26/96.08:00A	03/26/96.12:00P	
1.2.1.26.4F	1	Inspect, Install End Caps 29	03/26/96.01:00P	03/26/96.02:00P	
1.2.1.26.4H	1	Move to Test Area 29	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.26.4I	1	Pre-Clean & Black Light 29	03/27/96.10:00A	03/27/96.11:00A	
1.2.1.26.4J	30	Leak Test 29	03/27/96.11:00A	03/28/96.05:00P	
1.2.1.26.4M	1	Move to Post Test Storage 29	03/29/96.08:00A	03/29/96.09:00A	
1.2.1.26.4N	1	Clean, Dry & End Cap 29	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.26.4P	1	Transport to Erection 29	05/07/96.01:00P	05/07/96.02:00P	
1.2.1.26.4Q	1	Set & Align 29	05/07/96.02:00P	05/07/96.03:00P	
1.2.1.26.4R	1	Set Clean Room, Purge & Fit 29	05/07/96.03:00P	05/07/96.04:00P	
1.2.1.26.4S	2	Weld Joint 29	05/07/96.04:00P	05/08/96.09:00A	
1.2.1.26.4T	2	Leak Test Joint 29	05/08/96.09:00A	05/08/96.11:00A	
1.2.1.26.4U	2	Install Tube Supports 29	05/08/96.09:00A	05/08/96.11:00A	
1.2.1.26.4V	2	Remove Equip'mt, Clean & Cap 29	05/08/96.11:00A	05/08/96.02:00P	
1.2.1.26.5A	1	Unload,Rec/Insp Tube 30	03/19/96.01:00P	03/19/96.02:00P	
1.2.1.26.5B	1	Move to Stiff Fit Up Stat. 30	03/27/96.10:00A	03/27/96.11:00A	
1.2.1.26.5C	1	Set-up & Purge 30	03/27/96.11:00A	03/27/96.12:00P	
1.2.1.26.5D	1	F/W Pump Port Reinf. 30	03/27/96.01:00P	03/27/96.02:00P	
1.2.1.26.5E	2	Fit Stiffeners 30	03/27/96.02:00P	03/27/96.04:00P	
1.2.1.26.5F	4	Weld Stiffeners 30	03/27/96.04:00P	03/28/96.11:00A	
1.2.1.26.5G	1	Move to P.Port Stat.30	03/28/96.11:00A	03/28/96.12:00P	
1.2.1.26.5H	1	Setup & Bore 10" Inlet 30	03/28/96.01:00P	03/28/96.02:00P	
1.2.1.26.5I	2	Purge/F/W Pump Port 30	03/28/96.02:00P	03/28/96.04:00P	
1.2.1.26.5J	1	Inspect, Install End Caps 30	03/28/96.04:00P	03/28/96.05:00P	
1.2.1.26.5L	1	Move to Test Area 30	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.26.5M	1	Pre-Clean & Black Light 30	03/29/96.10:00A	03/29/96.11:00A	
1.2.1.26.5N	30	Leak Test 30	03/29/96.11:00A	03/30/96.05:00P	
1.2.1.26.5Q	1	Move to Post Test Storage 30	04/01/96.08:00A	04/01/96.09:00A	
1.2.1.26.5R	1	Clean, Dry & End Cap 30	04/01/96.09:00A	04/01/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.26.5T	1	Transport to Erection 30	05/09/96.10:00A	05/09/96.11:00A	
1.2.1.26.5U	1	Set & Align 30	05/09/96.11:00A	05/09/96.12:00P	
1.2.1.26.5V	1	Set Clean Room, Purge & Fit 30	05/09/96.01:00P	05/09/96.02:00P	
1.2.1.26.5W	2	Weld Joint 30	05/09/96.02:00P	05/09/96.04:00P	
1.2.1.26.5X	2	Leak Test Joint 30	05/09/96.04:00P	05/10/96.09:00A	
1.2.1.26.5Y	2	Install Tube Supports 30	05/09/96.04:00P	05/10/96.09:00A	
1.2.1.26.5Z	2	Remove Equip'mt, Clean & Cap 30	05/10/96.09:00A	05/10/96.11:00A	
1.2.1.26.B1A	1	Unload,Rec/Insp Tube B26	03/19/96.08:00A	03/19/96.09:00A	
1.2.1.26.B1B	1	Move to Stiff Fit Up Stat. B26	03/19/96.09:00A	03/19/96.10:00A	
1.2.1.26.B1C	1	Set-up & Purge B26	03/19/96.10:00A	03/19/96.11:00A	
1.2.1.26.B1D	2	Fit Stiffeners B26	03/19/96.11:00A	03/19/96.02:00P	
1.2.1.26.B1E	4	Weld Stiffeners B26	03/19/96.02:00P	03/20/96.09:00A	
1.2.1.26.B1F	1	Move to Exp.Bellows Stat. B26	03/20/96.09:00A	03/20/96.10:00A	
1.2.1.26.B1G	3	Fit,Purge,Weld Exp. Bellows B26	03/20/96.10:00A	03/20/96.02:00P	
1.2.1.26.B1H	1	Inspect, Install End Caps B26	03/20/96.02:00P	03/20/96.03:00P	
1.2.1.26.B1J	1	Move to Test Area B26	03/20/96.03:00P	03/20/96.04:00P	
1.2.1.26.B1K	1	Pre-Clean & Black Light B26	03/20/96.04:00P	03/20/96.05:00P	
1.2.1.26.B1L	30	Leak Test B26	03/20/96.05:00P	03/21/96.11:00P	
1.2.1.26.B1O	1	Move to Post Test Storage B26	03/22/96.08:00A	03/22/96.09:00A	
1.2.1.26.B1P	1	Clean, Dry & End Cap B26	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.26.B1R	1	Transport to Erection B26	04/29/96.11:00A	04/29/96.12:00P	
1.2.1.26.B1S	1	Set & Align B26	04/29/96.01:00P	04/29/96.02:00P	
1.2.1.26.B1T	1	Set Clean Room, Purge & Fit B26	04/29/96.02:00P	04/29/96.03:00P	
1.2.1.26.B1U	2	Weld Joint B26	04/29/96.03:00P	04/29/96.05:00P	
1.2.1.26.B1V	2	Leak Test Joint B26	04/30/96.08:00A	04/30/96.10:00A	
1.2.1.26.B1W	2	Install Tube Supports B26	04/30/96.08:00A	04/30/96.10:00A	
1.2.1.26.B1X	2	Remove Equip'mt, Clean & Cap B26	04/30/96.10:00A	04/30/96.12:00P	
1.2.1.26.B2A	1	Unload,Rec/Insp Tube B27	03/19/96.09:00A	03/19/96.10:00A	
1.2.1.26.B2B	1	Move to Stiff Fit Up Stat. B27	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.26.B2C	1	Set-up & Purge B27	03/20/96.11:00A	03/20/96.12:00P	
1.2.1.26.B2D	2	Fit Stiffeners B27	03/20/96.01:00P	03/20/96.03:00P	
1.2.1.26.B2E	4	Weld Stiffeners B27	03/20/96.03:00P	03/21/96.10:00A	
1.2.1.26.B2F	1	Move to Exp.Bellows Stat. B27	03/21/96.10:00A	03/21/96.11:00A	
1.2.1.26.B2G	3	Fit,Purge,Weld Exp. Bellows B27	03/21/96.11:00A	03/21/96.03:00P	
1.2.1.26.B2H	1	Inspect, Install End Caps B27	03/21/96.03:00P	03/21/96.04:00P	
1.2.1.26.B2J	1	Move to Test Area B27	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.26.B2K	1	Pre-Clean & Black Light B27	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.26.B2L	30	Leak Test B27	03/22/96.11:00A	03/23/96.05:00P	
1.2.1.26.B2O	1	Move to Post Test Storage B27	03/25/96.08:00A	03/25/96.09:00A	
1.2.1.26.B2P	1	Clean, Dry & End Cap B27	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.26.B2R	1	Transport to Erection B27	05/01/96.09:00A	05/01/96.10:00A	
1.2.1.26.B2S	1	Set & Align B27	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.26.B2T	1	Set Clean Room, Purge & Fit B27	05/01/96.11:00A	05/01/96.12:00P	
1.2.1.26.B2U	2	Weld Joint B27	05/01/96.01:00P	05/01/96.03:00P	
1.2.1.26.B2V	2	Leak Test Joint B27	05/01/96.03:00P	05/01/96.05:00P	
1.2.1.26.B2W	2	Install Tube SupportsB27	05/01/96.03:00P	05/01/96.05:00P	
1.2.1.26.B2X	2	Remove Equip'mt, Clean & Cap B27	05/02/96.08:00A	05/02/96.10:00A	
1.2.1.26.B3A	1	Unload,Rec/Insp Tube B28	03/19/96.10:00A	03/19/96.11:00A	
1.2.1.26.B3B	1	Move to Stiff Fit Up Stat. B28	03/21/96.11:00A	03/21/96.12:00P	
1.2.1.26.B3C	1	Set-up & Purge B28	03/21/96.01:00P	03/21/96.02:00P	
1.2.1.26.B3D	2	Fit Stiffeners B28	03/21/96.02:00P	03/21/96.04:00P	
1.2.1.26.B3E	4	Weld Stiffeners B28	03/21/96.04:00P	03/22/96.11:00A	
1.2.1.26.B3F	1	Move to Exp.Bellows Stat. B28	03/22/96.11:00A	03/22/96.12:00P	
1.2.1.26.B3G	3	Fit,Purge,Weld Exp. Bellows B28	03/22/96.01:00P	03/22/96.04:00P	
1.2.1.26.B3H	1	Inspect, Install End Caps B28	03/22/96.04:00P	03/22/96.05:00P	
1.2.1.26.B3J	1	Move to Test Area B28	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.26.B3K	1	Pre-Clean & Black Light B28	03/25/96.10:00A	03/25/96.11:00A	
1.2.1.26.B3L	30	Leak Test B28	03/25/96.11:00A	03/26/96.05:00P	
1.2.1.26.B3O	1	Move to Post Test Storage B28	03/27/96.08:00A	03/27/96.09:00A	
1.2.1.26.B3P	1	Clean, Dry & End Cap B28	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.26.B3R	1	Transport to Erection B28	05/02/96.04:00P	05/02/96.05:00P	
1.2.1.26.B3S	1	Set & Align B28	05/03/96.08:00A	05/03/96.09:00A	
1.2.1.26.B3T	1	Set Clean Room, Purge & Fit B28	05/03/96.09:00A	05/03/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.26.B3U	2	Weld Joint B28	05/03/96.10:00A	05/03/96.12:00P	
1.2.1.26.B3V	2	Leak Test Joint B28	05/03/96.01:00P	05/03/96.03:00P	
1.2.1.26.B3W	2	Install Tube Supports B28	05/03/96.01:00P	05/03/96.03:00P	
1.2.1.26.B3X	2	Remove Equip'mt, Clean & Cap B28	05/03/96.03:00P	05/03/96.05:00P	
1.2.1.26.B4A	1	Unload,Rec/Insp Tube B28	03/19/96.11:00A	03/19/96.12:00P	
1.2.1.26.B4B	1	Move to Stiff Fit Up Stat. B29	03/22/96.01:00P	03/22/96.02:00P	
1.2.1.26.B4C	1	Set-up & Purge B29	03/22/96.02:00P	03/22/96.03:00P	
1.2.1.26.B4D	2	Fit Stiffeners B29	03/22/96.03:00P	03/22/96.05:00P	
1.2.1.26.B4E	4	Weld Stiffeners B29	03/25/96.08:00A	03/25/96.12:00P	
1.2.1.26.B4F	1	Move to Exp.Bellows Stat. B29	03/25/96.01:00P	03/25/96.02:00P	
1.2.1.26.B4G	3	Fit,Purge,Weld Exp. Bellows B29	03/25/96.02:00P	03/25/96.05:00P	
1.2.1.26.B4H	1	Inspect, Install End Caps B29	03/26/96.08:00A	03/26/96.09:00A	
1.2.1.26.B4J	1	Move to Test Area B29	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.26.B4K	1	Pre-Clean & Black Light B29	03/27/96.10:00A	03/27/96.11:00A	
1.2.1.26.B4L	30	Leak Test B29	03/27/96.11:00A	03/28/96.05:00P	
1.2.1.26.B4O	1	Move to Post Test Storage B29	03/29/96.08:00A	03/29/96.09:00A	
1.2.1.26.B4P	1	Clean, Dry & End Cap B29	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.26.B4R	1	Transport to Erection B29	05/06/96.02:00P	05/06/96.03:00P	
1.2.1.26.B4S	1	Set & Align B29	05/06/96.03:00P	05/06/96.04:00P	
1.2.1.26.B4T	1	Set Clean Room, Purge & Fit B29	05/06/96.04:00P	05/06/96.05:00P	
1.2.1.26.B4U	2	Weld Joint B29	05/07/96.08:00A	05/07/96.10:00A	
1.2.1.26.B4V	2	Leak Test Joint B29	05/07/96.10:00A	05/07/96.12:00P	
1.2.1.26.B4W	2	Install Tube Supports B29	05/07/96.10:00A	05/07/96.12:00P	
1.2.1.26.B4X	2	Remove Equip'mt, Clean & Cap B29	05/07/96.01:00P	05/07/96.03:00P	
1.2.1.26.B5A	1	Unload,Rec/Insp Tube B30	03/19/96.01:00P	03/19/96.02:00P	
1.2.1.26.B5B	1	Move to Stiff Fit Up Stat. B30	03/25/96.02:00P	03/25/96.03:00P	
1.2.1.26.B5C	1	Set-up & Purge B30	03/25/96.03:00P	03/25/96.04:00P	
1.2.1.26.B5D	2	Fit Stiffeners B30	03/25/96.04:00P	03/26/96.09:00A	
1.2.1.26.B5E	4	Weld Stiffeners B30	03/26/96.09:00A	03/26/96.02:00P	
1.2.1.26.B5F	1	Move to Exp.Bellows Stat. B30	03/27/96.10:00A	03/27/96.11:00A	
1.2.1.26.B5G	3	Fit,Purge,Weld Exp. Bellows B30	03/27/96.11:00A	03/27/96.03:00P	
1.2.1.26.B5H	1	Inspect, Install End Caps B30	03/27/96.03:00P	03/27/96.04:00P	
1.2.1.26.B5J	1	Move to Test Area B30	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.26.B5K	1	Pre-Clean & Black Light B30	03/29/96.10:00A	03/29/96.11:00A	
1.2.1.26.B5L	30	Leak Test B30	03/29/96.11:00A	03/30/96.05:00P	
1.2.1.26.B5O	1	Move to Post Test Storage B30	04/01/96.08:00A	04/01/96.09:00A	
1.2.1.26.B5P	1	Clean, Dry & End Cap B30	04/01/96.09:00A	04/01/96.10:00A	
1.2.1.26.B5R	1	Transport to Erection B30	05/08/96.11:00A	05/08/96.12:00P	
1.2.1.26.B5S	1	Set & Align B30	05/08/96.01:00P	05/08/96.02:00P	
1.2.1.26.B5T	1	Set Clean Room, Purge & Fit B30	05/08/96.02:00P	05/08/96.03:00P	
1.2.1.26.B5U	2	Weld Joint B30	05/08/96.03:00P	05/08/96.05:00P	
1.2.1.26.B5V	2	Leak Test Joint B30	05/09/96.08:00A	05/09/96.10:00A	
1.2.1.26.B5W	2	Install Tube Supports B30	05/09/96.08:00A	05/09/96.10:00A	
1.2.1.26.B5X	2	Remove Equip'mt, Clean & Cap B30	05/09/96.10:00A	05/09/96.12:00P	
1.2.1.31	300	Cans 31-35	04/01/96.04:00P	05/23/96.11:00A	
1.2.1.31.1A	1	Unload,Rec/Insp Tube 31	04/02/96.08:00A	04/02/96.09:00A	
1.2.1.31.1B	1	Move to Stiff Fit Up Stat. 31	04/02/96.09:00A	04/02/96.10:00A	
1.2.1.31.1C	1	Set-up & Purge 31	04/02/96.10:00A	04/02/96.11:00A	
1.2.1.31.1D	2	Fit Stiffeners 31	04/02/96.11:00A	04/02/96.02:00P	
1.2.1.31.1E	4	Weld Stiffeners 31	04/02/96.02:00P	04/03/96.09:00A	
1.2.1.31.1F	1	Inspect, Install End Caps 31	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.31.1H	1	Move to Test Area 31	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.31.1I	1	Pre-Clean & Black Light 31	04/03/96.11:00A	04/03/96.12:00P	
1.2.1.31.1J	30	Leak Test 31	04/03/96.12:00P	04/04/96.06:00P	
1.2.1.31.1M	1	Move to Post Test Storage 31	04/05/96.08:00A	04/05/96.09:00A	
1.2.1.31.1N	1	Clean, Dry & End Cap 31	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.31.1P	1	Transport to Erection 31	05/13/96.10:00A	05/13/96.11:00A	
1.2.1.31.1Q	1	Set & Align 31	05/13/96.11:00A	05/13/96.12:00P	
1.2.1.31.1R	1	Set Clean Room, Purge & Fit 31	05/13/96.01:00P	05/13/96.02:00P	
1.2.1.31.1S	2	Weld Joint 31	05/13/96.02:00P	05/13/96.04:00P	
1.2.1.31.1T	2	Leak Test Joint 31	05/13/96.04:00P	05/14/96.09:00A	
1.2.1.31.1U	2	Install Tube Supports 31	05/13/96.04:00P	05/14/96.09:00A	
1.2.1.31.1V	2	Remove Equip'mt, Clean & Cap 31	05/14/96.09:00A	05/14/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.31.2A	1	Unload,Rec. & Inspect 32	04/02/96.09:00A	04/02/96.10:00A	
1.2.1.31.2B	1	Move to Stiff Fit Up Stat. 32	04/03/96.11:00A	04/03/96.12:00P	
1.2.1.31.2C	1	Set-up & Purge32	04/03/96.01:00P	04/03/96.02:00P	
1.2.1.31.2D	2	Fit Stiffeners 32	04/03/96.02:00P	04/03/96.04:00P	
1.2.1.31.2E	4	Weld Stiffeners 32	04/03/96.04:00P	04/04/96.11:00A	
1.2.1.31.2F	1	Inspect, Install End Caps 32	04/04/96.11:00A	04/04/96.12:00P	
1.2.1.31.2H	1	Move to Test Area 32	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.31.2I	1	Pre-Clean & Black Light 32	04/05/96.10:00A	04/05/96.11:00A	
1.2.1.31.2J	30	Leak Test 32	04/05/96.11:00A	04/06/96.05:00P	
1.2.1.31.2M	1	Move to Post Test Storage 3 2	04/08/96.08:00A	04/08/96.09:00A	
1.2.1.31.2N	1	Clean, Dry & End Cap 32	04/08/96.09:00A	04/08/96.10:00A	
1.2.1.31.2P	1	Transport to Erection 32	05/15/96.08:00A	05/15/96.09:00A	
1.2.1.31.2Q	1	Set & Align 32	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.31.2R	1	Set Clean Room, Purge & Fit 32	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.31.2S	2	Weld Joint 32	05/15/96.11:00A	05/15/96.02:00P	
1.2.1.31.2T	2	Leak Test Joint 32	05/15/96.02:00P	05/15/96.04:00P	
1.2.1.31.2U	2	Install Tube Supports 32	05/15/96.02:00P	05/15/96.04:00P	
1.2.1.31.2V	2	Remove Equip'mt, Clean & Cap 32	05/15/96.04:00P	05/16/96.09:00A	
1.2.1.31.3A	1	Unload,Rec/Insp Tube 33	04/02/96.10:00A	04/02/96.11:00A	
1.2.1.31.3B	1	Move to Stiff Fit Up Stat. 33	04/05/96.10:00A	04/05/96.11:00A	
1.2.1.31.3C	1	Set-up & Purge 33	04/05/96.11:00A	04/05/96.12:00P	
1.2.1.31.3D	2	Fit Stiffeners 33	04/05/96.01:00P	04/05/96.03:00P	
1.2.1.31.3E	4	Weld Stiffeners 33	04/05/96.03:00P	04/08/96.10:00A	
1.2.1.31.3F	1	Inspect, Install End Caps 33	04/08/96.10:00A	04/08/96.11:00A	
1.2.1.31.3H	1	Move to Test Area 33	04/08/96.11:00A	04/08/96.12:00P	
1.2.1.31.3I	1	Pre-Clean & Black Light 33	04/08/96.01:00P	04/08/96.02:00P	
1.2.1.31.3J	30	Leak Test 33	04/08/96.02:00P	04/09/96.08:00P	
1.2.1.31.3M	1	Move to Post Test Storage 3	04/10/96.08:00A	04/10/96.09:00A	
1.2.1.31.3N	1	Clean, Dry & End Cap 33 3	04/10/96.09:00A	04/10/96.10:00A	
1.2.1.31.3P	1	Transport to Erection 33	05/16/96.03:00P	05/16/96.04:00P	
1.2.1.31.3Q	1	Set & Align 33	05/16/96.04:00P	05/16/96.05:00P	
1.2.1.31.3R	1	Set Clean Room, Purge & Fit 33	05/17/96.08:00A	05/17/96.09:00A	
1.2.1.31.3S	2	Weld Joint 33	05/17/96.09:00A	05/17/96.11:00A	
1.2.1.31.3T	2	Leak Test Joint 33	05/17/96.11:00A	05/17/96.02:00P	
1.2.1.31.3U	2	Install Tube Supports 33	05/17/96.11:00A	05/17/96.02:00P	
1.2.1.31.3V	2	Remove Equip'mt, Clean & Cap 33	05/17/96.02:00P	05/17/96.04:00P	
1.2.1.31.4A	1	Unload,Rec/Insp Tube 34	04/02/96.11:00A	04/02/96.12:00P	
1.2.1.31.4B	1	Move to Stiff Fit Up Stat.34	04/08/96.01:00P	04/08/96.02:00P	
1.2.1.31.4C	1	Set-up & Purge 34	04/08/96.02:00P	04/08/96.03:00P	
1.2.1.31.4D	2	Fit Stiffeners 34	04/08/96.03:00P	04/08/96.05:00P	
1.2.1.31.4E	4	Weld Stiffeners 34	04/09/96.08:00A	04/09/96.12:00P	
1.2.1.31.4F	1	Inspect, Install End Caps 334	04/09/96.01:00P	04/09/96.02:00P	
1.2.1.31.4H	1	Move to Test Area 34	04/10/96.09:00A	04/10/96.10:00A	
1.2.1.31.4I	1	Pre-Clean & Black Light 34	04/10/96.10:00A	04/10/96.11:00A	
1.2.1.31.4J	30	Leak Test 34	04/10/96.11:00A	04/11/96.05:00P	
1.2.1.31.4M	1	Move to Post Test Storage 34	04/12/96.08:00A	04/12/96.09:00A	
1.2.1.31.4N	1	Clean, Dry & End Cap 34	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.31.4P	1	Transport to Erection 34	05/20/96.01:00P	05/20/96.02:00P	
1.2.1.31.4Q	1	Set & Align 34	05/20/96.02:00P	05/20/96.03:00P	
1.2.1.31.4R	1	Set Clean Room, Purge & Fit 34	05/20/96.03:00P	05/20/96.04:00P	
1.2.1.31.4S	2	Weld Joint 34	05/20/96.04:00P	05/21/96.09:00A	
1.2.1.31.4T	2	Leak Test Joint 34	05/21/96.09:00A	05/21/96.11:00A	
1.2.1.31.4U	2	Install Tube Supports 34	05/21/96.09:00A	05/21/96.11:00A	
1.2.1.31.4V	2	Remove Equip'mt, Clean & Cap 34	05/21/96.11:00A	05/21/96.02:00P	
1.2.1.31.5A	1	Unload,Rec/Insp Tube 35	04/02/96.01:00P	04/02/96.02:00P	
1.2.1.31.5B	1	Move to Stiff Fit Up Stat. 35	04/10/96.10:00A	04/10/96.11:00A	
1.2.1.31.5C	1	Set-up & Purge 35	04/10/96.11:00A	04/10/96.12:00P	
1.2.1.31.5D	1	F/W Pump Port Reinf. 35	04/10/96.01:00P	04/10/96.02:00P	
1.2.1.31.5E	2	Fit Stiffeners 35	04/10/96.02:00P	04/10/96.04:00P	
1.2.1.31.5F	4	Weld Stiffeners 35	04/10/96.04:00P	04/11/96.11:00A	
1.2.1.31.5G	1	Move to P.Port Stat. 35	04/11/96.11:00A	04/11/96.12:00P	
1.2.1.31.5H	1	Setup & Bore 10" Inlet 35	04/11/96.01:00P	04/11/96.02:00P	
1.2.1.31.5I	2	Purge/F/W Pump Port 35	04/11/96.02:00P	04/11/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.31.5J	1	Inspect, Install End Caps 35	04/11/96.04:00P	04/11/96.05:00P	
1.2.1.31.5L	1	Move to Test Area 35	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.31.5M	1	Pre-Clean & Black Light 35	04/12/96.10:00A	04/12/96.11:00A	
1.2.1.31.5N	30	Leak Test 35	04/12/96.11:00A	04/13/96.05:00P	
1.2.1.31.5Q	1	Move to Post Test Storage 35	04/15/96.08:00A	04/15/96.09:00A	
1.2.1.31.5R	1	Clean, Dry & End Cap 35	04/15/96.09:00A	04/15/96.10:00A	
1.2.1.31.5T	1	Transport to Erection 35	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.31.5U	1	Set & Align 35	05/22/96.11:00A	05/22/96.12:00P	
1.2.1.31.5V	1	Set Clean Room, Purge & Fit 35	05/22/96.01:00P	05/22/96.02:00P	
1.2.1.31.5W	2	Weld Joint 35	05/22/96.02:00P	05/22/96.04:00P	
1.2.1.31.5X	2	Leak Test Joint 35	05/22/96.04:00P	05/23/96.09:00A	
1.2.1.31.5Y	2	Install Tube Supports 35	05/22/96.04:00P	05/23/96.09:00A	
1.2.1.31.5Z	2	Remove Equip'mt, Clean & Cap 35	05/23/96.09:00A	05/23/96.11:00A	
1.2.1.31.B1A	1	Unload,Rec/Insp Tube B31	04/02/96.08:00A	04/02/96.09:00A	
1.2.1.31.B1B	1	Move to Stiff Fit Up Stat. B31	04/02/96.09:00A	04/02/96.10:00A	
1.2.1.31.B1C	1	Set-up & Purge B31	04/02/96.10:00A	04/02/96.11:00A	
1.2.1.31.B1D	2	Fit Stiffeners B31	04/02/96.11:00A	04/02/96.02:00P	
1.2.1.31.B1E	4	Weld Stiffeners B31	04/02/96.02:00P	04/03/96.09:00A	
1.2.1.31.B1F	1	Move to Exp.Bellows Stat. B31	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.31.B1G	3	Fit,Purge,Weld Exp. Bellows B31	04/03/96.10:00A	04/03/96.02:00P	
1.2.1.31.B1H	1	Inspect, Install End Caps B31	04/03/96.02:00P	04/03/96.03:00P	
1.2.1.31.B1J	1	Move to Test Area B31	04/03/96.03:00P	04/03/96.04:00P	
1.2.1.31.B1K	1	Pre-Clean & Black Light B31	04/03/96.04:00P	04/03/96.05:00P	
1.2.1.31.B1L	30	Leak Test B31	04/03/96.05:00P	04/04/96.11:00P	
1.2.1.31.B1O	1	Move to Post Test Storage B31	04/05/96.08:00A	04/05/96.09:00A	
1.2.1.31.B1P	1	Clean, Dry & End Cap B31	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.31.B1R	1	Transport to Erection B31	05/10/96.11:00A	05/10/96.12:00P	
1.2.1.31.B1S	1	Set & Align B31	05/10/96.01:00P	05/10/96.02:00P	
1.2.1.31.B1T	1	Set Clean Room, Purge & Fit B31	05/10/96.02:00P	05/10/96.03:00P	
1.2.1.31.B1U	2	Weld Joint B31	05/10/96.03:00P	05/10/96.05:00P	
1.2.1.31.B1V	2	Leak Test Joint B31	05/13/96.08:00A	05/13/96.10:00A	
1.2.1.31.B1W	2	Install Tube Supports B31	05/13/96.08:00A	05/13/96.10:00A	
1.2.1.31.B1X	2	Remove Equip'mt, Clean & Cap B31	05/13/96.10:00A	05/13/96.12:00P	
1.2.1.31.B2A	1	Unload,Rec/Insp Tube B32	04/02/96.09:00A	04/02/96.10:00A	
1.2.1.31.B2B	1	Move to Stiff Fit Up Stat. B32	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.31.B2C	1	Set-up & Purge B32	04/03/96.11:00A	04/03/96.12:00P	
1.2.1.31.B2D	2	Fit Stiffeners B32	04/03/96.01:00P	04/03/96.03:00P	
1.2.1.31.B2E	4	Weld Stiffeners B32	04/03/96.03:00P	04/04/96.10:00A	
1.2.1.31.B2F	1	Move to Exp.Bellows Stat. B32	04/04/96.10:00A	04/04/96.11:00A	
1.2.1.31.B2G	3	Fit,Purge,Weld Exp. Bellows B32	04/04/96.11:00A	04/04/96.03:00P	
1.2.1.31.B2H	1	Inspect, Install End Caps B32	04/04/96.03:00P	04/04/96.04:00P	
1.2.1.31.B2J	1	Move to Test Area B32	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.31.B2K	1	Pre-Clean & Black Light B32	04/05/96.10:00A	04/05/96.11:00A	
1.2.1.31.B2L	30	Leak Test B32	04/05/96.11:00A	04/06/96.05:00P	
1.2.1.31.B2O	1	Move to Post Test Storage B32	04/08/96.08:00A	04/08/96.09:00A	
1.2.1.31.B2P	1	Clean, Dry & End Cap B32	04/08/96.09:00A	04/08/96.10:00A	
1.2.1.31.B2R	1	Transport to Erection B32	05/14/96.09:00A	05/14/96.10:00A	
1.2.1.31.B2S	1	Set & Align B32	05/14/96.10:00A	05/14/96.11:00A	
1.2.1.31.B2T	1	Set Clean Room, Purge & Fit B32	05/14/96.11:00A	05/14/96.12:00P	
1.2.1.31.B2U	2	Weld Joint B32	05/14/96.01:00P	05/14/96.03:00P	
1.2.1.31.B2V	2	Leak Test Joint B32	05/14/96.03:00P	05/14/96.05:00P	
1.2.1.31.B2W	2	Install Tube SupportsB32	05/14/96.03:00P	05/14/96.05:00P	
1.2.1.31.B2X	2	Remove Equip'mt, Clean & Cap B32	05/15/96.08:00A	05/15/96.10:00A	
1.2.1.31.B3A	1	Unload,Rec/Insp Tube B33	04/02/96.10:00A	04/02/96.11:00A	
1.2.1.31.B3B	1	Move to Stiff Fit Up Stat. B33	04/04/96.11:00A	04/04/96.12:00P	
1.2.1.31.B3C	1	Set-up & Purge B33	04/04/96.01:00P	04/04/96.02:00P	
1.2.1.31.B3D	2	Fit Stiffeners B33	04/04/96.02:00P	04/04/96.04:00P	
1.2.1.31.B3E	4	Weld Stiffeners B33	04/04/96.04:00P	04/05/96.11:00A	
1.2.1.31.B3F	1	Move to Exp.Bellows Stat. B33	04/05/96.11:00A	04/05/96.12:00P	
1.2.1.31.B3G	3	Fit,Purge,Weld Exp. Bellows B33	04/05/96.01:00P	04/05/96.04:00P	
1.2.1.31.B3H	1	Inspect, Install End Caps B33	04/05/96.04:00P	04/05/96.05:00P	
1.2.1.31.B3J	1	Move to Test Area B33	04/08/96.09:00A	04/08/96.10:00A	
1.2.1.31.B3K	1	Pre-Clean & Black Light B33	04/08/96.10:00A	04/08/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.31.B3L	30	Leak Test B33	04/08/96.11:00A	04/09/96.05:00P	
1.2.1.31.B3O	1	Move to Post Test Storage B33	04/10/96.08:00A	04/10/96.09:00A	
1.2.1.31.B3P	1	Clean, Dry & End Cap B33	04/10/96.09:00A	04/10/96.10:00A	
1.2.1.31.B3R	1	Transport to Erection B33	05/15/96.04:00P	05/15/96.05:00P	
1.2.1.31.B3S	1	Set & Align B33	05/16/96.08:00A	05/16/96.09:00A	
1.2.1.31.B3T	1	Set Clean Room, Purge & Fit B33	05/16/96.09:00A	05/16/96.10:00A	
1.2.1.31.B3U	2	Weld Joint B33	05/16/96.10:00A	05/16/96.12:00P	
1.2.1.31.B3V	2	Leak Test Joint B33	05/16/96.01:00P	05/16/96.03:00P	
1.2.1.31.B3W	2	Install Tube Supports B33	05/16/96.01:00P	05/16/96.03:00P	
1.2.1.31.B3X	2	Remove Equip'mt, Clean & Cap B33	05/16/96.03:00P	05/16/96.05:00P	
1.2.1.31.B4A	1	Unload,Rec/Insp Tube B34	04/02/96.11:00A	04/02/96.12:00P	
1.2.1.31.B4B	1	Move to Stiff Fit Up Stat. B34	04/05/96.01:00P	04/05/96.02:00P	
1.2.1.31.B4C	1	Set-up & Purge B34	04/05/96.02:00P	04/05/96.03:00P	
1.2.1.31.B4D	2	Fit Stiffeners B34	04/05/96.03:00P	04/05/96.05:00P	
1.2.1.31.B4E	4	Weld Stiffeners B34	04/08/96.08:00A	04/08/96.12:00P	
1.2.1.31.B4F	1	Move to Exp.Bellows Stat. B34	04/08/96.01:00P	04/08/96.02:00P	
1.2.1.31.B4G	3	Fit,Purge,Weld Exp. Bellows B34	04/08/96.02:00P	04/08/96.05:00P	
1.2.1.31.B4H	1	Inspect, Install End Caps B34	04/09/96.08:00A	04/09/96.09:00A	
1.2.1.31.B4J	1	Move to Test Area B34	04/10/96.09:00A	04/10/96.10:00A	
1.2.1.31.B4K	1	Pre-Clean & Black Light B34	04/10/96.10:00A	04/10/96.11:00A	
1.2.1.31.B4L	30	Leak Test B34	04/10/96.11:00A	04/11/96.05:00P	
1.2.1.31.B4O	1	Move to Post Test Storage B34	04/12/96.08:00A	04/12/96.09:00A	
1.2.1.31.B4P	1	Clean, Dry & End Cap B3	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.31.B4R	1	Transport to Erection B34	05/17/96.02:00P	05/17/96.03:00P	
1.2.1.31.B4S	1	Set & Align B34	05/17/96.03:00P	05/17/96.04:00P	
1.2.1.31.B4T	1	Set Clean Room, Purge & Fit B34	05/17/96.04:00P	05/17/96.05:00P	
1.2.1.31.B4U	2	Weld Joint B34	05/20/96.08:00A	05/20/96.10:00A	
1.2.1.31.B4V	2	Leak Test Joint B34	05/20/96.10:00A	05/20/96.12:00P	
1.2.1.31.B4W	2	Install Tube Supports B34	05/20/96.10:00A	05/20/96.12:00P	
1.2.1.31.B4X	2	Remove Equip'mt, Clean & Cap B34	05/20/96.01:00P	05/20/96.03:00P	
1.2.1.31.B5A	1	Unload,Rec/Insp Tube B35	04/02/96.01:00P	04/02/96.02:00P	
1.2.1.31.B5B	1	Move to Stiff Fit Up Stat. B35	04/08/96.02:00P	04/08/96.03:00P	
1.2.1.31.B5C	1	Set-up & Purge B35	04/08/96.03:00P	04/08/96.04:00P	
1.2.1.31.B5D	2	Fit Stiffeners B35	04/08/96.04:00P	04/09/96.09:00A	
1.2.1.31.B5E	4	Weld Stiffeners B35	04/09/96.09:00A	04/09/96.02:00P	
1.2.1.31.B5F	1	Move to Exp.Bellows Stat. B35	04/10/96.10:00A	04/10/96.11:00A	
1.2.1.31.B5G	3	Fit,Purge,Weld Exp. Bellows B35	04/10/96.11:00A	04/10/96.03:00P	
1.2.1.31.B5H	1	Inspect, Install End Caps B35	04/10/96.03:00P	04/10/96.04:00P	
1.2.1.31.B5J	1	Move to Test Area B35	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.31.B5K	1	Pre-Clean & Black Light B35	04/12/96.10:00A	04/12/96.11:00A	
1.2.1.31.B5L	30	Leak Test B35	04/12/96.11:00A	04/13/96.05:00P	
1.2.1.31.B5O	1	Move to Post Test Storage B35	04/15/96.08:00A	04/15/96.09:00A	
1.2.1.31.B5P	1	Clean, Dry & End Cap B35	04/15/96.09:00A	04/15/96.10:00A	
1.2.1.31.B5R	1	Transport to Erection B35	05/21/96.11:00A	05/21/96.12:00P	
1.2.1.31.B5S	1	Set & Align B35	05/21/96.01:00P	05/21/96.02:00P	
1.2.1.31.B5T	1	Set Clean Room, Purge & Fit B35	05/21/96.02:00P	05/21/96.03:00P	
1.2.1.31.B5U	2	Weld Joint B35	05/21/96.03:00P	05/21/96.05:00P	
1.2.1.31.B5V	2	Leak Test Joint B35	05/22/96.08:00A	05/22/96.10:00A	
1.2.1.31.B5W	2	Install Tube Supports B35	05/22/96.08:00A	05/22/96.10:00A	
1.2.1.31.B5X	2	Remove Equip'mt, Clean & Cap B35	05/22/96.10:00A	05/22/96.12:00P	
1.2.1.36	292	Cans 36-40	04/15/96.04:00P	06/05/96.11:00A	
1.2.1.36.1A	1	Unload,Rec/Insp Tube 36	04/16/96.08:00A	04/16/96.09:00A	
1.2.1.36.1B	1	Move to Stiff Fit Up Stat. 36	04/16/96.09:00A	04/16/96.10:00A	
1.2.1.36.1C	1	Set-up & Purge 36	04/16/96.10:00A	04/16/96.11:00A	
1.2.1.36.1D	2	Fit Stiffeners 36	04/16/96.11:00A	04/16/96.02:00P	
1.2.1.36.1E	4	Weld Stiffeners 36	04/16/96.02:00P	04/17/96.09:00A	
1.2.1.36.1F	1	Inspect, Install End Caps 36	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.36.1H	1	Move to Test Area 36	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.36.1I	1	Pre-Clean & Black Light 36	04/17/96.11:00A	04/17/96.12:00P	
1.2.1.36.1J	30	Leak Test 36	04/17/96.12:00P	04/18/96.06:00P	
1.2.1.36.1M	1	Move to Post Test Storage 36	04/19/96.08:00A	04/19/96.09:00A	
1.2.1.36.1N	1	Clean, Dry & End Cap 36	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.36.1P	1	Transport to Erection 36	05/24/96.10:00A	05/24/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.36.1Q	1	Set & Align 36	05/24/96.11:00A	05/24/96.12:00P	
1.2.1.36.1R	1	Set Clean Room, Purge & Fit 36	05/24/96.01:00P	05/24/96.02:00P	
1.2.1.36.1S	2	Weld Joint 36	05/24/96.02:00P	05/24/96.04:00P	
1.2.1.36.1T	2	Leak Test Joint 36	05/24/96.04:00P	05/27/96.09:00A	
1.2.1.36.1U	2	Install Tube Supports 36	05/24/96.04:00P	05/27/96.09:00A	
1.2.1.36.1V	2	Remove Equip'mt, Clean & Cap 36	05/27/96.09:00A	05/27/96.11:00A	
1.2.1.36.2A	1	Unload,Rec. & Inspect 37	04/16/96.09:00A	04/16/96.10:00A	
1.2.1.36.2B	1	Move to Stiff Fit Up Stat. 37	04/17/96.11:00A	04/17/96.12:00P	
1.2.1.36.2C	1	Set-up & Purge 37	04/17/96.01:00P	04/17/96.02:00P	
1.2.1.36.2D	2	Fit Stiffeners 37	04/17/96.02:00P	04/17/96.04:00P	
1.2.1.36.2E	4	Weld Stiffeners 37	04/17/96.04:00P	04/18/96.11:00A	
1.2.1.36.2F	1	Inspect, Install End Caps 37	04/18/96.11:00A	04/18/96.12:00P	
1.2.1.36.2H	1	Move to Test Area 37	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.36.2I	1	Pre-Clean & Black Light 37	04/19/96.10:00A	04/19/96.11:00A	
1.2.1.36.2J	30	Leak Test 37	04/19/96.11:00A	04/20/96.05:00P	
1.2.1.36.2M	1	Move to Post Test Storage 37	04/22/96.08:00A	04/22/96.09:00A	
1.2.1.36.2N	1	Clean, Dry & End Cap 37	04/22/96.09:00A	04/22/96.10:00A	
1.2.1.36.2P	1	Transport to Erection 37	05/28/96.08:00A	05/28/96.09:00A	
1.2.1.36.2Q	1	Set & Align 37	05/28/96.09:00A	05/28/96.10:00A	
1.2.1.36.2R	1	Set Clean Room, Purge & Fit 37	05/28/96.10:00A	05/28/96.11:00A	
1.2.1.36.2S	2	Weld Joint 37	05/28/96.11:00A	05/28/96.02:00P	
1.2.1.36.2T	2	Leak Test Joint 37	05/28/96.02:00P	05/28/96.04:00P	
1.2.1.36.2U	2	Install Tube Supports 37	05/28/96.02:00P	05/28/96.04:00P	
1.2.1.36.2V	2	Remove Equip'mt, Clean & Cap 37	05/28/96.04:00P	05/29/96.09:00A	
1.2.1.36.3A	1	Unload,Rec/Insp Tube 38	04/16/96.10:00A	04/16/96.11:00A	
1.2.1.36.3B	1	Move to Stiff Fit Up Stat. 38	04/19/96.10:00A	04/19/96.11:00A	
1.2.1.36.3C	1	Set-up & Purge 38	04/19/96.11:00A	04/19/96.12:00P	
1.2.1.36.3D	2	Fit Stiffeners 38	04/19/96.01:00P	04/19/96.03:00P	
1.2.1.36.3E	4	Weld Stiffeners 38	04/19/96.03:00P	04/22/96.10:00A	
1.2.1.36.3F	1	Inspect, Install End Caps 38	04/22/96.10:00A	04/22/96.11:00A	
1.2.1.36.3H	1	Move to Test Area 38	04/22/96.11:00A	04/22/96.12:00P	
1.2.1.36.3I	1	Pre-Clean & Black Light 8	04/22/96.01:00P	04/22/96.02:00P	
1.2.1.36.3J	30	Leak Test 38	04/22/96.02:00P	04/23/96.08:00P	
1.2.1.36.3M	1	Move to Post Test Storage 38	04/24/96.08:00A	04/24/96.09:00A	
1.2.1.36.3N	1	Clean, Dry & End Cap 38	04/24/96.09:00A	04/24/96.10:00A	
1.2.1.36.3P	1	Transport to Erection 38	05/29/96.03:00P	05/29/96.04:00P	
1.2.1.36.3Q	1	Set & Align 38	05/29/96.04:00P	05/29/96.05:00P	
1.2.1.36.3R	1	Set Clean Room, Purge & Fit 38	05/30/96.08:00A	05/30/96.09:00A	
1.2.1.36.3S	2	Weld Joint 38	05/30/96.09:00A	05/30/96.11:00A	
1.2.1.36.3T	2	Leak Test Joint 38	05/30/96.11:00A	05/30/96.02:00P	
1.2.1.36.3U	2	Install Tube Supports 38	05/30/96.11:00A	05/30/96.02:00P	
1.2.1.36.3V	2	Remove Equip'mt, Clean & Cap 38	05/30/96.02:00P	05/30/96.04:00P	
1.2.1.36.4A	1	Unload,Rec/Insp Tube 39	04/16/96.11:00A	04/16/96.12:00P	
1.2.1.36.4B	1	Move to Stiff Fit Up Stat. 39	04/22/96.01:00P	04/22/96.02:00P	
1.2.1.36.4C	1	Set-up & Purge 39	04/22/96.02:00P	04/22/96.03:00P	
1.2.1.36.4D	2	Fit Stiffeners 39	04/22/96.03:00P	04/22/96.05:00P	
1.2.1.36.4E	4	Weld Stiffeners 39	04/23/96.08:00A	04/23/96.12:00P	
1.2.1.36.4F	1	Inspect, Install End Caps 39	04/23/96.01:00P	04/23/96.02:00P	
1.2.1.36.4H	1	Move to Test Area 39	04/24/96.09:00A	04/24/96.10:00A	
1.2.1.36.4I	1	Pre-Clean & Black Light 39	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.36.4J	30	Leak Test 39	04/24/96.11:00A	04/25/96.05:00P	
1.2.1.36.4M	1	Move to Post Test Storage 39	04/26/96.08:00A	04/26/96.09:00A	
1.2.1.36.4N	1	Clean, Dry & End Cap 39	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.36.4P	1	Transport to Erection 39	05/31/96.01:00P	05/31/96.02:00P	
1.2.1.36.4Q	1	Set & Align 39	05/31/96.02:00P	05/31/96.03:00P	
1.2.1.36.4R	1	Set Clean Room, Purge & Fit 39	05/31/96.03:00P	05/31/96.04:00P	
1.2.1.36.4S	2	Weld Joint 39	05/31/96.04:00P	06/03/96.09:00A	
1.2.1.36.4T	2	Leak Test Joint 39	06/03/96.09:00A	06/03/96.11:00A	
1.2.1.36.4U	2	Install Tube Supports 39	06/03/96.09:00A	06/03/96.11:00A	
1.2.1.36.4V	2	Remove Equip'mt, Clean & Cap 39	06/03/96.11:00A	06/03/96.02:00P	
1.2.1.36.5A	1	Unload,Rec/Insp Tube 40	04/16/96.01:00P	04/16/96.02:00P	
1.2.1.36.5B	1	Move to Stiff Fit Up Stat. 40	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.36.5C	1	Set-up & Purge 40	04/24/96.11:00A	04/24/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.36.5D	1	F/W Pump Port Reinf. 40	04/24/96.01:00P	04/24/96.02:00P	
1.2.1.36.5E	2	Fit Stiffeners 40	04/24/96.02:00P	04/24/96.04:00P	
1.2.1.36.5F	4	Weld Stiffeners 40	04/24/96.04:00P	04/25/96.11:00A	
1.2.1.36.5G	1	Move to P.Port Stat.	04/25/96.11:00A	04/25/96.12:00P	
1.2.1.36.5H	1	Setup & Bore 10" Inlet 40	04/25/96.01:00P	04/25/96.02:00P	
1.2.1.36.5I	2	Purge/F/W Pump Port 40	04/25/96.02:00P	04/25/96.04:00P	
1.2.1.36.5J	1	Inspect, Install End Caps 40	04/25/96.04:00P	04/25/96.05:00P	
1.2.1.36.5L	1	Move to Test Area 40	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.36.5M	1	Pre-Clean & Black Light 40	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.36.5N	30	Leak Test 40	04/26/96.11:00A	04/27/96.05:00P	
1.2.1.36.5Q	1	Move to Post Test Storage 40	04/29/96.08:00A	04/29/96.09:00A	
1.2.1.36.5R	1	Clean, Dry & End Cap 40	04/29/96.09:00A	04/29/96.10:00A	
1.2.1.36.5T	1	Transport to Erection 40	06/04/96.10:00A	06/04/96.11:00A	
1.2.1.36.5U	1	Set & Align 40	06/04/96.11:00A	06/04/96.12:00P	
1.2.1.36.5V	1	Set Clean Room, Purge & Fit 40	06/04/96.01:00P	06/04/96.02:00P	
1.2.1.36.5W	2	Weld Joint 40	06/04/96.02:00P	06/04/96.04:00P	
1.2.1.36.5X	2	Leak Test Joint 40	06/04/96.04:00P	06/05/96.09:00A	
1.2.1.36.5Y	2	Install Tube Supports 40	06/04/96.04:00P	06/05/96.09:00A	
1.2.1.36.5Z	2	Remove Equip'mt, Clean & Cap 40	06/05/96.09:00A	06/05/96.11:00A	
1.2.1.36.B1A	1	Unload,Rec/Insp Tube B36	04/16/96.08:00A	04/16/96.09:00A	
1.2.1.36.B1B	1	Move to Stiff Fit Up Stat. B36	04/16/96.09:00A	04/16/96.10:00A	
1.2.1.36.B1C	1	Set-up & Purge B36	04/16/96.10:00A	04/16/96.11:00A	
1.2.1.36.B1D	2	Fit Stiffeners B36	04/16/96.11:00A	04/16/96.02:00P	
1.2.1.36.B1E	4	Weld Stiffeners B36	04/16/96.02:00P	04/17/96.09:00A	
1.2.1.36.B1F	1	Move to Exp.Bellows Stat. B36	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.36.B1G	3	Fit,Purge,Weld Exp. Bellows B36	04/17/96.10:00A	04/17/96.02:00P	
1.2.1.36.B1H	1	Inspect, Install End Caps B36	04/17/96.02:00P	04/17/96.03:00P	
1.2.1.36.B1J	1	Move to Test Area B36	04/17/96.03:00P	04/17/96.04:00P	
1.2.1.36.B1K	1	Pre-Clean & Black Light B36	04/17/96.04:00P	04/17/96.05:00P	
1.2.1.36.B1L	30	Leak Test B36	04/17/96.05:00P	04/18/96.11:00P	
1.2.1.36.B1O	1	Move to Post Test Storage B36	04/19/96.08:00A	04/19/96.09:00A	
1.2.1.36.B1P	1	Clean, Dry & End Cap B36	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.36.B1R	1	Transport to Erection B363	05/23/96.11:00A	05/23/96.12:00P	
1.2.1.36.B1S	1	Set & Align B36	05/23/96.01:00P	05/23/96.02:00P	
1.2.1.36.B1T	1	Set Clean Room, Purge & Fit B36	05/23/96.02:00P	05/23/96.03:00P	
1.2.1.36.B1U	2	Weld Joint B36	05/23/96.03:00P	05/23/96.05:00P	
1.2.1.36.B1V	2	Leak Test Joint B36	05/24/96.08:00A	05/24/96.10:00A	
1.2.1.36.B1W	2	Install Tube Supports B36	05/24/96.08:00A	05/24/96.10:00A	
1.2.1.36.B1X	2	Remove Equip'mt, Clean & Cap B36	05/24/96.10:00A	05/24/96.12:00P	
1.2.1.36.B2A	1	Unload,Rec/Insp Tube B37	04/16/96.09:00A	04/16/96.10:00A	
1.2.1.36.B2B	1	Move to Stiff Fit Up Stat. B373	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.36.B2C	1	Set-up & Purge B37	04/17/96.11:00A	04/17/96.12:00P	
1.2.1.36.B2D	2	Fit Stiffeners B37	04/17/96.01:00P	04/17/96.03:00P	
1.2.1.36.B2E	4	Weld Stiffeners B373	04/17/96.03:00P	04/18/96.10:00A	
1.2.1.36.B2F	1	Move to Exp.Bellows Stat. 37	04/18/96.10:00A	04/18/96.11:00A	
1.2.1.36.B2G	3	Fit,Purge,Weld Exp. Bellows B37	04/18/96.11:00A	04/18/96.03:00P	
1.2.1.36.B2H	1	Inspect, Install End Caps B37	04/18/96.03:00P	04/18/96.04:00P	
1.2.1.36.B2J	1	Move to Test Area B37	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.36.B2K	1	Pre-Clean & Black Light B37	04/19/96.10:00A	04/19/96.11:00A	
1.2.1.36.B2L	30	Leak Test B37	04/19/96.11:00A	04/20/96.05:00P	
1.2.1.36.B2O	1	Move to Post Test Storage B37	04/22/96.08:00A	04/22/96.09:00A	
1.2.1.36.B2P	1	Clean, Dry & End Cap B37	04/22/96.09:00A	04/22/96.10:00A	
1.2.1.36.B2R	1	Transport to Erection B37	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.36.B2S	1	Set & Align B37	05/27/96.10:00A	05/27/96.11:00A	
1.2.1.36.B2T	1	Set Clean Room, Purge & Fit B37	05/27/96.11:00A	05/27/96.12:00P	
1.2.1.36.B2U	2	Weld Joint B37	05/27/96.01:00P	05/27/96.03:00P	
1.2.1.36.B2V	2	Leak Test Joint B37	05/27/96.03:00P	05/27/96.05:00P	
1.2.1.36.B2W	2	Install Tube SupportsB37	05/27/96.03:00P	05/27/96.05:00P	
1.2.1.36.B2X	2	Remove Equip'mt, Clean & Cap B37	05/28/96.08:00A	05/28/96.10:00A	
1.2.1.36.B3A	1	Unload,Rec/Insp Tube B38	04/16/96.10:00A	04/16/96.11:00A	
1.2.1.36.B3B	1	Move to Stiff Fit Up Stat. B38	04/18/96.11:00A	04/18/96.12:00P	
1.2.1.36.B3C	1	Set-up & Purge B38	04/18/96.01:00P	04/18/96.02:00P	
1.2.1.36.B3D	2	Fit Stiffeners B38	04/18/96.02:00P	04/18/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.36.B3E	4	Weld Stiffeners B38	04/18/96.04:00P	04/19/96.11:00A	
1.2.1.36.B3F	1	Move to Exp.Bellows Stat. B38	04/19/96.11:00A	04/19/96.12:00P	
1.2.1.36.B3G	3	Fit,Purge,Weld Exp. Bellows B38	04/19/96.01:00P	04/19/96.04:00P	
1.2.1.36.B3H	1	Inspect, Install End Caps B38	04/19/96.04:00P	04/19/96.05:00P	
1.2.1.36.B3J	1	Move to Test Area B38	04/22/96.09:00A	04/22/96.10:00A	
1.2.1.36.B3K	1	Pre-Clean & Black Light B38	04/22/96.10:00A	04/22/96.11:00A	
1.2.1.36.B3L	30	Leak Test B38	04/22/96.11:00A	04/23/96.05:00P	
1.2.1.36.B3O	1	Move to Post Test Storage B38	04/24/96.08:00A	04/24/96.09:00A	
1.2.1.36.B3P	1	Clean, Dry & End Cap B38	04/24/96.09:00A	04/24/96.10:00A	
1.2.1.36.B3R	1	Transport to Erection B38	05/28/96.04:00P	05/28/96.05:00P	
1.2.1.36.B3S	1	Set & Align B38	05/29/96.08:00A	05/29/96.09:00A	
1.2.1.36.B3T	1	Set Clean Room, Purge & Fit B38	05/29/96.09:00A	05/29/96.10:00A	
1.2.1.36.B3U	2	Weld Joint B38	05/29/96.10:00A	05/29/96.12:00P	
1.2.1.36.B3V	2	Leak Test Joint B38	05/29/96.01:00P	05/29/96.03:00P	
1.2.1.36.B3W	2	Install Tube Supports B38	05/29/96.01:00P	05/29/96.03:00P	
1.2.1.36.B3X	2	Remove Equip'mt, Clean & Cap B38	05/29/96.03:00P	05/29/96.05:00P	
1.2.1.36.B4A	1	Unload,Rec/Insp Tube B39	04/16/96.11:00A	04/16/96.12:00P	
1.2.1.36.B4B	1	Move to Stiff Fit Up Stat. B39	04/19/96.01:00P	04/19/96.02:00P	
1.2.1.36.B4C	1	Set-up & Purge B39	04/19/96.02:00P	04/19/96.03:00P	
1.2.1.36.B4D	2	Fit Stiffeners B39	04/19/96.03:00P	04/19/96.05:00P	
1.2.1.36.B4E	4	Weld Stiffeners B39	04/22/96.08:00A	04/22/96.12:00P	
1.2.1.36.B4F	1	Move to Exp.Bellows Stat. B39	04/22/96.01:00P	04/22/96.02:00P	
1.2.1.36.B4G	3	Fit,Purge,Weld Exp. Bellows B39	04/22/96.02:00P	04/22/96.05:00P	
1.2.1.36.B4H	1	Inspect, Install End Caps B39	04/23/96.08:00A	04/23/96.09:00A	
1.2.1.36.B4J	1	Move to Test Area B39	04/24/96.09:00A	04/24/96.10:00A	
1.2.1.36.B4K	1	Pre-Clean & Black Light B39	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.36.B4L	30	Leak Test B39	04/24/96.11:00A	04/25/96.05:00P	
1.2.1.36.B4O	1	Move to Post Test Storage B39	04/26/96.08:00A	04/26/96.09:00A	
1.2.1.36.B4P	1	Clean, Dry & End Cap B39	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.36.B4R	1	Transport to Erection B39	05/30/96.02:00P	05/30/96.03:00P	
1.2.1.36.B4S	1	Set & Align B39	05/30/96.03:00P	05/30/96.04:00P	
1.2.1.36.B4T	1	Set Clean Room, Purge & Fit B39	05/30/96.04:00P	05/30/96.05:00P	
1.2.1.36.B4U	2	Weld Joint B39	05/31/96.08:00A	05/31/96.10:00A	
1.2.1.36.B4V	2	Leak Test Joint B39	05/31/96.10:00A	05/31/96.12:00P	
1.2.1.36.B4W	2	Install Tube Supports B39	05/31/96.10:00A	05/31/96.12:00P	
1.2.1.36.B4X	2	Remove Equip'mt, Clean & Cap B39	05/31/96.01:00P	05/31/96.03:00P	
1.2.1.36.B5A	1	Unload,Rec/Insp Tube B40	04/16/96.01:00P	04/16/96.02:00P	
1.2.1.36.B5B	1	Move to Stiff Fit Up Stat. B40	04/22/96.02:00P	04/22/96.03:00P	
1.2.1.36.B5C	1	Set-up & Purge B40	04/22/96.03:00P	04/22/96.04:00P	
1.2.1.36.B5D	2	Fit Stiffeners B40	04/22/96.04:00P	04/23/96.09:00A	
1.2.1.36.B5E	4	Weld Stiffeners B40	04/23/96.09:00A	04/23/96.02:00P	
1.2.1.36.B5F	1	Move to Exp.Bellows Stat. B40	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.36.B5G	3	Fit,Purge,Weld Exp. Bellows B40	04/24/96.11:00A	04/24/96.03:00P	
1.2.1.36.B5H	1	Inspect, Install End Caps B40	04/24/96.03:00P	04/24/96.04:00P	
1.2.1.36.B5J	1	Move to Test Area B40	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.36.B5K	1	Pre-Clean & Black Light B40	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.36.B5L	30	Leak Test B40	04/26/96.11:00A	04/27/96.05:00P	
1.2.1.36.B5O	1	Move to Post Test Storage B40	04/29/96.08:00A	04/29/96.09:00A	
1.2.1.36.B5P	1	Clean, Dry & End Cap B40	04/29/96.09:00A	04/29/96.10:00A	
1.2.1.36.B5R	1	Transport to Erection B40	06/03/96.11:00A	06/03/96.12:00P	
1.2.1.36.B5S	1	Set & Align B40	06/03/96.01:00P	06/03/96.02:00P	
1.2.1.36.B5T	1	Set Clean Room, Purge & Fit B40	06/03/96.02:00P	06/03/96.03:00P	
1.2.1.36.B5U	2	Weld Joint B40	06/03/96.03:00P	06/03/96.05:00P	
1.2.1.36.B5V	2	Leak Test Joint B40	06/04/96.08:00A	06/04/96.10:00A	
1.2.1.36.B5W	2	Install Tube Supports B40	06/04/96.08:00A	06/04/96.10:00A	
1.2.1.36.B5X	2	Remove Equip'mt, Clean & Cap B40	06/04/96.10:00A	06/04/96.12:00P	
1.2.1.41	284	Cans 41-45	04/29/96.04:00P	06/18/96.11:00A	
1.2.1.41.1A	1	Unload,Rec/Insp Tube 41	04/30/96.08:00A	04/30/96.09:00A	
1.2.1.41.1B	1	Move to Stiff Fit Up Stat. 41	04/30/96.09:00A	04/30/96.10:00A	
1.2.1.41.1C	1	Set-up & Purge 41	04/30/96.10:00A	04/30/96.11:00A	
1.2.1.41.1D	2	Fit Stiffeners 41	04/30/96.11:00A	04/30/96.02:00P	
1.2.1.41.1E	4	Weld Stiffeners 41	04/30/96.02:00P	05/01/96.09:00A	
1.2.1.41.1F	1	Inspect, Install End Caps 41	05/01/96.09:00A	05/01/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.41.1H	1	Move to Test Area 41	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.41.1I	1	Pre-Clean & Black Light 41	05/01/96.11:00A	05/01/96.12:00P	
1.2.1.41.1J	30	Leak Test 41	05/01/96.12:00P	05/02/96.06:00P	
1.2.1.41.1M	1	Move to Post Test Storage 41	05/03/96.08:00A	05/03/96.09:00A	
1.2.1.41.1N	1	Clean, Dry & End Cap 41	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.41.1P	1	Transport to Erection 41	06/06/96.10:00A	06/06/96.11:00A	
1.2.1.41.1Q	1	Set & Align 41	06/06/96.11:00A	06/06/96.12:00P	
1.2.1.41.1R	1	Set Clean Room, Purge & Fit 41	06/06/96.01:00P	06/06/96.02:00P	
1.2.1.41.1S	2	Weld Joint 41	06/06/96.02:00P	06/06/96.04:00P	
1.2.1.41.1T	2	Leak Test Joint 41	06/06/96.04:00P	06/07/96.09:00A	
1.2.1.41.1U	2	Install Tube Supports 41	06/06/96.04:00P	06/07/96.09:00A	
1.2.1.41.1V	2	Remove Equip'mt, Clean & Cap 41	06/07/96.09:00A	06/07/96.11:00A	
1.2.1.41.2A	1	Unload,Rec. & Inspct 42	04/30/96.09:00A	04/30/96.10:00A	
1.2.1.41.2B	1	Move to Stiff Fit Up Stat. 42	05/01/96.11:00A	05/01/96.12:00P	
1.2.1.41.2C	1	Set-up & Purge 42	05/01/96.01:00P	05/01/96.02:00P	
1.2.1.41.2D	2	Fit Stiffeners 42	05/01/96.02:00P	05/01/96.04:00P	
1.2.1.41.2E	4	Weld Stiffeners 42	05/01/96.04:00P	05/02/96.11:00A	
1.2.1.41.2F	1	Inspect, Install End Caps 42	05/02/96.11:00A	05/02/96.12:00P	
1.2.1.41.2H	1	Move to Test Area 42	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.41.2I	1	Pre-Clean & Black Light 42	05/03/96.10:00A	05/03/96.11:00A	
1.2.1.41.2J	30	Leak Testt 42	05/03/96.11:00A	05/04/96.05:00P	
1.2.1.41.2M	1	Move to Post Test Storage 42	05/06/96.08:00A	05/06/96.09:00A	
1.2.1.41.2N	1	Clean, Dry & End Cap 42	05/06/96.09:00A	05/06/96.10:00A	
1.2.1.41.2P	1	Transport to Erection42	06/10/96.08:00A	06/10/96.09:00A	
1.2.1.41.2Q	1	Set & Align 42	06/10/96.09:00A	06/10/96.10:00A	
1.2.1.41.2R	1	Set Clean Room, Purge & Fit 42	06/10/96.10:00A	06/10/96.11:00A	
1.2.1.41.2S	2	Weld Joint 42	06/10/96.11:00A	06/10/96.02:00P	
1.2.1.41.2T	2	Leak Test Joint 42	06/10/96.02:00P	06/10/96.04:00P	
1.2.1.41.2U	2	Install Tube Supports 42	06/10/96.02:00P	06/10/96.04:00P	
1.2.1.41.2V	2	Remove Equip'mt, Clean & Cap 42	06/10/96.04:00P	06/11/96.09:00A	
1.2.1.41.3A	1	Unload,Rec/Insp Tube 43	04/30/96.10:00A	04/30/96.11:00A	
1.2.1.41.3B	1	Move to Stiff Fit Up Stat. 43	05/03/96.10:00A	05/03/96.11:00A	
1.2.1.41.3C	1	Set-up & Purge 43	05/03/96.11:00A	05/03/96.12:00P	
1.2.1.41.3D	2	Fit Stiffeners 43	05/03/96.01:00P	05/03/96.03:00P	
1.2.1.41.3E	4	Weld Stiffeners 43	05/03/96.03:00P	05/06/96.10:00A	
1.2.1.41.3F	1	Inspect, Install End Caps 43	05/06/96.10:00A	05/06/96.11:00A	
1.2.1.41.3H	1	Move to Test Area 43	05/06/96.11:00A	05/06/96.12:00P	
1.2.1.41.3I	1	Pre-Clean & Black Light 43	05/06/96.01:00P	05/06/96.02:00P	
1.2.1.41.3J	30	Leak Test 43	05/06/96.02:00P	05/07/96.08:00P	
1.2.1.41.3M	1	Move to Post Test Storage 43	05/08/96.08:00A	05/08/96.09:00A	
1.2.1.41.3N	1	Clean, Dry & End Cap 43	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.41.3P	1	Transport to Erection 43	06/11/96.03:00P	06/11/96.04:00P	
1.2.1.41.3Q	1	Set & Align 43	06/11/96.04:00P	06/11/96.05:00P	
1.2.1.41.3R	1	Set Clean Room, Purge & Fit43	06/12/96.08:00A	06/12/96.09:00A	
1.2.1.41.3S	2	Weld Joint 43	06/12/96.09:00A	06/12/96.11:00A	
1.2.1.41.3T	2	Leak Test Joint 43	06/12/96.11:00A	06/12/96.02:00P	
1.2.1.41.3U	2	Install Tube Supports43	06/12/96.11:00A	06/12/96.02:00P	
1.2.1.41.3V	2	Remove Equip'mt, Clean & Cap 43	06/12/96.02:00P	06/12/96.04:00P	
1.2.1.41.4A	1	Unload,Rec/Insp Tube 44	04/30/96.11:00A	04/30/96.12:00P	
1.2.1.41.4B	1	Move to Stiff Fit Up Stat. 44	05/06/96.01:00P	05/06/96.02:00P	
1.2.1.41.4C	1	Set-up & Purge 44	05/06/96.02:00P	05/06/96.03:00P	
1.2.1.41.4D	2	Fit Stiffeners 44	05/06/96.03:00P	05/06/96.05:00P	
1.2.1.41.4E	4	Weld Stiffeners 44	05/07/96.08:00A	05/07/96.12:00P	
1.2.1.41.4F	1	Inspect, Install End Caps 44	05/07/96.01:00P	05/07/96.02:00P	
1.2.1.41.4H	1	Move to Test Area 44	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.41.4I	1	Pre-Clean & Black Light 44	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.41.4J	30	Leak Test 44	05/08/96.11:00A	05/09/96.05:00P	
1.2.1.41.4M	1	Move to Post Test Storage 44	05/10/96.08:00A	05/10/96.09:00A	
1.2.1.41.4N	1	Clean, Dry & End Cap 44	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.41.4P	1	Transport to Erection 44	06/13/96.01:00P	06/13/96.02:00P	
1.2.1.41.4Q	1	Set & Align 44	06/13/96.02:00P	06/13/96.03:00P	
1.2.1.41.4R	1	Set Clean Room, Purge & Fit 44	06/13/96.03:00P	06/13/96.04:00P	
1.2.1.41.4S	2	Weld Joint 4 4	06/13/96.04:00P	06/14/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.41.4T	2	Leak Test Joint 44	06/14/96.09:00A	06/14/96.11:00A	
1.2.1.41.4U	2	Install Tube Supports 44	06/14/96.09:00A	06/14/96.11:00A	
1.2.1.41.4V	2	Remove Equip'mt, Clean & Cap 44	06/14/96.11:00A	06/14/96.02:00P	
1.2.1.41.5A	1	Unload,Rec/Insp Tube 4	04/30/96.01:00P	04/30/96.02:00P	
1.2.1.41.5B	1	Move to Stiff Fit Up Stat. 45	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.41.5C	1	Set-up & Purge 45	05/08/96.11:00A	05/08/96.12:00P	
1.2.1.41.5D	1	F/W Pump Port Reinf. 45	05/08/96.01:00P	05/08/96.02:00P	
1.2.1.41.5E	2	Fit Stiffeners 45	05/08/96.02:00P	05/08/96.04:00P	
1.2.1.41.5F	4	Weld Stiffeners 45	05/08/96.04:00P	05/09/96.11:00A	
1.2.1.41.5G	1	Move to P.Port Stat.45	05/09/96.11:00A	05/09/96.12:00P	
1.2.1.41.5H	1	Setup & Bore 10" Inlet 45	05/09/96.01:00P	05/09/96.02:00P	
1.2.1.41.5I	2	Purge/F/W Pump Port 45	05/09/96.02:00P	05/09/96.04:00P	
1.2.1.41.5J	1	Inspect, Install End Caps 45	05/09/96.04:00P	05/09/96.05:00P	
1.2.1.41.5L	1	Move to Test Area 45	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.41.5M	1	Pre-Clean & Black Light 55	05/10/96.10:00A	05/10/96.11:00A	
1.2.1.41.5N	30	Leak Test 45	05/10/96.11:00A	05/11/96.05:00P	
1.2.1.41.5Q	1	Move to Post Test Storage 45	05/13/96.08:00A	05/13/96.09:00A	
1.2.1.41.5R	1	Clean, Dry & End Cap 45	05/13/96.09:00A	05/13/96.10:00A	
1.2.1.41.5T	1	Transport to Erection 45	06/17/96.10:00A	06/17/96.11:00A	
1.2.1.41.5U	1	Set & Align 45	06/17/96.11:00A	06/17/96.12:00P	
1.2.1.41.5V	1	Set Clean Room, Purge & Fit 45	06/17/96.01:00P	06/17/96.02:00P	
1.2.1.41.5W	2	Weld Joint 45	06/17/96.02:00P	06/17/96.04:00P	
1.2.1.41.5X	2	Leak Test Joint 45	06/17/96.04:00P	06/18/96.09:00A	
1.2.1.41.5Y	2	Install Tube Supports 45	06/17/96.04:00P	06/18/96.09:00A	
1.2.1.41.5Z	2	Remove Equip'mt, Clean & Cap 45	06/18/96.09:00A	06/18/96.11:00A	
1.2.1.41.B1A	1	Unload,Rec/Insp Tube B41	04/30/96.08:00A	04/30/96.09:00A	
1.2.1.41.B1B	1	Move to Stiff Fit Up Stat. B41	04/30/96.09:00A	04/30/96.10:00A	
1.2.1.41.B1C	1	Set-up & Purge B41	04/30/96.10:00A	04/30/96.11:00A	
1.2.1.41.B1D	2	Fit Stiffeners B41	04/30/96.11:00A	04/30/96.02:00P	
1.2.1.41.B1E	4	Weld Stiffeners B41	04/30/96.02:00P	05/01/96.09:00A	
1.2.1.41.B1F	1	Move to Exp.Bellows Stat. B41	05/01/96.09:00A	05/01/96.10:00A	
1.2.1.41.B1G	3	Fit,Purge,Weld Exp. Bellows B41	05/01/96.10:00A	05/01/96.02:00P	
1.2.1.41.B1H	1	Inspect, Install End Caps B41	05/01/96.02:00P	05/01/96.03:00P	
1.2.1.41.B1J	1	Move to Test Area B41	05/01/96.03:00P	05/01/96.04:00P	
1.2.1.41.B1K	1	Pre-Clean & Black Light B41	05/01/96.04:00P	05/01/96.05:00P	
1.2.1.41.B1L	30	Leak Test B41	05/01/96.05:00P	05/02/96.11:00P	
1.2.1.41.B1O	1	Move to Post Test Storage B41	05/03/96.08:00A	05/03/96.09:00A	
1.2.1.41.B1P	1	Clean, Dry & End Cap B41	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.41.B1R	1	Transport to Erection B41	06/05/96.11:00A	06/05/96.12:00P	
1.2.1.41.B1S	1	Set & Align B41	06/05/96.01:00P	06/05/96.02:00P	
1.2.1.41.B1T	1	Set Clean Room, Purge & Fit B41	06/05/96.02:00P	06/05/96.03:00P	
1.2.1.41.B1U	2	Weld Joint B41	06/05/96.03:00P	06/05/96.05:00P	
1.2.1.41.B1V	2	Leak Test Joint B41	06/06/96.08:00A	06/06/96.10:00A	
1.2.1.41.B1W	2	Install Tube Supports B41	06/06/96.08:00A	06/06/96.10:00A	
1.2.1.41.B1X	2	Remove Equip'mt, Clean & Cap B41	06/06/96.10:00A	06/06/96.12:00P	
1.2.1.41.B2A	1	Unload,Rec/Insp Tube B42	04/30/96.09:00A	04/30/96.10:00A	
1.2.1.41.B2B	1	Move to Stiff Fit Up Stat. B42	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.41.B2C	1	Set-up & Purge B42	05/01/96.11:00A	05/01/96.12:00P	
1.2.1.41.B2D	2	Fit Stiffeners B42	05/01/96.01:00P	05/01/96.03:00P	
1.2.1.41.B2E	4	Weld Stiffeners B42	05/01/96.03:00P	05/02/96.10:00A	
1.2.1.41.B2F	1	Move to Exp.Bellows Stat. B42	05/02/96.10:00A	05/02/96.11:00A	
1.2.1.41.B2G	3	Fit,Purge,Weld Exp. Bellows B42	05/02/96.11:00A	05/02/96.03:00P	
1.2.1.41.B2H	1	Inspect, Install End Caps B42	05/02/96.03:00P	05/02/96.04:00P	
1.2.1.41.B2J	1	Move to Test Area B42	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.41.B2K	1	Pre-Clean & Black Light B42	05/03/96.10:00A	05/03/96.11:00A	
1.2.1.41.B2L	30	Leak Testt B42	05/03/96.11:00A	05/04/96.05:00P	
1.2.1.41.B2O	1	Move to Post Test Storage B42	05/06/96.08:00A	05/06/96.09:00A	
1.2.1.41.B2P	1	Clean, Dry & End Cap B42	05/06/96.09:00A	05/06/96.10:00A	
1.2.1.41.B2R	1	Transport to Erection B42	06/07/96.09:00A	06/07/96.10:00A	
1.2.1.41.B2S	1	Set & Align B42	06/07/96.10:00A	06/07/96.11:00A	
1.2.1.41.B2T	1	Set Clean Room, Purge & Fit B42	06/07/96.11:00A	06/07/96.12:00P	
1.2.1.41.B2U	2	Weld Joint B42	06/07/96.01:00P	06/07/96.03:00P	
1.2.1.41.B2V	2	Leak Test Joint B42	06/07/96.03:00P	06/07/96.05:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.41.B2W	2	Install Tube Supports B42	06/07/96.03:00P	06/07/96.05:00P	
1.2.1.41.B2X	2	Remove Equip'mt, Clean & Cap B42	06/10/96.08:00A	06/10/96.10:00A	
1.2.1.41.B3A	1	Unload,Rec/Insp Tube B43	04/30/96.10:00A	04/30/96.11:00A	
1.2.1.41.B3B	1	Move to Stiff Fit Up Stat. B43	05/02/96.11:00A	05/02/96.12:00P	
1.2.1.41.B3C	1	Set-up & Purge B43	05/02/96.01:00P	05/02/96.02:00P	
1.2.1.41.B3D	2	Fit Stiffeners B43	05/02/96.02:00P	05/02/96.04:00P	
1.2.1.41.B3E	4	Weld Stiffeners B43	05/02/96.04:00P	05/03/96.11:00A	
1.2.1.41.B3F	1	Move to Exp.Bellows Stat. B43	05/03/96.11:00A	05/03/96.12:00P	
1.2.1.41.B3G	3	Fit,Purge,Weld Exp. Bellows B43	05/03/96.01:00P	05/03/96.04:00P	
1.2.1.41.B3H	1	Inspect, Install End Caps B43	05/03/96.04:00P	05/03/96.05:00P	
1.2.1.41.B3J	1	Move to Test Area B43	05/06/96.09:00A	05/06/96.10:00A	
1.2.1.41.B3K	1	Pre-Clean & Black Light B43	05/06/96.10:00A	05/06/96.11:00A	
1.2.1.41.B3L	30	Leak Test B43	05/06/96.11:00A	05/07/96.05:00P	
1.2.1.41.B3O	1	Move to Post Test Storage B43	05/08/96.08:00A	05/08/96.09:00A	
1.2.1.41.B3P	1	Clean, Dry & End Cap B43	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.41.B3R	1	Transport to Erection B43	06/10/96.04:00P	06/10/96.05:00P	
1.2.1.41.B3S	1	Set & Align B43	06/11/96.08:00A	06/11/96.09:00A	
1.2.1.41.B3T	1	Set Clean Room, Purge & Fit B43	06/11/96.09:00A	06/11/96.10:00A	
1.2.1.41.B3U	2	Weld Joint B43	06/11/96.10:00A	06/11/96.12:00P	
1.2.1.41.B3V	2	Leak Test Joint B43	06/11/96.01:00P	06/11/96.03:00P	
1.2.1.41.B3W	2	Install Tube Supports B43	06/11/96.01:00P	06/11/96.03:00P	
1.2.1.41.B3X	2	Remove Equip'mt, Clean & Cap B43	06/11/96.03:00P	06/11/96.05:00P	
1.2.1.41.B4A	1	Unload,Rec/Insp Tube B44	04/30/96.11:00A	04/30/96.12:00P	
1.2.1.41.B4B	1	Move to Stiff Fit Up Stat. B44	05/03/96.01:00P	05/03/96.02:00P	
1.2.1.41.B4C	1	Set-up & Purge B44	05/03/96.02:00P	05/03/96.03:00P	
1.2.1.41.B4D	2	Fit Stiffeners B44	05/03/96.03:00P	05/03/96.05:00P	
1.2.1.41.B4E	4	Weld Stiffeners B44	05/06/96.08:00A	05/06/96.12:00P	
1.2.1.41.B4F	1	Move to Exp.Bellows Stat. B44	05/06/96.01:00P	05/06/96.02:00P	
1.2.1.41.B4G	3	Fit,Purge,Weld Exp. Bellows B44	05/06/96.02:00P	05/06/96.05:00P	
1.2.1.41.B4H	1	Inspect, Install End Caps B44	05/07/96.08:00A	05/07/96.09:00A	
1.2.1.41.B4J	1	Move to Test Area B44	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.41.B4K	1	Pre-Clean & Black Light B44	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.41.B4L	30	Leak Test B44	05/08/96.11:00A	05/09/96.05:00P	
1.2.1.41.B4O	1	Move to Post Test Storage B44	05/10/96.08:00A	05/10/96.09:00A	
1.2.1.41.B4P	1	Clean, Dry & End Cap B44	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.41.B4R	1	Transport to Erection B44	06/12/96.02:00P	06/12/96.03:00P	
1.2.1.41.B4S	1	Set & Align B44	06/12/96.03:00P	06/12/96.04:00P	
1.2.1.41.B4T	1	Set Clean Room, Purge & Fit B44	06/12/96.04:00P	06/12/96.05:00P	
1.2.1.41.B4U	2	Weld Joint B44	06/13/96.08:00A	06/13/96.10:00A	
1.2.1.41.B4V	2	Leak Test Joint B44	06/13/96.10:00A	06/13/96.12:00P	
1.2.1.41.B4W	2	Install Tube Supports B44	06/13/96.10:00A	06/13/96.12:00P	
1.2.1.41.B4X	2	Remove Equip'mt, Clean & Cap B44	06/13/96.01:00P	06/13/96.03:00P	
1.2.1.41.B5A	1	Unload,Rec/Insp Tube B45	04/30/96.01:00P	04/30/96.02:00P	
1.2.1.41.B5B	1	Move to Stiff Fit Up Stat. B45	05/06/96.02:00P	05/06/96.03:00P	
1.2.1.41.B5C	1	Set-up & Purge B45	05/06/96.03:00P	05/06/96.04:00P	
1.2.1.41.B5D	2	Fit Stiffeners B45	05/06/96.04:00P	05/07/96.09:00A	
1.2.1.41.B5E	4	Weld Stiffeners B45	05/07/96.09:00A	05/07/96.02:00P	
1.2.1.41.B5F	1	Move to Exp.Bellows Stat. B45	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.41.B5G	3	Fit,Purge,Weld Exp. Bellows B45	05/08/96.11:00A	05/08/96.03:00P	
1.2.1.41.B5H	1	Inspect, Install End Caps B45	05/08/96.03:00P	05/08/96.04:00P	
1.2.1.41.B5J	1	Move to Test Area B45	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.41.B5K	1	Pre-Clean & Black Light B45	05/10/96.10:00A	05/10/96.11:00A	
1.2.1.41.B5L	30	Leak Test B45	05/10/96.11:00A	05/11/96.05:00P	
1.2.1.41.B5O	1	Move to Post Test Storage B45	05/13/96.08:00A	05/13/96.09:00A	
1.2.1.41.B5P	1	Clean, Dry & End Cap B45	05/13/96.09:00A	05/13/96.10:00A	
1.2.1.41.B5R	1	Transport to Erection B45	06/14/96.11:00A	06/14/96.12:00P	
1.2.1.41.B5S	1	Set & Align B45	06/14/96.01:00P	06/14/96.02:00P	
1.2.1.41.B5T	1	Set Clean Room, Purge & Fit B45	06/14/96.02:00P	06/14/96.03:00P	
1.2.1.41.B5U	2	Weld Joint B45	06/14/96.03:00P	06/14/96.05:00P	
1.2.1.41.B5V	2	Leak Test Joint B45	06/17/96.08:00A	06/17/96.10:00A	
1.2.1.41.B5W	2	Install Tube Supports B45	06/17/96.08:00A	06/17/96.10:00A	
1.2.1.41.B5X	2	Remove Equip'mt, Clean & Cap B45	06/17/96.10:00A	06/17/96.12:00P	
1.2.1.46	942	Cans 46-50	01/15/96.04:00P	06/27/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.46.1A	1	Unload,Rec/Insp Tube 46	01/16/96.08:00A	01/16/96.09:00A	
1.2.1.46.1B	1	Move to Stiff Fit Up Stat. 46	01/16/96.09:00A	01/16/96.10:00A	
1.2.1.46.1C	1	Set-up & Purge 46	01/16/96.10:00A	01/16/96.11:00A	
1.2.1.46.1D	2	Fit Stiffeners 46	01/16/96.11:00A	01/16/96.02:00P	
1.2.1.46.1E	4	Weld Stiffeners 46	01/16/96.02:00P	01/17/96.09:00A	
1.2.1.46.1F	1	Inspect, Install End Caps 46	01/17/96.09:00A	01/17/96.10:00A	
1.2.1.46.1H	1	Move to Test Area 46	01/17/96.10:00A	01/17/96.11:00A	
1.2.1.46.1I	1	Pre-Clean & Black Light 46	01/17/96.11:00A	01/17/96.12:00P	
1.2.1.46.1J	30	Leak Test 46	01/17/96.12:00P	01/18/96.06:00P	
1.2.1.46.1M	1	Move to Post Test Storage 46	01/19/96.08:00A	01/19/96.09:00A	
1.2.1.46.1N	1	Clean, Dry & End Cap 46	01/19/96.09:00A	01/19/96.10:00A	
1.2.1.46.1P	1	Transport to Erection 46	06/19/96.10:00A	06/19/96.11:00A	
1.2.1.46.1Q	1	Set & Align 46	06/19/96.11:00A	06/19/96.12:00P	
1.2.1.46.1R	1	Set Clean Room, Purge & Fit 46	06/19/96.01:00P	06/19/96.02:00P	
1.2.1.46.1S	2	Weld Joint 46	06/19/96.02:00P	06/19/96.04:00P	
1.2.1.46.1T	2	Leak Test Joint 46	06/19/96.04:00P	06/20/96.09:00A	
1.2.1.46.1U	2	Install Tube Supports 46	06/19/96.04:00P	06/20/96.09:00A	
1.2.1.46.1V	2	Remove Equip'mt, Clean & Cap 46	06/20/96.09:00A	06/20/96.11:00A	
1.2.1.46.2A	1	Unload,Rec. & Inspect 47	01/16/96.09:00A	01/16/96.10:00A	
1.2.1.46.2B	1	Move to Stiff Fit Up Stat. 47	01/17/96.11:00A	01/17/96.12:00P	
1.2.1.46.2C	1	Set-up & Purge 47	01/17/96.01:00P	01/17/96.02:00P	
1.2.1.46.2D	2	Fit Stiffeners 47	01/17/96.02:00P	01/17/96.04:00P	
1.2.1.46.2E	4	Weld Stiffeners 47	01/17/96.04:00P	01/18/96.11:00A	
1.2.1.46.2F	1	Inspect, Install End Caps 47	01/18/96.11:00A	01/18/96.12:00P	
1.2.1.46.2H	1	Move to Test Area 47	01/19/96.09:00A	01/19/96.10:00A	
1.2.1.46.2I	1	Pre-Clean & Black Light 47	01/19/96.10:00A	01/19/96.11:00A	
1.2.1.46.2J	30	Leak Test 47	01/19/96.11:00A	01/20/96.05:00P	
1.2.1.46.2M	1	Move to Post Test Storage 47	01/22/96.08:00A	01/22/96.09:00A	
1.2.1.46.2N	1	Clean, Dry & End Cap 47	01/22/96.09:00A	01/22/96.10:00A	
1.2.1.46.2P	1	Transport to Erection 47	06/21/96.08:00A	06/21/96.09:00A	
1.2.1.46.2Q	1	Set & Align 47	06/21/96.09:00A	06/21/96.10:00A	
1.2.1.46.2R	1	Set Clean Room, Purge & Fit 47	06/21/96.10:00A	06/21/96.11:00A	
1.2.1.46.2S	2	Weld Joint 47	06/21/96.11:00A	06/21/96.02:00P	
1.2.1.46.2T	2	Leak Test Joint 47	06/21/96.02:00P	06/21/96.04:00P	
1.2.1.46.2U	2	Install Tube Supports 47	06/21/96.02:00P	06/21/96.04:00P	
1.2.1.46.2V	2	Remove Equip'mt, Clean & Cap 47	06/21/96.04:00P	06/24/96.09:00A	
1.2.1.46.3A	1	Unload,Rec/Insp Tube 48	01/16/96.10:00A	01/16/96.11:00A	
1.2.1.46.3B	1	Move to Stiff Fit Up Stat. 48	01/19/96.10:00A	01/19/96.11:00A	
1.2.1.46.3C	1	Set-up & Purge 48	01/19/96.11:00A	01/19/96.12:00P	
1.2.1.46.3D	2	Fit Stiffeners 48	01/19/96.01:00P	01/19/96.03:00P	
1.2.1.46.3E	4	Weld Stiffeners 48	01/19/96.03:00P	01/22/96.10:00A	
1.2.1.46.3F	1	Inspect, Install End Caps 48	01/22/96.10:00A	01/22/96.11:00A	
1.2.1.46.3H	1	Move to Test Area 48	01/22/96.11:00A	01/22/96.12:00P	
1.2.1.46.3I	1	Pre-Clean & Black Light 48	01/22/96.01:00P	01/22/96.02:00P	
1.2.1.46.3J	30	Leak Test 48	01/22/96.02:00P	01/23/96.08:00P	
1.2.1.46.3M	1	Move to Post Test Storage 48	01/24/96.08:00A	01/24/96.09:00A	
1.2.1.46.3N	1	Clean, Dry & End Cap 48	01/24/96.09:00A	01/24/96.10:00A	
1.2.1.46.3P	1	Transport to Erection 48	06/24/96.03:00P	06/24/96.04:00P	
1.2.1.46.3Q	1	Set & Align 48	06/24/96.04:00P	06/24/96.05:00P	
1.2.1.46.3R	1	Set Clean Room, Purge & Fit 48	06/25/96.08:00A	06/25/96.09:00A	
1.2.1.46.3S	2	Weld Joint 48	06/25/96.09:00A	06/25/96.11:00A	
1.2.1.46.3T	2	Leak Test Joint 48	06/25/96.11:00A	06/25/96.02:00P	
1.2.1.46.3U	2	Install Tube Supports 48	06/25/96.11:00A	06/25/96.02:00P	
1.2.1.46.3V	2	Remove Equip'mt, Clean & Cap 48	06/25/96.02:00P	06/25/96.04:00P	
1.2.1.46.4A	1	Unload,Rec/Insp Tube 49	01/16/96.11:00A	01/16/96.12:00P	
1.2.1.46.4B	1	Move to Stiff Fit Up Stat. 49	01/22/96.01:00P	01/22/96.02:00P	
1.2.1.46.4C	1	Set-up & Purge 49	01/22/96.02:00P	01/22/96.03:00P	
1.2.1.46.4D	2	Fit Stiffeners 49	01/22/96.03:00P	01/22/96.05:00P	
1.2.1.46.4E	4	Weld Stiffeners 49	01/23/96.08:00A	01/23/96.12:00P	
1.2.1.46.4F	1	Inspect, Install End Caps 49	01/23/96.01:00P	01/23/96.02:00P	
1.2.1.46.4H	1	Move to Test Area 49	01/24/96.09:00A	01/24/96.10:00A	
1.2.1.46.4I	1	Pre-Clean & Black Light 49	01/24/96.10:00A	01/24/96.11:00A	
1.2.1.46.4J	30	Leak Test 49	01/24/96.11:00A	01/25/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.46.4M	1	Move to Post Test Storage 49	01/26/96.08:00A	01/26/96.09:00A	
1.2.1.46.4N	1	Clean, Dry & End Cap 49	01/26/96.09:00A	01/26/96.10:00A	
1.2.1.46.4P	1	Transport to Erection Stat 49	06/26/96.01:00P	06/26/96.02:00P	
1.2.1.46.4Q	1	Set & Align 49	06/26/96.02:00P	06/26/96.03:00P	
1.2.1.46.4R	1	Set Clean Room, Purge & Fit 49	06/26/96.03:00P	06/26/96.04:00P	
1.2.1.46.4S	2	Weld Joint 49	06/26/96.04:00P	06/27/96.09:00A	
1.2.1.46.4T	2	Leak Test Joint 49	06/27/96.09:00A	06/27/96.11:00A	
1.2.1.46.4U	2	Install Tube Supports 49	06/27/96.09:00A	06/27/96.11:00A	
1.2.1.46.4V	2	Remove Equip'mt, Clean & Cap 49	06/27/96.11:00A	06/27/96.02:00P	
1.2.1.46.5A	1	Unload,Rec/Insp Tube 50	01/16/96.01:00P	01/16/96.02:00P	
1.2.1.46.5B	1	Move to Stiff Fit Up Stat. 50	01/24/96.10:00A	01/24/96.11:00A	
1.2.1.46.5C	1	Set-up & Purge 50	01/24/96.11:00A	01/24/96.12:00P	
1.2.1.46.5D	1	F/W Pump Port Reinf. 50	01/24/96.01:00P	01/24/96.02:00P	
1.2.1.46.5E	2	Fit Stiffeners 50	01/24/96.02:00P	01/24/96.04:00P	
1.2.1.46.5F	4	Weld Stiffeners 50	01/24/96.04:00P	01/25/96.11:00A	
1.2.1.46.5G	1	Move to P.Port Stat.50	01/25/96.11:00A	01/25/96.12:00P	
1.2.1.46.5H	1	Setup & Bore 10" Inlet 50	01/25/96.01:00P	01/25/96.02:00P	
1.2.1.46.5I	2	Purge/F/W Pump Port 50	01/25/96.02:00P	01/25/96.04:00P	
1.2.1.46.5J	1	Inspect, Install End Caps 50	01/25/96.04:00P	01/25/96.05:00P	
1.2.1.46.5L	1	Move to Test Area 50	01/26/96.09:00A	01/26/96.10:00A	
1.2.1.46.5M	1	Pre-Clean & Black Light 50	01/26/96.10:00A	01/26/96.11:00A	
1.2.1.46.5N	30	Leak Test 50	01/26/96.11:00A	01/27/96.05:00P	
1.2.1.46.5Q	1	Move to Post Test Storage 50	01/29/96.08:00A	01/29/96.09:00A	
1.2.1.46.5R	1	Clean, Dry & End Cap 50	01/29/96.09:00A	01/29/96.10:00A	
1.2.1.46.5T	1	Transport to Erection 50	02/22/96.09:00A	02/22/96.10:00A	
1.2.1.46.5U	1	Set & Align 50	02/22/96.10:00A	02/22/96.11:00A	
1.2.1.46.5V	1	Set Clean Room, Purge & Fit 50	02/22/96.11:00A	02/22/96.12:00P	
1.2.1.46.5W	2	Weld Joint 50	02/22/96.01:00P	02/22/96.03:00P	
1.2.1.46.5X	2	Leak Test Joint 50	02/22/96.03:00P	02/22/96.05:00P	
1.2.1.46.5Y	2	Install Tube Supports 50	02/22/96.03:00P	02/22/96.05:00P	
1.2.1.46.5Z	2	Remove Equip'mt, Clean & Cap 50	02/23/96.08:00A	02/23/96.10:00A	
1.2.1.46.B1A	1	Unload,Rec/Insp Tube B46	01/16/96.08:00A	01/16/96.09:00A	
1.2.1.46.B1B	1	Move to Stiff Fit Up Stat. B46	01/16/96.09:00A	01/16/96.10:00A	
1.2.1.46.B1C	1	Set-up & Purge B46	01/16/96.10:00A	01/16/96.11:00A	
1.2.1.46.B1D	2	Fit Stiffeners B46	01/16/96.11:00A	01/16/96.02:00P	
1.2.1.46.B1E	4	Weld Stiffeners B46	01/16/96.02:00P	01/17/96.09:00A	
1.2.1.46.B1F	1	Move to Exp.Bellows Stat. B46	01/17/96.09:00A	01/17/96.10:00A	
1.2.1.46.B1G	3	Fit,Purge,Weld Exp. Bellows B46	01/17/96.10:00A	01/17/96.02:00P	
1.2.1.46.B1H	1	Inspect, Install End Caps B46	01/17/96.02:00P	01/17/96.03:00P	
1.2.1.46.B1J	1	Move to Test Area B46	01/17/96.03:00P	01/17/96.04:00P	
1.2.1.46.B1K	1	Pre-Clean & Black Light B46	01/17/96.04:00P	01/17/96.05:00P	
1.2.1.46.B1L	30	Leak Test B46	01/17/96.05:00P	01/18/96.11:00A	
1.2.1.46.B1O	1	Move to Post Test Storage B46	01/19/96.08:00A	01/19/96.09:00A	
1.2.1.46.B1P	1	Clean, Dry & End Cap B46	01/19/96.09:00A	01/19/96.10:00A	
1.2.1.46.B1R	1	Transport to Erection B46	06/18/96.11:00A	06/18/96.12:00P	
1.2.1.46.B1S	1	Set & Align B46	06/18/96.01:00P	06/18/96.02:00P	
1.2.1.46.B1T	1	Set Clean Room, Purge & Fit B46	06/18/96.02:00P	06/18/96.03:00P	
1.2.1.46.B1U	2	Weld Joint B46	06/18/96.03:00P	06/18/96.05:00P	
1.2.1.46.B1V	2	Leak Test Joint B46	06/19/96.08:00A	06/19/96.10:00A	
1.2.1.46.B1W	2	Install Tube Supports B46	06/19/96.08:00A	06/19/96.10:00A	
1.2.1.46.B1X	2	Remove Equip'mt, Clean & Cap B46	06/19/96.10:00A	06/19/96.12:00P	
1.2.1.46.B2A	1	Unload,Rec/Insp Tube B47	01/16/96.09:00A	01/16/96.10:00A	
1.2.1.46.B2B	1	Move to Stiff Fit Up Stat. B47	01/17/96.10:00A	01/17/96.11:00A	
1.2.1.46.B2C	1	Set-up & Purge B47	01/17/96.11:00A	01/17/96.12:00P	
1.2.1.46.B2D	2	Fit Stiffeners B47	01/17/96.01:00P	01/17/96.03:00P	
1.2.1.46.B2E	4	Weld Stiffeners B47	01/17/96.03:00P	01/18/96.10:00A	
1.2.1.46.B2F	1	Move to Exp.Bellows Stat. B47	01/18/96.10:00A	01/18/96.11:00A	
1.2.1.46.B2G	3	Fit,Purge,Weld Exp. Bellows B47	01/18/96.11:00A	01/18/96.03:00P	
1.2.1.46.B2H	1	Inspect, Install End Caps B47	01/18/96.03:00P	01/18/96.04:00P	
1.2.1.46.B2J	1	Move to Test Area B47	01/19/96.09:00A	01/19/96.10:00A	
1.2.1.46.B2K	1	Pre-Clean & Black Light B47	01/19/96.10:00A	01/19/96.11:00A	
1.2.1.46.B2L	30	Leak Test B47	01/19/96.11:00A	01/20/96.05:00P	
1.2.1.46.B2O	1	Move to Post Test Storage B47	01/22/96.08:00A	01/22/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.46.B2P	1	Clean, Dry & End Cap B47	01/22/96.09:00A	01/22/96.10:00A	
1.2.1.46.B2R	1	Transport to Erection B47	06/20/96.09:00A	06/20/96.10:00A	
1.2.1.46.B2S	1	Set & Align B47	06/20/96.10:00A	06/20/96.11:00A	
1.2.1.46.B2T	1	Set Clean Room, Purge & Fit B47	06/20/96.11:00A	06/20/96.12:00P	
1.2.1.46.B2U	2	Weld Joint B47	06/20/96.01:00P	06/20/96.03:00P	
1.2.1.46.B2V	2	Leak Test Joint B47	06/20/96.03:00P	06/20/96.05:00P	
1.2.1.46.B2W	2	Install Tube Supports B47	06/20/96.03:00P	06/20/96.05:00P	
1.2.1.46.B2X	2	Remove Equip'mt, Clean & Cap B47	06/21/96.08:00A	06/21/96.10:00A	
1.2.1.46.B3A	1	Unload,Rec/Insp Tube B48	01/16/96.10:00A	01/16/96.11:00A	
1.2.1.46.B3B	1	Move to Stiff Fit Up Stat. B48	01/18/96.11:00A	01/18/96.12:00P	
1.2.1.46.B3C	1	Set-up & Purge B48	01/18/96.01:00P	01/18/96.02:00P	
1.2.1.46.B3D	2	Fit Stiffeners B48	01/18/96.02:00P	01/18/96.04:00P	
1.2.1.46.B3E	4	Weld Stiffeners B48	01/18/96.04:00P	01/19/96.11:00A	
1.2.1.46.B3F	1	Move to Exp.Bellows Stat. B48	01/19/96.11:00A	01/19/96.12:00P	
1.2.1.46.B3G	3	Fit,Purge,Weld Exp. Bellows B48	01/19/96.01:00P	01/19/96.04:00P	
1.2.1.46.B3H	1	Inspect, Install End Caps B48	01/19/96.04:00P	01/19/96.05:00P	
1.2.1.46.B3J	1	Move to Test Area B48	01/22/96.09:00A	01/22/96.10:00A	
1.2.1.46.B3K	1	Pre-Clean & Black Light B48	01/22/96.10:00A	01/22/96.11:00A	
1.2.1.46.B3L	30	Leak Testt B48	01/22/96.11:00A	01/23/96.05:00P	
1.2.1.46.B3O	1	Move to Post Test Storage B48	01/24/96.08:00A	01/24/96.09:00A	
1.2.1.46.B3P	1	Clean, Dry & End Cap B48	01/24/96.09:00A	01/24/96.10:00A	
1.2.1.46.B3R	1	Transport to Erection B48	06/21/96.04:00P	06/21/96.05:00P	
1.2.1.46.B3S	1	Set & Align B48	06/24/96.08:00A	06/24/96.09:00A	
1.2.1.46.B3T	1	Set Clean Room, Purge & Fit B48	06/24/96.09:00A	06/24/96.10:00A	
1.2.1.46.B3U	2	Weld Joint B48	06/24/96.10:00A	06/24/96.12:00P	
1.2.1.46.B3V	2	Leak Test Joint B48	06/24/96.01:00P	06/24/96.03:00P	
1.2.1.46.B3W	2	Install Tube Supports B48	06/24/96.01:00P	06/24/96.03:00P	
1.2.1.46.B3X	2	Remove Equip'mt, Clean & Cap B48	06/24/96.03:00P	06/24/96.05:00P	
1.2.1.46.B4A	1	Unload,Rec/Insp Tube B49	01/16/96.11:00A	01/16/96.12:00P	
1.2.1.46.B4B	1	Move to Stiff Fit Up Stat. B49	01/19/96.01:00P	01/19/96.02:00P	
1.2.1.46.B4C	1	Set-up & Purge B49	01/19/96.02:00P	01/19/96.03:00P	
1.2.1.46.B4D	2	Fit Stiffeners B49	01/19/96.03:00P	01/19/96.05:00P	
1.2.1.46.B4E	4	Weld Stiffeners B49	01/22/96.08:00A	01/22/96.12:00P	
1.2.1.46.B4F	1	Move to Exp.Bellows Stat. B49	01/22/96.01:00P	01/22/96.02:00P	
1.2.1.46.B4G	3	Fit,Purge,Weld Exp. Bellows B49	01/22/96.02:00P	01/22/96.05:00P	
1.2.1.46.B4H	1	Inspect, Install End Caps B49	01/23/96.08:00A	01/23/96.09:00A	
1.2.1.46.B4J	1	Move to Test Area B49	01/24/96.09:00A	01/24/96.10:00A	
1.2.1.46.B4K	1	Pre-Clean & Black Light B49	01/24/96.10:00A	01/24/96.11:00A	
1.2.1.46.B4L	30	Leak Test B49	01/24/96.11:00A	01/25/96.05:00P	
1.2.1.46.B4O	1	Move to Post Test Storage B49	01/26/96.08:00A	01/26/96.09:00A	
1.2.1.46.B4P	1	Clean, Dry & End Cap B49	01/26/96.09:00A	01/26/96.10:00A	
1.2.1.46.B4R	1	Transport to Erection B49	06/25/96.02:00P	06/25/96.03:00P	
1.2.1.46.B4S	1	Set & Align B49	06/25/96.03:00P	06/25/96.04:00P	
1.2.1.46.B4T	1	Set Clean Room, Purge & Fit B49	06/25/96.04:00P	06/25/96.05:00P	
1.2.1.46.B4U	2	Weld Joint B49	06/26/96.08:00A	06/26/96.10:00A	
1.2.1.46.B4V	2	Leak Test Joint B49	06/26/96.10:00A	06/26/96.12:00P	
1.2.1.46.B4W	2	Install Tube Supports B49	06/26/96.10:00A	06/26/96.12:00P	
1.2.1.46.B4X	2	Remove Equip'mt, Clean & Cap B49	06/26/96.01:00P	06/26/96.03:00P	
1.2.1.46.B5A	1	Unload,Rec/Insp Tube B50	01/16/96.01:00P	01/16/96.02:00P	
1.2.1.46.B5B	1	Move to Stiff Fit Up Stat. B50	01/22/96.02:00P	01/22/96.03:00P	
1.2.1.46.B5C	1	Set-up & Purge B50	01/22/96.03:00P	01/22/96.04:00P	
1.2.1.46.B5D	2	Fit Stiffeners B50	01/22/96.04:00P	01/23/96.09:00A	
1.2.1.46.B5E	4	Weld Stiffeners B50	01/23/96.09:00A	01/23/96.02:00P	
1.2.1.46.B5F	1	Move to Exp.Bellows Stat. B50	01/24/96.10:00A	01/24/96.11:00A	
1.2.1.46.B5G	3	Fit,Purge,Weld Exp. Bellows B50	01/24/96.11:00A	01/24/96.03:00P	
1.2.1.46.B5H	1	Inspect, Install End Caps B50	01/24/96.03:00P	01/24/96.04:00P	
1.2.1.46.B5J	1	Move to Test Area B50	01/26/96.09:00A	01/26/96.10:00A	
1.2.1.46.B5K	1	Pre-Clean & Black Light B50	01/26/96.10:00A	01/26/96.11:00A	
1.2.1.46.B5L	30	Leak Test B50	01/26/96.11:00A	01/27/96.05:00P	
1.2.1.46.B5O	1	Move to Post Test Storage B50	01/29/96.08:00A	01/29/96.09:00A	
1.2.1.46.B5P	1	Clean, Dry & End Cap B50	01/29/96.09:00A	01/29/96.10:00A	
1.2.1.46.B5R	1	Transport to Erection B50	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.46.B5S	1	Set & Align B50	02/21/96.11:00A	02/21/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.46.B5T	1	Set Clean Room, Purge & Fit B50	02/21/96.01:00P	02/21/96.02:00P	
1.2.1.46.B5U	2	Weld Joint B50	02/21/96.02:00P	02/21/96.04:00P	
1.2.1.46.B5V	2	Leak Test Joint B50	02/21/96.04:00P	02/22/96.09:00A	
1.2.1.46.B5W	2	Install Tube Supports B50	02/21/96.04:00P	02/22/96.09:00A	
1.2.1.46.B5X	2	Remove Equip'mt, Clean & Cap B50	02/22/96.09:00A	02/22/96.11:00A	
1.2.1.51	219	Cans 51-55	01/29/96.04:00P	03/07/96.10:00A	
1.2.1.51.1A	1	Unload,Rec/Insp Tube 52	01/30/96.08:00A	01/30/96.09:00A	
1.2.1.51.1B	1	Move to Stiff Fit Up Stat. 51	01/30/96.09:00A	01/30/96.10:00A	
1.2.1.51.1C	1	Set-up & Purge 51	01/30/96.10:00A	01/30/96.11:00A	
1.2.1.51.1D	2	Fit Stiffeners 51	01/30/96.11:00A	01/30/96.02:00P	
1.2.1.51.1E	4	Weld Stiffeners 51	01/30/96.02:00P	01/31/96.09:00A	
1.2.1.51.1F	1	Inspect, Install End Caps 51	01/31/96.09:00A	01/31/96.10:00A	
1.2.1.51.1H	1	Move to Test Area 51	01/31/96.10:00A	01/31/96.11:00A	
1.2.1.51.1I	1	Pre-Clean & Black Light 51	01/31/96.11:00A	01/31/96.12:00P	
1.2.1.51.1J	30	Leak Test 51	01/31/96.12:00P	02/01/96.06:00P	
1.2.1.51.1M	1	Move to Post Test Storage 51	02/02/96.08:00A	02/02/96.09:00A	
1.2.1.51.1N	1	Clean, Dry & End Cap 51	02/02/96.09:00A	02/02/96.10:00A	
1.2.1.51.1P	1	Transport to Erection 51	02/26/96.09:00A	02/26/96.10:00A	
1.2.1.51.1Q	1	Set & Align 51	02/26/96.10:00A	02/26/96.11:00A	
1.2.1.51.1R	1	Set Clean Room, Purge & Fit 51	02/26/96.11:00A	02/26/96.12:00P	
1.2.1.51.1S	2	Weld Joint 51	02/26/96.01:00P	02/26/96.03:00P	
1.2.1.51.1T	2	Leak Test Joint 51	02/26/96.03:00P	02/26/96.05:00P	
1.2.1.51.1U	2	Install Tube Supports 51	02/26/96.03:00P	02/26/96.05:00P	
1.2.1.51.1V	2	Remove Equip'mt, Clean & Cap 51	02/27/96.08:00A	02/27/96.10:00A	
1.2.1.51.2A	1	Unload,Rec. & Inspect 52	01/30/96.09:00A	01/30/96.10:00A	
1.2.1.51.2B	1	Move to Stiff Fit Up Stat. 52	01/31/96.11:00A	01/31/96.12:00P	
1.2.1.51.2C	1	Set-up & Purge 52	01/31/96.01:00P	01/31/96.02:00P	
1.2.1.51.2D	2	Fit Stiffeners 52	01/31/96.02:00P	01/31/96.04:00P	
1.2.1.51.2E	4	Weld Stiffeners 52	01/31/96.04:00P	02/01/96.11:00A	
1.2.1.51.2F	1	Inspect, Install End Caps 52	02/01/96.11:00A	02/01/96.12:00P	
1.2.1.51.2H	1	Move to Test Area 52	02/02/96.09:00A	02/02/96.10:00A	
1.2.1.51.2I	1	Pre-Clean & Black Light 52	02/02/96.10:00A	02/02/96.11:00A	
1.2.1.51.2J	30	Leak Test 52	02/02/96.11:00A	02/03/96.05:00P	
1.2.1.51.2M	1	Move to Post Test Storage 52	02/05/96.08:00A	02/05/96.09:00A	
1.2.1.51.2N	1	Clean, Dry & End Cap 52	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.51.2P	1	Transport to Erection 52	02/27/96.04:00P	02/27/96.05:00P	
1.2.1.51.2Q	1	Set & Align 52	02/28/96.08:00A	02/28/96.09:00A	
1.2.1.51.2R	1	Set Clean Room, Purge & Fit 52	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.51.2S	2	Weld Joint 52	02/28/96.10:00A	02/28/96.12:00P	
1.2.1.51.2T	2	Leak Test Joint 52	02/28/96.01:00P	02/28/96.03:00P	
1.2.1.51.2U	2	Install Tube Supports 52	02/28/96.01:00P	02/28/96.03:00P	
1.2.1.51.2V	2	Remove Equip'mt, Clean & Cap 52	02/28/96.03:00P	02/28/96.05:00P	
1.2.1.51.3A	1	Unload,Rec/Insp Tube 53	01/30/96.10:00A	01/30/96.11:00A	
1.2.1.51.3B	1	Move to Stiff Fit Up Stat. 53	02/02/96.10:00A	02/02/96.11:00A	
1.2.1.51.3C	1	Set-up & Purge 53	02/02/96.11:00A	02/02/96.12:00P	
1.2.1.51.3D	2	Fit Stiffeners 53	02/02/96.01:00P	02/02/96.03:00P	
1.2.1.51.3E	4	Weld Stiffeners 53	02/02/96.03:00P	02/05/96.10:00A	
1.2.1.51.3F	1	Inspect, Install End Caps 53	02/05/96.10:00A	02/05/96.11:00A	
1.2.1.51.3H	1	Move to Test Area 53	02/05/96.11:00A	02/05/96.12:00P	
1.2.1.51.3I	1	Pre-Clean & Black Light 53	02/05/96.01:00P	02/05/96.02:00P	
1.2.1.51.3J	30	Leak Test 53	02/05/96.02:00P	02/06/96.08:00P	
1.2.1.51.3M	1	Move to Post Test Storage 53	02/07/96.08:00A	02/07/96.09:00A	
1.2.1.51.3N	1	Clean, Dry & End Cap 53	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.51.3P	1	Transport to Erection 53	02/29/96.02:00P	02/29/96.03:00P	
1.2.1.51.3Q	1	Set & Align 53	02/29/96.03:00P	02/29/96.04:00P	
1.2.1.51.3R	1	Set Clean Room, Purge & Fit 53	02/29/96.04:00P	02/29/96.05:00P	
1.2.1.51.3S	2	Weld Joint 53	03/01/96.08:00A	03/01/96.10:00A	
1.2.1.51.3T	2	Leak Test Joint 53	03/01/96.10:00A	03/01/96.12:00P	
1.2.1.51.3U	2	Install Tube Supports 53	03/01/96.10:00A	03/01/96.12:00P	
1.2.1.51.3V	2	Remove Equip'mt, Clean & Cap 53	03/01/96.01:00P	03/01/96.03:00P	
1.2.1.51.4A	1	Unload,Rec/Insp Tube 54	01/30/96.11:00A	01/30/96.12:00P	
1.2.1.51.4B	1	Move to Stiff Fit Up Stat. 54	02/05/96.01:00P	02/05/96.02:00P	
1.2.1.51.4C	1	Set-up & Purge 54	02/05/96.02:00P	02/05/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.51.4D	2	Fit Stiffeners 54	02/05/96.03:00P	02/05/96.05:00P	
1.2.1.51.4E	4	Weld Stiffeners 54	02/06/96.08:00A	02/06/96.12:00P	
1.2.1.51.4F	1	Inspect, Install End Caps 54	02/06/96.01:00P	02/06/96.02:00P	
1.2.1.51.4H	1	Move to Test Area 54	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.51.4I	1	Pre-Clean & Black Light 54	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.51.4J	30	Leak Test 54	02/07/96.11:00A	02/08/96.05:00P	
1.2.1.51.4M	1	Move to Post Test Storage 54	02/09/96.08:00A	02/09/96.09:00A	
1.2.1.51.4N	1	Clean, Dry & End Cap 54	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.51.4P	1	Transport to Erection 54	03/04/96.11:00A	03/04/96.12:00P	
1.2.1.51.4Q	1	Set & Align 54	03/04/96.01:00P	03/04/96.02:00P	
1.2.1.51.4R	1	Set Clean Room, Purge & Fit 54	03/04/96.02:00P	03/04/96.03:00P	
1.2.1.51.4S	2	Weld Joint 54	03/04/96.03:00P	03/04/96.05:00P	
1.2.1.51.4T	2	Leak Test Joint 54	03/05/96.08:00A	03/05/96.10:00A	
1.2.1.51.4U	2	Install Tube Supports 54	03/05/96.08:00A	03/05/96.10:00A	
1.2.1.51.4V	2	Remove Equip'mt, Clean & Cap 54	03/05/96.10:00A	03/05/96.12:00P	
1.2.1.51.5A	1	Unload,Rec/Insp Tube 55	01/30/96.01:00P	01/30/96.02:00P	
1.2.1.51.5B	1	Move to Stiff Fit Up Stat. 55	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.51.5C	1	Set-up & Purge 55	02/07/96.11:00A	02/07/96.12:00P	
1.2.1.51.5D	1	F/W Pump Port Reinf. 55	02/07/96.01:00P	02/07/96.02:00P	
1.2.1.51.5E	2	Fit Stiffeners 55	02/07/96.02:00P	02/07/96.04:00P	
1.2.1.51.5F	4	Weld Stiffeners 55	02/07/96.04:00P	02/08/96.11:00A	
1.2.1.51.5G	1	Move to P.Port Stat. 55	02/08/96.11:00A	02/08/96.12:00P	
1.2.1.51.5H	1	Setup & Bore 10" Inlet 55	02/08/96.01:00P	02/08/96.02:00P	
1.2.1.51.5I	2	Purge/F/W Pump Port 55	02/08/96.02:00P	02/08/96.04:00P	
1.2.1.51.5J	1	Inspect, Install End Caps 55	02/08/96.04:00P	02/08/96.05:00P	
1.2.1.51.5L	1	Move to Test Area 55	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.51.5M	1	Pre-Clean & Black Light 55	02/09/96.10:00A	02/09/96.11:00A	
1.2.1.51.5N	30	Leak Test 55	02/09/96.11:00A	02/10/96.05:00P	
1.2.1.51.5Q	1	Move to Post Test Storage 55	02/12/96.08:00A	02/12/96.09:00A	
1.2.1.51.5R	1	Clean, Dry & End Cap 55	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.51.5T	1	Transport to Erection 55	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.51.5U	1	Set & Align 55	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.51.5V	1	Set Clean Room, Purge & Fit 55	03/06/96.11:00A	03/06/96.12:00P	
1.2.1.51.5W	2	Weld Joint 55	03/06/96.01:00P	03/06/96.03:00P	
1.2.1.51.5X	2	Leak Test Joint 55	03/06/96.03:00P	03/06/96.05:00P	
1.2.1.51.5Y	2	Install Tube Supports 55	03/06/96.03:00P	03/06/96.05:00P	
1.2.1.51.5Z	2	Remove Equip'mt, Clean & Cap 55	03/07/96.08:00A	03/07/96.10:00A	
1.2.1.51.B1A	1	Unload,Rec/Insp Tube B51	01/30/96.08:00A	01/30/96.09:00A	
1.2.1.51.B1B	1	Move to Stiff Fit Up Stat. B51	01/30/96.09:00A	01/30/96.10:00A	
1.2.1.51.B1C	1	Set-up & Purge B51	01/30/96.10:00A	01/30/96.11:00A	
1.2.1.51.B1D	2	Fit Stiffeners B51	01/30/96.11:00A	01/30/96.02:00P	
1.2.1.51.B1E	4	Weld Stiffeners B51	01/30/96.02:00P	01/31/96.09:00A	
1.2.1.51.B1F	1	Move to Exp.Bellows Stat. B51	01/31/96.09:00A	01/31/96.10:00A	
1.2.1.51.B1G	3	Fit,Purge,Weld Exp. Bellows B51	01/31/96.10:00A	01/31/96.02:00P	
1.2.1.51.B1H	1	Inspect, Install End Caps B51	01/31/96.02:00P	01/31/96.03:00P	
1.2.1.51.B1J	1	Move to Test Area B51	01/31/96.03:00P	01/31/96.04:00P	
1.2.1.51.B1K	1	Pre-Clean & Black Light B51	01/31/96.04:00P	01/31/96.05:00P	
1.2.1.51.B1L	30	Leak Test B51	01/31/96.05:00P	02/01/96.11:00P	
1.2.1.51.B1O	1	Move to Post Test Storage B51	02/02/96.08:00A	02/02/96.09:00A	
1.2.1.51.B1P	1	Clean, Dry & End Cap B51	02/02/96.09:00A	02/02/96.10:00A	
1.2.1.51.B1R	1	Transport to Erection B51	02/23/96.10:00A	02/23/96.11:00A	
1.2.1.51.B1S	1	Set & Align B51	02/23/96.11:00A	02/23/96.12:00P	
1.2.1.51.B1T	1	Set Clean Room, Purge & Fit B51	02/23/96.01:00P	02/23/96.02:00P	
1.2.1.51.B1U	2	Weld Joint B51	02/23/96.02:00P	02/23/96.04:00P	
1.2.1.51.B1V	2	Leak Test Joint B51	02/23/96.04:00P	02/26/96.09:00A	
1.2.1.51.B1W	2	Install Tube Supports B51	02/23/96.04:00P	02/26/96.09:00A	
1.2.1.51.B1X	2	Remove Equip'mt, Clean & Cap B51	02/26/96.09:00A	02/26/96.11:00A	
1.2.1.51.B2A	1	Unload,Rec/Insp Tube B52	01/30/96.09:00A	01/30/96.10:00A	
1.2.1.51.B2B	1	Move to Stiff Fit Up Stat. B52	01/31/96.10:00A	01/31/96.11:00A	
1.2.1.51.B2C	1	Set-up & Purge B52	01/31/96.11:00A	01/31/96.12:00P	
1.2.1.51.B2D	2	Fit Stiffeners B52	01/31/96.01:00P	01/31/96.03:00P	
1.2.1.51.B2E	4	Weld Stiffeners B52	01/31/96.03:00P	02/01/96.10:00A	
1.2.1.51.B2F	1	Move to Exp.Bellows Stat. B52	02/01/96.10:00A	02/01/96.11:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.51.B2G	3	Fit,Purge,Weld Exp. Bellows B52	02/01/96.11:00A	02/01/96.03:00P	
1.2.1.51.B2H	1	Inspect, Install End Caps B52	02/01/96.03:00P	02/01/96.04:00P	
1.2.1.51.B2J	1	Move to Test Area B52	02/02/96.09:00A	02/02/96.10:00A	
1.2.1.51.B2K	1	Pre-Clean & Black Light B52	02/02/96.10:00A	02/02/96.11:00A	
1.2.1.51.B2L	30	Leak Test B52	02/02/96.11:00A	02/03/96.05:00P	
1.2.1.51.B2O	1	Move to Post Test Storage B52	02/05/96.08:00A	02/05/96.09:00A	
1.2.1.51.B2P	1	Clean, Dry & End Cap B52	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.51.B2R	1	Transport to Erection B52	02/27/96.08:00A	02/27/96.09:00A	
1.2.1.51.B2S	1	Set & Align B52	02/27/96.09:00A	02/27/96.10:00A	
1.2.1.51.B2T	1	Set Clean Room, Purge & Fit B52	02/27/96.10:00A	02/27/96.11:00A	
1.2.1.51.B2U	2	Weld Joint B52	02/27/96.11:00A	02/27/96.02:00P	
1.2.1.51.B2V	2	Leak Test Joint B52	02/27/96.02:00P	02/27/96.04:00P	
1.2.1.51.B2W	2	Install Tube Supports B52	02/27/96.02:00P	02/27/96.04:00P	
1.2.1.51.B2X	2	Remove Equip'mt, Clean & Cap B52	02/27/96.04:00P	02/28/96.09:00A	
1.2.1.51.B3A	1	Unload,Rec/Insp Tube B53	01/30/96.10:00A	01/30/96.11:00A	
1.2.1.51.B3B	1	Move to Stiff Fit Up Stat. B53	02/01/96.11:00A	02/01/96.12:00P	
1.2.1.51.B3C	1	Set-up & Purge B53	02/01/96.01:00P	02/01/96.02:00P	
1.2.1.51.B3D	2	Fit Stiffeners B53	02/01/96.02:00P	02/01/96.04:00P	
1.2.1.51.B3E	4	Weld Stiffeners B53	02/01/96.04:00P	02/02/96.11:00A	
1.2.1.51.B3F	1	Move to Exp.Bellows Stat. B53	02/02/96.11:00A	02/02/96.12:00P	
1.2.1.51.B3G	3	Fit,Purge,Weld Exp. Bellows B53	02/02/96.01:00P	02/02/96.04:00P	
1.2.1.51.B3H	1	Inspect, Install End Caps B53	02/02/96.04:00P	02/02/96.05:00P	
1.2.1.51.B3J	1	Move to Test Area B53	02/05/96.09:00A	02/05/96.10:00A	
1.2.1.51.B3K	1	Pre-Clean & Black Light B53	02/05/96.10:00A	02/05/96.11:00A	
1.2.1.51.B3L	30	Leak Test B53	02/05/96.11:00A	02/06/96.05:00P	
1.2.1.51.B3O	1	Move to Post Test Storage B53	02/07/96.08:00A	02/07/96.09:00A	
1.2.1.51.B3P	1	Clean, Dry & End Cap B53	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.51.B3R	1	Transport to Erection B53	02/28/96.03:00P	02/28/96.04:00P	
1.2.1.51.B3S	1	Set & Align B53	02/28/96.04:00P	02/28/96.05:00P	
1.2.1.51.B3T	1	Set Clean Room, Purge & Fit B53	02/29/96.08:00A	02/29/96.09:00A	
1.2.1.51.B3U	2	Weld Joint B53	02/29/96.09:00A	02/29/96.11:00A	
1.2.1.51.B3V	2	Leak Test Joint B53	02/29/96.11:00A	02/29/96.02:00P	
1.2.1.51.B3W	2	Install Tube Supports B53	02/29/96.11:00A	02/29/96.02:00P	
1.2.1.51.B3X	2	Remove Equip'mt, Clean & Cap B53	02/29/96.02:00P	02/29/96.04:00P	
1.2.1.51.B4A	1	Unload,Rec/Insp Tube B54	01/30/96.11:00A	01/30/96.12:00P	
1.2.1.51.B4B	1	Move to Stiff Fit Up Stat. B54	02/02/96.01:00P	02/02/96.02:00P	
1.2.1.51.B4C	1	Set-up & Purge B54	02/02/96.02:00P	02/02/96.03:00P	
1.2.1.51.B4D	2	Fit Stiffeners B54	02/02/96.03:00P	02/02/96.05:00P	
1.2.1.51.B4E	4	Weld Stiffeners B54	02/05/96.08:00A	02/05/96.12:00P	
1.2.1.51.B4F	1	Move to Exp.Bellows Stat. B54	02/05/96.01:00P	02/05/96.02:00P	
1.2.1.51.B4G	3	Fit,Purge,Weld Exp. Bellows B54	02/05/96.02:00P	02/05/96.05:00P	
1.2.1.51.B4H	1	Inspect, Install End Caps B54	02/06/96.08:00A	02/06/96.09:00A	
1.2.1.51.B4J	1	Move to Test Area B54	02/07/96.09:00A	02/07/96.10:00A	
1.2.1.51.B4K	1	Pre-Clean & Black Light B54	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.51.B4L	30	Leak Test B54	02/07/96.11:00A	02/08/96.05:00P	
1.2.1.51.B4O	1	Move to Post Test Storage B54	02/09/96.08:00A	02/09/96.09:00A	
1.2.1.51.B4P	1	Clean, Dry & End Cap B54	02/09/96.09:00A	02/09/96.10:00A	
1.2.1.51.B4R	1	Transport to Erection B54	03/01/96.01:00P	03/01/96.02:00P	
1.2.1.51.B4S	1	Set & Align B54	03/01/96.02:00P	03/01/96.03:00P	
1.2.1.51.B4T	1	Set Clean Room, Purge & Fit B54	03/01/96.03:00P	03/01/96.04:00P	
1.2.1.51.B4U	2	Weld Joint B54	03/01/96.04:00P	03/04/96.09:00A	
1.2.1.51.B4V	2	Leak Test Joint B54	03/04/96.09:00A	03/04/96.11:00A	
1.2.1.51.B4W	2	Install Tube Supports 54	03/04/96.09:00A	03/04/96.11:00A	
1.2.1.51.B4X	2	Remove Equip'mt, Clean & Cap B54	03/04/96.11:00A	03/04/96.02:00P	
1.2.1.51.B5A	1	Unload,Rec/Insp Tube B55	01/30/96.01:00P	01/30/96.02:00P	
1.2.1.51.B5B	1	Move to Stiff Fit Up Stat. B55	02/05/96.02:00P	02/05/96.03:00P	
1.2.1.51.B5C	1	Set-up & Purge B55	02/05/96.03:00P	02/05/96.04:00P	
1.2.1.51.B5D	2	Fit Stiffeners B55	02/05/96.04:00P	02/06/96.09:00A	
1.2.1.51.B5E	4	Weld Stiffeners B55	02/06/96.09:00A	02/06/96.02:00P	
1.2.1.51.B5F	1	Move to Exp.Bellows Stat. B55	02/07/96.10:00A	02/07/96.11:00A	
1.2.1.51.B5G	3	Fit,Purge,Weld Exp. Bellows B55	02/07/96.11:00A	02/07/96.03:00P	
1.2.1.51.B5H	1	Inspect, Install End Caps B55	02/07/96.03:00P	02/07/96.04:00P	
1.2.1.51.B5J	1	Move to Test Area B55	02/09/96.09:00A	02/09/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.51.B5K	1	Pre-Clean & Black Light B55	02/09/96.10:00A	02/09/96.11:00A	
1.2.1.51.B5L	30	Leak Test B55	02/09/96.11:00A	02/10/96.05:00P	
1.2.1.51.B5O	1	Move to Post Test Storage B55	02/12/96.08:00A	02/12/96.09:00A	
1.2.1.51.B5P	1	Clean, Dry & End Cap B55	02/12/96.09:00A	02/12/96.10:00A	
1.2.1.51.B5R	1	Transport to Erection B55	03/05/96.10:00A	03/05/96.11:00A	
1.2.1.51.B5S	1	Set & Align B55	03/05/96.11:00A	03/05/96.12:00P	
1.2.1.51.B5T	1	Set Clean Room, Purge & Fit B55	03/05/96.01:00P	03/05/96.02:00P	
1.2.1.51.B5U	2	Weld Joint B55	03/05/96.02:00P	03/05/96.04:00P	
1.2.1.51.B5V	2	Leak Test Joint B55	03/05/96.04:00P	03/06/96.09:00A	
1.2.1.51.B5W	2	Install Tube Supports B55	03/05/96.04:00P	03/06/96.09:00A	
1.2.1.51.B5X	2	Remove Equip'mt, Clean & Cap B55	03/06/96.09:00A	03/06/96.11:00A	
1.2.1.56	211	Cans 56-60	02/12/96.04:00P	03/20/96.10:00A	
1.2.1.56.1A	1	Unload,Rec/Insp Tube 56	02/13/96.08:00A	02/13/96.09:00A	
1.2.1.56.1B	1	Move to Stiff Fit Up Stat. 65	02/13/96.09:00A	02/13/96.10:00A	
1.2.1.56.1C	1	Set-up & Purge 56	02/13/96.10:00A	02/13/96.11:00A	
1.2.1.56.1D	2	Fit Stiffeners 56	02/13/96.11:00A	02/13/96.02:00P	
1.2.1.56.1E	4	Weld Stiffeners 56	02/13/96.02:00P	02/14/96.09:00A	
1.2.1.56.1F	1	Inspect, Install End Caps 56	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.56.1H	1	Move to Test Area 56	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.56.1I	1	Pre-Clean & Black Light 56	02/14/96.11:00A	02/14/96.12:00P	
1.2.1.56.1J	30	Leak Test 56	02/14/96.12:00P	02/15/96.06:00P	
1.2.1.56.1M	1	Move to Post Test Storage56	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.56.1N	1	Clean, Dry & End Cap 56	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.56.1P	1	Transport to Erection 56	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.56.1Q	1	Set & Align 56	03/08/96.10:00A	03/08/96.11:00A	
1.2.1.56.1R	1	Set Clean Room, Purge & Fit 56	03/08/96.11:00A	03/08/96.12:00P	
1.2.1.56.1S	2	Weld Joint 56	03/08/96.01:00P	03/08/96.03:00P	
1.2.1.56.1T	2	Leak Test Joint 56	03/08/96.03:00P	03/08/96.05:00P	
1.2.1.56.1U	2	Install Tube Supports 56	03/08/96.03:00P	03/08/96.05:00P	
1.2.1.56.1V	2	Remove Equip'mt, Clean & Cap 56	03/11/96.08:00A	03/11/96.10:00A	
1.2.1.56.2A	1	Unload,Rec. & Inspect 57	02/13/96.09:00A	02/13/96.10:00A	
1.2.1.56.2B	1	Move to Stiff Fit Up Stat. 57	02/14/96.11:00A	02/14/96.12:00P	
1.2.1.56.2C	1	Set-up & Purge 57	02/14/96.01:00P	02/14/96.02:00P	
1.2.1.56.2D	2	Fit Stiffeners 57	02/14/96.02:00P	02/14/96.04:00P	
1.2.1.56.2E	4	Weld Stiffeners 57	02/14/96.04:00P	02/15/96.11:00A	
1.2.1.56.2F	1	Inspect, Install End Caps 57	02/15/96.11:00A	02/15/96.12:00P	
1.2.1.56.2H	1	Move to Test Area 57	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.56.2I	1	Pre-Clean & Black Light 57	02/16/96.10:00A	02/16/96.11:00A	
1.2.1.56.2J	30	Leak Test 57	02/16/96.11:00A	02/17/96.05:00P	
1.2.1.56.2M	1	Move to Post Test Storage 57	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.56.2N	1	Clean, Dry & End Cap 57	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.56.2P	1	Transport to Erection 57	03/11/96.04:00P	03/11/96.05:00P	
1.2.1.56.2Q	1	Set & Align 57	03/12/96.08:00A	03/12/96.09:00A	
1.2.1.56.2R	1	Set Clean Room, Purge & Fit 57	03/12/96.09:00A	03/12/96.10:00A	
1.2.1.56.2S	2	Weld Joint 57	03/12/96.10:00A	03/12/96.12:00P	
1.2.1.56.2T	2	Leak Test Joint 57	03/12/96.01:00P	03/12/96.03:00P	
1.2.1.56.2U	2	Install Tube Supports 57	03/12/96.01:00P	03/12/96.03:00P	
1.2.1.56.2V	2	Remove Equip'mt, Clean & Cap 57	03/12/96.03:00P	03/12/96.05:00P	
1.2.1.56.3A	1	Unload,Rec/Insp Tube 58	02/13/96.10:00A	02/13/96.11:00A	
1.2.1.56.3B	1	Move to Stiff Fit Up Stat. 58	02/16/96.10:00A	02/16/96.11:00A	
1.2.1.56.3C	1	Set-up & Purge 58	02/16/96.11:00A	02/16/96.12:00P	
1.2.1.56.3D	2	Fit Stiffeners 58	02/16/96.01:00P	02/16/96.03:00P	
1.2.1.56.3E	4	Weld Stiffeners 58	02/16/96.03:00P	02/19/96.10:00A	
1.2.1.56.3F	1	Inspect, Install End Caps 58	02/19/96.10:00A	02/19/96.11:00A	
1.2.1.56.3H	1	Move to Test Area 58	02/19/96.11:00A	02/19/96.12:00P	
1.2.1.56.3I	1	Pre-Clean & Black Light 58	02/19/96.01:00P	02/19/96.02:00P	
1.2.1.56.3J	30	Leak Test 58	02/19/96.02:00P	02/20/96.08:00P	
1.2.1.56.3M	1	Move to Post Test Storage 58	02/21/96.08:00A	02/21/96.09:00A	
1.2.1.56.3N	1	Clean, Dry & End Cap 58	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.56.3P	1	Transport to Erection 58	03/13/96.02:00P	03/13/96.03:00P	
1.2.1.56.3Q	1	Set & Align 58	03/13/96.03:00P	03/13/96.04:00P	
1.2.1.56.3R	1	Set Clean Room, Purge & Fit 58	03/13/96.04:00P	03/13/96.05:00P	
1.2.1.56.3S	2	Weld Joint 58	03/14/96.08:00A	03/14/96.10:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.56.3T	2	Leak Test Joint 58	03/14/96.10:00A	03/14/96.12:00P	
1.2.1.56.3U	2	Install Tube Supports 58	03/14/96.10:00A	03/14/96.12:00P	
1.2.1.56.3V	2	Remove Equip'mt, Clean & Cap 58	03/14/96.01:00P	03/14/96.03:00P	
1.2.1.56.4A	1	Unload,Rec/Insp Tube 59	02/13/96.11:00A	02/13/96.12:00P	
1.2.1.56.4B	1	Move to Stiff Fit Up Stat. 59	02/19/96.01:00P	02/19/96.02:00P	
1.2.1.56.4C	1	Set-up & Purge 59	02/19/96.02:00P	02/19/96.03:00P	
1.2.1.56.4D	2	Fit Stiffeners 59	02/19/96.03:00P	02/19/96.05:00P	
1.2.1.56.4E	4	Weld Stiffeners 59	02/20/96.08:00A	02/20/96.12:00P	
1.2.1.56.4F	1	Inspect, Install End Caps 59	02/20/96.01:00P	02/20/96.02:00P	
1.2.1.56.4H	1	Move to Test Area 59	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.56.4I	1	Pre-Clean & Black Light 59	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.56.4J	30	Leak Test 59	02/21/96.11:00A	02/22/96.05:00P	
1.2.1.56.4M	1	Move to Post Test Storage 59	02/23/96.08:00A	02/23/96.09:00A	
1.2.1.56.4N	1	Clean, Dry & End Cap 59	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.56.4P	1	Transport to Erection 59	03/15/96.11:00A	03/15/96.12:00P	
1.2.1.56.4Q	1	Set & Align 59	03/15/96.01:00P	03/15/96.02:00P	
1.2.1.56.4R	1	Set Clean Room, Purge & Fit 59	03/15/96.02:00P	03/15/96.03:00P	
1.2.1.56.4S	2	Weld Joint 59	03/15/96.03:00P	03/15/96.05:00P	
1.2.1.56.4T	2	Leak Test Joint 59	03/18/96.08:00A	03/18/96.10:00A	
1.2.1.56.4U	2	Install Tube Supports 59	03/18/96.08:00A	03/18/96.10:00A	
1.2.1.56.4V	2	Remove Equip'mt, Clean & Cap 59	03/18/96.10:00A	03/18/96.12:00P	
1.2.1.56.5A	1	Unload,Rec/Insp Tube 62	02/13/96.01:00P	02/13/96.02:00P	
1.2.1.56.5B	1	Move to Stiff Fit Up Stat. 60	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.56.5C	1	Set-up & Purge 60	02/21/96.11:00A	02/21/96.12:00P	
1.2.1.56.5D	1	F/W Pump Port Reinf. 60	02/21/96.01:00P	02/21/96.02:00P	
1.2.1.56.5E	2	Fit Stiffeners 60	02/21/96.02:00P	02/21/96.04:00P	
1.2.1.56.5F	4	Weld Stiffeners 60	02/21/96.04:00P	02/22/96.11:00A	
1.2.1.56.5G	1	Move to P.Port Stat. 60	02/22/96.11:00A	02/22/96.12:00P	
1.2.1.56.5H	1	Setup & Bore 10" Inlet 60	02/22/96.01:00P	02/22/96.02:00P	
1.2.1.56.5I	2	Purge/F/W Pump Port 60	02/22/96.02:00P	02/22/96.04:00P	
1.2.1.56.5J	1	Inspect, Install End Caps 60	02/22/96.04:00P	02/22/96.05:00P	
1.2.1.56.5L	1	Move to Test Area 60	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.56.5M	1	Pre-Clean & Black Light 60	02/23/96.10:00A	02/23/96.11:00A	
1.2.1.56.5N	30	Leak Test 60	02/23/96.11:00A	02/24/96.05:00P	
1.2.1.56.5Q	1	Move to Post Test Storage 60	02/26/96.08:00A	02/26/96.09:00A	
1.2.1.56.5R	1	Clean, Dry & End Cap 60	02/26/96.09:00A	02/26/96.10:00A	
1.2.1.56.5T	1	Transport to Erection 60	03/19/96.09:00A	03/19/96.10:00A	
1.2.1.56.5U	1	Set & Align 60	03/19/96.10:00A	03/19/96.11:00A	
1.2.1.56.5V	1	Set Clean Room, Purge & Fit 60	03/19/96.11:00A	03/19/96.12:00P	
1.2.1.56.5W	2	Weld Joint 60	03/19/96.01:00P	03/19/96.03:00P	
1.2.1.56.5X	2	Leak Test Joint 60	03/19/96.03:00P	03/19/96.05:00P	
1.2.1.56.5Y	2	Install Tube Supports 60	03/19/96.03:00P	03/19/96.05:00P	
1.2.1.56.5Z	2	Remove Equip'mt, Clean & Cap 60	03/20/96.08:00A	03/20/96.10:00A	
1.2.1.56.B1A	1	Unload,Rec/Insp Tube B56	02/13/96.08:00A	02/13/96.09:00A	
1.2.1.56.B1B	1	Move to Stiff Fit Up Stat. B56	02/13/96.09:00A	02/13/96.10:00A	
1.2.1.56.B1C	1	Set-up & Purge B56	02/13/96.10:00A	02/13/96.11:00A	
1.2.1.56.B1D	2	Fit Stiffeners B56	02/13/96.11:00A	02/13/96.02:00P	
1.2.1.56.B1E	4	Weld Stiffeners B56	02/13/96.02:00P	02/14/96.09:00A	
1.2.1.56.B1F	1	Move to Exp.Bellows Stat. B56	02/14/96.09:00A	02/14/96.10:00A	
1.2.1.56.B1G	3	Fit,Purge,Weld Exp. Bellows B56	02/14/96.10:00A	02/14/96.02:00P	
1.2.1.56.B1H	1	Inspect, Install End Caps B56	02/14/96.02:00P	02/14/96.03:00P	
1.2.1.56.B1J	1	Move to Test Area B565	02/14/96.03:00P	02/14/96.04:00P	
1.2.1.56.B1K	1	Pre-Clean & Black Light B56	02/14/96.04:00P	02/14/96.05:00P	
1.2.1.56.B1L	30	Leak Test B56	02/14/96.05:00P	02/15/96.11:00P	
1.2.1.56.B1O	1	Move to Post Test Storage B56	02/16/96.08:00A	02/16/96.09:00A	
1.2.1.56.B1P	1	Clean, Dry & End Cap B56	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.56.B1R	1	Transport to Erection B56	03/07/96.10:00A	03/07/96.11:00A	
1.2.1.56.B1S	1	Set & Align B56	03/07/96.11:00A	03/07/96.12:00P	
1.2.1.56.B1T	1	Set Clean Room, Purge & Fit B56	03/07/96.01:00P	03/07/96.02:00P	
1.2.1.56.B1U	2	Weld Joint B56	03/07/96.02:00P	03/07/96.04:00P	
1.2.1.56.B1V	2	Leak Test Joint B56	03/07/96.04:00P	03/08/96.09:00A	
1.2.1.56.B1W	2	Install Tube Supports B56	03/07/96.04:00P	03/08/96.09:00A	
1.2.1.56.B1X	2	Remove Equip'mt, Clean & Cap B56	03/08/96.09:00A	03/08/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.56.B2A	1	Unload,Rec/Insp Tube B57	02/13/96.09:00A	02/13/96.10:00A	
1.2.1.56.B2B	1	Move to Stiff Fit Up Stat. B57	02/14/96.10:00A	02/14/96.11:00A	
1.2.1.56.B2C	1	Set-up & Purge B57	02/14/96.11:00A	02/14/96.12:00P	
1.2.1.56.B2D	2	Fit Stiffeners B57	02/14/96.01:00P	02/14/96.03:00P	
1.2.1.56.B2E	4	Weld Stiffeners B57	02/14/96.03:00P	02/15/96.10:00A	
1.2.1.56.B2F	1	Move to Exp.Bellows Stat. B57	02/15/96.10:00A	02/15/96.11:00A	
1.2.1.56.B2G	3	Fit,Purge,Weld Exp. Bellows B57	02/15/96.11:00A	02/15/96.03:00P	
1.2.1.56.B2H	1	Inspect, Install End Caps B57	02/15/96.03:00P	02/15/96.04:00P	
1.2.1.56.B2J	1	Move to Test Area B57	02/16/96.09:00A	02/16/96.10:00A	
1.2.1.56.B2K	1	Pre-Clean & Black Light B57	02/16/96.10:00A	02/16/96.11:00A	
1.2.1.56.B2L	30	Leak Test B57	02/16/96.11:00A	02/17/96.05:00P	
1.2.1.56.B2O	1	Move to Post Test Storage B57	02/19/96.08:00A	02/19/96.09:00A	
1.2.1.56.B2P	1	Clean, Dry & End Cap B57	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.56.B2R	1	Transport to Erection B57	03/11/96.08:00A	03/11/96.09:00A	
1.2.1.56.B2S	1	Set & Align B57	03/11/96.09:00A	03/11/96.10:00A	
1.2.1.56.B2T	1	Set Clean Room, Purge & Fit B57	03/11/96.10:00A	03/11/96.11:00A	
1.2.1.56.B2U	2	Weld Joint B57	03/11/96.11:00A	03/11/96.02:00P	
1.2.1.56.B2V	2	Leak Test Joint B57	03/11/96.02:00P	03/11/96.04:00P	
1.2.1.56.B2W	2	Install Tube Supports B57	03/11/96.02:00P	03/11/96.04:00P	
1.2.1.56.B2X	2	Remove Equip'mt, Clean & Cap B58	03/11/96.04:00P	03/12/96.09:00A	
1.2.1.56.B3A	1	Unload,Rec/Insp Tube B58	02/13/96.10:00A	02/13/96.11:00A	
1.2.1.56.B3B	1	Move to Stiff Fit Up Stat. B58	02/15/96.11:00A	02/15/96.12:00P	
1.2.1.56.B3C	1	Set-up & Purge B58	02/15/96.01:00P	02/15/96.02:00P	
1.2.1.56.B3D	2	Fit Stiffeners B58	02/15/96.02:00P	02/15/96.04:00P	
1.2.1.56.B3E	4	Weld Stiffeners B58	02/15/96.04:00P	02/16/96.11:00A	
1.2.1.56.B3F	1	Move to Exp.Bellows Stat. B58	02/16/96.11:00A	02/16/96.12:00P	
1.2.1.56.B3G	3	Fit,Purge,Weld Exp. Bellows B58	02/16/96.01:00P	02/16/96.04:00P	
1.2.1.56.B3H	1	Inspect, Install End Caps B58	02/16/96.04:00P	02/16/96.05:00P	
1.2.1.56.B3J	1	Move to Test Area B58	02/19/96.09:00A	02/19/96.10:00A	
1.2.1.56.B3K	1	Pre-Clean & Black Light B58	02/19/96.10:00A	02/19/96.11:00A	
1.2.1.56.B3L	30	Leak Test B58	02/19/96.11:00A	02/20/96.05:00P	
1.2.1.56.B3O	1	Move to Post Test Storage B58	02/21/96.08:00A	02/21/96.09:00A	
1.2.1.56.B3P	1	Clean, Dry & End Cap B58	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.56.B3R	1	Transport to Erection B58	03/12/96.03:00P	03/12/96.04:00P	
1.2.1.56.B3S	1	Set & Align B58	03/12/96.04:00P	03/12/96.05:00P	
1.2.1.56.B3T	1	Set Clean Room, Purge & Fit B58	03/13/96.08:00A	03/13/96.09:00A	
1.2.1.56.B3U	2	Weld Joint B58	03/13/96.09:00A	03/13/96.11:00A	
1.2.1.56.B3V	2	Leak Test Joint B58	03/13/96.11:00A	03/13/96.02:00P	
1.2.1.56.B3W	2	Install Tube Supports 58	03/13/96.11:00A	03/13/96.02:00P	
1.2.1.56.B3X	2	Remove Equip'mt, Clean & Cap B59	03/13/96.02:00P	03/13/96.04:00P	
1.2.1.56.B4A	1	Unload,Rec/Insp Tube B59	02/13/96.11:00A	02/13/96.12:00P	
1.2.1.56.B4B	1	Move to Stiff Fit Up Stat. B59	02/16/96.01:00P	02/16/96.02:00P	
1.2.1.56.B4C	1	Set-up & Purge B59	02/16/96.02:00P	02/16/96.03:00P	
1.2.1.56.B4D	2	Fit Stiffeners B59	02/16/96.03:00P	02/16/96.05:00P	
1.2.1.56.B4E	4	Weld Stiffeners B59	02/19/96.08:00A	02/19/96.12:00P	
1.2.1.56.B4F	1	Move to Exp.Bellows Stat. B59	02/19/96.01:00P	02/19/96.02:00P	
1.2.1.56.B4G	3	Fit,Purge,Weld Exp. Bellows B59	02/19/96.02:00P	02/19/96.05:00P	
1.2.1.56.B4H	1	Inspect, Install End Caps B59	02/20/96.08:00A	02/20/96.09:00A	
1.2.1.56.B4J	1	Move to Test Area B59	02/21/96.09:00A	02/21/96.10:00A	
1.2.1.56.B4K	1	Pre-Clean & Black Light B59	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.56.B4L	30	Leak Test B59	02/21/96.11:00A	02/22/96.05:00P	
1.2.1.56.B4O	1	Move to Post Test Storage B59	02/23/96.08:00A	02/23/96.09:00A	
1.2.1.56.B4P	1	Clean, Dry & End Cap B59	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.56.B4R	1	Transport to Erection B59	03/14/96.01:00P	03/14/96.02:00P	
1.2.1.56.B4S	1	Set & Align B59	03/14/96.02:00P	03/14/96.03:00P	
1.2.1.56.B4T	1	Set Clean Room, Purge & Fit B59	03/14/96.03:00P	03/14/96.04:00P	
1.2.1.56.B4U	2	Weld Joint B59	03/14/96.04:00P	03/15/96.09:00A	
1.2.1.56.B4V	2	Leak Test Joint B59	03/15/96.09:00A	03/15/96.11:00A	
1.2.1.56.B4W	2	Install Tube Supports B59	03/15/96.09:00A	03/15/96.11:00A	
1.2.1.56.B4X	2	Remove Equip'mt, Clean & Cap B59	03/15/96.11:00A	03/15/96.02:00P	
1.2.1.56.B5A	1	Unload,Rec/Insp Tube B60	02/13/96.01:00P	02/13/96.02:00P	
1.2.1.56.B5B	1	Move to Stiff Fit Up Stat. B60	02/19/96.02:00P	02/19/96.03:00P	
1.2.1.56.B5C	1	Set-up & Purge B60	02/19/96.03:00P	02/19/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.56.B5D	2	Fit Stiffeners B60	02/19/96.04:00P	02/20/96.09:00A	
1.2.1.56.B5E	4	Weld Stiffeners B60	02/20/96.09:00A	02/20/96.02:00P	
1.2.1.56.B5F	1	Move to Exp.Bellows Stat. B60	02/21/96.10:00A	02/21/96.11:00A	
1.2.1.56.B5G	3	Fit,Purge,Weld Exp. Bellows B60	02/21/96.11:00A	02/21/96.03:00P	
1.2.1.56.B5H	1	Inspect, Install End Caps B60	02/21/96.03:00P	02/21/96.04:00P	
1.2.1.56.B5J	1	Move to Test Area B60	02/23/96.09:00A	02/23/96.10:00A	
1.2.1.56.B5K	1	Pre-Clean & Black Light B60	02/23/96.10:00A	02/23/96.11:00A	
1.2.1.56.B5L	30	Leak Test B60	02/23/96.11:00A	02/24/96.05:00P	
1.2.1.56.B5O	1	Move to Post Test Storage B60	02/26/96.08:00A	02/26/96.09:00A	
1.2.1.56.B5P	1	Clean, Dry & End Cap B60	02/26/96.09:00A	02/26/96.10:00A	
1.2.1.56.B5R	1	Transport to Erection B60	03/18/96.10:00A	03/18/96.11:00A	
1.2.1.56.B5S	1	Set & Align B60	03/18/96.11:00A	03/18/96.12:00P	
1.2.1.56.B5T	1	Set Clean Room, Purge & Fit B60	03/18/96.01:00P	03/18/96.02:00P	
1.2.1.56.B5U	2	Weld Joint B60	03/18/96.02:00P	03/18/96.04:00P	
1.2.1.56.B5V	2	Leak Test Joint B60	03/18/96.04:00P	03/19/96.09:00A	
1.2.1.56.B5W	2	Install Tube Supports B60	03/18/96.04:00P	03/19/96.09:00A	
1.2.1.56.B5X	2	Remove Equip'mt, Clean & Cap B60	03/19/96.09:00A	03/19/96.11:00A	
1.2.1.61	203	Cans 61-65	02/26/96.04:00P	04/02/96.10:00A	
1.2.1.61.1A	1	Unload,Rec/Insp Tube 61	02/27/96.08:00A	02/27/96.09:00A	
1.2.1.61.1B	1	Move to Stiff Fit Up Stat. 61	02/27/96.09:00A	02/27/96.10:00A	
1.2.1.61.1C	1	Set-up & Purge 61	02/27/96.10:00A	02/27/96.11:00A	
1.2.1.61.1D	2	Fit Stiffeners 61	02/27/96.11:00A	02/27/96.02:00P	
1.2.1.61.1E	4	Weld Stiffeners 61	02/27/96.02:00P	02/28/96.09:00A	
1.2.1.61.1F	1	Inspect, Install End Caps 61	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.61.1H	1	Move to Test Area 61	02/28/96.10:00A	02/28/96.11:00A	
1.2.1.61.1I	1	Pre-Clean & Black Light 61	02/28/96.11:00A	02/28/96.12:00P	
1.2.1.61.1J	30	Leak Test 61	02/28/96.12:00P	02/29/96.06:00P	
1.2.1.61.1M	1	Move to Post Test Storage 61	03/01/96.08:00A	03/01/96.09:00A	
1.2.1.61.1N	1	Clean, Dry & End Cap 61	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.61.1P	1	Transport to Erection 61	03/21/96.09:00A	03/21/96.10:00A	
1.2.1.61.1Q	1	Set & Align 61	03/21/96.10:00A	03/21/96.11:00A	
1.2.1.61.1R	1	Set Clean Room, Purge & Fit 61	03/21/96.11:00A	03/21/96.12:00P	
1.2.1.61.1S	2	Weld Joint 61	03/21/96.01:00P	03/21/96.03:00P	
1.2.1.61.1T	2	Leak Test Joint 61	03/21/96.03:00P	03/21/96.05:00P	
1.2.1.61.1U	2	Install Tube Supports 61	03/21/96.03:00P	03/21/96.05:00P	
1.2.1.61.1V	2	Remove Equip'mt, Clean & Cap 61	03/22/96.08:00A	03/22/96.10:00A	
1.2.1.61.2A	1	Unload,Rec. & Inspect 62	02/27/96.09:00A	02/27/96.10:00A	
1.2.1.61.2B	1	Move to Stiff Fit Up Stat. 62	02/28/96.11:00A	02/28/96.12:00P	
1.2.1.61.2C	1	Set-up & Purge 62	02/28/96.01:00P	02/28/96.02:00P	
1.2.1.61.2D	2	Fit Stiffeners 62	02/28/96.02:00P	02/28/96.04:00P	
1.2.1.61.2E	4	Weld Stiffeners 62	02/28/96.04:00P	02/29/96.11:00A	
1.2.1.61.2F	1	Inspect, Install End Caps 62	02/29/96.11:00A	02/29/96.12:00P	
1.2.1.61.2H	1	Move to Test Area 62	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.61.2I	1	Pre-Clean & Black Light 62	03/01/96.10:00A	03/01/96.11:00A	
1.2.1.61.2J	30	Leak Test 62	03/01/96.11:00A	03/02/96.05:00P	
1.2.1.61.2M	1	Move to Post Test Storage 62	03/04/96.08:00A	03/04/96.09:00A	
1.2.1.61.2N	1	Clean, Dry & End Cap 62	03/04/96.09:00A	03/04/96.10:00A	
1.2.1.61.2P	1	Transport to Erection 62	03/22/96.04:00P	03/22/96.05:00P	
1.2.1.61.2Q	1	Set & Align 62	03/25/96.08:00A	03/25/96.09:00A	
1.2.1.61.2R	1	Set Clean Room, Purge & Fit 62	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.61.2S	2	Weld Joint 62	03/25/96.10:00A	03/25/96.12:00P	
1.2.1.61.2T	2	Leak Test Joint62	03/25/96.01:00P	03/25/96.03:00P	
1.2.1.61.2U	2	Install Tube Supports 62	03/25/96.01:00P	03/25/96.03:00P	
1.2.1.61.2V	2	Remove Equip'mt, Clean & Cap 62	03/25/96.03:00P	03/25/96.05:00P	
1.2.1.61.3A	1	Unload,Rec/Insp Tube 63	02/27/96.10:00A	02/27/96.11:00A	
1.2.1.61.3B	1	Move to Stiff Fit Up Stat. 63	03/01/96.10:00A	03/01/96.11:00A	
1.2.1.61.3C	1	Set-up & Purge 63	03/01/96.11:00A	03/01/96.12:00P	
1.2.1.61.3D	2	Fit Stiffeners 63	03/01/96.01:00P	03/01/96.03:00P	
1.2.1.61.3E	4	Weld Stiffeners 63	03/01/96.03:00P	03/04/96.10:00A	
1.2.1.61.3F	1	Inspect, Install End Caps 63	03/04/96.10:00A	03/04/96.11:00A	
1.2.1.61.3H	1	Move to Test Area 63	03/04/96.11:00A	03/04/96.12:00P	
1.2.1.61.3I	1	Pre-Clean & Black Light 63	03/04/96.01:00P	03/04/96.02:00P	
1.2.1.61.3J	30	Leak Test 63	03/04/96.02:00P	03/05/96.08:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.61.3M	1	Move to Post Test Storage 63	03/06/96.08:00A	03/06/96.09:00A	
1.2.1.61.3N	1	Clean, Dry & End Cap 63	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.61.3P	1	Transport to Erection 63	03/26/96.02:00P	03/26/96.03:00P	
1.2.1.61.3Q	1	Set & Align 63	03/26/96.03:00P	03/26/96.04:00P	
1.2.1.61.3R	1	Set Clean Room, Purge & Fit 63	03/26/96.04:00P	03/26/96.05:00P	
1.2.1.61.3S	2	Weld Joint 63	03/27/96.08:00A	03/27/96.10:00A	
1.2.1.61.3T	2	Leak Test Joint 63	03/27/96.10:00A	03/27/96.12:00P	
1.2.1.61.3U	2	Install Tube Supports 63	03/27/96.10:00A	03/27/96.12:00P	
1.2.1.61.3V	2	Remove Equip'mt, Clean & Cap 63	03/27/96.01:00P	03/27/96.03:00P	
1.2.1.61.4A	1	Unload,Rec/Insp Tube 64	02/27/96.11:00A	02/27/96.12:00P	
1.2.1.61.4B	1	Move to Stiff Fit Up Stat. 64	03/04/96.01:00P	03/04/96.02:00P	
1.2.1.61.4C	1	Set-up & Purge 64	03/04/96.02:00P	03/04/96.03:00P	
1.2.1.61.4D	2	Fit Stiffeners 64	03/04/96.03:00P	03/04/96.05:00P	
1.2.1.61.4E	4	Weld Stiffeners 64	03/05/96.08:00A	03/05/96.12:00P	
1.2.1.61.4F	1	Inspect, Install End Caps 64	03/05/96.01:00P	03/05/96.02:00P	
1.2.1.61.4H	1	Move to Test Area 64	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.61.4I	1	Pre-Clean & Black Light 64	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.61.4J	30	Leak Test 64	03/06/96.11:00A	03/07/96.05:00P	
1.2.1.61.4M	1	Move to Post Test Storage 64	03/08/96.08:00A	03/08/96.09:00A	
1.2.1.61.4N	1	Clean, Dry & End Cap 64	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.61.4P	1	Transport to Erection 64	03/28/96.11:00A	03/28/96.12:00P	
1.2.1.61.4Q	1	Set & Align 64	03/28/96.01:00P	03/28/96.02:00P	
1.2.1.61.4R	1	Set Clean Room, Purge & Fit 64	03/28/96.02:00P	03/28/96.03:00P	
1.2.1.61.4S	2	Weld Joint 64	03/28/96.03:00P	03/28/96.05:00P	
1.2.1.61.4T	2	Leak Test Joint 64	03/29/96.08:00A	03/29/96.10:00A	
1.2.1.61.4U	2	Install Tube Supports 64	03/29/96.08:00A	03/29/96.10:00A	
1.2.1.61.4V	2	Remove Equip'mt, Clean & Cap 64	03/29/96.10:00A	03/29/96.12:00P	
1.2.1.61.5A	1	Unload,Rec/Insp Tube 6	02/27/96.01:00P	02/27/96.02:00P	
1.2.1.61.5B	1	Move to Stiff Fit Up Stat. 65	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.61.5C	1	Set-up & Purge 65	03/06/96.11:00A	03/06/96.12:00P	
1.2.1.61.5D	1	F/W Pump Port Reinf. 65	03/06/96.01:00P	03/06/96.02:00P	
1.2.1.61.5E	2	Fit Stiffeners 65	03/06/96.02:00P	03/06/96.04:00P	
1.2.1.61.5F	4	Weld Stiffeners 65	03/06/96.04:00P	03/07/96.11:00A	
1.2.1.61.5G	1	Move to P.Port Stat.65	03/07/96.11:00A	03/07/96.12:00P	
1.2.1.61.5H	1	Setup & Bore 10" Inlet 65	03/07/96.01:00P	03/07/96.02:00P	
1.2.1.61.5I	2	Purge/F/W Pump Port 65	03/07/96.02:00P	03/07/96.04:00P	
1.2.1.61.5J	1	Inspect, Install End Caps 65	03/07/96.04:00P	03/07/96.05:00P	
1.2.1.61.5L	1	Move to Test Area 65	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.61.5M	1	Pre-Clean & Black Light 65	03/08/96.10:00A	03/08/96.11:00A	
1.2.1.61.5N	30	Leak Test 65	03/08/96.11:00A	03/09/96.05:00P	
1.2.1.61.5Q	1	Move to Post Test Storage 65	03/11/96.08:00A	03/11/96.09:00A	
1.2.1.61.5R	1	Clean, Dry & End Cap 65	03/11/96.09:00A	03/11/96.10:00A	
1.2.1.61.5T	1	Transport to Erection 65	04/01/96.09:00A	04/01/96.10:00A	
1.2.1.61.5U	1	Set & Align 65	04/01/96.10:00A	04/01/96.11:00A	
1.2.1.61.5V	1	Set Clean Room, Purge & Fit 65	04/01/96.11:00A	04/01/96.12:00P	
1.2.1.61.5W	2	Weld Joint 65	04/01/96.01:00P	04/01/96.03:00P	
1.2.1.61.5X	2	Leak Test Joint 65	04/01/96.03:00P	04/01/96.05:00P	
1.2.1.61.5Y	2	Install Tube Supports 65	04/01/96.03:00P	04/01/96.05:00P	
1.2.1.61.5Z	2	Remove Equip'mt, Clean & Cap 65	04/02/96.08:00A	04/02/96.10:00A	
1.2.1.61.B1A	1	Unload,Rec/Insp Tube B61	02/27/96.08:00A	02/27/96.09:00A	
1.2.1.61.B1B	1	Move to Stiff Fit Up Stat. B61	02/27/96.09:00A	02/27/96.10:00A	
1.2.1.61.B1C	1	Set-up & Purge B61	02/27/96.10:00A	02/27/96.11:00A	
1.2.1.61.B1D	2	Fit Stiffeners B61	02/27/96.11:00A	02/27/96.02:00P	
1.2.1.61.B1E	4	Weld Stiffeners B61	02/27/96.02:00P	02/28/96.09:00A	
1.2.1.61.B1F	1	Move to Exp.Bellows Stat. B61	02/28/96.09:00A	02/28/96.10:00A	
1.2.1.61.B1G	3	Fit,Purge,Weld Exp. Bellows B61	02/28/96.10:00A	02/28/96.02:00P	
1.2.1.61.B1H	1	Inspect, Install End Caps B61	02/28/96.02:00P	02/28/96.03:00P	
1.2.1.61.B1J	1	Move to Test Area B61	02/28/96.03:00P	02/28/96.04:00P	
1.2.1.61.B1K	1	Pre-Clean & Black Light B61	02/28/96.04:00P	02/28/96.05:00P	
1.2.1.61.B1L	30	Leak Test B61	02/28/96.05:00P	02/29/96.11:00P	
1.2.1.61.B1O	1	Move to Post Test Storage B61	03/01/96.08:00A	03/01/96.09:00A	
1.2.1.61.B1P	1	Clean, Dry & End Cap B61	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.61.B1R	1	Transport to Erection B61	03/20/96.10:00A	03/20/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.61.B1S	1	Set & Align B61	03/20/96.11:00A	03/20/96.12:00P	
1.2.1.61.B1T	1	Set Clean Room, Purge & Fit B61	03/20/96.01:00P	03/20/96.02:00P	
1.2.1.61.B1U	2	Weld Joint B61	03/20/96.02:00P	03/20/96.04:00P	
1.2.1.61.B1V	2	Leak Test Joint B61	03/20/96.04:00P	03/21/96.09:00A	
1.2.1.61.B1W	2	Install Tube Supports B6	03/20/96.04:00P	03/21/96.09:00A	
1.2.1.61.B1X	2	Remove Equip'mt, Clean & Cap B61	03/21/96.09:00A	03/21/96.11:00A	
1.2.1.61.B2A	1	Unload,Rec/Insp Tube B62	02/27/96.09:00A	02/27/96.10:00A	
1.2.1.61.B2B	1	Move to Stiff Fit Up Stat. B62	02/28/96.10:00A	02/28/96.11:00A	
1.2.1.61.B2C	1	Set-up & Purge B62	02/28/96.11:00A	02/28/96.12:00P	
1.2.1.61.B2D	2	Fit Stiffeners B62	02/28/96.01:00P	02/28/96.03:00P	
1.2.1.61.B2E	4	Weld Stiffeners B62	02/28/96.03:00P	02/29/96.10:00A	
1.2.1.61.B2F	1	Move to Exp.Bellows Stat. B62	02/29/96.10:00A	02/29/96.11:00A	
1.2.1.61.B2G	3	Fit,Purge,Weld Exp. Bellows B62	02/29/96.11:00A	02/29/96.03:00P	
1.2.1.61.B2H	1	Inspect, Install End Caps B62	02/29/96.03:00P	02/29/96.04:00P	
1.2.1.61.B2J	1	Move to Test Area B62	03/01/96.09:00A	03/01/96.10:00A	
1.2.1.61.B2K	1	Pre-Clean & Black Light B62	03/01/96.10:00A	03/01/96.11:00A	
1.2.1.61.B2L	30	Leak Test B62	03/01/96.11:00A	03/02/96.05:00P	
1.2.1.61.B2O	1	Move to Post Test Storage B62	03/04/96.08:00A	03/04/96.09:00A	
1.2.1.61.B2P	1	Clean, Dry & End Cap B62	03/04/96.09:00A	03/04/96.10:00A	
1.2.1.61.B2R	1	Transport to Erection B62	03/22/96.08:00A	03/22/96.09:00A	
1.2.1.61.B2S	1	Set & Align B62	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.61.B2T	1	Set Clean Room, Purge & Fit B62	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.61.B2U	2	Weld Joint B62	03/22/96.11:00A	03/22/96.02:00P	
1.2.1.61.B2V	2	Leak Test Joint B62	03/22/96.02:00P	03/22/96.04:00P	
1.2.1.61.B2W	2	Install Tube SupportsB62	03/22/96.02:00P	03/22/96.04:00P	
1.2.1.61.B2X	2	Remove Equip'mt, Clean & Cap B62	03/22/96.04:00P	03/25/96.09:00A	
1.2.1.61.B3A	1	Unload,Rec/Insp Tube B63	02/27/96.10:00A	02/27/96.11:00A	
1.2.1.61.B3B	1	Move to Stiff Fit Up Stat. B63	02/29/96.11:00A	02/29/96.12:00P	
1.2.1.61.B3C	1	Set-up & Purge B63	02/29/96.01:00P	02/29/96.02:00P	
1.2.1.61.B3D	2	Fit Stiffeners B63	02/29/96.02:00P	02/29/96.04:00P	
1.2.1.61.B3E	4	Weld Stiffeners B63	02/29/96.04:00P	03/01/96.11:00A	
1.2.1.61.B3F	1	Move to Exp.Bellows Stat. B63	03/01/96.11:00A	03/01/96.12:00P	
1.2.1.61.B3G	3	Fit,Purge,Weld Exp. Bellows B63	03/01/96.01:00P	03/01/96.04:00P	
1.2.1.61.B3H	1	Inspect, Install End Caps B63	03/01/96.04:00P	03/01/96.05:00P	
1.2.1.61.B3J	1	Move to Test Area B63	03/04/96.09:00A	03/04/96.10:00A	
1.2.1.61.B3K	1	Pre-Clean & Black Light B63	03/04/96.10:00A	03/04/96.11:00A	
1.2.1.61.B3L	30	Leak Test B63	03/04/96.11:00A	03/05/96.05:00P	
1.2.1.61.B3O	1	Move to Post Test Storage B63	03/06/96.08:00A	03/06/96.09:00A	
1.2.1.61.B3P	1	Clean, Dry & End Cap B63	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.61.B3R	1	Transport to Erection B63	03/25/96.03:00P	03/25/96.04:00P	
1.2.1.61.B3S	1	Set & Align B63	03/25/96.04:00P	03/25/96.05:00P	
1.2.1.61.B3T	1	Set Clean Room, Purge & Fit B63	03/26/96.08:00A	03/26/96.09:00A	
1.2.1.61.B3U	2	Weld Joint B63	03/26/96.09:00A	03/26/96.11:00A	
1.2.1.61.B3V	2	Leak Test Joint B63	03/26/96.11:00A	03/26/96.02:00P	
1.2.1.61.B3W	2	Install Tube Supports B63	03/26/96.11:00A	03/26/96.02:00P	
1.2.1.61.B3X	2	Remove Equip'mt, Clean & Cap B63	03/26/96.02:00P	03/26/96.04:00P	
1.2.1.61.B4A	1	Unload,Rec/Insp Tube B64	02/27/96.11:00A	02/27/96.12:00P	
1.2.1.61.B4B	1	Move to Stiff Fit Up Stat. B64	03/01/96.01:00P	03/01/96.02:00P	
1.2.1.61.B4C	1	Set-up & Purge B64	03/01/96.02:00P	03/01/96.03:00P	
1.2.1.61.B4D	2	Fit Stiffeners B64	03/01/96.03:00P	03/01/96.05:00P	
1.2.1.61.B4E	4	Weld Stiffeners B64	03/04/96.08:00A	03/04/96.12:00P	
1.2.1.61.B4F	1	Move to Exp.Bellows Stat. B64	03/04/96.01:00P	03/04/96.02:00P	
1.2.1.61.B4G	3	Fit,Purge,Weld Exp. Bellows B64	03/04/96.02:00P	03/04/96.05:00P	
1.2.1.61.B4H	1	Inspect, Install End Caps B64	03/05/96.08:00A	03/05/96.09:00A	
1.2.1.61.B4J	1	Move to Test Area B64	03/06/96.09:00A	03/06/96.10:00A	
1.2.1.61.B4K	1	Pre-Clean & Black Light B64	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.61.B4L	30	Leak Test B64	03/06/96.11:00A	03/07/96.05:00P	
1.2.1.61.B4O	1	Move to Post Test Storage B64	03/08/96.08:00A	03/08/96.09:00A	
1.2.1.61.B4P	1	Clean, Dry & End Cap B64	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.61.B4R	1	Transport to Erection B64	03/27/96.01:00P	03/27/96.02:00P	
1.2.1.61.B4S	1	Set & Align B64	03/27/96.02:00P	03/27/96.03:00P	
1.2.1.61.B4T	1	Set Clean Room, Purge & Fit B64	03/27/96.03:00P	03/27/96.04:00P	
1.2.1.61.B4U	2	Weld Joint B64	03/27/96.04:00P	03/28/96.09:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.61.B4V	2	Leak Test Joint B64	03/28/96.09:00A	03/28/96.11:00A	
1.2.1.61.B4W	2	Install Tube Supports B64	03/28/96.09:00A	03/28/96.11:00A	
1.2.1.61.B4X	2	Remove Equip'mt, Clean & Cap B64	03/28/96.11:00A	03/28/96.02:00P	
1.2.1.61.B5A	1	Unload,Rec/Insp Tube B65	02/27/96.01:00P	02/27/96.02:00P	
1.2.1.61.B5B	1	Move to Stiff Fit Up Stat. B65	03/04/96.02:00P	03/04/96.03:00P	
1.2.1.61.B5C	1	Set-up & Purge B65	03/04/96.03:00P	03/04/96.04:00P	
1.2.1.61.B5D	2	Fit Stiffeners B65	03/04/96.04:00P	03/05/96.09:00A	
1.2.1.61.B5E	4	Weld Stiffeners B65	03/05/96.09:00A	03/05/96.02:00P	
1.2.1.61.B5F	1	Move to Exp.Bellows Stat. B65	03/06/96.10:00A	03/06/96.11:00A	
1.2.1.61.B5G	3	Fit,Purge,Weld Exp. Bellows B65	03/06/96.11:00A	03/06/96.03:00P	
1.2.1.61.B5H	1	Inspect, Install End Caps B65	03/06/96.03:00P	03/06/96.04:00P	
1.2.1.61.B5J	1	Move to Test Area B65	03/08/96.09:00A	03/08/96.10:00A	
1.2.1.61.B5K	1	Pre-Clean & Black Light B65	03/08/96.10:00A	03/08/96.11:00A	
1.2.1.61.B5L	30	Leak Test B65	03/08/96.11:00A	03/09/96.05:00P	
1.2.1.61.B5O	1	Move to Post Test Storage B65	03/11/96.08:00A	03/11/96.09:00A	
1.2.1.61.B5P	1	Clean, Dry & End Cap B65	03/11/96.09:00A	03/11/96.10:00A	
1.2.1.61.B5R	1	Transport to Erection B65	03/29/96.10:00A	03/29/96.11:00A	
1.2.1.61.B5S	1	Set & Align B65	03/29/96.11:00A	03/29/96.12:00P	
1.2.1.61.B5T	1	Set Clean Room, Purge & Fit B65	03/29/96.01:00P	03/29/96.02:00P	
1.2.1.61.B5U	2	Weld Joint B65	03/29/96.02:00P	03/29/96.04:00P	
1.2.1.61.B5V	2	Leak Test Joint B65	03/29/96.04:00P	04/01/96.09:00A	
1.2.1.61.B5W	2	Install Tube Supports B65	03/29/96.04:00P	04/01/96.09:00A	
1.2.1.61.B5X	2	Remove Equip'mt, Clean & Cap B65	04/01/96.09:00A	04/01/96.11:00A	
1.2.1.66	195	Cans 66-70	03/11/96.04:00P	04/15/96.10:00A	
1.2.1.66.1A	1	Unload,Rec/Insp Tube 66	03/12/96.08:00A	03/12/96.09:00A	
1.2.1.66.1B	1	Move to Stiff Fit Up Stat. 666	03/12/96.09:00A	03/12/96.10:00A	
1.2.1.66.1C	1	Set-up & Purge 66	03/12/96.10:00A	03/12/96.11:00A	
1.2.1.66.1D	2	Fit Stiffeners 66	03/12/96.11:00A	03/12/96.02:00P	
1.2.1.66.1E	4	Weld Stiffeners 66	03/12/96.02:00P	03/13/96.09:00A	
1.2.1.66.1F	1	Inspect, Install End Caps 66	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.66.1H	1	Move to Test Area 66	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.66.1I	1	Pre-Clean & Black Light 66	03/13/96.11:00A	03/13/96.12:00P	
1.2.1.66.1J	30	Leak Test 66	03/13/96.12:00P	03/14/96.06:00P	
1.2.1.66.1M	1	Move to Post Test Storage 66	03/15/96.08:00A	03/15/96.09:00A	
1.2.1.66.1N	1	Clean, Dry & End Cap 66	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.66.1P	1	Transport to Erection 66	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.66.1Q	1	Set & Align 66	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.66.1R	1	Set Clean Room, Purge & Fit 66	04/03/96.11:00A	04/03/96.12:00P	
1.2.1.66.1S	2	Weld Joint 66	04/03/96.01:00P	04/03/96.03:00P	
1.2.1.66.1T	2	Leak Test Joint 66	04/03/96.03:00P	04/03/96.05:00P	
1.2.1.66.1U	2	Install Tube Supports 66	04/03/96.03:00P	04/03/96.05:00P	
1.2.1.66.1V	2	Remove Equip'mt, Clean & Cap 66	04/04/96.08:00A	04/04/96.10:00A	
1.2.1.66.2A	1	Unload,Rec. & Insp 67	03/12/96.09:00A	03/12/96.10:00A	
1.2.1.66.2B	1	Move to Stiff Fit Up Stat. 67	03/13/96.11:00A	03/13/96.12:00P	
1.2.1.66.2C	1	Set-up & Purge 676	03/13/96.01:00P	03/13/96.02:00P	
1.2.1.66.2D	2	Fit Stiffeners 67	03/13/96.02:00P	03/13/96.04:00P	
1.2.1.66.2E	4	Weld Stiffeners 67	03/13/96.04:00P	03/14/96.11:00A	
1.2.1.66.2F	1	Inspect, Install End Caps 67	03/14/96.11:00A	03/14/96.12:00P	
1.2.1.66.2H	1	Move to Test Area 67	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.66.2I	1	Pre-Clean & Black Light 67	03/15/96.10:00A	03/15/96.11:00A	
1.2.1.66.2J	30	Leak Test 67	03/15/96.11:00A	03/16/96.05:00P	
1.2.1.66.2M	1	Move to Post Test Storage 67	03/18/96.08:00A	03/18/96.09:00A	
1.2.1.66.2N	1	Clean, Dry & End Cap 67	03/18/96.09:00A	03/18/96.10:00A	
1.2.1.66.2P	1	Transport to Erection 67	04/04/96.04:00P	04/04/96.05:00P	
1.2.1.66.2Q	1	Set & Align 67	04/05/96.08:00A	04/05/96.09:00A	
1.2.1.66.2R	1	Set Clean Room, Purge & Fit 67	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.66.2S	2	Weld Joint 67	04/05/96.10:00A	04/05/96.12:00P	
1.2.1.66.2T	2	Leak Test Joint 67	04/05/96.01:00P	04/05/96.03:00P	
1.2.1.66.2U	2	Install Tube Supports 67	04/05/96.01:00P	04/05/96.03:00P	
1.2.1.66.2V	2	Remove Equip'mt, Clean & Cap 67	04/05/96.03:00P	04/05/96.05:00P	
1.2.1.66.3A	1	Unload,Rec/Insp Tube 68	03/12/96.10:00A	03/12/96.11:00A	
1.2.1.66.3B	1	Move to Stiff Fit Up Stat. 68	03/15/96.10:00A	03/15/96.11:00A	
1.2.1.66.3C	1	Set-up & Purge 68	03/15/96.11:00A	03/15/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.66.3D	2	Fit Stiffeners 68	03/15/96.01:00P	03/15/96.03:00P	
1.2.1.66.3E	4	Weld Stiffeners 68	03/15/96.03:00P	03/18/96.10:00A	
1.2.1.66.3F	1	Inspect, Install End Caps 68	03/18/96.10:00A	03/18/96.11:00A	
1.2.1.66.3H	1	Move to Test Area 68	03/18/96.11:00A	03/18/96.12:00P	
1.2.1.66.3I	1	Pre-Clean & Black Light 68	03/18/96.01:00P	03/18/96.02:00P	
1.2.1.66.3J	30	Leak Test 68	03/18/96.02:00P	03/19/96.08:00P	
1.2.1.66.3M	1	Move to Post Test Storage 68	03/20/96.08:00A	03/20/96.09:00A	
1.2.1.66.3N	1	Clean, Dry & End Cap 68	03/20/96.09:00A	03/20/96.10:00A	
1.2.1.66.3P	1	Transport to Erection 68	04/08/96.02:00P	04/08/96.03:00P	
1.2.1.66.3Q	1	Set & Align 68	04/08/96.03:00P	04/08/96.04:00P	
1.2.1.66.3R	1	Set Clean Room, Purge & Fit 68	04/08/96.04:00P	04/08/96.05:00P	
1.2.1.66.3S	2	Weld Joint 68	04/09/96.08:00A	04/09/96.10:00A	
1.2.1.66.3T	2	Leak Test Joint 68	04/09/96.10:00A	04/09/96.12:00P	
1.2.1.66.3U	2	Install Tube Supports 68	04/09/96.10:00A	04/09/96.12:00P	
1.2.1.66.3V	2	Remove Equip'mt, Clean & Cap 68	04/09/96.01:00P	04/09/96.03:00P	
1.2.1.66.4A	1	Unload,Rec/Insp Tube 69	03/12/96.11:00A	03/12/96.12:00P	
1.2.1.66.4B	1	Move to Stiff Fit Up Stat. 688	03/18/96.01:00P	03/18/96.02:00P	
1.2.1.66.4C	1	Set-up & Purge 69	03/18/96.02:00P	03/18/96.03:00P	
1.2.1.66.4D	2	Fit Stiffeners 69	03/18/96.03:00P	03/18/96.05:00P	
1.2.1.66.4E	4	Weld Stiffeners 69	03/19/96.08:00A	03/19/96.12:00P	
1.2.1.66.4F	1	Inspect, Install End Caps 69	03/19/96.01:00P	03/19/96.02:00P	
1.2.1.66.4H	1	Move to Test Area 69	03/20/96.09:00A	03/20/96.10:00A	
1.2.1.66.4I	1	Pre-Clean & Black Light 69	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.66.4J	30	Leak Test 69	03/20/96.11:00A	03/21/96.05:00P	
1.2.1.66.4M	1	Move to Post Test Storage 69	03/22/96.08:00A	03/22/96.09:00A	
1.2.1.66.4N	1	Clean, Dry & End Cap 69	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.66.4P	1	Transport to Erection 69	04/10/96.11:00A	04/10/96.12:00P	
1.2.1.66.4Q	1	Set & Align 69	04/10/96.01:00P	04/10/96.02:00P	
1.2.1.66.4R	1	Set Clean Room, Purge & Fit 69	04/10/96.02:00P	04/10/96.03:00P	
1.2.1.66.4S	2	Weld Joint 69	04/10/96.03:00P	04/10/96.05:00P	
1.2.1.66.4T	2	Leak Test Joint 69	04/11/96.08:00A	04/11/96.10:00A	
1.2.1.66.4U	2	Install Tube Supports 69	04/11/96.08:00A	04/11/96.10:00A	
1.2.1.66.4V	2	Remove Equip'mt, Clean & Cap 69	04/11/96.10:00A	04/11/96.12:00P	
1.2.1.66.5A	1	Unload,Rec/Insp Tube 70	03/12/96.01:00P	03/12/96.02:00P	
1.2.1.66.5B	1	Move to Stiff Fit Up Stat. 70	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.66.5C	1	Set-up & Purge 70	03/20/96.11:00A	03/20/96.12:00P	
1.2.1.66.5D	1	F/W Pump Port Reinf. 70	03/20/96.01:00P	03/20/96.02:00P	
1.2.1.66.5E	2	Fit Stiffeners 70	03/20/96.02:00P	03/20/96.04:00P	
1.2.1.66.5F	4	Weld Stiffeners 70	03/20/96.04:00P	03/21/96.11:00A	
1.2.1.66.5G	1	Move to P.Port Stat.70	03/21/96.11:00A	03/21/96.12:00P	
1.2.1.66.5H	1	Setup & Bore 10" Inlet 70	03/21/96.01:00P	03/21/96.02:00P	
1.2.1.66.5I	2	Purge/F/W Pump Port 70	03/21/96.02:00P	03/21/96.04:00P	
1.2.1.66.5J	1	Inspect, Install End Caps 70	03/21/96.04:00P	03/21/96.05:00P	
1.2.1.66.5L	1	Move to Test Area 70	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.66.5M	1	Pre-Clean & Black Light 70	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.66.5N	30	Leak Test 70	03/22/96.11:00A	03/23/96.05:00P	
1.2.1.66.5Q	1	Move to Post Test Storage 70	03/25/96.08:00A	03/25/96.09:00A	
1.2.1.66.5R	1	Clean, Dry & End Cap 70	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.66.5T	1	Transport to Erection 70	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.66.5U	1	Set & Align 70	04/12/96.10:00A	04/12/96.11:00A	
1.2.1.66.5V	1	Set Clean Room, Purge & Fit 70	04/12/96.11:00A	04/12/96.12:00P	
1.2.1.66.5W	2	Weld Joint 70	04/12/96.01:00P	04/12/96.03:00P	
1.2.1.66.5X	2	Leak Test Joint 70	04/12/96.03:00P	04/12/96.05:00P	
1.2.1.66.5Y	2	Install Tube Supports 70	04/12/96.03:00P	04/12/96.05:00P	
1.2.1.66.5Z	2	Remove Equip'mt, Clean & Cap 70	04/15/96.08:00A	04/15/96.10:00A	
1.2.1.66.B1A	1	Unload,Rec/Insp Tube B66	03/12/96.08:00A	03/12/96.09:00A	
1.2.1.66.B1B	1	Move to Stiff Fit Up Stat. B66	03/12/96.09:00A	03/12/96.10:00A	
1.2.1.66.B1C	1	Set-up & Purge B66	03/12/96.10:00A	03/12/96.11:00A	
1.2.1.66.B1D	2	Fit Stiffeners B66	03/12/96.11:00A	03/12/96.02:00P	
1.2.1.66.B1E	4	Weld Stiffeners B66	03/12/96.02:00P	03/13/96.09:00A	
1.2.1.66.B1F	1	Move to Exp.Bellows Stat. B66	03/13/96.09:00A	03/13/96.10:00A	
1.2.1.66.B1G	3	Fit,Purge,Weld Exp. Bellows B66	03/13/96.10:00A	03/13/96.02:00P	
1.2.1.66.B1H	1	Inspect, Install End Caps B66	03/13/96.02:00P	03/13/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.66.B1J	1	Move to Test Area B66	03/13/96.03:00P	03/13/96.04:00P	
1.2.1.66.B1K	1	Pre-Clean & Black Light B66	03/13/96.04:00P	03/13/96.05:00P	
1.2.1.66.B1L	30	Leak Test B66	03/13/96.05:00P	03/14/96.11:00P	
1.2.1.66.B1O	1	Move to Post Test Storage B66	03/15/96.08:00A	03/15/96.09:00A	
1.2.1.66.B1P	1	Clean, Dry & End Cap B66	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.66.B1R	1	Transport to Erection B66	04/02/96.10:00A	04/02/96.11:00A	
1.2.1.66.B1S	1	Set & Align B66	04/02/96.11:00A	04/02/96.12:00P	
1.2.1.66.B1T	1	Set Clean Room, Purge & Fit B66	04/02/96.01:00P	04/02/96.02:00P	
1.2.1.66.B1U	2	Weld Joint B66	04/02/96.02:00P	04/02/96.04:00P	
1.2.1.66.B1V	2	Leak Test Joint B66	04/02/96.04:00P	04/03/96.09:00A	
1.2.1.66.B1W	2	Install Tube Supports B66	04/02/96.04:00P	04/03/96.09:00A	
1.2.1.66.B1X	2	Remove Equip'mt, Clean & Cap B66	04/03/96.09:00A	04/03/96.11:00A	
1.2.1.66.B2A	1	Unload,Rec/Insp Tube B67	03/12/96.09:00A	03/12/96.10:00A	
1.2.1.66.B2B	1	Move to Stiff Fit Up Stat. B67	03/13/96.10:00A	03/13/96.11:00A	
1.2.1.66.B2C	1	Set-up & Purge B67	03/13/96.11:00A	03/13/96.12:00P	
1.2.1.66.B2D	2	Fit Stiffeners B67	03/13/96.01:00P	03/13/96.03:00P	
1.2.1.66.B2E	4	Weld Stiffeners B67	03/13/96.03:00P	03/14/96.10:00A	
1.2.1.66.B2F	1	Move to Exp.Bellows Stat. B67	03/14/96.10:00A	03/14/96.11:00A	
1.2.1.66.B2G	3	Fit,Purge,Weld Exp. Bellows B67	03/14/96.11:00A	03/14/96.03:00P	
1.2.1.66.B2H	1	Inspect, Install End Caps B67	03/14/96.03:00P	03/14/96.04:00P	
1.2.1.66.B2J	1	Move to Test Area B67	03/15/96.09:00A	03/15/96.10:00A	
1.2.1.66.B2K	1	Pre-Clean & Black Light B67	03/15/96.10:00A	03/15/96.11:00A	
1.2.1.66.B2L	30	Leak Test B67	03/15/96.11:00A	03/16/96.05:00P	
1.2.1.66.B2O	1	Move to Post Test Storage B67	03/18/96.08:00A	03/18/96.09:00A	
1.2.1.66.B2P	1	Clean, Dry & End Cap B67	03/18/96.09:00A	03/18/96.10:00A	
1.2.1.66.B2R	1	Transport to Erection B67	04/04/96.08:00A	04/04/96.09:00A	
1.2.1.66.B2S	1	Set & Align B67	04/04/96.09:00A	04/04/96.10:00A	
1.2.1.66.B2T	1	Set Clean Room, Purge & Fit B67	04/04/96.10:00A	04/04/96.11:00A	
1.2.1.66.B2U	2	Weld Joint B67	04/04/96.11:00A	04/04/96.02:00P	
1.2.1.66.B2V	2	Leak Test Joint B67	04/04/96.02:00P	04/04/96.04:00P	
1.2.1.66.B2W	2	Install Tube SupportsB67	04/04/96.02:00P	04/04/96.04:00P	
1.2.1.66.B2X	2	Remove Equip'mt, Clean & Cap B67	04/04/96.04:00P	04/05/96.09:00A	
1.2.1.66.B3A	1	Unload,Rec/Insp Tube B68	03/12/96.10:00A	03/12/96.11:00A	
1.2.1.66.B3B	1	Move to Stiff Fit Up Stat. B68	03/14/96.11:00A	03/14/96.12:00P	
1.2.1.66.B3C	1	Set-up & Purge B68	03/14/96.01:00P	03/14/96.02:00P	
1.2.1.66.B3D	2	Fit Stiffeners B68	03/14/96.02:00P	03/14/96.04:00P	
1.2.1.66.B3E	4	Weld Stiffeners B68	03/14/96.04:00P	03/15/96.11:00A	
1.2.1.66.B3F	1	Move to Exp.Bellows Stat. B68	03/15/96.11:00A	03/15/96.12:00P	
1.2.1.66.B3G	3	Fit,Purge,Weld Exp. Bellows B68	03/15/96.01:00P	03/15/96.04:00P	
1.2.1.66.B3H	1	Inspect, Install End Caps B68	03/15/96.04:00P	03/15/96.05:00P	
1.2.1.66.B3J	1	Move to Test Area B68	03/18/96.09:00A	03/18/96.10:00A	
1.2.1.66.B3K	1	Pre-Clean & Black Light B68	03/18/96.10:00A	03/18/96.11:00A	
1.2.1.66.B3L	30	Leak TestB68	03/18/96.11:00A	03/19/96.05:00P	
1.2.1.66.B3O	1	Move to Post Test Storage B68	03/20/96.08:00A	03/20/96.09:00A	
1.2.1.66.B3P	1	Clean, Dry & End Cap B68	03/20/96.09:00A	03/20/96.10:00A	
1.2.1.66.B3R	1	Transport to Erection B68	04/05/96.03:00P	04/05/96.04:00P	
1.2.1.66.B3S	1	Set & Align B68	04/05/96.04:00P	04/05/96.05:00P	
1.2.1.66.B3T	1	Set Clean Room, Purge & Fit B68	04/08/96.08:00A	04/08/96.09:00A	
1.2.1.66.B3U	2	Weld Joint B68	04/08/96.09:00A	04/08/96.11:00A	
1.2.1.66.B3V	2	Leak Test Joint B68	04/08/96.11:00A	04/08/96.02:00P	
1.2.1.66.B3W	2	Install Tube Supports B68	04/08/96.11:00A	04/08/96.02:00P	
1.2.1.66.B3X	2	Remove Equip'mt, Clean & Cap B68	04/08/96.02:00P	04/08/96.04:00P	
1.2.1.66.B4A	1	Unload,Rec/Insp Tube B69	03/12/96.11:00A	03/12/96.12:00P	
1.2.1.66.B4B	1	Move to Stiff Fit Up Stat. B69	03/15/96.01:00P	03/15/96.02:00P	
1.2.1.66.B4C	1	Set-up & Purge B69	03/15/96.02:00P	03/15/96.03:00P	
1.2.1.66.B4D	2	Fit Stiffeners B69	03/15/96.03:00P	03/15/96.05:00P	
1.2.1.66.B4E	4	Weld Stiffeners B69	03/18/96.08:00A	03/18/96.12:00P	
1.2.1.66.B4F	1	Move to Exp.Bellows Stat. B69	03/18/96.01:00P	03/18/96.02:00P	
1.2.1.66.B4G	3	Fit,Purge,Weld Exp. Bellows B69	03/18/96.02:00P	03/18/96.05:00P	
1.2.1.66.B4H	1	Inspect, Install End Caps B69	03/19/96.08:00A	03/19/96.09:00A	
1.2.1.66.B4J	1	Move to Test Area B69	03/20/96.09:00A	03/20/96.10:00A	
1.2.1.66.B4K	1	Pre-Clean & Black Light B69	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.66.B4L	30	Leak Test B69	03/20/96.11:00A	03/21/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.66.B4O	1	Move to Post Test Storage B69	03/22/96.08:00A	03/22/96.09:00A	
1.2.1.66.B4P	1	Clean, Dry & End Cap B69	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.66.B4R	1	Transport to Erection B69	04/09/96.01:00P	04/09/96.02:00P	
1.2.1.66.B4S	1	Set & Align B69	04/09/96.02:00P	04/09/96.03:00P	
1.2.1.66.B4T	1	Set Clean Room, Purge & Fit B69	04/09/96.03:00P	04/09/96.04:00P	
1.2.1.66.B4U	2	Weld Joint B69	04/09/96.04:00P	04/10/96.09:00A	
1.2.1.66.B4V	2	Leak Test Joint B69	04/10/96.09:00A	04/10/96.11:00A	
1.2.1.66.B4W	2	Install Tube Supports B69	04/10/96.09:00A	04/10/96.11:00A	
1.2.1.66.B4X	2	Remove Equip'mt, Clean & Cap B69	04/10/96.11:00A	04/10/96.02:00P	
1.2.1.66.B5A	1	Unload,Rec/Insp Tube B70	03/12/96.01:00P	03/12/96.02:00P	
1.2.1.66.B5B	1	Move to Stiff Fit Up Stat. B70	03/18/96.02:00P	03/18/96.03:00P	
1.2.1.66.B5C	1	Set-up & Purge B70	03/18/96.03:00P	03/18/96.04:00P	
1.2.1.66.B5D	2	Fit Stiffeners 70	03/18/96.04:00P	03/19/96.09:00A	
1.2.1.66.B5E	4	Weld Stiffeners B70	03/19/96.09:00A	03/19/96.02:00P	
1.2.1.66.B5F	1	Move to Exp.Bellows Stat. B70	03/20/96.10:00A	03/20/96.11:00A	
1.2.1.66.B5G	3	Fit,Purge,Weld Exp. Bellows B70	03/20/96.11:00A	03/20/96.03:00P	
1.2.1.66.B5H	1	Inspect, Install End Caps B70	03/20/96.03:00P	03/20/96.04:00P	
1.2.1.66.B5J	1	Move to Test Area B70	03/22/96.09:00A	03/22/96.10:00A	
1.2.1.66.B5K	1	Pre-Clean & Black Light B70	03/22/96.10:00A	03/22/96.11:00A	
1.2.1.66.B5L	30	Leak Test B70	03/22/96.11:00A	03/23/96.05:00P	
1.2.1.66.B5O	1	Move to Post Test Storage B70	03/25/96.08:00A	03/25/96.09:00A	
1.2.1.66.B5P	1	Clean, Dry & End Cap B70	03/25/96.09:00A	03/25/96.10:00A	
1.2.1.66.B5R	1	Transport to Erection B70	04/11/96.10:00A	04/11/96.11:00A	
1.2.1.66.B5S	1	Set & Align B70	04/11/96.11:00A	04/11/96.12:00P	
1.2.1.66.B5T	1	Set Clean Room, Purge & Fit B70	04/11/96.01:00P	04/11/96.02:00P	
1.2.1.66.B5U	2	Weld Joint B5	04/11/96.02:00P	04/11/96.04:00P	
1.2.1.66.B5V	2	Leak Test Joint B70	04/11/96.04:00P	04/12/96.09:00A	
1.2.1.66.B5W	2	Install Tube Supports B70	04/11/96.04:00P	04/12/96.09:00A	
1.2.1.66.B5X	2	Remove Equip'mt, Clean & Cap B70	04/12/96.09:00A	04/12/96.11:00A	
1.2.1.71	187	Cans 71-75	03/25/96.04:00P	04/26/96.10:00A	
1.2.1.71.1A	1	Unload,Rec/Insp Tube 71	03/26/96.08:00A	03/26/96.09:00A	
1.2.1.71.1B	1	Move to Stiff Fit Up Stat. 71	03/26/96.09:00A	03/26/96.10:00A	
1.2.1.71.1C	1	Set-up & Purge 71	03/26/96.10:00A	03/26/96.11:00A	
1.2.1.71.1D	2	Fit Stiffeners 71	03/26/96.11:00A	03/26/96.02:00P	
1.2.1.71.1E	4	Weld Stiffeners 71	03/26/96.02:00P	03/27/96.09:00A	
1.2.1.71.1F	1	Inspect, Install End Caps 71	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.71.1H	1	Move to Test Area 71	03/27/96.10:00A	03/27/96.11:00A	
1.2.1.71.1I	1	Pre-Clean & Black Light 71	03/27/96.11:00A	03/27/96.12:00P	
1.2.1.71.1J	30	Leak Test 71	03/27/96.12:00P	03/28/96.06:00P	
1.2.1.71.1M	1	Move to Post Test Storage 71	03/29/96.08:00A	03/29/96.09:00A	
1.2.1.71.1N	1	Clean, Dry & End Cap 71	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.71.1P	1	Transport to Erection 71	04/16/96.09:00A	04/16/96.10:00A	
1.2.1.71.1Q	1	Set & Align 71	04/16/96.10:00A	04/16/96.11:00A	
1.2.1.71.1R	1	Set Clean Room, Purge & Fit 71	04/16/96.11:00A	04/16/96.12:00P	
1.2.1.71.1S	2	Weld Joint 71	04/16/96.01:00P	04/16/96.03:00P	
1.2.1.71.1T	2	Leak Test Joint 71	04/16/96.03:00P	04/16/96.05:00P	
1.2.1.71.1U	2	Install Tube Supports 71	04/16/96.03:00P	04/16/96.05:00P	
1.2.1.71.1V	2	Remove Equip'mt, Clean & Cap 71	04/17/96.08:00A	04/17/96.10:00A	
1.2.1.71.2A	1	Unload,Rec. & Inspect 72	03/26/96.09:00A	03/26/96.10:00A	
1.2.1.71.2B	1	Move to Stiff Fit Up Stat. 72	03/27/96.11:00A	03/27/96.12:00P	
1.2.1.71.2C	1	Set-up & Purge 72	03/27/96.01:00P	03/27/96.02:00P	
1.2.1.71.2D	2	Fit Stiffeners 72	03/27/96.02:00P	03/27/96.04:00P	
1.2.1.71.2E	4	Weld Stiffeners 72	03/27/96.04:00P	03/28/96.11:00A	
1.2.1.71.2F	1	Inspect, Install End Caps 72	03/28/96.11:00A	03/28/96.12:00P	
1.2.1.71.2H	1	Move to Test Area 72	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.71.2I	1	Pre-Clean & Black Light 72	03/29/96.10:00A	03/29/96.11:00A	
1.2.1.71.2J	30	Leak Test 72	03/29/96.11:00A	03/30/96.05:00P	
1.2.1.71.2M	1	Move to Post Test Storage 72	04/01/96.08:00A	04/01/96.09:00A	
1.2.1.71.2N	1	Clean, Dry & End Cap 72	04/01/96.09:00A	04/01/96.10:00A	
1.2.1.71.2P	1	Transport to Erection 72	04/17/96.04:00P	04/17/96.05:00P	
1.2.1.71.2Q	1	Set & Align 72	04/18/96.08:00A	04/18/96.09:00A	
1.2.1.71.2R	1	Set Clean Room, Purge & Fit 72	04/18/96.09:00A	04/18/96.10:00A	
1.2.1.71.2S	2	Weld Joint 72	04/18/96.10:00A	04/18/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.71.2T	2	Leak Test Joint 72	04/18/96.01:00P	04/18/96.03:00P	
1.2.1.71.2U	2	Install Tube Supports 72	04/18/96.01:00P	04/18/96.03:00P	
1.2.1.71.2V	2	Remove Equip'mt, Clean & Cap 72	04/18/96.03:00P	04/18/96.05:00P	
1.2.1.71.3A	1	Unload,Rec/Insp Tube 73	03/26/96.10:00A	03/26/96.11:00A	
1.2.1.71.3B	1	Move to Stiff Fit Up Stat. 73	03/29/96.10:00A	03/29/96.11:00A	
1.2.1.71.3C	1	Set-up & Purge 73	03/29/96.11:00A	03/29/96.12:00P	
1.2.1.71.3D	2	Fit Stiffeners 73	03/29/96.01:00P	03/29/96.03:00P	
1.2.1.71.3E	4	Weld Stiffeners 73	03/29/96.03:00P	04/01/96.10:00A	
1.2.1.71.3F	1	Inspect, Install End Caps 73	04/01/96.10:00A	04/01/96.11:00A	
1.2.1.71.3H	1	Move to Test Area 73	04/01/96.11:00A	04/01/96.12:00P	
1.2.1.71.3I	1	Pre-Clean & Black Light 73	04/01/96.01:00P	04/01/96.02:00P	
1.2.1.71.3J	30	Leak Test 73	04/01/96.02:00P	04/02/96.08:00P	
1.2.1.71.3M	1	Move to Post Test Storage 73	04/03/96.08:00A	04/03/96.09:00A	
1.2.1.71.3N	1	Clean, Dry & End Cap 73	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.71.3P	1	Transport to Erection 73	04/19/96.02:00P	04/19/96.03:00P	
1.2.1.71.3Q	1	Set & Align 73	04/19/96.03:00P	04/19/96.04:00P	
1.2.1.71.3R	1	Set Clean Room, Purge & Fit 73	04/19/96.04:00P	04/19/96.05:00P	
1.2.1.71.3S	2	Weld Joint 73	04/22/96.08:00A	04/22/96.10:00A	
1.2.1.71.3T	2	Leak Test Joint 73	04/22/96.10:00A	04/22/96.12:00P	
1.2.1.71.3U	2	Install Tube Supports73	04/22/96.10:00A	04/22/96.12:00P	
1.2.1.71.3V	2	Remove Equip'mt, Clean & Cap 73	04/22/96.01:00P	04/22/96.03:00P	
1.2.1.71.4A	1	Unload,Rec/Insp Tube 74	03/26/96.11:00A	03/26/96.12:00P	
1.2.1.71.4B	1	Move to Stiff Fit Up Stat. 74	04/01/96.01:00P	04/01/96.02:00P	
1.2.1.71.4C	1	Set-up & Purge 74	04/01/96.02:00P	04/01/96.03:00P	
1.2.1.71.4D	2	Fit Stiffeners 74	04/01/96.03:00P	04/01/96.05:00P	
1.2.1.71.4E	4	Weld Stiffeners7 4	04/02/96.08:00A	04/02/96.12:00P	
1.2.1.71.4F	1	Inspect, Install End Caps 74	04/02/96.01:00P	04/02/96.02:00P	
1.2.1.71.4H	1	Move to Test Area 74	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.71.4I	1	Pre-Clean & Black Light 74	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.71.4J	30	Leak Test 74	04/03/96.11:00A	04/04/96.05:00P	
1.2.1.71.4M	1	Move to Post Test Storage 74	04/05/96.08:00A	04/05/96.09:00A	
1.2.1.71.4N	1	Clean, Dry & End Cap 74	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.71.4P	1	Transport to Erection 74	04/23/96.11:00A	04/23/96.12:00P	
1.2.1.71.4Q	1	Set & Align 74	04/23/96.01:00P	04/23/96.02:00P	
1.2.1.71.4R	1	Set Clean Room, Purge & Fit 74	04/23/96.02:00P	04/23/96.03:00P	
1.2.1.71.4S	2	Weld Joint 7	04/23/96.03:00P	04/23/96.05:00P	
1.2.1.71.4T	2	Leak Test Joint 74	04/24/96.08:00A	04/24/96.10:00A	
1.2.1.71.4U	2	Install Tube Supports 74	04/24/96.08:00A	04/24/96.10:00A	
1.2.1.71.4V	2	Remove Equip'mt, Clean & Cap 74	04/24/96.10:00A	04/24/96.12:00P	
1.2.1.71.5A	1	Unload,Rec/Insp Tube 57	03/26/96.01:00P	03/26/96.02:00P	
1.2.1.71.5B	1	Move to Stiff Fit Up Stat. 75	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.71.5C	1	Set-up & Purge 75	04/03/96.11:00A	04/03/96.12:00P	
1.2.1.71.5D	1	F/W Pump Port Reinf. 75	04/03/96.01:00P	04/03/96.02:00P	
1.2.1.71.5E	2	Fit Stiffeners 75	04/03/96.02:00P	04/03/96.04:00P	
1.2.1.71.5F	4	Weld Stiffeners75	04/03/96.04:00P	04/04/96.11:00A	
1.2.1.71.5G	1	Move to P.Port Stat. 75	04/04/96.11:00A	04/04/96.12:00P	
1.2.1.71.5H	1	Setup & Bore 10" Inlet 75	04/04/96.01:00P	04/04/96.02:00P	
1.2.1.71.5I	2	Purge/F/W Pump Port 75	04/04/96.02:00P	04/04/96.04:00P	
1.2.1.71.5J	1	Inspect, Install End Caps 75	04/04/96.04:00P	04/04/96.05:00P	
1.2.1.71.5L	1	Move to Test Area 75	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.71.5M	1	Pre-Clean & Black Light 75	04/05/96.10:00A	04/05/96.11:00A	
1.2.1.71.5N	30	Leak Test 75	04/05/96.11:00A	04/06/96.05:00P	
1.2.1.71.5Q	1	Move to Post Test Storage 75	04/08/96.08:00A	04/08/96.09:00A	
1.2.1.71.5R	1	Clean, Dry & End Cap 75	04/08/96.09:00A	04/08/96.10:00A	
1.2.1.71.5T	1	Transport to Erection 75	04/25/96.09:00A	04/25/96.10:00A	
1.2.1.71.5U	1	Set & Align 75	04/25/96.10:00A	04/25/96.11:00A	
1.2.1.71.5V	1	Set Clean Room, Purge & Fit 75	04/25/96.11:00A	04/25/96.12:00P	
1.2.1.71.5W	2	Weld Joint 75	04/25/96.01:00P	04/25/96.03:00P	
1.2.1.71.5X	2	Leak Test Joint 75	04/25/96.03:00P	04/25/96.05:00P	
1.2.1.71.5Y	2	Install Tube Supports 75	04/25/96.03:00P	04/25/96.05:00P	
1.2.1.71.5Z	2	Remove Equip'mt, Clean & Cap 75	04/26/96.08:00A	04/26/96.10:00A	
1.2.1.71.B1A	1	Unload,Rec/Insp Tube B71	03/26/96.08:00A	03/26/96.09:00A	
1.2.1.71.B1B	1	Move to Stiff Fit Up Stat. B71	03/26/96.09:00A	03/26/96.10:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.71.B1C	1	Set-up & Purge B71	03/26/96.10:00A	03/26/96.11:00A	
1.2.1.71.B1D	2	Fit Stiffeners B71	03/26/96.11:00A	03/26/96.02:00P	
1.2.1.71.B1E	4	Weld Stiffeners B71	03/26/96.02:00P	03/27/96.09:00A	
1.2.1.71.B1F	1	Move to Exp.Bellows Stat. B71	03/27/96.09:00A	03/27/96.10:00A	
1.2.1.71.B1G	3	Fit,Purge,Weld Exp. Bellows B71	03/27/96.10:00A	03/27/96.02:00P	
1.2.1.71.B1H	1	Inspect, Install End Caps B71	03/27/96.02:00P	03/27/96.03:00P	
1.2.1.71.B1J	1	Move to Test Area B71	03/27/96.03:00P	03/27/96.04:00P	
1.2.1.71.B1K	1	Pre-Clean & Black Light B71	03/27/96.04:00P	03/27/96.05:00P	
1.2.1.71.B1L	30	Leak Test B71	03/27/96.05:00P	03/28/96.11:00P	
1.2.1.71.B1O	1	Move to Post Test Storage B71	03/29/96.08:00A	03/29/96.09:00A	
1.2.1.71.B1P	1	Clean, Dry & End Cap B71	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.71.B1R	1	Transport to Erection B71	04/15/96.10:00A	04/15/96.11:00A	
1.2.1.71.B1S	1	Set & Align B71	04/15/96.11:00A	04/15/96.12:00P	
1.2.1.71.B1T	1	Set Clean Room, Purge & Fit B71	04/15/96.01:00P	04/15/96.02:00P	
1.2.1.71.B1U	2	Weld Joint B71	04/15/96.02:00P	04/15/96.04:00P	
1.2.1.71.B1V	2	Leak Test Joint B71	04/15/96.04:00P	04/16/96.09:00A	
1.2.1.71.B1W	2	Install Tube Supports B71	04/15/96.04:00P	04/16/96.09:00A	
1.2.1.71.B1X	2	Remove Equip'mt, Clean & Cap B71	04/16/96.09:00A	04/16/96.11:00A	
1.2.1.71.B2A	1	Unload,Rec/Insp Tube B72	03/26/96.09:00A	03/26/96.10:00A	
1.2.1.71.B2B	1	Move to Stiff Fit Up Stat. B72	03/27/96.10:00A	03/27/96.11:00A	
1.2.1.71.B2C	1	Set-up & Purge B72	03/27/96.11:00A	03/27/96.12:00P	
1.2.1.71.B2D	2	Fit Stiffeners B72	03/27/96.01:00P	03/27/96.03:00P	
1.2.1.71.B2E	4	Weld Stiffeners B72	03/27/96.03:00P	03/28/96.10:00A	
1.2.1.71.B2F	1	Move to Exp.Bellows Stat. B72	03/28/96.10:00A	03/28/96.11:00A	
1.2.1.71.B2G	3	Fit,Purge,Weld Exp. Bellows B72	03/28/96.11:00A	03/28/96.03:00P	
1.2.1.71.B2H	1	Inspect, Install End Caps B72	03/28/96.03:00P	03/28/96.04:00P	
1.2.1.71.B2J	1	Move to Test Area B72	03/29/96.09:00A	03/29/96.10:00A	
1.2.1.71.B2K	1	Pre-Clean & Black Light B72	03/29/96.10:00A	03/29/96.11:00A	
1.2.1.71.B2L	30	Leak Test B72	03/29/96.11:00A	03/30/96.05:00P	
1.2.1.71.B2O	1	Move to Post Test Storage B72	04/01/96.08:00A	04/01/96.09:00A	
1.2.1.71.B2P	1	Clean, Dry & End Cap B72	04/01/96.09:00A	04/01/96.10:00A	
1.2.1.71.B2R	1	Transport to Erection B72	04/17/96.08:00A	04/17/96.09:00A	
1.2.1.71.B2S	1	Set & Align B72	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.71.B2T	1	Set Clean Room, Purge & Fit B72	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.71.B2U	2	Weld Joint B72	04/17/96.11:00A	04/17/96.02:00P	
1.2.1.71.B2V	2	Leak Test Joint B72	04/17/96.02:00P	04/17/96.04:00P	
1.2.1.71.B2W	2	Install Tube Supports B72	04/17/96.02:00P	04/17/96.04:00P	
1.2.1.71.B2X	2	Remove Equip'mt, Clean & Cap B72	04/17/96.04:00P	04/18/96.09:00A	
1.2.1.71.B3A	1	Unload,Rec/Insp Tube B73	03/26/96.10:00A	03/26/96.11:00A	
1.2.1.71.B3B	1	Move to Stiff Fit Up Stat. B73	03/28/96.11:00A	03/28/96.12:00P	
1.2.1.71.B3C	1	Set-up & Purge B73	03/28/96.01:00P	03/28/96.02:00P	
1.2.1.71.B3D	2	Fit Stiffeners B73	03/28/96.02:00P	03/28/96.04:00P	
1.2.1.71.B3E	4	Weld Stiffeners B73	03/28/96.04:00P	03/29/96.11:00A	
1.2.1.71.B3F	1	Move to Exp.Bellows Stat. B73	03/29/96.11:00A	03/29/96.12:00P	
1.2.1.71.B3G	3	Fit,Purge,Weld Exp. Bellows B73	03/29/96.01:00P	03/29/96.04:00P	
1.2.1.71.B3H	1	Inspect, Install End Caps B73	03/29/96.04:00P	03/29/96.05:00P	
1.2.1.71.B3J	1	Move to Test Area B73	04/01/96.09:00A	04/01/96.10:00A	
1.2.1.71.B3K	1	Pre-Clean & Black Light B3	04/01/96.10:00A	04/01/96.11:00A	
1.2.1.71.B3L	30	Leak Test B3	04/01/96.11:00A	04/02/96.05:00P	
1.2.1.71.B3O	1	Move to Post Test Storage B73	04/03/96.08:00A	04/03/96.09:00A	
1.2.1.71.B3P	1	Clean, Dry & End Cap B73	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.71.B3R	1	Transport to Erection B73	04/18/96.03:00P	04/18/96.04:00P	
1.2.1.71.B3S	1	Set & Align B73	04/18/96.04:00P	04/18/96.05:00P	
1.2.1.71.B3T	1	Set Clean Room, Purge & Fit B73	04/19/96.08:00A	04/19/96.09:00A	
1.2.1.71.B3U	2	Weld Joint B73	04/19/96.09:00A	04/19/96.11:00A	
1.2.1.71.B3V	2	Leak Test Joint B73	04/19/96.11:00A	04/19/96.02:00P	
1.2.1.71.B3W	2	Install Tube Supports B73	04/19/96.11:00A	04/19/96.02:00P	
1.2.1.71.B3X	2	Remove Equip'mt, Clean & Cap B73	04/19/96.02:00P	04/19/96.04:00P	
1.2.1.71.B4A	1	Unload,Rec/Insp Tube B74	03/26/96.11:00A	03/26/96.12:00P	
1.2.1.71.B4B	1	Move to Stiff Fit Up Stat. B74	03/29/96.01:00P	03/29/96.02:00P	
1.2.1.71.B4C	1	Set-up & Purge B74	03/29/96.02:00P	03/29/96.03:00P	
1.2.1.71.B4D	2	Fit Stiffeners B74	03/29/96.03:00P	03/29/96.05:00P	
1.2.1.71.B4E	4	Weld Stiffeners B74	04/01/96.08:00A	04/01/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.71.B4F	1	Move to Exp.Bellows Stat. B74	04/01/96.01:00P	04/01/96.02:00P	
1.2.1.71.B4G	3	Fit,Purge,Weld Exp. Bellows B74	04/01/96.02:00P	04/01/96.05:00P	
1.2.1.71.B4H	1	Inspect, Install End Caps B74	04/02/96.08:00A	04/02/96.09:00A	
1.2.1.71.B4J	1	Move to Test Area B74	04/03/96.09:00A	04/03/96.10:00A	
1.2.1.71.B4K	1	Pre-Clean & Black Light B74	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.71.B4L	30	Leak Test B74	04/03/96.11:00A	04/04/96.05:00P	
1.2.1.71.B4O	1	Move to Post Test Storage B74	04/05/96.08:00A	04/05/96.09:00A	
1.2.1.71.B4P	1	Clean, Dry & End Cap B74	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.71.B4R	1	Transport to Erection B74	04/22/96.01:00P	04/22/96.02:00P	
1.2.1.71.B4S	1	Set & Align B74	04/22/96.02:00P	04/22/96.03:00P	
1.2.1.71.B4T	1	Set Clean Room, Purge & Fit B74	04/22/96.03:00P	04/22/96.04:00P	
1.2.1.71.B4U	2	Weld Joint B74	04/22/96.04:00P	04/23/96.09:00A	
1.2.1.71.B4V	2	Leak Test Joint B74	04/23/96.09:00A	04/23/96.11:00A	
1.2.1.71.B4W	2	Install Tube Supports B74	04/23/96.09:00A	04/23/96.11:00A	
1.2.1.71.B4X	2	Remove Equip'mt, Clean & Cap B74	04/23/96.11:00A	04/23/96.02:00P	
1.2.1.71.B5A	1	Unload,Rec/Insp Tube B75	03/26/96.01:00P	03/26/96.02:00P	
1.2.1.71.B5B	1	Move to Stiff Fit Up Stat. B75	04/01/96.02:00P	04/01/96.03:00P	
1.2.1.71.B5C	1	Set-up & Purge B75	04/01/96.03:00P	04/01/96.04:00P	
1.2.1.71.B5D	2	Fit Stiffeners B75	04/01/96.04:00P	04/02/96.09:00A	
1.2.1.71.B5E	4	Weld Stiffeners B75	04/02/96.09:00A	04/02/96.02:00P	
1.2.1.71.B5F	1	Move to Exp.Bellows Stat. B75	04/03/96.10:00A	04/03/96.11:00A	
1.2.1.71.B5G	3	Fit,Purge,Weld Exp. Bellows B75	04/03/96.11:00A	04/03/96.03:00P	
1.2.1.71.B5H	1	Inspect, Install End Caps B75	04/03/96.03:00P	04/03/96.04:00P	
1.2.1.71.B5J	1	Move to Test Area B75	04/05/96.09:00A	04/05/96.10:00A	
1.2.1.71.B5K	1	Pre-Clean & Black Light B75	04/05/96.10:00A	04/05/96.11:00A	
1.2.1.71.B5L	30	Leak Test B75	04/05/96.11:00A	04/06/96.05:00P	
1.2.1.71.B5O	1	Move to Post Test Storage B75	04/08/96.08:00A	04/08/96.09:00A	
1.2.1.71.B5P	1	Clean, Dry & End Cap B75	04/08/96.09:00A	04/08/96.10:00A	
1.2.1.71.B5R	1	Transport to Erection B75	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.71.B5S	1	Set & Align B75	04/24/96.11:00A	04/24/96.12:00P	
1.2.1.71.B5T	1	Set Clean Room, Purge & Fit B75	04/24/96.01:00P	04/24/96.02:00P	
1.2.1.71.B5U	2	Weld Joint B75	04/24/96.02:00P	04/24/96.04:00P	
1.2.1.71.B5V	2	Leak Test Joint B75	04/24/96.04:00P	04/25/96.09:00A	
1.2.1.71.B5W	2	Install Tube Supports B75	04/24/96.04:00P	04/25/96.09:00A	
1.2.1.71.B5X	2	Remove Equip'mt, Clean & Cap B75	04/25/96.09:00A	04/25/96.11:00A	
1.2.1.76	179	Cans 76-80	04/08/96.04:00P	05/09/96.10:00A	
1.2.1.76.1A	1	Unload,Rec/Insp Tube 76	04/09/96.08:00A	04/09/96.09:00A	
1.2.1.76.1B	1	Move to Stiff Fit Up Stat. 76	04/09/96.09:00A	04/09/96.10:00A	
1.2.1.76.1C	1	Set-up & Purge 76	04/09/96.10:00A	04/09/96.11:00A	
1.2.1.76.1D	2	Fit Stiffeners 76	04/09/96.11:00A	04/09/96.02:00P	
1.2.1.76.1E	4	Weld Stiffeners 76	04/09/96.02:00P	04/10/96.09:00A	
1.2.1.76.1F	1	Inspect, Install End Caps 76	04/10/96.09:00A	04/10/96.10:00A	
1.2.1.76.1H	1	Move to Test Area 76	04/10/96.10:00A	04/10/96.11:00A	
1.2.1.76.1I	1	Pre-Clean & Black Light 76	04/10/96.11:00A	04/10/96.12:00P	
1.2.1.76.1J	30	Leak Test 76	04/10/96.12:00P	04/11/96.06:00P	
1.2.1.76.1M	1	Move to Post Test Storage 76	04/12/96.08:00A	04/12/96.09:00A	
1.2.1.76.1N	1	Clean, Dry & End Cap 76	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.76.1P	1	Transport to Erection 76	04/29/96.09:00A	04/29/96.10:00A	
1.2.1.76.1Q	1	Set & Align 76	04/29/96.10:00A	04/29/96.11:00A	
1.2.1.76.1R	1	Set Clean Room, Purge & Fit 76	04/29/96.11:00A	04/29/96.12:00P	
1.2.1.76.1S	2	Weld Joint 76	04/29/96.01:00P	04/29/96.03:00P	
1.2.1.76.1T	2	Leak Test Joint 76	04/29/96.03:00P	04/29/96.05:00P	
1.2.1.76.1U	2	Install Tube Supports 76	04/29/96.03:00P	04/29/96.05:00P	
1.2.1.76.1V	2	Remove Equip'mt, Clean & Cap 76	04/30/96.08:00A	04/30/96.10:00A	
1.2.1.76.2A	1	Unload,Rec. & Inspect 77	04/09/96.09:00A	04/09/96.10:00A	
1.2.1.76.2B	1	Move to Stiff Fit Up Stat. 77	04/10/96.11:00A	04/10/96.12:00P	
1.2.1.76.2C	1	Set-up & Purge 77	04/10/96.01:00P	04/10/96.02:00P	
1.2.1.76.2D	2	Fit Stiffeners 77	04/10/96.02:00P	04/10/96.04:00P	
1.2.1.76.2E	4	Weld Stiffeners 77	04/10/96.04:00P	04/11/96.11:00A	
1.2.1.76.2F	1	Inspect, Install End Caps 77	04/11/96.11:00A	04/11/96.12:00P	
1.2.1.76.2H	1	Move to Test Area 77	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.76.2I	1	Pre-Clean & Black Light 77	04/12/96.10:00A	04/12/96.11:00A	
1.2.1.76.2J	30	Leak Test 77	04/12/96.11:00A	04/13/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.76.2M	1	Move to Post Test Storage 77	04/15/96.08:00A	04/15/96.09:00A	
1.2.1.76.2N	1	Clean, Dry & End Cap 77	04/15/96.09:00A	04/15/96.10:00A	
1.2.1.76.2P	1	Transport to Erection 77	04/30/96.04:00P	04/30/96.05:00P	
1.2.1.76.2Q	1	Set & Align 77	05/01/96.08:00A	05/01/96.09:00A	
1.2.1.76.2R	1	Set Clean Room, Purge & Fit 77	05/01/96.09:00A	05/01/96.10:00A	
1.2.1.76.2S	2	Weld Joint 77	05/01/96.10:00A	05/01/96.12:00P	
1.2.1.76.2T	2	Leak Test Joint 77	05/01/96.01:00P	05/01/96.03:00P	
1.2.1.76.2U	2	Install Tube Supports 77	05/01/96.01:00P	05/01/96.03:00P	
1.2.1.76.2V	2	Remove Equip'mt, Clean & Cap 77	05/01/96.03:00P	05/01/96.05:00P	
1.2.1.76.3A	1	Unload,Rec/Insp Tube 78	04/09/96.10:00A	04/09/96.11:00A	
1.2.1.76.3B	1	Move to Stiff Fit Up Stat. 78	04/12/96.10:00A	04/12/96.11:00A	
1.2.1.76.3C	1	Set-up & Purge 78	04/12/96.11:00A	04/12/96.12:00P	
1.2.1.76.3D	2	Fit Stiffeners 78	04/12/96.01:00P	04/12/96.03:00P	
1.2.1.76.3E	4	Weld Stiffeners 78	04/12/96.03:00P	04/15/96.10:00A	
1.2.1.76.3F	1	Inspect, Install End Caps 78	04/15/96.10:00A	04/15/96.11:00A	
1.2.1.76.3H	1	Move to Test Area 78	04/15/96.11:00A	04/15/96.12:00P	
1.2.1.76.3I	1	Pre-Clean & Black Light 78	04/15/96.01:00P	04/15/96.02:00P	
1.2.1.76.3J	30	Leak Test 787	04/15/96.02:00P	04/16/96.08:00P	
1.2.1.76.3M	1	Move to Post Test Storage 78	04/17/96.08:00A	04/17/96.09:00A	
1.2.1.76.3N	1	Clean, Dry & End Cap 78	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.76.3P	1	Transport to Erection 78	05/02/96.02:00P	05/02/96.03:00P	
1.2.1.76.3Q	1	Set & Align 78	05/02/96.03:00P	05/02/96.04:00P	
1.2.1.76.3R	1	Set Clean Room, Purge & Fit 78	05/02/96.04:00P	05/02/96.05:00P	
1.2.1.76.3S	2	Weld Joint 78	05/03/96.08:00A	05/03/96.10:00A	
1.2.1.76.3T	2	Leak Test Joint 78	05/03/96.10:00A	05/03/96.12:00P	
1.2.1.76.3U	2	Install Tube Supports 78	05/03/96.10:00A	05/03/96.12:00P	
1.2.1.76.3V	2	Remove Equip'mt, Clean & Cap 78	05/03/96.01:00P	05/03/96.03:00P	
1.2.1.76.4A	1	Unload,Rec/Insp Tube 79	04/09/96.11:00A	04/09/96.12:00P	
1.2.1.76.4B	1	Move to Stiff Fit Up Stat. 79	04/15/96.01:00P	04/15/96.02:00P	
1.2.1.76.4C	1	Set-up & Purge 79	04/15/96.02:00P	04/15/96.03:00P	
1.2.1.76.4D	2	Fit Stiffeners 79	04/15/96.03:00P	04/15/96.05:00P	
1.2.1.76.4E	4	Weld Stiffeners 79	04/16/96.08:00A	04/16/96.12:00P	
1.2.1.76.4F	1	Inspect, Install End Caps 79	04/16/96.01:00P	04/16/96.02:00P	
1.2.1.76.4H	1	Move to Test Area 79	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.76.4I	1	Pre-Clean & Black Light 79	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.76.4J	30	Leak Test 79	04/17/96.11:00A	04/18/96.05:00P	
1.2.1.76.4M	1	Move to Post Test Storage 79	04/19/96.08:00A	04/19/96.09:00A	
1.2.1.76.4N	1	Clean, Dry & End Cap 79	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.76.4P	1	Transport to Erection 79	05/06/96.11:00A	05/06/96.12:00P	
1.2.1.76.4Q	1	Set & Align 79	05/06/96.01:00P	05/06/96.02:00P	
1.2.1.76.4R	1	Set Clean Room, Purge & Fit 79	05/06/96.02:00P	05/06/96.03:00P	
1.2.1.76.4S	2	Weld Joint 79	05/06/96.03:00P	05/06/96.05:00P	
1.2.1.76.4T	2	Leak Test Joint 79	05/07/96.08:00A	05/07/96.10:00A	
1.2.1.76.4U	2	Install Tube Supports 79	05/07/96.08:00A	05/07/96.10:00A	
1.2.1.76.4V	2	Remove Equip'mt, Clean & Cap 79	05/07/96.10:00A	05/07/96.12:00P	
1.2.1.76.5A	1	Unload,Rec/Insp Tube 79	04/09/96.01:00P	04/09/96.02:00P	
1.2.1.76.5B	1	Move to Stiff Fit Up Stat. 79	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.76.5C	1	Set-up & Purge 80	04/17/96.11:00A	04/17/96.12:00P	
1.2.1.76.5D	1	F/W Pump Port Reinf. 80	04/17/96.01:00P	04/17/96.02:00P	
1.2.1.76.5E	2	Fit Stiffeners80	04/17/96.02:00P	04/17/96.04:00P	
1.2.1.76.5F	4	Weld Stiffeners 80	04/17/96.04:00P	04/18/96.11:00A	
1.2.1.76.5G	1	Move to P.Port Stat. 80	04/18/96.11:00A	04/18/96.12:00P	
1.2.1.76.5H	1	Setup & Bore 10" Inlet 80	04/18/96.01:00P	04/18/96.02:00P	
1.2.1.76.5I	2	Purge/F/W Pump Port 80	04/18/96.02:00P	04/18/96.04:00P	
1.2.1.76.5J	1	Inspect, Install End Caps 80	04/18/96.04:00P	04/18/96.05:00P	
1.2.1.76.5L	1	Move to Test Area 80	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.76.5M	1	Pre-Clean & Black Light 80	04/19/96.10:00A	04/19/96.11:00A	
1.2.1.76.5N	30	Leak Test 80	04/19/96.11:00A	04/20/96.05:00P	
1.2.1.76.5Q	1	Move to Post Test Storage 80	04/22/96.08:00A	04/22/96.09:00A	
1.2.1.76.5R	1	Clean, Dry & End Cap 80	04/22/96.09:00A	04/22/96.10:00A	
1.2.1.76.5T	1	Transport to Erection 80	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.76.5U	1	Set & Align 80	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.76.5V	1	Set Clean Room, Purge & Fit 80	05/08/96.11:00A	05/08/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.76.5W	2	Weld Joint 80	05/08/96.01:00P	05/08/96.03:00P	
1.2.1.76.5X	2	Leak Test Joint 80	05/08/96.03:00P	05/08/96.05:00P	
1.2.1.76.5Y	2	Install Tube Supports 80	05/08/96.03:00P	05/08/96.05:00P	
1.2.1.76.5Z	2	Remove Equip'mt, Clean & Cap 80	05/09/96.08:00A	05/09/96.10:00A	
1.2.1.76.B1A	1	Unload,Rec/Insp Tube B76	04/09/96.08:00A	04/09/96.09:00A	
1.2.1.76.B1B	1	Move to Stiff Fit Up Stat. B76	04/09/96.09:00A	04/09/96.10:00A	
1.2.1.76.B1C	1	Set-up & Purge B76	04/09/96.10:00A	04/09/96.11:00A	
1.2.1.76.B1D	2	Fit Stiffeners B76	04/09/96.11:00A	04/09/96.02:00P	
1.2.1.76.B1E	4	Weld Stiffeners B76	04/09/96.02:00P	04/10/96.09:00A	
1.2.1.76.B1F	1	Move to Exp.Bellows Stat. B76	04/10/96.09:00A	04/10/96.10:00A	
1.2.1.76.B1G	3	Fit,Purge,Weld Exp. Bellows B76	04/10/96.10:00A	04/10/96.02:00P	
1.2.1.76.B1H	1	Inspect, Install End Caps B76	04/10/96.02:00P	04/10/96.03:00P	
1.2.1.76.B1J	1	Move to Test Area B76	04/10/96.03:00P	04/10/96.04:00P	
1.2.1.76.B1K	1	Pre-Clean & Black Light B76	04/10/96.04:00P	04/10/96.05:00P	
1.2.1.76.B1L	30	Leak Test B76	04/10/96.05:00P	04/11/96.11:00P	
1.2.1.76.B1O	1	Move to Post Test Storage B76	04/12/96.08:00A	04/12/96.09:00A	
1.2.1.76.B1P	1	Clean, Dry & End Cap B76	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.76.B1R	1	Transport to Erection B76	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.76.B1S	1	Set & Align B76	04/26/96.11:00A	04/26/96.12:00P	
1.2.1.76.B1T	1	Set Clean Room, Purge & Fit B76	04/26/96.01:00P	04/26/96.02:00P	
1.2.1.76.B1U	2	Weld Joint B76	04/26/96.02:00P	04/26/96.04:00P	
1.2.1.76.B1V	2	Leak Test Joint B76	04/26/96.04:00P	04/29/96.09:00A	
1.2.1.76.B1W	2	Install Tube Supports B76	04/26/96.04:00P	04/29/96.09:00A	
1.2.1.76.B1X	2	Remove Equip'mt, Clean & Cap B76	04/29/96.09:00A	04/29/96.11:00A	
1.2.1.76.B2A	1	Unload,Rec/Insp Tube B77	04/09/96.09:00A	04/09/96.10:00A	
1.2.1.76.B2B	1	Move to Stiff Fit Up Stat. B77	04/10/96.10:00A	04/10/96.11:00A	
1.2.1.76.B2C	1	Set-up & Purge B77	04/10/96.11:00A	04/10/96.12:00P	
1.2.1.76.B2D	2	Fit Stiffeners B77	04/10/96.01:00P	04/10/96.03:00P	
1.2.1.76.B2E	4	Weld Stiffeners B77	04/10/96.03:00P	04/11/96.10:00A	
1.2.1.76.B2F	1	Move to Exp.Bellows Stat. B77	04/11/96.10:00A	04/11/96.11:00A	
1.2.1.76.B2G	3	Fit,Purge,Weld Exp. Bellows B77	04/11/96.11:00A	04/11/96.03:00P	
1.2.1.76.B2H	1	Inspect, Install End Caps B77	04/11/96.03:00P	04/11/96.04:00P	
1.2.1.76.B2J	1	Move to Test Area B77	04/12/96.09:00A	04/12/96.10:00A	
1.2.1.76.B2K	1	Pre-Clean & Black Light B77	04/12/96.10:00A	04/12/96.11:00A	
1.2.1.76.B2L	30	Leak Test B77	04/12/96.11:00A	04/13/96.05:00P	
1.2.1.76.B2O	1	Move to Post Test Storage B77	04/15/96.08:00A	04/15/96.09:00A	
1.2.1.76.B2P	1	Clean, Dry & End Cap B77	04/15/96.09:00A	04/15/96.10:00A	
1.2.1.76.B2R	1	Transport to Erection B77	04/30/96.08:00A	04/30/96.09:00A	
1.2.1.76.B2S	1	Set & Align B77	04/30/96.09:00A	04/30/96.10:00A	
1.2.1.76.B2T	1	Set Clean Room, Purge & Fit B77	04/30/96.10:00A	04/30/96.11:00A	
1.2.1.76.B2U	2	Weld Joint B77	04/30/96.11:00A	04/30/96.02:00P	
1.2.1.76.B2V	2	Leak Test Joint B77	04/30/96.02:00P	04/30/96.04:00P	
1.2.1.76.B2W	2	Install Tube SupportsB77	04/30/96.02:00P	04/30/96.04:00P	
1.2.1.76.B2X	2	Remove Equip'mt, Clean & Cap B77	04/30/96.04:00P	05/01/96.09:00A	
1.2.1.76.B3A	1	Unload,Rec/Insp Tube B78	04/09/96.10:00A	04/09/96.11:00A	
1.2.1.76.B3B	1	Move to Stiff Fit Up Stat. B78	04/11/96.11:00A	04/11/96.12:00P	
1.2.1.76.B3C	1	Set-up & Purge B78	04/11/96.01:00P	04/11/96.02:00P	
1.2.1.76.B3D	2	Fit Stiffeners B3	04/11/96.02:00P	04/11/96.04:00P	
1.2.1.76.B3E	4	Weld Stiffeners B3	04/11/96.04:00P	04/12/96.11:00A	
1.2.1.76.B3F	1	Move to Exp.Bellows Stat. B78	04/12/96.11:00A	04/12/96.12:00P	
1.2.1.76.B3G	3	Fit,Purge,Weld Exp. Bellows B78	04/12/96.01:00P	04/12/96.04:00P	
1.2.1.76.B3H	1	Inspect, Install End Caps B78	04/12/96.04:00P	04/12/96.05:00P	
1.2.1.76.B3J	1	Move to Test Area B78	04/15/96.09:00A	04/15/96.10:00A	
1.2.1.76.B3K	1	Pre-Clean & Black Light B78	04/15/96.10:00A	04/15/96.11:00A	
1.2.1.76.B3L	30	Leak Test B78	04/15/96.11:00A	04/16/96.05:00P	
1.2.1.76.B3O	1	Move to Post Test Storage B78	04/17/96.08:00A	04/17/96.09:00A	
1.2.1.76.B3P	1	Clean, Dry & End Cap B78	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.76.B3R	1	Transport to Erection B78	05/01/96.03:00P	05/01/96.04:00P	
1.2.1.76.B3S	1	Set & Align B78	05/01/96.04:00P	05/01/96.05:00P	
1.2.1.76.B3T	1	Set Clean Room, Purge & Fit B78	05/02/96.08:00A	05/02/96.09:00A	
1.2.1.76.B3U	2	Weld Joint B78	05/02/96.09:00A	05/02/96.11:00A	
1.2.1.76.B3V	2	Leak Test Joint B78	05/02/96.11:00A	05/02/96.02:00P	
1.2.1.76.B3W	2	Install Tube Supports B78	05/02/96.11:00A	05/02/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.76.B3X	2	Remove Equip'mt, Clean & Cap B78	05/02/96.02:00P	05/02/96.04:00P	
1.2.1.76.B4A	1	Unload,Rec/Insp Tube B79	04/09/96.11:00A	04/09/96.12:00P	
1.2.1.76.B4B	1	Move to Stiff Fit Up Stat. B79	04/12/96.01:00P	04/12/96.02:00P	
1.2.1.76.B4C	1	Set-up & Purge B79	04/12/96.02:00P	04/12/96.03:00P	
1.2.1.76.B4D	2	Fit Stiffeners B79	04/12/96.03:00P	04/12/96.05:00P	
1.2.1.76.B4E	4	Weld Stiffeners B79	04/15/96.08:00A	04/15/96.12:00P	
1.2.1.76.B4F	1	Move to Exp.Bellows Stat. B79	04/15/96.01:00P	04/15/96.02:00P	
1.2.1.76.B4G	3	Fit,Purge,Weld Exp. Bellows B79	04/15/96.02:00P	04/15/96.05:00P	
1.2.1.76.B4H	1	Inspect, Install End Caps B79	04/16/96.08:00A	04/16/96.09:00A	
1.2.1.76.B4J	1	Move to Test Area B79	04/17/96.09:00A	04/17/96.10:00A	
1.2.1.76.B4K	1	Pre-Clean & Black Light B79	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.76.B4L	30	Leak Test B79	04/17/96.11:00A	04/18/96.05:00P	
1.2.1.76.B4O	1	Move to Post Test Storage B79	04/19/96.08:00A	04/19/96.09:00A	
1.2.1.76.B4P	1	Clean, Dry & End Cap B79	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.76.B4R	1	Transport to Erection B79	05/03/96.01:00P	05/03/96.02:00P	
1.2.1.76.B4S	1	Set & Align B4	05/03/96.02:00P	05/03/96.03:00P	
1.2.1.76.B4T	1	Set Clean Room, Purge & Fit B79	05/03/96.03:00P	05/03/96.04:00P	
1.2.1.76.B4U	2	Weld Joint B79	05/03/96.04:00P	05/06/96.09:00A	
1.2.1.76.B4V	2	Leak Test Joint B79	05/06/96.09:00A	05/06/96.11:00A	
1.2.1.76.B4W	2	Install Tube Supports B79	05/06/96.09:00A	05/06/96.11:00A	
1.2.1.76.B4X	2	Remove Equip'mt, Clean & Cap B79	05/06/96.11:00A	05/06/96.02:00P	
1.2.1.76.B5A	1	Unload,Rec/Insp Tube B80	04/09/96.01:00P	04/09/96.02:00P	
1.2.1.76.B5B	1	Move to Stiff Fit Up Stat. B80	04/15/96.02:00P	04/15/96.03:00P	
1.2.1.76.B5C	1	Set-up & Purge B80	04/15/96.03:00P	04/15/96.04:00P	
1.2.1.76.B5D	2	Fit Stiffeners B80	04/15/96.04:00P	04/16/96.09:00A	
1.2.1.76.B5E	4	Weld Stiffeners B80	04/16/96.09:00A	04/16/96.02:00P	
1.2.1.76.B5F	1	Move to Exp.Bellows Stat. B80	04/17/96.10:00A	04/17/96.11:00A	
1.2.1.76.B5G	3	Fit,Purge,Weld Exp. Bellows B80	04/17/96.11:00A	04/17/96.03:00P	
1.2.1.76.B5H	1	Inspect, Install End Caps B80	04/17/96.03:00P	04/17/96.04:00P	
1.2.1.76.B5J	1	Move to Test Area B80	04/19/96.09:00A	04/19/96.10:00A	
1.2.1.76.B5K	1	Pre-Clean & Black Light B80	04/19/96.10:00A	04/19/96.11:00A	
1.2.1.76.B5L	30	Leak Test B80	04/19/96.11:00A	04/20/96.05:00P	
1.2.1.76.B5O	1	Move to Post Test Storage B80	04/22/96.08:00A	04/22/96.09:00A	
1.2.1.76.B5P	1	Clean, Dry & End Cap B80	04/22/96.09:00A	04/22/96.10:00A	
1.2.1.76.B5R	1	Transport to Erection B80	05/07/96.10:00A	05/07/96.11:00A	
1.2.1.76.B5S	1	Set & Align B80	05/07/96.11:00A	05/07/96.12:00P	
1.2.1.76.B5T	1	Set Clean Room, Purge & Fit B80	05/07/96.01:00P	05/07/96.02:00P	
1.2.1.76.B5U	2	Weld Joint B80	05/07/96.02:00P	05/07/96.04:00P	
1.2.1.76.B5V	2	Leak Test Joint B80	05/07/96.04:00P	05/08/96.09:00A	
1.2.1.76.B5W	2	Install Tube Supports B80	05/07/96.04:00P	05/08/96.09:00A	
1.2.1.76.B5X	2	Remove Equip'mt, Clean & Cap B80	05/08/96.09:00A	05/08/96.11:00A	
1.2.1.81	171	Cans 81-85	04/22/96.04:00P	05/22/96.10:00A	
1.2.1.81.1A	1	Unload,Rec/Insp Tube 81	04/23/96.08:00A	04/23/96.09:00A	
1.2.1.81.1B	1	Move to Stiff Fit Up Stat. 81	04/23/96.09:00A	04/23/96.10:00A	
1.2.1.81.1C	1	Set-up & Purge 81	04/23/96.10:00A	04/23/96.11:00A	
1.2.1.81.1D	2	Fit Stiffeners 81	04/23/96.11:00A	04/23/96.02:00P	
1.2.1.81.1E	4	Weld Stiffeners 81	04/23/96.02:00P	04/24/96.09:00A	
1.2.1.81.1F	1	Inspect, Install End Caps 81	04/24/96.09:00A	04/24/96.10:00A	
1.2.1.81.1H	1	Move to Test Area 81	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.81.1I	1	Pre-Clean & Black Light 81	04/24/96.11:00A	04/24/96.12:00P	
1.2.1.81.1J	30	Leak Test 81	04/24/96.12:00P	04/25/96.06:00P	
1.2.1.81.1M	1	Move to Post Test Storage 81	04/26/96.08:00A	04/26/96.09:00A	
1.2.1.81.1N	1	Clean, Dry & End Cap 81	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.81.1P	1	Transport to Erection 81	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.81.1Q	1	Set & Align 81	05/10/96.10:00A	05/10/96.11:00A	
1.2.1.81.1R	1	Set Clean Room, Purge & Fit 81	05/10/96.11:00A	05/10/96.12:00P	
1.2.1.81.1S	2	Weld Joint 81	05/10/96.01:00P	05/10/96.03:00P	
1.2.1.81.1T	2	Leak Test Joint 81	05/10/96.03:00P	05/10/96.05:00P	
1.2.1.81.1U	2	Install Tube Supports 81	05/10/96.03:00P	05/10/96.05:00P	
1.2.1.81.1V	2	Remove Equip'mt, Clean & Cap 81	05/13/96.08:00A	05/13/96.10:00A	
1.2.1.81.2A	1	Unload,Rec. & Inspect 82	04/23/96.09:00A	04/23/96.10:00A	
1.2.1.81.2B	1	Move to Stiff Fit Up Stat. 82	04/24/96.11:00A	04/24/96.12:00P	
1.2.1.81.2C	1	Set-up & Purge 82	04/24/96.01:00P	04/24/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.81.2D	2	Fit Stiffeners 82	04/24/96.02:00P	04/24/96.04:00P	
1.2.1.81.2E	4	Weld Stiffeners 82	04/24/96.04:00P	04/25/96.11:00A	
1.2.1.81.2F	1	Inspect, Install End Caps 82	04/25/96.11:00A	04/25/96.12:00P	
1.2.1.81.2H	1	Move to Test Area 82	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.81.2I	1	Pre-Clean & Black Light 82	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.81.2J	30	Leak Test 82	04/26/96.11:00A	04/27/96.05:00P	
1.2.1.81.2M	1	Move to Post Test Storage 82	04/29/96.08:00A	04/29/96.09:00A	
1.2.1.81.2N	1	Clean, Dry & End Cap 82	04/29/96.09:00A	04/29/96.10:00A	
1.2.1.81.2P	1	Transport to Erection 82	05/13/96.04:00P	05/13/96.05:00P	
1.2.1.81.2Q	1	Set & Align 82	05/14/96.08:00A	05/14/96.09:00A	
1.2.1.81.2R	1	Set Clean Room, Purge & Fit 82	05/14/96.09:00A	05/14/96.10:00A	
1.2.1.81.2S	2	Weld Joint 82	05/14/96.10:00A	05/14/96.12:00P	
1.2.1.81.2T	2	Leak Test Joint 82	05/14/96.01:00P	05/14/96.03:00P	
1.2.1.81.2U	2	Install Tube Supports 82	05/14/96.01:00P	05/14/96.03:00P	
1.2.1.81.2V	2	Remove Equip'mt, Clean & Cap 82	05/14/96.03:00P	05/14/96.05:00P	
1.2.1.81.3A	1	Unload,Rec/Insp Tube 83	04/23/96.10:00A	04/23/96.11:00A	
1.2.1.81.3B	1	Move to Stiff Fit Up Stat. 83	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.81.3C	1	Set-up & Purge 83	04/26/96.11:00A	04/26/96.12:00P	
1.2.1.81.3D	2	Fit Stiffeners 83	04/26/96.01:00P	04/26/96.03:00P	
1.2.1.81.3E	4	Weld Stiffeners 83	04/26/96.03:00P	04/29/96.10:00A	
1.2.1.81.3F	1	Inspect, Install End Caps 83	04/29/96.10:00A	04/29/96.11:00A	
1.2.1.81.3H	1	Move to Test Area 83	04/29/96.11:00A	04/29/96.12:00P	
1.2.1.81.3I	1	Pre-Clean & Black Light 83	04/29/96.01:00P	04/29/96.02:00P	
1.2.1.81.3J	30	Leak Test 83	04/29/96.02:00P	04/30/96.08:00P	
1.2.1.81.3M	1	Move to Post Test Storage 83	05/01/96.08:00A	05/01/96.09:00A	
1.2.1.81.3N	1	Clean, Dry & End Cap 83	05/01/96.09:00A	05/01/96.10:00A	
1.2.1.81.3P	1	Transport to Erection 83	05/15/96.02:00P	05/15/96.03:00P	
1.2.1.81.3Q	1	Set & Align 83	05/15/96.03:00P	05/15/96.04:00P	
1.2.1.81.3R	1	Set Clean Room, Purge & Fit 83	05/15/96.04:00P	05/15/96.05:00P	
1.2.1.81.3S	2	Weld Joint 83	05/16/96.08:00A	05/16/96.10:00A	
1.2.1.81.3T	2	Leak Test Joint 83	05/16/96.10:00A	05/16/96.12:00P	
1.2.1.81.3U	2	Install Tube Supports 83	05/16/96.10:00A	05/16/96.12:00P	
1.2.1.81.3V	2	Remove Equip'mt, Clean & Cap 83	05/16/96.01:00P	05/16/96.03:00P	
1.2.1.81.4A	1	Unload,Rec/Insp Tube 84	04/23/96.11:00A	04/23/96.12:00P	
1.2.1.81.4B	1	Move to Stiff Fit Up Stat. 84	04/29/96.01:00P	04/29/96.02:00P	
1.2.1.81.4C	1	Set-up & Purge 84	04/29/96.02:00P	04/29/96.03:00P	
1.2.1.81.4D	2	Fit Stiffeners 84	04/29/96.03:00P	04/29/96.05:00P	
1.2.1.81.4E	4	Weld Stiffeners 84	04/30/96.08:00A	04/30/96.12:00P	
1.2.1.81.4F	1	Inspect, Install End Caps 84	04/30/96.01:00P	04/30/96.02:00P	
1.2.1.81.4H	1	Move to Test Area 84	05/01/96.09:00A	05/01/96.10:00A	
1.2.1.81.4I	1	Pre-Clean & Black Light 84	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.81.4J	30	Leak Test 84	05/01/96.11:00A	05/02/96.05:00P	
1.2.1.81.4M	1	Move to Post Test Storage 84	05/03/96.08:00A	05/03/96.09:00A	
1.2.1.81.4N	1	Clean, Dry & End Cap 84	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.81.4P	1	Transport to Erection 84	05/17/96.11:00A	05/17/96.12:00P	
1.2.1.81.4Q	1	Set & Align 84	05/17/96.01:00P	05/17/96.02:00P	
1.2.1.81.4R	1	Set Clean Room, Purge & Fit 84	05/17/96.02:00P	05/17/96.03:00P	
1.2.1.81.4S	2	Weld Joint 84	05/17/96.03:00P	05/17/96.05:00P	
1.2.1.81.4T	2	Leak Test Joint 84	05/20/96.08:00A	05/20/96.10:00A	
1.2.1.81.4U	2	Install Tube Supports 84	05/20/96.08:00A	05/20/96.10:00A	
1.2.1.81.4V	2	Remove Equip'mt, Clean & Cap 84	05/20/96.10:00A	05/20/96.12:00P	
1.2.1.81.5A	1	Unload,Rec/Insp Tube 85	04/23/96.01:00P	04/23/96.02:00P	
1.2.1.81.5B	1	Move to Stiff Fit Up Stat. 85	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.81.5C	1	Set-up & Purge 85	05/01/96.11:00A	05/01/96.12:00P	
1.2.1.81.5D	1	F/W Pump Port Reinf. 85	05/01/96.01:00P	05/01/96.02:00P	
1.2.1.81.5E	2	Fit Stiffeners 85	05/01/96.02:00P	05/01/96.04:00P	
1.2.1.81.5F	4	Weld Stiffeners 85	05/01/96.04:00P	05/02/96.11:00A	
1.2.1.81.5G	1	Move to P.Port Stat. 85	05/02/96.11:00A	05/02/96.12:00P	
1.2.1.81.5H	1	Setup & Bore 10" Inlet 85	05/02/96.01:00P	05/02/96.02:00P	
1.2.1.81.5I	2	Purge/F/W Pump Port 85	05/02/96.02:00P	05/02/96.04:00P	
1.2.1.81.5J	1	Inspect, Install End Caps 85	05/02/96.04:00P	05/02/96.05:00P	
1.2.1.81.5L	1	Move to Test Area 85	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.81.5M	1	Pre-Clean & Black Light 85	05/03/96.10:00A	05/03/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.81.5N	30	Leak Test 85	05/03/96.11:00A	05/04/96.05:00P	
1.2.1.81.5Q	1	Move to Post Test Storage 85	05/06/96.08:00A	05/06/96.09:00A	
1.2.1.81.5R	1	Clean, Dry & End Cap 85	05/06/96.09:00A	05/06/96.10:00A	
1.2.1.81.5T	1	Transport to Erection 85	05/21/96.09:00A	05/21/96.10:00A	
1.2.1.81.5U	1	Set & Align 85	05/21/96.10:00A	05/21/96.11:00A	
1.2.1.81.5V	1	Set Clean Room, Purge & Fit 85	05/21/96.11:00A	05/21/96.12:00P	
1.2.1.81.5W	2	Weld Joint 85	05/21/96.01:00P	05/21/96.03:00P	
1.2.1.81.5X	2	Leak Test Joint 85	05/21/96.03:00P	05/21/96.05:00P	
1.2.1.81.5Y	2	Install Tube Supports 85	05/21/96.03:00P	05/21/96.05:00P	
1.2.1.81.5Z	2	Remove Equip'mt, Clean & Cap 85	05/22/96.08:00A	05/22/96.10:00A	
1.2.1.81.B1A	1	Unload,Rec/Insp Tube B81	04/23/96.08:00A	04/23/96.09:00A	
1.2.1.81.B1B	1	Move to Stiff Fit Up Stat. B81	04/23/96.09:00A	04/23/96.10:00A	
1.2.1.81.B1C	1	Set-up & Purge B81	04/23/96.10:00A	04/23/96.11:00A	
1.2.1.81.B1D	2	Fit Stiffeners B81	04/23/96.11:00A	04/23/96.02:00P	
1.2.1.81.B1E	4	Weld Stiffeners B81	04/23/96.02:00P	04/24/96.09:00A	
1.2.1.81.B1F	1	Move to Exp.Bellows Stat. B81	04/24/96.09:00A	04/24/96.10:00A	
1.2.1.81.B1G	3	Fit,Purge,Weld Exp. Bellows B81	04/24/96.10:00A	04/24/96.02:00P	
1.2.1.81.B1H	1	Inspect, Install End Caps B81	04/24/96.02:00P	04/24/96.03:00P	
1.2.1.81.B1J	1	Move to Test Area B81	04/24/96.03:00P	04/24/96.04:00P	
1.2.1.81.B1K	1	Pre-Clean & Black Light B81	04/24/96.04:00P	04/24/96.05:00P	
1.2.1.81.B1L	30	Leak Test B81	04/24/96.05:00P	04/25/96.11:00P	
1.2.1.81.B1O	1	Move to Post Test Storage B81	04/26/96.08:00A	04/26/96.09:00A	
1.2.1.81.B1P	1	Clean, Dry & End Cap B81	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.81.B1R	1	Transport to Erection B81	05/09/96.10:00A	05/09/96.11:00A	
1.2.1.81.B1S	1	Set & Align B81	05/09/96.11:00A	05/09/96.12:00P	
1.2.1.81.B1T	1	Set Clean Room, Purge & Fit B1	05/09/96.01:00P	05/09/96.02:00P	
1.2.1.81.B1U	2	Weld Joint B81	05/09/96.02:00P	05/09/96.04:00P	
1.2.1.81.B1V	2	Leak Test Joint B81	05/09/96.04:00P	05/10/96.09:00A	
1.2.1.81.B1W	2	Install Tube Supports B81	05/09/96.04:00P	05/10/96.09:00A	
1.2.1.81.B1X	2	Remove Equip'mt, Clean & Cap B81	05/10/96.09:00A	05/10/96.11:00A	
1.2.1.81.B2A	1	Unload,Rec/Insp Tube B82	04/23/96.09:00A	04/23/96.10:00A	
1.2.1.81.B2B	1	Move to Stiff Fit Up Stat. B82	04/24/96.10:00A	04/24/96.11:00A	
1.2.1.81.B2C	1	Set-up & Purge B82	04/24/96.11:00A	04/24/96.12:00P	
1.2.1.81.B2D	2	Fit Stiffeners B82	04/24/96.01:00P	04/24/96.03:00P	
1.2.1.81.B2E	4	Weld Stiffeners B82	04/24/96.03:00P	04/25/96.10:00A	
1.2.1.81.B2F	1	Move to Exp.Bellows Stat. B82	04/25/96.10:00A	04/25/96.11:00A	
1.2.1.81.B2G	3	Fit,Purge,Weld Exp. Bellows B82	04/25/96.11:00A	04/25/96.03:00P	
1.2.1.81.B2H	1	Inspect, Install End Caps B82	04/25/96.03:00P	04/25/96.04:00P	
1.2.1.81.B2J	1	Move to Test Area B82	04/26/96.09:00A	04/26/96.10:00A	
1.2.1.81.B2K	1	Pre-Clean & Black Light B82	04/26/96.10:00A	04/26/96.11:00A	
1.2.1.81.B2L	30	Leak Test B82	04/26/96.11:00A	04/27/96.05:00P	
1.2.1.81.B2O	1	Move to Post Test Storage B82	04/29/96.08:00A	04/29/96.09:00A	
1.2.1.81.B2P	1	Clean, Dry & End Cap B82	04/29/96.09:00A	04/29/96.10:00A	
1.2.1.81.B2R	1	Transport to Erection B82	05/13/96.08:00A	05/13/96.09:00A	
1.2.1.81.B2S	1	Set & Align B82	05/13/96.09:00A	05/13/96.10:00A	
1.2.1.81.B2T	1	Set Clean Room, Purge & Fit B82	05/13/96.10:00A	05/13/96.11:00A	
1.2.1.81.B2U	2	Weld Joint B82	05/13/96.11:00A	05/13/96.02:00P	
1.2.1.81.B2V	2	Leak Test Joint B82	05/13/96.02:00P	05/13/96.04:00P	
1.2.1.81.B2W	2	Install Tube SupportsB82	05/13/96.02:00P	05/13/96.04:00P	
1.2.1.81.B2X	2	Remove Equip'mt, Clean & Cap B82	05/13/96.04:00P	05/14/96.09:00A	
1.2.1.81.B3A	1	Unload,Rec/Insp Tube B83	04/23/96.10:00A	04/23/96.11:00A	
1.2.1.81.B3B	1	Move to Stiff Fit Up Stat. B83	04/25/96.11:00A	04/25/96.12:00P	
1.2.1.81.B3C	1	Set-up & Purge B83	04/25/96.01:00P	04/25/96.02:00P	
1.2.1.81.B3D	2	Fit Stiffeners B83	04/25/96.02:00P	04/25/96.04:00P	
1.2.1.81.B3E	4	Weld Stiffeners B83	04/25/96.04:00P	04/26/96.11:00A	
1.2.1.81.B3F	1	Move to Exp.Bellows Stat. B83	04/26/96.11:00A	04/26/96.12:00P	
1.2.1.81.B3G	3	Fit,Purge,Weld Exp. Bellows B83	04/26/96.01:00P	04/26/96.04:00P	
1.2.1.81.B3H	1	Inspect, Install End Caps B83	04/26/96.04:00P	04/26/96.05:00P	
1.2.1.81.B3J	1	Move to Test Area B83	04/29/96.09:00A	04/29/96.10:00A	
1.2.1.81.B3K	1	Pre-Clean & Black Light B83	04/29/96.10:00A	04/29/96.11:00A	
1.2.1.81.B3L	30	Leak Test B83	04/29/96.11:00A	04/30/96.05:00P	
1.2.1.81.B3O	1	Move to Post Test Storage B83	05/01/96.08:00A	05/01/96.09:00A	
1.2.1.81.B3P	1	Clean, Dry & End Cap B83	05/01/96.09:00A	05/01/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.81.B3R	1	Transport to Erection B883	05/14/96.03:00P	05/14/96.04:00P	
1.2.1.81.B3S	1	Set & Align B83	05/14/96.04:00P	05/14/96.05:00P	
1.2.1.81.B3T	1	Set Clean Room, Purge & Fit B83	05/15/96.08:00A	05/15/96.09:00A	
1.2.1.81.B3U	2	Weld Joint B83	05/15/96.09:00A	05/15/96.11:00A	
1.2.1.81.B3V	2	Leak Test Joint B83	05/15/96.11:00A	05/15/96.02:00P	
1.2.1.81.B3W	2	Install Tube Supports B83	05/15/96.11:00A	05/15/96.02:00P	
1.2.1.81.B3X	2	Remove Equip'mt, Clean & Cap B83	05/15/96.02:00P	05/15/96.04:00P	
1.2.1.81.B4A	1	Unload,Rec/Insp Tube B84	04/23/96.11:00A	04/23/96.12:00P	
1.2.1.81.B4B	1	Move to Stiff Fit Up Stat. B84	04/26/96.01:00P	04/26/96.02:00P	
1.2.1.81.B4C	1	Set-up & Purge B84	04/26/96.02:00P	04/26/96.03:00P	
1.2.1.81.B4D	2	Fit Stiffeners B84	04/26/96.03:00P	04/26/96.05:00P	
1.2.1.81.B4E	4	Weld Stiffeners B84	04/29/96.08:00A	04/29/96.12:00P	
1.2.1.81.B4F	1	Move to Exp.Bellows Stat. B84	04/29/96.01:00P	04/29/96.02:00P	
1.2.1.81.B4G	3	Fit,Purge,Weld Exp. Bellows B84	04/29/96.02:00P	04/29/96.05:00P	
1.2.1.81.B4H	1	Inspect, Install End Caps B84	04/30/96.08:00A	04/30/96.09:00A	
1.2.1.81.B4J	1	Move to Test Area B84	05/01/96.09:00A	05/01/96.10:00A	
1.2.1.81.B4K	1	Pre-Clean & Black Light B84	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.81.B4L	30	Leak Test B84	05/01/96.11:00A	05/02/96.05:00P	
1.2.1.81.B4O	1	Move to Post Test Storage B84	05/03/96.08:00A	05/03/96.09:00A	
1.2.1.81.B4P	1	Clean, Dry & End Cap B84	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.81.B4R	1	Transport to Erection B84	05/16/96.01:00P	05/16/96.02:00P	
1.2.1.81.B4S	1	Set & Align B84	05/16/96.02:00P	05/16/96.03:00P	
1.2.1.81.B4T	1	Set Clean Room, Purge & Fit B84	05/16/96.03:00P	05/16/96.04:00P	
1.2.1.81.B4U	2	Weld Joint B84	05/16/96.04:00P	05/17/96.09:00A	
1.2.1.81.B4V	2	Leak Test Joint B84	05/17/96.09:00A	05/17/96.11:00A	
1.2.1.81.B4W	2	Install Tube Supports B84	05/17/96.09:00A	05/17/96.11:00A	
1.2.1.81.B4X	2	Remove Equip'mt, Clean & Cap B84	05/17/96.11:00A	05/17/96.02:00P	
1.2.1.81.B5A	1	Unload,Rec/Insp Tube B85	04/23/96.01:00P	04/23/96.02:00P	
1.2.1.81.B5B	1	Move to Stiff Fit Up Stat. B85	04/29/96.02:00P	04/29/96.03:00P	
1.2.1.81.B5C	1	Set-up & Purge B85	04/29/96.03:00P	04/29/96.04:00P	
1.2.1.81.B5D	2	Fit Stiffeners B85	04/29/96.04:00P	04/30/96.09:00A	
1.2.1.81.B5E	4	Weld Stiffeners B85	04/30/96.09:00A	04/30/96.02:00P	
1.2.1.81.B5F	1	Move to Exp.Bellows Stat. B85	05/01/96.10:00A	05/01/96.11:00A	
1.2.1.81.B5G	3	Fit,Purge,Weld Exp. Bellows B85	05/01/96.11:00A	05/01/96.03:00P	
1.2.1.81.B5H	1	Inspect, Install End Caps B85	05/01/96.03:00P	05/01/96.04:00P	
1.2.1.81.B5J	1	Move to Test Area B85	05/03/96.09:00A	05/03/96.10:00A	
1.2.1.81.B5K	1	Pre-Clean & Black Light B85	05/03/96.10:00A	05/03/96.11:00A	
1.2.1.81.B5L	30	Leak Test B85	05/03/96.11:00A	05/04/96.05:00P	
1.2.1.81.B5O	1	Move to Post Test Storage B85	05/06/96.08:00A	05/06/96.09:00A	
1.2.1.81.B5P	1	Clean, Dry & End Cap B85	05/06/96.09:00A	05/06/96.10:00A	
1.2.1.81.B5R	1	Transport to Erection B85	05/20/96.10:00A	05/20/96.11:00A	
1.2.1.81.B5S	1	Set & Align B85	05/20/96.11:00A	05/20/96.12:00P	
1.2.1.81.B5T	1	Set Clean Room, Purge & Fit B85	05/20/96.01:00P	05/20/96.02:00P	
1.2.1.81.B5U	2	Weld Joint B85	05/20/96.02:00P	05/20/96.04:00P	
1.2.1.81.B5V	2	Leak Test Joint B85	05/20/96.04:00P	05/21/96.09:00A	
1.2.1.81.B5W	2	Install Tube Supports B85	05/20/96.04:00P	05/21/96.09:00A	
1.2.1.81.B5X	2	Remove Equip'mt, Clean & Cap B85	05/21/96.09:00A	05/21/96.11:00A	
1.2.1.86	163	Cans 86-90	05/06/96.04:00P	06/04/96.10:00A	
1.2.1.86.1A	1	Unload,Rec/Insp Tube 86	05/07/96.08:00A	05/07/96.09:00A	
1.2.1.86.1B	1	Move to Stiff Fit Up Stat. 86	05/07/96.09:00A	05/07/96.10:00A	
1.2.1.86.1C	1	Set-up & Purge 86	05/07/96.10:00A	05/07/96.11:00A	
1.2.1.86.1D	2	Fit Stiffeners 86	05/07/96.11:00A	05/07/96.02:00P	
1.2.1.86.1E	4	Weld Stiffeners 86	05/07/96.02:00P	05/08/96.09:00A	
1.2.1.86.1F	1	Inspect, Install End Caps 86	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.86.1H	1	Move to Test Area 86	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.86.1I	1	Pre-Clean & Black Light 86	05/08/96.11:00A	05/08/96.12:00P	
1.2.1.86.1J	30	Leak Test 86	05/08/96.12:00P	05/09/96.06:00P	
1.2.1.86.1M	1	Move to Post Test Storage 86	05/10/96.08:00A	05/10/96.09:00A	
1.2.1.86.1N	1	Clean, Dry & End Cap 86	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.86.1P	1	Transport to Erection 86	05/23/96.09:00A	05/23/96.10:00A	
1.2.1.86.1Q	1	Set & Align 86	05/23/96.10:00A	05/23/96.11:00A	
1.2.1.86.1R	1	Set Clean Room, Purge & Fit 86	05/23/96.11:00A	05/23/96.12:00P	
1.2.1.86.1S	2	Weld Joint 86	05/23/96.01:00P	05/23/96.03:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.86.1T	2	Leak Test Joint 86	05/23/96.03:00P	05/23/96.05:00P	
1.2.1.86.1U	2	Install Tube Supports 86	05/23/96.03:00P	05/23/96.05:00P	
1.2.1.86.1V	2	Remove Equip'mt, Clean & Cap 86	05/24/96.08:00A	05/24/96.10:00A	
1.2.1.86.2A	1	Unload,Rec. & Inspect 87	05/07/96.09:00A	05/07/96.10:00A	
1.2.1.86.2B	1	Move to Stiff Fit Up Stat. 87	05/08/96.11:00A	05/08/96.12:00P	
1.2.1.86.2C	1	Set-up & Purge 87	05/08/96.01:00P	05/08/96.02:00P	
1.2.1.86.2D	2	Fit Stiffeners 87	05/08/96.02:00P	05/08/96.04:00P	
1.2.1.86.2E	4	Weld Stiffeners 87	05/08/96.04:00P	05/09/96.11:00A	
1.2.1.86.2F	1	Inspect, Install End Caps 87	05/09/96.11:00A	05/09/96.12:00P	
1.2.1.86.2H	1	Move to Test Area 87	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.86.2I	1	Pre-Clean & Black Light 87	05/10/96.10:00A	05/10/96.11:00A	
1.2.1.86.2J	30	Leak Test 87	05/10/96.11:00A	05/11/96.05:00P	
1.2.1.86.2M	1	Move to Post Test Storage 87	05/13/96.08:00A	05/13/96.09:00A	
1.2.1.86.2N	1	Clean, Dry & End Cap 87	05/13/96.09:00A	05/13/96.10:00A	
1.2.1.86.2P	1	Transport to Erection 87	05/24/96.04:00P	05/24/96.05:00P	
1.2.1.86.2Q	1	Set & Align 87	05/27/96.08:00A	05/27/96.09:00A	
1.2.1.86.2R	1	Set Clean Room, Purge & Fit 87	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.86.2S	2	Weld Joint 87	05/27/96.10:00A	05/27/96.12:00P	
1.2.1.86.2T	2	Leak Test Joint 87	05/27/96.01:00P	05/27/96.03:00P	
1.2.1.86.2U	2	Install Tube Supports 87	05/27/96.01:00P	05/27/96.03:00P	
1.2.1.86.2V	2	Remove Equip'mt, Clean & Cap 87	05/27/96.03:00P	05/27/96.05:00P	
1.2.1.86.3A	1	Unload,Rec/Insp Tube 88	05/07/96.10:00A	05/07/96.11:00A	
1.2.1.86.3B	1	Move to Stiff Fit Up Stat. 88	05/10/96.10:00A	05/10/96.11:00A	
1.2.1.86.3C	1	Set-up & Purge 88	05/10/96.11:00A	05/10/96.12:00P	
1.2.1.86.3D	2	Fit Stiffeners 88	05/10/96.01:00P	05/10/96.03:00P	
1.2.1.86.3E	4	Weld Stiffeners 88	05/10/96.03:00P	05/13/96.10:00A	
1.2.1.86.3F	1	Inspect, Install End Caps 88	05/13/96.10:00A	05/13/96.11:00A	
1.2.1.86.3H	1	Move to Test Area 88	05/13/96.11:00A	05/13/96.12:00P	
1.2.1.86.3I	1	Pre-Clean & Black Light 88	05/13/96.01:00P	05/13/96.02:00P	
1.2.1.86.3J	30	Leak Test 88	05/13/96.02:00P	05/14/96.08:00P	
1.2.1.86.3M	1	Move to Post Test Storage 88	05/15/96.08:00A	05/15/96.09:00A	
1.2.1.86.3N	1	Clean, Dry & End Cap 88	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.86.3P	1	Transport to Erection 88	05/28/96.02:00P	05/28/96.03:00P	
1.2.1.86.3Q	1	Set & Align 88	05/28/96.03:00P	05/28/96.04:00P	
1.2.1.86.3R	1	Set Clean Room, Purge & Fit 88	05/28/96.04:00P	05/28/96.05:00P	
1.2.1.86.3S	2	Weld Joint 88	05/29/96.08:00A	05/29/96.10:00A	
1.2.1.86.3T	2	Leak Test Joint 88	05/29/96.10:00A	05/29/96.12:00P	
1.2.1.86.3U	2	Install Tube Supports 88	05/29/96.10:00A	05/29/96.12:00P	
1.2.1.86.3V	2	Remove Equip'mt, Clean & Cap 88	05/29/96.01:00P	05/29/96.03:00P	
1.2.1.86.4A	1	Unload,Rec/Insp Tube 89	05/07/96.11:00A	05/07/96.12:00P	
1.2.1.86.4B	1	Move to Stiff Fit Up Stat. 89	05/13/96.01:00P	05/13/96.02:00P	
1.2.1.86.4C	1	Set-up & Purge 89	05/13/96.02:00P	05/13/96.03:00P	
1.2.1.86.4D	2	Fit Stiffeners 89	05/13/96.03:00P	05/13/96.05:00P	
1.2.1.86.4E	4	Weld Stiffeners 89	05/14/96.08:00A	05/14/96.12:00P	
1.2.1.86.4F	1	Inspect, Install End Caps 89	05/14/96.01:00P	05/14/96.02:00P	
1.2.1.86.4H	1	Move to Test Area 89	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.86.4I	1	Pre-Clean & Black Light 89	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.86.4J	30	Leak Test 89	05/15/96.11:00A	05/16/96.05:00P	
1.2.1.86.4M	1	Move to Post Test Storage 89	05/17/96.08:00A	05/17/96.09:00A	
1.2.1.86.4N	1	Clean, Dry & End Cap 89	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.86.4P	1	Transport to Erection 89	05/30/96.11:00A	05/30/96.12:00P	
1.2.1.86.4Q	1	Set & Align 89	05/30/96.01:00P	05/30/96.02:00P	
1.2.1.86.4R	1	Set Clean Room, Purge & Fit 89	05/30/96.02:00P	05/30/96.03:00P	
1.2.1.86.4S	2	Weld Joint 89	05/30/96.03:00P	05/30/96.05:00P	
1.2.1.86.4T	2	Leak Test Joint 89	05/31/96.08:00A	05/31/96.10:00A	
1.2.1.86.4U	2	Install Tube Supports 89	05/31/96.08:00A	05/31/96.10:00A	
1.2.1.86.4V	2	Remove Equip'mt, Clean & Cap 89	05/31/96.10:00A	05/31/96.12:00P	
1.2.1.86.5A	1	Unload,Rec/Insp Tube 90	05/07/96.01:00P	05/07/96.02:00P	
1.2.1.86.5B	1	Move to Stiff Fit Up Stat. 90	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.86.5C	1	Set-up & Purge 90	05/15/96.11:00A	05/15/96.12:00P	
1.2.1.86.5D	1	F/W Pump Port Reinf. 90	05/15/96.01:00P	05/15/96.02:00P	
1.2.1.86.5E	2	Fit Stiffeners 90	05/15/96.02:00P	05/15/96.04:00P	
1.2.1.86.5F	4	Weld Stiffeners 90	05/15/96.04:00P	05/16/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.86.5G	1	Move to P.Port Stat. 90	05/16/96.11:00A	05/16/96.12:00P	
1.2.1.86.5H	1	Setup & Bore 10" Inlet90	05/16/96.01:00P	05/16/96.02:00P	
1.2.1.86.5I	2	Purge/F/W Pump Port 90	05/16/96.02:00P	05/16/96.04:00P	
1.2.1.86.5J	1	Inspect, Install End Caps 90	05/16/96.04:00P	05/16/96.05:00P	
1.2.1.86.5L	1	Move to Test Area 90	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.86.5M	1	Pre-Clean & Black Light 90	05/17/96.10:00A	05/17/96.11:00A	
1.2.1.86.5N	30	Leak Test 90	05/17/96.11:00A	05/18/96.05:00P	
1.2.1.86.5Q	1	Move to Post Test Storage 90	05/20/96.08:00A	05/20/96.09:00A	
1.2.1.86.5R	1	Clean, Dry & End Cap90	05/20/96.09:00A	05/20/96.10:00A	
1.2.1.86.5T	1	Transport to Erection 90	06/03/96.09:00A	06/03/96.10:00A	
1.2.1.86.5U	1	Set & Align 90	06/03/96.10:00A	06/03/96.11:00A	
1.2.1.86.5V	1	Set Clean Room, Purge & Fit 90	06/03/96.11:00A	06/03/96.12:00P	
1.2.1.86.5W	2	Weld Joint 90	06/03/96.01:00P	06/03/96.03:00P	
1.2.1.86.5X	2	Leak Test Joint 90	06/03/96.03:00P	06/03/96.05:00P	
1.2.1.86.5Y	2	Install Tube Supports 90	06/03/96.03:00P	06/03/96.05:00P	
1.2.1.86.5Z	2	Remove Equip'mt, Clean & Cap 90	06/04/96.08:00A	06/04/96.10:00A	
1.2.1.86.B1A	1	Unload,Rec/Insp Tube B86	05/07/96.08:00A	05/07/96.09:00A	
1.2.1.86.B1B	1	Move to Stiff Fit Up Stat. B86	05/07/96.09:00A	05/07/96.10:00A	
1.2.1.86.B1C	1	Set-up & Purge B86	05/07/96.10:00A	05/07/96.11:00A	
1.2.1.86.B1D	2	Fit Stiffeners B86	05/07/96.11:00A	05/07/96.02:00P	
1.2.1.86.B1E	4	Weld Stiffeners B86	05/07/96.02:00P	05/08/96.09:00A	
1.2.1.86.B1F	1	Move to Exp.Bellows Stat. B86	05/08/96.09:00A	05/08/96.10:00A	
1.2.1.86.B1G	3	Fit,Purge,Weld Exp. Bellows B86	05/08/96.10:00A	05/08/96.02:00P	
1.2.1.86.B1H	1	Inspect, Install End Caps B86	05/08/96.02:00P	05/08/96.03:00P	
1.2.1.86.B1J	1	Move to Test Area B86	05/08/96.03:00P	05/08/96.04:00P	
1.2.1.86.B1K	1	Pre-Clean & Black Light B86	05/08/96.04:00P	05/08/96.05:00P	
1.2.1.86.B1L	30	Leak Test B86	05/08/96.05:00P	05/09/96.11:00P	
1.2.1.86.B1O	1	Move to Post Test Storage B86	05/10/96.08:00A	05/10/96.09:00A	
1.2.1.86.B1P	1	Clean, Dry & End Cap B86	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.86.B1R	1	Transport to Erection B86	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.86.B1S	1	Set & Align B86	05/22/96.11:00A	05/22/96.12:00P	
1.2.1.86.B1T	1	Set Clean Room, Purge & Fit B86	05/22/96.01:00P	05/22/96.02:00P	
1.2.1.86.B1U	2	Weld Joint B86	05/22/96.02:00P	05/22/96.04:00P	
1.2.1.86.B1V	2	Leak Test Joint B86	05/22/96.04:00P	05/23/96.09:00A	
1.2.1.86.B1W	2	Install Tube Supports B86	05/22/96.04:00P	05/23/96.09:00A	
1.2.1.86.B1X	2	Remove Equip'mt, Clean & Cap B86	05/23/96.09:00A	05/23/96.11:00A	
1.2.1.86.B2A	1	Unload,Rec/Insp Tube B87	05/07/96.09:00A	05/07/96.10:00A	
1.2.1.86.B2B	1	Move to Stiff Fit Up Stat. B87	05/08/96.10:00A	05/08/96.11:00A	
1.2.1.86.B2C	1	Set-up & Purge B87	05/08/96.11:00A	05/08/96.12:00P	
1.2.1.86.B2D	2	Fit Stiffeners B87	05/08/96.01:00P	05/08/96.03:00P	
1.2.1.86.B2E	4	Weld Stiffeners B87	05/08/96.03:00P	05/09/96.10:00A	
1.2.1.86.B2F	1	Move to Exp.Bellows Stat. B87	05/09/96.10:00A	05/09/96.11:00A	
1.2.1.86.B2G	3	Fit,Purge,Weld Exp. Bellows B87	05/09/96.11:00A	05/09/96.03:00P	
1.2.1.86.B2H	1	Inspect, Install End Caps B87	05/09/96.03:00P	05/09/96.04:00P	
1.2.1.86.B2J	1	Move to Test Area B87	05/10/96.09:00A	05/10/96.10:00A	
1.2.1.86.B2K	1	Pre-Clean & Black Light B87	05/10/96.10:00A	05/10/96.11:00A	
1.2.1.86.B2L	30	Leak Test B87	05/10/96.11:00A	05/11/96.05:00P	
1.2.1.86.B2O	1	Move to Post Test Storage 87	05/13/96.08:00A	05/13/96.09:00A	
1.2.1.86.B2P	1	Clean, Dry & End Cap B87	05/13/96.09:00A	05/13/96.10:00A	
1.2.1.86.B2R	1	Transport to Erection B87	05/24/96.08:00A	05/24/96.09:00A	
1.2.1.86.B2S	1	Set & Align B87	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.86.B2T	1	Set Clean Room, Purge & Fit B87	05/24/96.10:00A	05/24/96.11:00A	
1.2.1.86.B2U	2	Weld Joint B87	05/24/96.11:00A	05/24/96.02:00P	
1.2.1.86.B2V	2	Leak Test Joint B87	05/24/96.02:00P	05/24/96.04:00P	
1.2.1.86.B2W	2	Install Tube SupportsB87	05/24/96.02:00P	05/24/96.04:00P	
1.2.1.86.B2X	2	Remove Equip'mt, Clean & Cap B87	05/24/96.04:00P	05/27/96.09:00A	
1.2.1.86.B3A	1	Unload,Rec/Insp Tube B88	05/07/96.10:00A	05/07/96.11:00A	
1.2.1.86.B3B	1	Move to Stiff Fit Up Stat. B88	05/09/96.11:00A	05/09/96.12:00P	
1.2.1.86.B3C	1	Set-up & Purge B88	05/09/96.01:00P	05/09/96.02:00P	
1.2.1.86.B3D	2	Fit Stiffeners B88	05/09/96.02:00P	05/09/96.04:00P	
1.2.1.86.B3E	4	Weld Stiffeners B88	05/09/96.04:00P	05/10/96.11:00A	
1.2.1.86.B3F	1	Move to Exp.Bellows Stat. B88	05/10/96.11:00A	05/10/96.12:00P	
1.2.1.86.B3G	3	Fit,Purge,Weld Exp. Bellows B88	05/10/96.01:00P	05/10/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.86.B3H	1	Inspect, Install End Caps B88	05/10/96.04:00P	05/10/96.05:00P	
1.2.1.86.B3J	1	Move to Test Area B88	05/13/96.09:00A	05/13/96.10:00A	
1.2.1.86.B3K	1	Pre-Clean & Black Light B88	05/13/96.10:00A	05/13/96.11:00A	
1.2.1.86.B3L	30	Leak Test B88	05/13/96.11:00A	05/14/96.05:00P	
1.2.1.86.B3O	1	Move to Post Test Storage B88	05/15/96.08:00A	05/15/96.09:00A	
1.2.1.86.B3P	1	Clean, Dry & End Cap B88	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.86.B3R	1	Transport to Erection B88	05/27/96.03:00P	05/27/96.04:00P	
1.2.1.86.B3S	1	Set & Align B88	05/27/96.04:00P	05/27/96.05:00P	
1.2.1.86.B3T	1	Set Clean Room, Purge & Fit B88	05/28/96.08:00A	05/28/96.09:00A	
1.2.1.86.B3U	2	Weld Joint B88	05/28/96.09:00A	05/28/96.11:00A	
1.2.1.86.B3V	2	Leak Test Joint B88	05/28/96.11:00A	05/28/96.02:00P	
1.2.1.86.B3W	2	Install Tube Supports B88	05/28/96.11:00A	05/28/96.02:00P	
1.2.1.86.B3X	2	Remove Equip'mt, Clean & Cap B88	05/28/96.02:00P	05/28/96.04:00P	
1.2.1.86.B4A	1	Unload,Rec/Insp Tube B89	05/07/96.11:00A	05/07/96.12:00P	
1.2.1.86.B4B	1	Move to Stiff Fit Up Stat. B89	05/10/96.01:00P	05/10/96.02:00P	
1.2.1.86.B4C	1	Set-up & Purge B89	05/10/96.02:00P	05/10/96.03:00P	
1.2.1.86.B4D	2	Fit Stiffeners B89	05/10/96.03:00P	05/10/96.05:00P	
1.2.1.86.B4E	4	Weld Stiffeners B89	05/13/96.08:00A	05/13/96.12:00P	
1.2.1.86.B4F	1	Move to Exp.Bellows Stat. B89	05/13/96.01:00P	05/13/96.02:00P	
1.2.1.86.B4G	3	Fit,Purge,Weld Exp. Bellows B89	05/13/96.02:00P	05/13/96.05:00P	
1.2.1.86.B4H	1	Inspect, Install End Caps B89	05/14/96.08:00A	05/14/96.09:00A	
1.2.1.86.B4J	1	Move to Test Area B89	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.86.B4K	1	Pre-Clean & Black Light B89	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.86.B4L	30	Leak Test B89	05/15/96.11:00A	05/16/96.05:00P	
1.2.1.86.B4O	1	Move to Post Test Storage B89	05/17/96.08:00A	05/17/96.09:00A	
1.2.1.86.B4P	1	Clean, Dry & End Cap B89	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.86.B4R	1	Transport to Erection B89	05/29/96.01:00P	05/29/96.02:00P	
1.2.1.86.B4S	1	Set & Align B89	05/29/96.02:00P	05/29/96.03:00P	
1.2.1.86.B4T	1	Set Clean Room, Purge & Fit B89	05/29/96.03:00P	05/29/96.04:00P	
1.2.1.86.B4U	2	Weld Joint B89	05/29/96.04:00P	05/30/96.09:00A	
1.2.1.86.B4V	2	Leak Test Joint B89	05/30/96.09:00A	05/30/96.11:00A	
1.2.1.86.B4W	2	Install Tube Supports B89	05/30/96.09:00A	05/30/96.11:00A	
1.2.1.86.B4X	2	Remove Equip'mt, Clean & Cap B89	05/30/96.11:00A	05/30/96.02:00P	
1.2.1.86.B5A	1	Unload,Rec/Insp Tube B90	05/07/96.01:00P	05/07/96.02:00P	
1.2.1.86.B5B	1	Move to Stiff Fit Up Stat. B90	05/13/96.02:00P	05/13/96.03:00P	
1.2.1.86.B5C	1	Set-up & Purge B90	05/13/96.03:00P	05/13/96.04:00P	
1.2.1.86.B5D	2	Fit Stiffeners B90	05/13/96.04:00P	05/14/96.09:00A	
1.2.1.86.B5E	4	Weld Stiffeners B90	05/14/96.09:00A	05/14/96.02:00P	
1.2.1.86.B5F	1	Move to Exp.Bellows Stat. B90	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.86.B5G	3	Fit,Purge,Weld Exp. Bellows B90	05/15/96.11:00A	05/15/96.03:00P	
1.2.1.86.B5H	1	Inspect, Install End Caps B90	05/15/96.03:00P	05/15/96.04:00P	
1.2.1.86.B5J	1	Move to Test Area B90	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.86.B5K	1	Pre-Clean & Black Light B90	05/17/96.10:00A	05/17/96.11:00A	
1.2.1.86.B5L	30	Leak Test B90	05/17/96.11:00A	05/18/96.05:00P	
1.2.1.86.B5O	1	Move to Post Test Storage B90	05/20/96.08:00A	05/20/96.09:00A	
1.2.1.86.B5P	1	Clean, Dry & End Cap B90	05/20/96.09:00A	05/20/96.10:00A	
1.2.1.86.B5R	1	Transport to Erection B90	05/31/96.10:00A	05/31/96.11:00A	
1.2.1.86.B5S	1	Set & Align B90	05/31/96.11:00A	05/31/96.12:00P	
1.2.1.86.B5T	1	Set Clean Room, Purge & Fit B90	05/31/96.01:00P	05/31/96.02:00P	
1.2.1.86.B5U	2	Weld Joint B90	05/31/96.02:00P	05/31/96.04:00P	
1.2.1.86.B5V	2	Leak Test Joint 90	05/31/96.04:00P	06/03/96.09:00A	
1.2.1.86.B5W	2	Install Tube Supports B90	05/31/96.04:00P	06/03/96.09:00A	
1.2.1.86.B5X	2	Remove Equip'mt, Clean & Cap B90	06/03/96.09:00A	06/03/96.11:00A	
1.2.1.91	195	Cans 91-95	05/13/96.04:00P	06/17/96.10:00A	
1.2.1.91.1A	1	Unload,Rec/Insp Tube 91	05/14/96.08:00A	05/14/96.09:00A	
1.2.1.91.1B	1	Move to Stiff Fit Up Stat. 91	05/14/96.09:00A	05/14/96.10:00A	
1.2.1.91.1C	1	Set-up & Purge 91	05/14/96.10:00A	05/14/96.11:00A	
1.2.1.91.1D	2	Fit Stiffeners 91	05/14/96.11:00A	05/14/96.02:00P	
1.2.1.91.1E	4	Weld Stiffeners 91	05/14/96.02:00P	05/15/96.09:00A	
1.2.1.91.1F	1	Inspect, Install End Caps 91	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.91.1H	1	Move to Test Area 91	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.91.1I	1	Pre-Clean & Black Light 91	05/15/96.11:00A	05/15/96.12:00P	
1.2.1.91.1J	30	Leak Test 91	05/15/96.12:00P	05/16/96.06:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.91.1M	1	Move to Post Test Storage 91	05/17/96.08:00A	05/17/96.09:00A	
1.2.1.91.1N	1	Clean, Dry & End Cap 91	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.91.1P	1	Transport to Erection 91	06/05/96.09:00A	06/05/96.10:00A	
1.2.1.91.1Q	1	Set & Align 91	06/05/96.10:00A	06/05/96.11:00A	
1.2.1.91.1R	1	Set Clean Room, Purge & Fit 91	06/05/96.11:00A	06/05/96.12:00P	
1.2.1.91.1S	2	Weld Joint 9	06/05/96.01:00P	06/05/96.03:00P	
1.2.1.91.1T	2	Leak Test Joint 91	06/05/96.03:00P	06/05/96.05:00P	
1.2.1.91.1U	2	Install Tube Supports 91	06/05/96.03:00P	06/05/96.05:00P	
1.2.1.91.1V	2	Remove Equip'mt, Clean & Cap 91	06/06/96.08:00A	06/06/96.10:00A	
1.2.1.91.2A	1	Unload,Rec. & Inspect 92	05/14/96.09:00A	05/14/96.10:00A	
1.2.1.91.2B	1	Move to Stiff Fit Up Stat. 92	05/15/96.11:00A	05/15/96.12:00P	
1.2.1.91.2C	1	Set-up & Purge 92	05/15/96.01:00P	05/15/96.02:00P	
1.2.1.91.2D	2	Fit Stiffeners 92	05/15/96.02:00P	05/15/96.04:00P	
1.2.1.91.2E	4	Weld Stiffeners 92	05/15/96.04:00P	05/16/96.11:00A	
1.2.1.91.2F	1	Inspect, Install End Caps 92	05/16/96.11:00A	05/16/96.12:00P	
1.2.1.91.2H	1	Move to Test Area 92	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.91.2I	1	Pre-Clean & Black Light 92	05/17/96.10:00A	05/17/96.11:00A	
1.2.1.91.2J	30	Leak Test 92	05/17/96.11:00A	05/18/96.05:00P	
1.2.1.91.2M	1	Move to Post Test Storage 92	05/20/96.08:00A	05/20/96.09:00A	
1.2.1.91.2N	1	Clean, Dry & End Cap 92	05/20/96.09:00A	05/20/96.10:00A	
1.2.1.91.2P	1	Transport to Erection 992	06/06/96.04:00P	06/06/96.05:00P	
1.2.1.91.2Q	1	Set & Align 92	06/07/96.08:00A	06/07/96.09:00A	
1.2.1.91.2R	1	Set Clean Room, Purge & Fit 92	06/07/96.09:00A	06/07/96.10:00A	
1.2.1.91.2S	2	Weld Joint 92	06/07/96.10:00A	06/07/96.12:00P	
1.2.1.91.2T	2	Leak Test Joint 92	06/07/96.01:00P	06/07/96.03:00P	
1.2.1.91.2U	2	Install Tube Supports 92	06/07/96.01:00P	06/07/96.03:00P	
1.2.1.91.2V	2	Remove Equip'mt, Clean & Cap 92	06/07/96.03:00P	06/07/96.05:00P	
1.2.1.91.3A	1	Unload,Rec/Insp Tube 93	05/14/96.10:00A	05/14/96.11:00A	
1.2.1.91.3B	1	Move to Stiff Fit Up Stat. 93	05/17/96.10:00A	05/17/96.11:00A	
1.2.1.91.3C	1	Set-up & Purge 93	05/17/96.11:00A	05/17/96.12:00P	
1.2.1.91.3D	2	Fit Stiffeners 93	05/17/96.01:00P	05/17/96.03:00P	
1.2.1.91.3E	4	Weld Stiffeners 93	05/17/96.03:00P	05/20/96.10:00A	
1.2.1.91.3F	1	Inspect, Install End Caps 93	05/20/96.10:00A	05/20/96.11:00A	
1.2.1.91.3H	1	Move to Test Area 93	05/20/96.11:00A	05/20/96.12:00P	
1.2.1.91.3I	1	Pre-Clean & Black Light 93	05/20/96.01:00P	05/20/96.02:00P	
1.2.1.91.3J	30	Leak Test 93	05/20/96.02:00P	05/21/96.08:00P	
1.2.1.91.3M	1	Move to Post Test Storage 93	05/22/96.08:00A	05/22/96.09:00A	
1.2.1.91.3N	1	Clean, Dry & End Cap 93	05/22/96.09:00A	05/22/96.10:00A	
1.2.1.91.3P	1	Transport to Erection 93	06/10/96.02:00P	06/10/96.03:00P	
1.2.1.91.3Q	1	Set & Align 93	06/10/96.03:00P	06/10/96.04:00P	
1.2.1.91.3R	1	Set Clean Room, Purge & Fit 93	06/10/96.04:00P	06/10/96.05:00P	
1.2.1.91.3S	2	Weld Joint 93	06/11/96.08:00A	06/11/96.10:00A	
1.2.1.91.3T	2	Leak Test Joint 93	06/11/96.10:00A	06/11/96.12:00P	
1.2.1.91.3U	2	Install Tube Supports 93	06/11/96.10:00A	06/11/96.12:00P	
1.2.1.91.3V	2	Remove Equip'mt, Clean & Cap 93	06/11/96.01:00P	06/11/96.03:00P	
1.2.1.91.4A	1	Unload,Rec/Insp Tube 94	05/14/96.11:00A	05/14/96.12:00P	
1.2.1.91.4B	1	Move to Stiff Fit Up Stat. 94	05/20/96.01:00P	05/20/96.02:00P	
1.2.1.91.4C	1	Set-up & Purge 94	05/20/96.02:00P	05/20/96.03:00P	
1.2.1.91.4D	2	Fit Stiffeners 94	05/20/96.03:00P	05/20/96.05:00P	
1.2.1.91.4E	4	Weld Stiffeners 94	05/21/96.08:00A	05/21/96.12:00P	
1.2.1.91.4F	1	Inspect, Install End Caps 94	05/21/96.01:00P	05/21/96.02:00P	
1.2.1.91.4H	1	Move to Test Area 94	05/22/96.09:00A	05/22/96.10:00A	
1.2.1.91.4I	1	Pre-Clean & Black Light 94	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.91.4J	30	Leak Test 94	05/22/96.11:00A	05/23/96.05:00P	
1.2.1.91.4M	1	Move to Post Test Storage 94	05/24/96.08:00A	05/24/96.09:00A	
1.2.1.91.4N	1	Clean, Dry & End Cap 94	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.91.4P	1	Transport to Erection 94	06/12/96.11:00A	06/12/96.12:00P	
1.2.1.91.4Q	1	Set & Align 994	06/12/96.01:00P	06/12/96.02:00P	
1.2.1.91.4R	1	Set Clean Room, Purge & Fit 94	06/12/96.02:00P	06/12/96.03:00P	
1.2.1.91.4S	2	Weld Joint 94	06/12/96.03:00P	06/12/96.05:00P	
1.2.1.91.4T	2	Leak Test Joint 94	06/13/96.08:00A	06/13/96.10:00A	
1.2.1.91.4U	2	Install Tube Supports 94	06/13/96.08:00A	06/13/96.10:00A	
1.2.1.91.4V	2	Remove Equip'mt, Clean & Cap 94	06/13/96.10:00A	06/13/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.91.5A	1	Unload,Rec/Insp Tube 95	05/14/96.01:00P	05/14/96.02:00P	
1.2.1.91.5B	1	Move to Stiff Fit Up Stat. 95	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.91.5C	1	Set-up & Purge 95	05/22/96.11:00A	05/22/96.12:00P	
1.2.1.91.5D	1	F/W Pump Port Reinf. 95	05/22/96.01:00P	05/22/96.02:00P	
1.2.1.91.5E	2	Fit Stiffeners 95	05/22/96.02:00P	05/22/96.04:00P	
1.2.1.91.5F	4	Weld Stiffeners 95	05/22/96.04:00P	05/23/96.11:00A	
1.2.1.91.5G	1	Move to P.Port Stat. 95	05/23/96.11:00A	05/23/96.12:00P	
1.2.1.91.5H	1	Setup & Bore 10" Inlet 95	05/23/96.01:00P	05/23/96.02:00P	
1.2.1.91.5I	2	Purge/F/W Pump Port 5	05/23/96.02:00P	05/23/96.04:00P	
1.2.1.91.5J	1	Inspect, Install End Caps 5	05/23/96.04:00P	05/23/96.05:00P	
1.2.1.91.5L	1	Move to Test Area 95	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.91.5M	1	Pre-Clean & Black Light 95	05/24/96.10:00A	05/24/96.11:00A	
1.2.1.91.5N	30	Leak Test 95	05/24/96.11:00A	05/25/96.05:00P	
1.2.1.91.5Q	1	Move to Post Test Storage 95	05/27/96.08:00A	05/27/96.09:00A	
1.2.1.91.5R	1	Clean, Dry & End Cap 95	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.91.5T	1	Transport to Erection 95	06/14/96.09:00A	06/14/96.10:00A	
1.2.1.91.5U	1	Set & Align 9	06/14/96.10:00A	06/14/96.11:00A	
1.2.1.91.5V	1	Set Clean Room, Purge & Fit 95	06/14/96.11:00A	06/14/96.12:00P	
1.2.1.91.5W	2	Weld Joint 95	06/14/96.01:00P	06/14/96.03:00P	
1.2.1.91.5X	2	Leak Test Joint 95	06/14/96.03:00P	06/14/96.05:00P	
1.2.1.91.5Y	2	Install Tube Supports 95	06/14/96.03:00P	06/14/96.05:00P	
1.2.1.91.5Z	2	Remove Equip'mt, Clean & Cap95	06/17/96.08:00A	06/17/96.10:00A	
1.2.1.91.B1A	1	Unload,Rec/Insp Tube B91	05/14/96.08:00A	05/14/96.09:00A	
1.2.1.91.B1B	1	Move to Stiff Fit Up Stat. B91	05/14/96.09:00A	05/14/96.10:00A	
1.2.1.91.B1C	1	Set-up & Purge B91	05/14/96.10:00A	05/14/96.11:00A	
1.2.1.91.B1D	2	Fit Stiffeners B91	05/14/96.11:00A	05/14/96.02:00P	
1.2.1.91.B1E	4	Weld Stiffeners B91	05/14/96.02:00P	05/15/96.09:00A	
1.2.1.91.B1F	1	Move to Exp.Bellows Stat. B91	05/15/96.09:00A	05/15/96.10:00A	
1.2.1.91.B1G	3	Fit,Purge,Weld Exp. Bellows B92	05/15/96.10:00A	05/15/96.02:00P	
1.2.1.91.B1H	1	Inspect, Install End Caps B91	05/15/96.02:00P	05/15/96.03:00P	
1.2.1.91.B1J	1	Move to Test Area B91	05/15/96.03:00P	05/15/96.04:00P	
1.2.1.91.B1K	1	Pre-Clean & Black Light B91	05/15/96.04:00P	05/15/96.05:00P	
1.2.1.91.B1L	30	Leak Test B91	05/15/96.05:00P	05/16/96.11:00P	
1.2.1.91.B1O	1	Move to Post Test Storage B91	05/17/96.08:00A	05/17/96.09:00A	
1.2.1.91.B1P	1	Clean, Dry & End Cap B91	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.91.B1R	1	Transport to Erection B91	06/04/96.10:00A	06/04/96.11:00A	
1.2.1.91.B1S	1	Set & Align B91	06/04/96.11:00A	06/04/96.12:00P	
1.2.1.91.B1T	1	Set Clean Room, Purge & Fit B91	06/04/96.01:00P	06/04/96.02:00P	
1.2.1.91.B1U	2	Weld Joint B91	06/04/96.02:00P	06/04/96.04:00P	
1.2.1.91.B1V	2	Leak Test Joint B91	06/04/96.04:00P	06/05/96.09:00A	
1.2.1.91.B1W	2	Install Tube Supports B91	06/04/96.04:00P	06/05/96.09:00A	
1.2.1.91.B1X	2	Remove Equip'mt, Clean & Cap B91	06/05/96.09:00A	06/05/96.11:00A	
1.2.1.91.B2A	1	Unload,Rec/Insp Tube B92	05/14/96.09:00A	05/14/96.10:00A	
1.2.1.91.B2B	1	Move to Stiff Fit Up Stat. B92	05/15/96.10:00A	05/15/96.11:00A	
1.2.1.91.B2C	1	Set-up & Purge B92	05/15/96.11:00A	05/15/96.12:00P	
1.2.1.91.B2D	2	Fit Stiffeners B92	05/15/96.01:00P	05/15/96.03:00P	
1.2.1.91.B2E	4	Weld Stiffeners B92	05/15/96.03:00P	05/16/96.10:00A	
1.2.1.91.B2F	1	Move to Exp.Bellows Stat. B92	05/16/96.10:00A	05/16/96.11:00A	
1.2.1.91.B2G	3	Fit,Purge,Weld Exp. Bellows B92	05/16/96.11:00A	05/16/96.03:00P	
1.2.1.91.B2H	1	Inspect, Install End Caps B92	05/16/96.03:00P	05/16/96.04:00P	
1.2.1.91.B2J	1	Move to Test Area B92	05/17/96.09:00A	05/17/96.10:00A	
1.2.1.91.B2K	1	Pre-Clean & Black Light B92	05/17/96.10:00A	05/17/96.11:00A	
1.2.1.91.B2L	30	Leak Test B92	05/17/96.11:00A	05/18/96.05:00P	
1.2.1.91.B2O	1	Move to Post Test Storage B92	05/20/96.08:00A	05/20/96.09:00A	
1.2.1.91.B2P	1	Clean, Dry & End Cap B92	05/20/96.09:00A	05/20/96.10:00A	
1.2.1.91.B2R	1	Transport to Erection B92	06/06/96.08:00A	06/06/96.09:00A	
1.2.1.91.B2S	1	Set & Align B92	06/06/96.09:00A	06/06/96.10:00A	
1.2.1.91.B2T	1	Set Clean Room, Purge & Fit B92	06/06/96.10:00A	06/06/96.11:00A	
1.2.1.91.B2U	2	Weld Joint B92	06/06/96.11:00A	06/06/96.02:00P	
1.2.1.91.B2V	2	Leak Test Joint B92	06/06/96.02:00P	06/06/96.04:00P	
1.2.1.91.B2W	2	Install Tube SupportsB92	06/06/96.02:00P	06/06/96.04:00P	
1.2.1.91.B2X	2	Remove Equip'mt, Clean & Cap B92	06/06/96.04:00P	06/07/96.09:00A	
1.2.1.91.B3A	1	Unload,Rec/Insp Tube B93	05/14/96.10:00A	05/14/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.91.B3B	1	Move to Stiff Fit Up Stat. B93	05/16/96.11:00A	05/16/96.12:00P	
1.2.1.91.B3C	1	Set-up & Purge B9	05/16/96.01:00P	05/16/96.02:00P	
1.2.1.91.B3D	2	Fit Stiffeners B93	05/16/96.02:00P	05/16/96.04:00P	
1.2.1.91.B3E	4	Weld Stiffeners B9	05/16/96.04:00P	05/17/96.11:00A	
1.2.1.91.B3F	1	Move to Exp.Bellows Stat. B93	05/17/96.11:00A	05/17/96.12:00P	
1.2.1.91.B3G	3	Fit,Purge,Weld Exp. Bellows B93	05/17/96.01:00P	05/17/96.04:00P	
1.2.1.91.B3H	1	Inspect, Install End Caps B93	05/17/96.04:00P	05/17/96.05:00P	
1.2.1.91.B3J	1	Move to Test Area B93	05/20/96.09:00A	05/20/96.10:00A	
1.2.1.91.B3K	1	Pre-Clean & Black Light B93	05/20/96.10:00A	05/20/96.11:00A	
1.2.1.91.B3L	30	Leak Test B93	05/20/96.11:00A	05/21/96.05:00P	
1.2.1.91.B3O	1	Move to Post Test Storage B93	05/22/96.08:00A	05/22/96.09:00A	
1.2.1.91.B3P	1	Clean, Dry & End Cap B93	05/22/96.09:00A	05/22/96.10:00A	
1.2.1.91.B3R	1	Transport to Erection B93	06/07/96.03:00P	06/07/96.04:00P	
1.2.1.91.B3S	1	Set & Align B93	06/07/96.04:00P	06/07/96.05:00P	
1.2.1.91.B3T	1	Set Clean Room, Purge & Fit B93	06/10/96.08:00A	06/10/96.09:00A	
1.2.1.91.B3U	2	Weld Joint B93	06/10/96.09:00A	06/10/96.11:00A	
1.2.1.91.B3V	2	Leak Test Joint B93	06/10/96.11:00A	06/10/96.02:00P	
1.2.1.91.B3W	2	Install Tube Supports B9	06/10/96.11:00A	06/10/96.02:00P	
1.2.1.91.B3X	2	Remove Equip'mt, Clean & Cap B93	06/10/96.02:00P	06/10/96.04:00P	
1.2.1.91.B4A	1	Unload,Rec/Insp Tube B94	05/14/96.11:00A	05/14/96.12:00P	
1.2.1.91.B4B	1	Move to Stiff Fit Up Stat. B94	05/17/96.01:00P	05/17/96.02:00P	
1.2.1.91.B4C	1	Set-up & Purge B94	05/17/96.02:00P	05/17/96.03:00P	
1.2.1.91.B4D	2	Fit Stiffeners B94	05/17/96.03:00P	05/17/96.05:00P	
1.2.1.91.B4E	4	Weld Stiffeners B94	05/20/96.08:00A	05/20/96.12:00P	
1.2.1.91.B4F	1	Move to Exp.Bellows Stat. B94	05/20/96.01:00P	05/20/96.02:00P	
1.2.1.91.B4G	3	Fit,Purge,Weld Exp. Bellows B94	05/20/96.02:00P	05/20/96.05:00P	
1.2.1.91.B4H	1	Inspect, Install End Caps B94	05/21/96.08:00A	05/21/96.09:00A	
1.2.1.91.B4J	1	Move to Test Area B94	05/22/96.09:00A	05/22/96.10:00A	
1.2.1.91.B4K	1	Pre-Clean & Black Light B94	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.91.B4L	30	Leak Test B9	05/22/96.11:00A	05/23/96.05:00P	
1.2.1.91.B4O	1	Move to Post Test Storage B94	05/24/96.08:00A	05/24/96.09:00A	
1.2.1.91.B4P	1	Clean, Dry & End Cap B94	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.91.B4R	1	Transport to Erection B94	06/11/96.01:00P	06/11/96.02:00P	
1.2.1.91.B4S	1	Set & Align B94	06/11/96.02:00P	06/11/96.03:00P	
1.2.1.91.B4T	1	Set Clean Room, Purge & Fit B94	06/11/96.03:00P	06/11/96.04:00P	
1.2.1.91.B4U	2	Weld Joint B94	06/11/96.04:00P	06/12/96.09:00A	
1.2.1.91.B4V	2	Leak Test Joint B94	06/12/96.09:00A	06/12/96.11:00A	
1.2.1.91.B4W	2	Install Tube Supports B94	06/12/96.09:00A	06/12/96.11:00A	
1.2.1.91.B4X	2	Remove Equip'mt, Clean & Cap B94	06/12/96.11:00A	06/12/96.02:00P	
1.2.1.91.B5A	1	Unload,Rec/Insp Tube B95	05/14/96.01:00P	05/14/96.02:00P	
1.2.1.91.B5B	1	Move to Stiff Fit Up Stat. B95	05/20/96.02:00P	05/20/96.03:00P	
1.2.1.91.B5C	1	Set-up & Purge B95	05/20/96.03:00P	05/20/96.04:00P	
1.2.1.91.B5D	2	Fit Stiffeners B95	05/20/96.04:00P	05/21/96.09:00A	
1.2.1.91.B5E	4	Weld Stiffeners B95	05/21/96.09:00A	05/21/96.02:00P	
1.2.1.91.B5F	1	Move to Exp.Bellows Stat. B95	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.91.B5G	3	Fit,Purge,Weld Exp. Bellows B95	05/22/96.11:00A	05/22/96.03:00P	
1.2.1.91.B5H	1	Inspect, Install End Caps B95	05/22/96.03:00P	05/22/96.04:00P	
1.2.1.91.B5J	1	Move to Test Area B95	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.91.B5K	1	Pre-Clean & Black Light B95	05/24/96.10:00A	05/24/96.11:00A	
1.2.1.91.B5L	30	Leak Test B95	05/24/96.11:00A	05/25/96.05:00P	
1.2.1.91.B5O	1	Move to Post Test Storage B95	05/27/96.08:00A	05/27/96.09:00A	
1.2.1.91.B5P	1	Clean, Dry & End Cap B95	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.91.B5R	1	Transport to Erection B95	06/13/96.10:00A	06/13/96.11:00A	
1.2.1.91.B5S	1	Set & Align B95	06/13/96.11:00A	06/13/96.12:00P	
1.2.1.91.B5T	1	Set Clean Room, Purge & Fit B95	06/13/96.01:00P	06/13/96.02:00P	
1.2.1.91.B5U	2	Weld Joint B95	06/13/96.02:00P	06/13/96.04:00P	
1.2.1.91.B5V	2	Leak Test Joint B95	06/13/96.04:00P	06/14/96.09:00A	
1.2.1.91.B5W	2	Install Tube Supports B95	06/13/96.04:00P	06/14/96.09:00A	
1.2.1.91.B5X	2	Remove Equip'mt, Clean & Cap B95	06/14/96.09:00A	06/14/96.11:00A	
1.2.1.96	199	Cans 96-98	05/20/96.04:00P	06/24/96.03:00P	
1.2.1.96.1A	1	Unload,Rec/Insp Tube 96	05/21/96.08:00A	05/21/96.09:00A	
1.2.1.96.1B	1	Move to Stiff Fit Up Stat. 96	05/21/96.09:00A	05/21/96.10:00A	
1.2.1.96.1C	1	Set-up & Purge 96	05/21/96.10:00A	05/21/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.96.1D	2	Fit Stiffeners 96	05/21/96.11:00A	05/21/96.02:00P	
1.2.1.96.1E	4	Weld Stiffeners 96	05/21/96.02:00P	05/22/96.09:00A	
1.2.1.96.1F	1	Inspect, Install End Caps 96	05/22/96.09:00A	05/22/96.10:00A	
1.2.1.96.1H	1	Move to Test Area 96	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.96.1I	1	Pre-Clean & Black Light 96	05/22/96.11:00A	05/22/96.12:00P	
1.2.1.96.1J	30	Leak Test 96	05/22/96.12:00P	05/23/96.06:00P	
1.2.1.96.1M	1	Move to Post Test Storage 96	05/24/96.08:00A	05/24/96.09:00A	
1.2.1.96.1N	1	Clean, Dry & End Cap 96	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.96.1P	1	Transport to Erection 96	06/18/96.09:00A	06/18/96.10:00A	
1.2.1.96.1Q	1	Set & Align 96	06/18/96.10:00A	06/18/96.11:00A	
1.2.1.96.1R	1	Set Clean Room, Purge & Fit 96	06/18/96.11:00A	06/18/96.12:00P	
1.2.1.96.1S	2	Weld Joint 96	06/18/96.01:00P	06/18/96.03:00P	
1.2.1.96.1T	2	Leak Test Joint 96	06/18/96.03:00P	06/18/96.05:00P	
1.2.1.96.1U	2	Install Tube Supports 96	06/18/96.03:00P	06/18/96.05:00P	
1.2.1.96.1V	2	Remove Equip'mt, Clean & Cap 96	06/19/96.08:00A	06/19/96.10:00A	
1.2.1.96.2A	1	Unload,Rec. & Inspect 97	05/21/96.09:00A	05/21/96.10:00A	
1.2.1.96.2B	1	Move to Stiff Fit Up Stat. 97	05/22/96.11:00A	05/22/96.12:00P	
1.2.1.96.2C	1	Set-up & Purge 97	05/22/96.01:00P	05/22/96.02:00P	
1.2.1.96.2D	2	Fit Stiffeners 97	05/22/96.02:00P	05/22/96.04:00P	
1.2.1.96.2E	4	Weld Stiffeners 97	05/22/96.04:00P	05/23/96.11:00A	
1.2.1.96.2F	1	Inspect, Install End Caps 97	05/23/96.11:00A	05/23/96.12:00P	
1.2.1.96.2H	1	Move to Test Area 97	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.96.2I	1	Pre-Clean & Black Light 97	05/24/96.10:00A	05/24/96.11:00A	
1.2.1.96.2J	30	Leak Test 97	05/24/96.11:00A	05/25/96.05:00P	
1.2.1.96.2M	1	Move to Post Test Storage 97	05/27/96.08:00A	05/27/96.09:00A	
1.2.1.96.2N	1	Clean, Dry & End Cap 97	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.96.2P	1	Transport to Erection 97	06/19/96.04:00P	06/19/96.05:00P	
1.2.1.96.2Q	1	Set & Align 97	06/20/96.08:00A	06/20/96.09:00A	
1.2.1.96.2R	1	Set Clean Room, Purge & Fit 97	06/20/96.09:00A	06/20/96.10:00A	
1.2.1.96.2S	2	Weld Joint 97	06/20/96.10:00A	06/20/96.12:00P	
1.2.1.96.2T	2	Leak Test Joint 97	06/20/96.01:00P	06/20/96.03:00P	
1.2.1.96.2U	2	Install Tube Supports 97	06/20/96.01:00P	06/20/96.03:00P	
1.2.1.96.2V	2	Remove Equip'mt, Clean & Cap 97	06/20/96.03:00P	06/20/96.05:00P	
1.2.1.96.3A	1	Unload,Rec/Insp Tube 98	05/21/96.10:00A	05/21/96.11:00A	
1.2.1.96.3B	1	Move to Stiff Fit Up Stat. 98	05/24/96.10:00A	05/24/96.11:00A	
1.2.1.96.3C	1	Set-up & Purge 98	05/24/96.11:00A	05/24/96.12:00P	
1.2.1.96.3D	2	Fit Stiffeners 98	05/24/96.01:00P	05/24/96.03:00P	
1.2.1.96.3E	4	Weld Stiffeners 98	05/24/96.03:00P	05/27/96.10:00A	
1.2.1.96.3F	1	Inspect, Install End Caps 98	05/27/96.10:00A	05/27/96.11:00A	
1.2.1.96.3H	1	Move to Test Area 98	05/27/96.11:00A	05/27/96.12:00P	
1.2.1.96.3I	1	Pre-Clean & Black Light 98	05/27/96.01:00P	05/27/96.02:00P	
1.2.1.96.3J	30	Leak Test 98	05/27/96.02:00P	05/28/96.08:00P	
1.2.1.96.3M	1	Move to Post Test Storage 98	05/29/96.08:00A	05/29/96.09:00A	
1.2.1.96.3N	1	Clean, Dry & End Cap 98	05/29/96.09:00A	05/29/96.10:00A	
1.2.1.96.3P	1	Transport to Erection 98	06/21/96.02:00P	06/21/96.03:00P	
1.2.1.96.3Q	1	Set & Align 98	06/21/96.03:00P	06/21/96.04:00P	
1.2.1.96.3R	1	Set Clean Room, Purge & Fit 98	06/21/96.04:00P	06/21/96.05:00P	
1.2.1.96.3S	2	Weld Joint 98	06/24/96.08:00A	06/24/96.10:00A	
1.2.1.96.3T	2	Leak Test Joint 98	06/24/96.10:00A	06/24/96.12:00P	
1.2.1.96.3U	2	Install Tube Supports 98	06/24/96.10:00A	06/24/96.12:00P	
1.2.1.96.3V	2	Remove Equip'mt, Clean & Cap 98	06/24/96.01:00P	06/24/96.03:00P	
1.2.1.96.B1A	1	Unload,Rec/Insp Tube B96	05/21/96.08:00A	05/21/96.09:00A	
1.2.1.96.B1B	1	Move to Stiff Fit Up Stat. B96	05/21/96.09:00A	05/21/96.10:00A	
1.2.1.96.B1C	1	Set-up & Purge B96	05/21/96.10:00A	05/21/96.11:00A	
1.2.1.96.B1D	2	Fit Stiffeners B96	05/21/96.11:00A	05/21/96.02:00P	
1.2.1.96.B1E	4	Weld Stiffeners B96	05/21/96.02:00P	05/22/96.09:00A	
1.2.1.96.B1F	1	Move to Exp.Bellows Stat. B96	05/22/96.09:00A	05/22/96.10:00A	
1.2.1.96.B1G	3	Fit,Purge,Weld Exp. Bellows B96	05/22/96.10:00A	05/22/96.02:00P	
1.2.1.96.B1H	1	Inspect, Install End Caps B96	05/22/96.02:00P	05/22/96.03:00P	
1.2.1.96.B1J	1	Move to Test Area B96	05/22/96.03:00P	05/22/96.04:00P	
1.2.1.96.B1K	1	Pre-Clean & Black Light B96	05/22/96.04:00P	05/22/96.05:00P	
1.2.1.96.B1L	30	Leak Test B96	05/22/96.05:00P	05/23/96.11:00P	
1.2.1.96.B1O	1	Move to Post Test Storage B96	05/24/96.08:00A	05/24/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.1.96.B1P	1	Clean, Dry & End Cap B96	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.96.B1R	1	Transport to Erection B96	06/17/96.10:00A	06/17/96.11:00A	
1.2.1.96.B1S	1	Set & Align B96	06/17/96.11:00A	06/17/96.12:00P	
1.2.1.96.B1T	1	Set Clean Room, Purge & Fit B96	06/17/96.01:00P	06/17/96.02:00P	
1.2.1.96.B1U	2	Weld Joint B96	06/17/96.02:00P	06/17/96.04:00P	
1.2.1.96.B1V	2	Leak Test Joint B96	06/17/96.04:00P	06/18/96.09:00A	
1.2.1.96.B1W	2	Install Tube Supports B96	06/17/96.04:00P	06/18/96.09:00A	
1.2.1.96.B1X	2	Remove Equip'mt, Clean & Cap B96	06/18/96.09:00A	06/18/96.11:00A	
1.2.1.96.B2A	1	Unload,Rec/Insp Tube B97	05/21/96.09:00A	05/21/96.10:00A	
1.2.1.96.B2B	1	Move to Stiff Fit Up Stat. B97	05/22/96.10:00A	05/22/96.11:00A	
1.2.1.96.B2C	1	Set-up & Purge B97	05/22/96.11:00A	05/22/96.12:00P	
1.2.1.96.B2D	2	Fit Stiffeners B97	05/22/96.01:00P	05/22/96.03:00P	
1.2.1.96.B2E	4	Weld Stiffeners B97	05/22/96.03:00P	05/23/96.10:00A	
1.2.1.96.B2F	1	Move to Exp.Bellows Stat. B97	05/23/96.10:00A	05/23/96.11:00A	
1.2.1.96.B2G	3	Fit,Purge,Weld Exp. Bellows B97	05/23/96.11:00A	05/23/96.03:00P	
1.2.1.96.B2H	1	Inspect, Install End Caps B97	05/23/96.03:00P	05/23/96.04:00P	
1.2.1.96.B2J	1	Move to Test Area B97	05/24/96.09:00A	05/24/96.10:00A	
1.2.1.96.B2K	1	Pre-Clean & Black Light B97	05/24/96.10:00A	05/24/96.11:00A	
1.2.1.96.B2L	30	Leak Test B97	05/24/96.11:00A	05/25/96.05:00P	
1.2.1.96.B2O	1	Move to Post Test Storage B97	05/27/96.08:00A	05/27/96.09:00A	
1.2.1.96.B2P	1	Clean, Dry & End Cap B97	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.96.B2R	1	Transport to Erection B97	06/19/96.08:00A	06/19/96.09:00A	
1.2.1.96.B2S	1	Set & Align B97	06/19/96.09:00A	06/19/96.10:00A	
1.2.1.96.B2T	1	Set Clean Room, Purge & Fit B97	06/19/96.10:00A	06/19/96.11:00A	
1.2.1.96.B2U	2	Weld Joint B97	06/19/96.11:00A	06/19/96.02:00P	
1.2.1.96.B2V	2	Leak Test Joint B97	06/19/96.02:00P	06/19/96.04:00P	
1.2.1.96.B2W	2	Install Tube Supports B97	06/19/96.02:00P	06/19/96.04:00P	
1.2.1.96.B2X	2	Remove Equip'mt, Clean & Cap B97	06/19/96.04:00P	06/20/96.09:00A	
1.2.1.96.B3A	1	Unload,Rec/Insp Tube B98	05/21/96.10:00A	05/21/96.11:00A	
1.2.1.96.B3B	1	Move to Stiff Fit Up Stat. B98	05/23/96.11:00A	05/23/96.12:00P	
1.2.1.96.B3C	1	Set-up & Purge B98	05/23/96.01:00P	05/23/96.02:00P	
1.2.1.96.B3D	2	Fit Stiffeners B98	05/23/96.02:00P	05/23/96.04:00P	
1.2.1.96.B3E	4	Weld Stiffeners B98	05/23/96.04:00P	05/24/96.11:00A	
1.2.1.96.B3F	1	Move to Exp.Bellows Stat. B98	05/24/96.11:00A	05/24/96.12:00P	
1.2.1.96.B3G	3	Fit,Purge,Weld Exp. Bellows 98	05/24/96.01:00P	05/24/96.04:00P	
1.2.1.96.B3H	1	Inspect, Install End Caps B98	05/24/96.04:00P	05/24/96.05:00P	
1.2.1.96.B3J	1	Move to Test Area B98	05/27/96.09:00A	05/27/96.10:00A	
1.2.1.96.B3K	1	Pre-Clean & Black Light B98	05/27/96.10:00A	05/27/96.11:00A	
1.2.1.96.B3L	30	Leak Test B98	05/27/96.11:00A	05/28/96.05:00P	
1.2.1.96.B3O	1	Move to Post Test Storage B98	05/29/96.08:00A	05/29/96.09:00A	
1.2.1.96.B3P	1	Clean, Dry & End Cap B98	05/29/96.09:00A	05/29/96.10:00A	
1.2.1.96.B3R	1	Transport to Erection B98	06/20/96.03:00P	06/20/96.04:00P	
1.2.1.96.B3S	1	Set & Align B98	06/20/96.04:00P	06/20/96.05:00P	
1.2.1.96.B3T	1	Set Clean Room, Purge & Fit B98	06/21/96.08:00A	06/21/96.09:00A	
1.2.1.96.B3U	2	Weld Joint B98	06/21/96.09:00A	06/21/96.11:00A	
1.2.1.96.B3V	2	Leak Test Joint B98	06/21/96.11:00A	06/21/96.02:00P	
1.2.1.96.B3W	2	Install Tube Supports B98	06/21/96.11:00A	06/21/96.02:00P	
1.2.1.96.B3X	2	Remove Equip'mt, Clean & Cap B98	06/21/96.02:00P	06/21/96.04:00P	
1.2.2	895	Leg 2 Can Assy & Erect	05/27/96.04:00P	10/30/96.03:00P	
1.2.2.01	252	Cans 1-5	05/27/96.04:00P	07/10/96.11:00A	
1.2.2.01.1A	1	Unload,Rec/Insp Tube 1	05/28/96.08:00A	05/28/96.09:00A	
1.2.2.01.1B	1	Move to Stiff Fit Up Stat. 1	05/28/96.09:00A	05/28/96.10:00A	
1.2.2.01.1C	1	Set-up & Purge 1	05/28/96.10:00A	05/28/96.11:00A	
1.2.2.01.1D	2	Fit Stiffeners 1	05/28/96.11:00A	05/28/96.02:00P	
1.2.2.01.1E	4	Weld Stiffeners 1	05/28/96.02:00P	05/29/96.09:00A	
1.2.2.01.1F	1	Inspect, Install End Caps 1	05/29/96.09:00A	05/29/96.10:00A	
1.2.2.01.1H	1	Move to Test Area 1	05/29/96.10:00A	05/29/96.11:00A	
1.2.2.01.1I	1	Pre-Clean & Black Light 1	05/29/96.11:00A	05/29/96.12:00P	
1.2.2.01.1J	30	Leak Test 1	05/29/96.12:00P	05/30/96.06:00P	
1.2.2.01.1M	1	Move to Post Test Storage 1	05/31/96.08:00A	05/31/96.09:00A	
1.2.2.01.1N	1	Clean, Dry & End Cap 1	05/31/96.09:00A	05/31/96.10:00A	
1.2.2.01.1P	1	Transport to Erection 1	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.01.1Q	1	Set & Align 1	06/28/96.11:00A	06/28/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.01.1R	1	Set Clean Room, Purge & Fit 1	06/28/96.01:00P	06/28/96.02:00P	
1.2.2.01.1S	2	Weld Joint 1	06/28/96.02:00P	06/28/96.04:00P	
1.2.2.01.1T	2	Leak Test Joint 1	06/28/96.04:00P	07/01/96.09:00A	
1.2.2.01.1U	2	Install Tube Supports 1	06/28/96.04:00P	07/01/96.09:00A	
1.2.2.01.1V	2	Remove Equip'mt, Clean & Cap 1	07/01/96.09:00A	07/01/96.11:00A	
1.2.2.01.2A	1	Unload,Rec. & Inspct 2	05/28/96.09:00A	05/28/96.10:00A	
1.2.2.01.2B	1	Move to Stiff Fit Up Stat. 2	05/29/96.11:00A	05/29/96.12:00P	
1.2.2.01.2C	1	Set-up & Purge 2	05/29/96.01:00P	05/29/96.02:00P	
1.2.2.01.2D	2	Fit Stiffeners 2	05/29/96.02:00P	05/29/96.04:00P	
1.2.2.01.2E	4	Weld Stiffeners 2	05/29/96.04:00P	05/30/96.11:00A	
1.2.2.01.2F	1	Inspect, Install End Caps 2	05/30/96.11:00A	05/30/96.12:00P	
1.2.2.01.2H	1	Move to Test Area 2	05/31/96.09:00A	05/31/96.10:00A	
1.2.2.01.2I	1	Pre-Clean & Black Light 2	05/31/96.10:00A	05/31/96.11:00A	
1.2.2.01.2J	30	Leak Test 2	05/31/96.11:00A	06/01/96.05:00P	
1.2.2.01.2M	1	Move to Post Test Storage 2	06/03/96.08:00A	06/03/96.09:00A	
1.2.2.01.2N	1	Clean, Dry & End Cap 2	06/03/96.09:00A	06/03/96.10:00A	
1.2.2.01.2P	1	Transport to Erection 2	07/02/96.08:00A	07/02/96.09:00A	
1.2.2.01.2Q	1	Set & Align 2	07/02/96.09:00A	07/02/96.10:00A	
1.2.2.01.2R	1	Set Clean Room, Purge & Fit 2	07/02/96.10:00A	07/02/96.11:00A	
1.2.2.01.2S	2	Weld Joint 2	07/02/96.11:00A	07/02/96.02:00P	
1.2.2.01.2T	2	Leak Test Joint 2	07/02/96.02:00P	07/02/96.04:00P	
1.2.2.01.2U	2	Install Tube Supports 2	07/02/96.02:00P	07/02/96.04:00P	
1.2.2.01.2V	2	Remove Equip'mt, Clean & Cap 2	07/02/96.04:00P	07/03/96.09:00A	
1.2.2.01.3A	1	Unload,Rec/Insp Tube 3	05/28/96.10:00A	05/28/96.11:00A	
1.2.2.01.3B	1	Move to Stiff Fit Up Stat. 3	05/31/96.10:00A	05/31/96.11:00A	
1.2.2.01.3C	1	Set-up & Purge 3	05/31/96.11:00A	05/31/96.12:00P	
1.2.2.01.3D	2	Fit Stiffeners 3	05/31/96.01:00P	05/31/96.03:00P	
1.2.2.01.3E	4	Weld Stiffeners 3	05/31/96.03:00P	06/03/96.10:00A	
1.2.2.01.3F	1	Inspect, Install End Caps 3	06/03/96.10:00A	06/03/96.11:00A	
1.2.2.01.3H	1	Move to Test Area 3	06/03/96.11:00A	06/03/96.12:00P	
1.2.2.01.3I	1	Pre-Clean & Black Light 3	06/03/96.01:00P	06/03/96.02:00P	
1.2.2.01.3J	30	Leak Test 3	06/03/96.02:00P	06/04/96.08:00P	
1.2.2.01.3M	1	Move to Post Test Storage 3	06/05/96.08:00A	06/05/96.09:00A	
1.2.2.01.3N	1	Clean, Dry & End Cap 3	06/05/96.09:00A	06/05/96.10:00A	
1.2.2.01.3P	1	Transport to Erection 3	07/03/96.03:00P	07/03/96.04:00P	
1.2.2.01.3Q	1	Set & Align 3	07/03/96.04:00P	07/03/96.05:00P	
1.2.2.01.3R	1	Set Clean Room, Purge & Fit 3	07/04/96.08:00A	07/04/96.09:00A	
1.2.2.01.3S	2	Weld Joint 3	07/04/96.09:00A	07/04/96.11:00A	
1.2.2.01.3T	2	Leak Test Joint 3	07/04/96.11:00A	07/04/96.02:00P	
1.2.2.01.3U	2	Install Tube Supports 3	07/04/96.11:00A	07/04/96.02:00P	
1.2.2.01.3V	2	Remove Equip'mt, Clean & Cap 3	07/04/96.02:00P	07/04/96.04:00P	
1.2.2.01.4A	1	Unload,Rec/Insp Tube 4	05/28/96.11:00A	05/28/96.12:00P	
1.2.2.01.4B	1	Move to Stiff Fit Up Stat. 4	06/03/96.01:00P	06/03/96.02:00P	
1.2.2.01.4C	1	Set-up & Purge 4	06/03/96.02:00P	06/03/96.03:00P	
1.2.2.01.4D	2	Fit Stiffeners 4	06/03/96.03:00P	06/03/96.05:00P	
1.2.2.01.4E	4	Weld Stiffeners 4	06/04/96.08:00A	06/04/96.12:00P	
1.2.2.01.4F	1	Inspect, Install End Caps 4	06/04/96.01:00P	06/04/96.02:00P	
1.2.2.01.4H	1	Move to Test Area 4	06/05/96.09:00A	06/05/96.10:00A	
1.2.2.01.4I	1	Pre-Clean & Black Light 4	06/05/96.10:00A	06/05/96.11:00A	
1.2.2.01.4J	30	Leak Test 4	06/05/96.11:00A	06/06/96.05:00P	
1.2.2.01.4M	1	Move to Post Test Storage 4	06/07/96.08:00A	06/07/96.09:00A	
1.2.2.01.4N	1	Clean, Dry & End Cap 4	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.01.4P	1	Transport to Erection 4	07/05/96.01:00P	07/05/96.02:00P	
1.2.2.01.4Q	1	Set & Align 4	07/05/96.02:00P	07/05/96.03:00P	
1.2.2.01.4R	1	Set Clean Room, Purge & Fit 4	07/05/96.03:00P	07/05/96.04:00P	
1.2.2.01.4S	2	Weld Joint 4	07/05/96.04:00P	07/08/96.09:00A	
1.2.2.01.4T	2	Leak Test Joint 4	07/08/96.09:00A	07/08/96.11:00A	
1.2.2.01.4U	2	Install Tube Supports 4	07/08/96.09:00A	07/08/96.11:00A	
1.2.2.01.4V	2	Remove Equip'mt, Clean & Cap 4	07/08/96.11:00A	07/08/96.02:00P	
1.2.2.01.5A	1	Unload,Rec/Insp Tube 5	05/28/96.01:00P	05/28/96.02:00P	
1.2.2.01.5B	1	Move to Stiff Fit Up Stat. 5	06/05/96.10:00A	06/05/96.11:00A	
1.2.2.01.5C	1	Set-up & Purge 5	06/05/96.11:00A	06/05/96.12:00P	
1.2.2.01.5D	1	F/W Pump Port Reinf. 5	06/05/96.01:00P	06/05/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.01.5E	2	Fit Stiffeners 5	06/05/96.02:00P	06/05/96.04:00P	
1.2.2.01.5F	4	Weld Stiffeners 5	06/05/96.04:00P	06/06/96.11:00A	
1.2.2.01.5G	1	Move to P.Port Stat.	06/06/96.11:00A	06/06/96.12:00P	
1.2.2.01.5H	1	Setup & Bore 10" Inlet 5	06/06/96.01:00P	06/06/96.02:00P	
1.2.2.01.5I	2	Purge/F/W Pump Port 5	06/06/96.02:00P	06/06/96.04:00P	
1.2.2.01.5J	1	Inspect, Install End Caps 5	06/06/96.04:00P	06/06/96.05:00P	
1.2.2.01.5L	1	Move to Test Area 5	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.01.5M	1	Pre-Clean & Black Light 5	06/07/96.10:00A	06/07/96.11:00A	
1.2.2.01.5N	30	Leak Test 5	06/07/96.11:00A	06/08/96.05:00P	
1.2.2.01.5Q	1	Move to Post Test Storage 5	06/10/96.08:00A	06/10/96.09:00A	
1.2.2.01.5R	1	Clean, Dry & End Cap 5	06/10/96.09:00A	06/10/96.10:00A	
1.2.2.01.5T	1	Transport to Erection 5	07/09/96.10:00A	07/09/96.11:00A	
1.2.2.01.5U	1	Set & Align 5	07/09/96.11:00A	07/09/96.12:00P	
1.2.2.01.5V	1	Set Clean Room, Purge & Fit 5	07/09/96.01:00P	07/09/96.02:00P	
1.2.2.01.5W	2	Weld Joint 5	07/09/96.02:00P	07/09/96.04:00P	
1.2.2.01.5X	2	Leak Test Joint 5	07/09/96.04:00P	07/10/96.09:00A	
1.2.2.01.5Y	2	Install Tube Supports 5	07/09/96.04:00P	07/10/96.09:00A	
1.2.2.01.5Z	2	Remove Equip'mt, Clean & Cap 5	07/10/96.09:00A	07/10/96.11:00A	
1.2.2.01.B1A	1	Unload,Rec/Insp Tube B1	05/28/96.08:00A	05/28/96.09:00A	
1.2.2.01.B1B	1	Move to Stiff Fit Up Stat. B1	05/28/96.09:00A	05/28/96.10:00A	
1.2.2.01.B1C	1	Set-up & Purge B1	05/28/96.10:00A	05/28/96.11:00A	
1.2.2.01.B1D	2	Fit Stiffeners B1	05/28/96.11:00A	05/28/96.02:00P	
1.2.2.01.B1E	4	Weld Stiffeners B1	05/28/96.02:00P	05/29/96.09:00A	
1.2.2.01.B1F	1	Move to Exp.Bellows Stat. B1	05/29/96.09:00A	05/29/96.10:00A	
1.2.2.01.B1G	3	Fit,Purge,Weld Exp. Bellows B1	05/29/96.10:00A	05/29/96.02:00P	
1.2.2.01.B1H	1	Inspect, Install End Caps B1	05/29/96.02:00P	05/29/96.03:00P	
1.2.2.01.B1J	1	Move to Test Area B1	05/29/96.03:00P	05/29/96.04:00P	
1.2.2.01.B1K	1	Pre-Clean & Black Light B1	05/29/96.04:00P	05/29/96.05:00P	
1.2.2.01.B1L	30	Leak Test B1	05/29/96.05:00P	05/30/96.11:00P	
1.2.2.01.B1O	1	Move to Post Test Storage B1	05/31/96.08:00A	05/31/96.09:00A	
1.2.2.01.B1P	1	Clean, Dry & End Cap B1	05/31/96.09:00A	05/31/96.10:00A	
1.2.2.01.B1R	1	Transport to Erection B1	06/27/96.11:00A	06/27/96.12:00P	
1.2.2.01.B1S	1	Set & Align B1	06/27/96.01:00P	06/27/96.02:00P	
1.2.2.01.B1T	1	Set Clean Room, Purge & Fit B1	06/27/96.02:00P	06/27/96.03:00P	
1.2.2.01.B1U	2	Weld Joint B1	06/27/96.03:00P	06/27/96.05:00P	
1.2.2.01.B1V	2	Leak Test Joint B1	06/28/96.08:00A	06/28/96.10:00A	
1.2.2.01.B1W	2	Install Tube Supports B1	06/28/96.08:00A	06/28/96.10:00A	
1.2.2.01.B1X	2	Remove Equip'mt, Clean & Cap B1	06/28/96.10:00A	06/28/96.12:00P	
1.2.2.01.B2A	1	Unload,Rec/Insp Tube B2	05/28/96.09:00A	05/28/96.10:00A	
1.2.2.01.B2B	1	Move to Stiff Fit Up Stat. B2	05/29/96.10:00A	05/29/96.11:00A	
1.2.2.01.B2C	1	Set-up & Purge B2	05/29/96.11:00A	05/29/96.12:00P	
1.2.2.01.B2D	2	Fit Stiffeners B2	05/29/96.01:00P	05/29/96.03:00P	
1.2.2.01.B2E	4	Weld Stiffeners B2	05/29/96.03:00P	05/30/96.10:00A	
1.2.2.01.B2F	1	Move to Exp.Bellows Stat. B2	05/30/96.10:00A	05/30/96.11:00A	
1.2.2.01.B2G	3	Fit,Purge,Weld Exp. Bellows B2	05/30/96.11:00A	05/30/96.03:00P	
1.2.2.01.B2H	1	Inspect, Install End Caps B2	05/30/96.03:00P	05/30/96.04:00P	
1.2.2.01.B2J	1	Move to Test Area B2	05/31/96.09:00A	05/31/96.10:00A	
1.2.2.01.B2K	1	Pre-Clean & Black Light B2	05/31/96.10:00A	05/31/96.11:00A	
1.2.2.01.B2L	30	Leak Test B2	05/31/96.11:00A	06/01/96.05:00P	
1.2.2.01.B2O	1	Move to Post Test Storage B2	06/03/96.08:00A	06/03/96.09:00A	
1.2.2.01.B2P	1	Clean, Dry & End Cap B2	06/03/96.09:00A	06/03/96.10:00A	
1.2.2.01.B2R	1	Transport to Erection B2	07/01/96.09:00A	07/01/96.10:00A	
1.2.2.01.B2S	1	Set & Align B2	07/01/96.10:00A	07/01/96.11:00A	
1.2.2.01.B2T	1	Set Clean Room, Purge & Fit B2	07/01/96.11:00A	07/01/96.12:00P	
1.2.2.01.B2U	2	Weld Joint B2	07/01/96.01:00P	07/01/96.03:00P	
1.2.2.01.B2V	2	Leak Test Joint B2	07/01/96.03:00P	07/01/96.05:00P	
1.2.2.01.B2W	2	Install Tube Supports B2	07/01/96.03:00P	07/01/96.05:00P	
1.2.2.01.B2X	2	Remove Equip'mt, Clean & Cap B2	07/02/96.08:00A	07/02/96.10:00A	
1.2.2.01.B3A	1	Unload,Rec/Insp Tube B3	05/28/96.10:00A	05/28/96.11:00A	
1.2.2.01.B3B	1	Move to Stiff Fit Up Stat. B3	05/30/96.11:00A	05/30/96.12:00P	
1.2.2.01.B3C	1	Set-up & Purge B3	05/30/96.01:00P	05/30/96.02:00P	
1.2.2.01.B3D	2	Fit Stiffeners B3	05/30/96.02:00P	05/30/96.04:00P	
1.2.2.01.B3E	4	Weld Stiffeners B3	05/30/96.04:00P	05/31/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.01.B3F	1	Move to Exp.Bellows Stat. B3	05/31/96.11:00A	05/31/96.12:00P	
1.2.2.01.B3G	3	Fit,Purge,Weld Exp. Bellows B3	05/31/96.01:00P	05/31/96.04:00P	
1.2.2.01.B3H	1	Inspect, Install End Caps B3	05/31/96.04:00P	05/31/96.05:00P	
1.2.2.01.B3J	1	Move to Test Area B3	06/03/96.09:00A	06/03/96.10:00A	
1.2.2.01.B3K	1	Pre-Clean & Black Light B3	06/03/96.10:00A	06/03/96.11:00A	
1.2.2.01.B3L	30	Leak Test B3	06/03/96.11:00A	06/04/96.05:00P	
1.2.2.01.B3O	1	Move to Post Test Storage B3	06/05/96.08:00A	06/05/96.09:00A	
1.2.2.01.B3P	1	Clean, Dry & End Cap B3	06/05/96.09:00A	06/05/96.10:00A	
1.2.2.01.B3R	1	Transport to Erection B3	07/02/96.04:00P	07/02/96.05:00P	
1.2.2.01.B3S	1	Set & Align B3	07/03/96.08:00A	07/03/96.09:00A	
1.2.2.01.B3T	1	Set Clean Room, Purge & Fit B3	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.01.B3U	2	Weld Joint B3	07/03/96.10:00A	07/03/96.12:00P	
1.2.2.01.B3V	2	Leak Test Joint B3	07/03/96.01:00P	07/03/96.03:00P	
1.2.2.01.B3W	2	Install Tube Supports B3	07/03/96.01:00P	07/03/96.03:00P	
1.2.2.01.B3X	2	Remove Equip'mt, Clean & Cap B3	07/03/96.03:00P	07/03/96.05:00P	
1.2.2.01.B4A	1	Unload,Rec/Insp Tube B4	05/28/96.11:00A	05/28/96.12:00P	
1.2.2.01.B4B	1	Move to Stiff Fit Up Stat. B4	05/31/96.01:00P	05/31/96.02:00P	
1.2.2.01.B4C	1	Set-up & Purge B4	05/31/96.02:00P	05/31/96.03:00P	
1.2.2.01.B4D	2	Fit Stiffeners B4	05/31/96.03:00P	05/31/96.05:00P	
1.2.2.01.B4E	4	Weld Stiffeners B4	06/03/96.08:00A	06/03/96.12:00P	
1.2.2.01.B4F	1	Move to Exp.Bellows Stat. B4	06/03/96.01:00P	06/03/96.02:00P	
1.2.2.01.B4G	3	Fit,Purge,Weld Exp. Bellows B4	06/03/96.02:00P	06/03/96.05:00P	
1.2.2.01.B4H	1	Inspect, Install End Caps B4	06/04/96.08:00A	06/04/96.09:00A	
1.2.2.01.B4J	1	Move to Test Area B4	06/05/96.09:00A	06/05/96.10:00A	
1.2.2.01.B4K	1	Pre-Clean & Black Light B4	06/05/96.10:00A	06/05/96.11:00A	
1.2.2.01.B4L	30	Leak Test B4	06/05/96.11:00A	06/06/96.05:00P	
1.2.2.01.B4O	1	Move to Post Test Storage B4	06/07/96.08:00A	06/07/96.09:00A	
1.2.2.01.B4P	1	Clean, Dry & End Cap B4	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.01.B4R	1	Transport to Erection B4	07/04/96.02:00P	07/04/96.03:00P	
1.2.2.01.B4S	1	Set & Align B4	07/04/96.03:00P	07/04/96.04:00P	
1.2.2.01.B4T	1	Set Clean Room, Purge & Fit B4	07/04/96.04:00P	07/04/96.05:00P	
1.2.2.01.B4U	2	Weld Joint B4	07/05/96.08:00A	07/05/96.10:00A	
1.2.2.01.B4V	2	Leak Test Joint B4	07/05/96.10:00A	07/05/96.12:00P	
1.2.2.01.B4W	2	Install Tube Supports B4	07/05/96.10:00A	07/05/96.12:00P	
1.2.2.01.B4X	2	Remove Equip'mt, Clean & Cap B4	07/05/96.01:00P	07/05/96.03:00P	
1.2.2.01.B5A	1	Unload,Rec/Insp Tube B5	05/28/96.01:00P	05/28/96.02:00P	
1.2.2.01.B5B	1	Move to Stiff Fit Up Stat. B5	06/03/96.02:00P	06/03/96.03:00P	
1.2.2.01.B5C	1	Set-up & Purge B5	06/03/96.03:00P	06/03/96.04:00P	
1.2.2.01.B5D	2	Fit Stiffeners B5	06/03/96.04:00P	06/04/96.09:00A	
1.2.2.01.B5E	4	Weld Stiffeners B5	06/04/96.09:00A	06/04/96.02:00P	
1.2.2.01.B5F	1	Move to Exp.Bellows Stat. B5	06/05/96.10:00A	06/05/96.11:00A	
1.2.2.01.B5G	3	Fit,Purge,Weld Exp. Bellows B5	06/05/96.11:00A	06/05/96.03:00P	
1.2.2.01.B5H	1	Inspect, Install End Caps B5	06/05/96.03:00P	06/05/96.04:00P	
1.2.2.01.B5J	1	Move to Test Area B5	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.01.B5K	1	Pre-Clean & Black Light B5	06/07/96.10:00A	06/07/96.11:00A	
1.2.2.01.B5L	30	Leak Test B5	06/07/96.11:00A	06/08/96.05:00P	
1.2.2.01.B5O	1	Move to Post Test Storage B5	06/10/96.08:00A	06/10/96.09:00A	
1.2.2.01.B5P	1	Clean, Dry & End Cap B5	06/10/96.09:00A	06/10/96.10:00A	
1.2.2.01.B5R	1	Transport to Erection B5	07/08/96.11:00A	07/08/96.12:00P	
1.2.2.01.B5S	1	Set & Align B5	07/08/96.01:00P	07/08/96.02:00P	
1.2.2.01.B5T	1	Set Clean Room, Purge & Fit B5	07/08/96.02:00P	07/08/96.03:00P	
1.2.2.01.B5U	2	Weld Joint B5	07/08/96.03:00P	07/08/96.05:00P	
1.2.2.01.B5V	2	Leak Test Joint B5	07/09/96.08:00A	07/09/96.10:00A	
1.2.2.01.B5W	2	Install Tube Supports B5	07/09/96.08:00A	07/09/96.10:00A	
1.2.2.01.B5X	2	Remove Equip'mt, Clean & Cap B5	07/09/96.10:00A	07/09/96.12:00P	
1.2.2.06	244	Cans 6-10	06/10/96.04:00P	07/23/96.11:00A	
1.2.2.06.1A	1	Unload,Rec/Insp Tube 6	06/11/96.08:00A	06/11/96.09:00A	
1.2.2.06.1B	1	Move to Stiff Fit Up Stat. 6	06/11/96.09:00A	06/11/96.10:00A	
1.2.2.06.1C	1	Set-up & Purge 6	06/11/96.10:00A	06/11/96.11:00A	
1.2.2.06.1D	2	Fit Stiffeners 6	06/11/96.11:00A	06/11/96.02:00P	
1.2.2.06.1E	4	Weld Stiffeners 6	06/11/96.02:00P	06/12/96.09:00A	
1.2.2.06.1F	1	Inspect, Install End Caps 6	06/12/96.09:00A	06/12/96.10:00A	
1.2.2.06.1H	1	Move to Test Area 6	06/12/96.10:00A	06/12/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.06.1I	1	Pre-Clean & Black Light 6	06/12/96.11:00A	06/12/96.12:00P	
1.2.2.06.1J	30	Leak Test 6	06/12/96.12:00P	06/13/96.06:00P	
1.2.2.06.1M	1	Move to Post Test Storage 6	06/14/96.08:00A	06/14/96.09:00A	
1.2.2.06.1N	1	Clean, Dry & End Cap 6	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.06.1P	1	Transport to Erection 6	07/11/96.10:00A	07/11/96.11:00A	
1.2.2.06.1Q	1	Set & Align 6	07/11/96.11:00A	07/11/96.12:00P	
1.2.2.06.1R	1	Set Clean Room, Purge & Fit 6	07/11/96.01:00P	07/11/96.02:00P	
1.2.2.06.1S	2	Weld Joint 6	07/11/96.02:00P	07/11/96.04:00P	
1.2.2.06.1T	2	Leak Test Joint 6	07/11/96.04:00P	07/12/96.09:00A	
1.2.2.06.1U	2	Install Tube Supports 6	07/11/96.04:00P	07/12/96.09:00A	
1.2.2.06.1V	2	Remove Equip'mt, Clean & Cap 6	07/12/96.09:00A	07/12/96.11:00A	
1.2.2.06.2A	1	Unload,Rec. & Inspct 7	06/11/96.09:00A	06/11/96.10:00A	
1.2.2.06.2B	1	Move to Stiff Fit Up Stat. 7	06/12/96.11:00A	06/12/96.12:00P	
1.2.2.06.2C	1	Set-up & Purge 7	06/12/96.01:00P	06/12/96.02:00P	
1.2.2.06.2D	2	Fit Stiffeners 7	06/12/96.02:00P	06/12/96.04:00P	
1.2.2.06.2E	4	Weld Stiffeners 7	06/12/96.04:00P	06/13/96.11:00A	
1.2.2.06.2F	1	Inspect, Install End Caps 7	06/13/96.11:00A	06/13/96.12:00P	
1.2.2.06.2H	1	Move to Test Area 7	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.06.2I	1	Pre-Clean & Black Light 7	06/14/96.10:00A	06/14/96.11:00A	
1.2.2.06.2J	30	Leak Test 7	06/14/96.11:00A	06/15/96.05:00P	
1.2.2.06.2M	1	Move to Post Test Storage 7	06/17/96.08:00A	06/17/96.09:00A	
1.2.2.06.2N	1	Clean, Dry & End Cap 7	06/17/96.09:00A	06/17/96.10:00A	
1.2.2.06.2P	1	Transport to Erection 7	07/15/96.08:00A	07/15/96.09:00A	
1.2.2.06.2Q	1	Set & Align 7	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.06.2R	1	Set Clean Room, Purge & Fit 7	07/15/96.10:00A	07/15/96.11:00A	
1.2.2.06.2S	2	Weld Joint 7	07/15/96.11:00A	07/15/96.02:00P	
1.2.2.06.2T	2	Leak Test Joint 7	07/15/96.02:00P	07/15/96.04:00P	
1.2.2.06.2U	2	Install Tube Supports 7	07/15/96.02:00P	07/15/96.04:00P	
1.2.2.06.2V	2	Remove Equip'mt, Clean & Cap 7	07/15/96.04:00P	07/16/96.09:00A	
1.2.2.06.3A	1	Unload,Rec/Insp Tube 8	06/11/96.10:00A	06/11/96.11:00A	
1.2.2.06.3B	1	Move to Stiff Fit Up Stat. 8	06/14/96.10:00A	06/14/96.11:00A	
1.2.2.06.3C	1	Set-up & Purge 8	06/14/96.11:00A	06/14/96.12:00P	
1.2.2.06.3D	2	Fit Stiffeners 8	06/14/96.01:00P	06/14/96.03:00P	
1.2.2.06.3E	4	Weld Stiffeners 8	06/14/96.03:00P	06/17/96.10:00A	
1.2.2.06.3F	1	Inspect, Install End Caps 8	06/17/96.10:00A	06/17/96.11:00A	
1.2.2.06.3H	1	Move to Test Area 8	06/17/96.11:00A	06/17/96.12:00P	
1.2.2.06.3I	1	Pre-Clean & Black Light 8	06/17/96.01:00P	06/17/96.02:00P	
1.2.2.06.3J	30	Leak Test 8	06/17/96.02:00P	06/18/96.08:00P	
1.2.2.06.3M	1	Move to Post Test Storage 8	06/19/96.08:00A	06/19/96.09:00A	
1.2.2.06.3N	1	Clean, Dry & End Cap 8	06/19/96.09:00A	06/19/96.10:00A	
1.2.2.06.3P	1	Transport to Erection 8	07/16/96.03:00P	07/16/96.04:00P	
1.2.2.06.3Q	1	Set & Align 8	07/16/96.04:00P	07/16/96.05:00P	
1.2.2.06.3R	1	Set Clean Room, Purge & Fit 8	07/17/96.08:00A	07/17/96.09:00A	
1.2.2.06.3S	2	Weld Joint 8	07/17/96.09:00A	07/17/96.11:00A	
1.2.2.06.3T	2	Leak Test Joint 8	07/17/96.11:00A	07/17/96.02:00P	
1.2.2.06.3U	2	Install Tube Supports 8	07/17/96.11:00A	07/17/96.02:00P	
1.2.2.06.3V	2	Remove Equip'mt, Clean & Cap 8	07/17/96.02:00P	07/17/96.04:00P	
1.2.2.06.4A	1	Unload,Rec/Insp Tube 100	06/11/96.11:00A	06/11/96.12:00P	
1.2.2.06.4B	1	Move to Stiff Fit Up Stat. 100	06/17/96.01:00P	06/17/96.02:00P	
1.2.2.06.4C	1	Set-up & Purge 100	06/17/96.02:00P	06/17/96.03:00P	
1.2.2.06.4D	2	Fit Stiffeners 100	06/17/96.03:00P	06/17/96.05:00P	
1.2.2.06.4E	4	Weld Stiffeners 100	06/18/96.08:00A	06/18/96.12:00P	
1.2.2.06.4F	1	Inspect, Install End Caps 100	06/18/96.01:00P	06/18/96.02:00P	
1.2.2.06.4H	1	Move to Test Area 100	06/19/96.09:00A	06/19/96.10:00A	
1.2.2.06.4I	1	Pre-Clean & Black Light 100	06/19/96.10:00A	06/19/96.11:00A	
1.2.2.06.4J	30	Leak Test 10	06/19/96.11:00A	06/20/96.05:00P	
1.2.2.06.4M	1	Move to Post Test Storage 10	06/21/96.08:00A	06/21/96.09:00A	
1.2.2.06.4N	1	Clean, Dry & End Cap 100	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.06.4P	1	Transport to Erection 100	07/18/96.01:00P	07/18/96.02:00P	
1.2.2.06.4Q	1	Set & Align 100	07/18/96.02:00P	07/18/96.03:00P	
1.2.2.06.4R	1	Set Clean Room, Purge & Fit 100	07/18/96.03:00P	07/18/96.04:00P	
1.2.2.06.4S	2	Weld Joint 100	07/18/96.04:00P	07/19/96.09:00A	
1.2.2.06.4T	2	Leak Test Joint 100	07/19/96.09:00A	07/19/96.11:00A	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

OBJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.06.4U	2	Install Tube Supports 100	07/19/96.09:00A	07/19/96.11:00A	
1.2.2.06.4V	2	Remove Equip'mt, Clean & Cap 100	07/19/96.11:00A	07/19/96.02:00P	
1.2.2.06.5A	1	Unload,Rec/Insp Tube 10	06/11/96.01:00P	06/11/96.02:00P	
1.2.2.06.5B	1	Move to Stiff Fit Up Stat. 10	06/19/96.10:00A	06/19/96.11:00A	
1.2.2.06.5C	1	Set-up & Purge 10	06/19/96.11:00A	06/19/96.12:00P	
1.2.2.06.5D	1	F/W Pump Port Reinf. 10	06/19/96.01:00P	06/19/96.02:00P	
1.2.2.06.5E	2	Fit Stiffeners 10	06/19/96.02:00P	06/19/96.04:00P	
1.2.2.06.5F	4	Weld Stiffeners 10	06/19/96.04:00P	06/20/96.11:00A	
1.2.2.06.5G	1	Move to P.Port Stat.10	06/20/96.11:00A	06/20/96.12:00P	
1.2.2.06.5H	1	Setup & Bore 10" Inlet 10	06/20/96.01:00P	06/20/96.02:00P	
1.2.2.06.5I	2	Purge/F/W Pump Port 10	06/20/96.02:00P	06/20/96.04:00P	
1.2.2.06.5J	1	Inspect, Install End Caps 10	06/20/96.04:00P	06/20/96.05:00P	
1.2.2.06.5L	1	Move to Test Area 10	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.06.5M	1	Pre-Clean & Black Light 10	06/21/96.10:00A	06/21/96.11:00A	
1.2.2.06.5N	30	Leak Test 10	06/21/96.11:00A	06/22/96.05:00P	
1.2.2.06.5Q	1	Move to Post Test Storage 10	06/24/96.08:00A	06/24/96.09:00A	
1.2.2.06.5R	1	Clean, Dry & End Cap 10	06/24/96.09:00A	06/24/96.10:00A	
1.2.2.06.5T	1	Transport to Erection 10	07/22/96.10:00A	07/22/96.11:00A	
1.2.2.06.5U	1	Set & Align 10	07/22/96.11:00A	07/22/96.12:00P	
1.2.2.06.5V	1	Set Clean Room, Purge & Fit 10	07/22/96.01:00P	07/22/96.02:00P	
1.2.2.06.5W	2	Weld Joint 10	07/22/96.02:00P	07/22/96.04:00P	
1.2.2.06.5X	2	Leak Test Joint 10	07/22/96.04:00P	07/23/96.09:00A	
1.2.2.06.5Y	2	Install Tube Supports 10	07/22/96.04:00P	07/23/96.09:00A	
1.2.2.06.5Z	2	Remove Equip'mt, Clean & Cap 10	07/23/96.09:00A	07/23/96.11:00A	
1.2.2.06.B1A	1	Unload,Rec/Insp Tube B6	06/11/96.08:00A	06/11/96.09:00A	
1.2.2.06.B1B	1	Move to Stiff Fit Up Stat. B6	06/11/96.09:00A	06/11/96.10:00A	
1.2.2.06.B1C	1	Set-up & Purge B6	06/11/96.10:00A	06/11/96.11:00A	
1.2.2.06.B1D	2	Fit Stiffeners B6	06/11/96.11:00A	06/11/96.02:00P	
1.2.2.06.B1E	4	Weld Stiffeners B6	06/11/96.02:00P	06/12/96.09:00A	
1.2.2.06.B1F	1	Move to Exp.Bellows Stat. B6	06/12/96.09:00A	06/12/96.10:00A	
1.2.2.06.B1G	3	Fit,Purge,Weld Exp. Bellows B6	06/12/96.10:00A	06/12/96.02:00P	
1.2.2.06.B1H	1	Inspect, Install End Caps B6	06/12/96.02:00P	06/12/96.03:00P	
1.2.2.06.B1J	1	Move to Test Area B6	06/12/96.03:00P	06/12/96.04:00P	
1.2.2.06.B1K	1	Pre-Clean & Black Light B6	06/12/96.04:00P	06/12/96.05:00P	
1.2.2.06.B1L	30	Leak Test B6	06/12/96.05:00P	06/13/96.11:00P	
1.2.2.06.B1O	1	Move to Post Test Storage B6	06/14/96.08:00A	06/14/96.09:00A	
1.2.2.06.B1P	1	Clean, Dry & End Cap B6	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.06.B1R	1	Transport to Erection B6	07/10/96.11:00A	07/10/96.12:00P	
1.2.2.06.B1S	1	Set & Align B6	07/10/96.01:00P	07/10/96.02:00P	
1.2.2.06.B1T	1	Set Clean Room, Purge & Fit B6	07/10/96.02:00P	07/10/96.03:00P	
1.2.2.06.B1U	2	Weld Joint B6	07/10/96.03:00P	07/10/96.05:00P	
1.2.2.06.B1V	2	Leak Test Joint B6	07/11/96.08:00A	07/11/96.10:00A	
1.2.2.06.B1W	2	Install Tube Supports B6	07/11/96.08:00A	07/11/96.10:00A	
1.2.2.06.B1X	2	Remove Equip'mt, Clean & Cap B6	07/11/96.10:00A	07/11/96.12:00P	
1.2.2.06.B2A	1	Unload,Rec/Insp Tube B7	06/11/96.09:00A	06/11/96.10:00A	
1.2.2.06.B2B	1	Move to Stiff Fit Up Stat. B7	06/12/96.10:00A	06/12/96.11:00A	
1.2.2.06.B2C	1	Set-up & Purge B7	06/12/96.11:00A	06/12/96.12:00P	
1.2.2.06.B2D	2	Fit Stiffeners B7	06/12/96.01:00P	06/12/96.03:00P	
1.2.2.06.B2E	4	Weld Stiffeners B7	06/12/96.03:00P	06/13/96.10:00A	
1.2.2.06.B2F	1	Move to Exp.Bellows Stat. B7	06/13/96.10:00A	06/13/96.11:00A	
1.2.2.06.B2G	3	Fit,Purge,Weld Exp. Bellows B7	06/13/96.11:00A	06/13/96.03:00P	
1.2.2.06.B2H	1	Inspect, Install End Caps B7	06/13/96.03:00P	06/13/96.04:00P	
1.2.2.06.B2J	1	Move to Test Area B7	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.06.B2K	1	Pre-Clean & Black Light B7	06/14/96.10:00A	06/14/96.11:00A	
1.2.2.06.B2L	30	Leak Test B7	06/14/96.11:00A	06/15/96.05:00P	
1.2.2.06.B2O	1	Move to Post Test Storage B7	06/17/96.08:00A	06/17/96.09:00A	
1.2.2.06.B2P	1	Clean, Dry & End Cap B7	06/17/96.09:00A	06/17/96.10:00A	
1.2.2.06.B2R	1	Transport to Erection B7	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.06.B2S	1	Set & Align B7	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.06.B2T	1	Set Clean Room, Purge & Fit B7	07/12/96.11:00A	07/12/96.12:00P	
1.2.2.06.B2U	2	Weld Joint B7	07/12/96.01:00P	07/12/96.03:00P	
1.2.2.06.B2V	2	Leak Test Joint B7	07/12/96.03:00P	07/12/96.05:00P	
1.2.2.06.B2W	2	Install Tube SupportsB7	07/12/96.03:00P	07/12/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.06.B2X	2	Remove Equip'mt, Clean & Cap B7	07/15/96.08:00A	07/15/96.10:00A	
1.2.2.06.B3A	1	Unload,Rec/Insp Tube B8	06/11/96.10:00A	06/11/96.11:00A	
1.2.2.06.B3B	1	Move to Stiff Fit Up Stat. B8	06/13/96.11:00A	06/13/96.12:00P	
1.2.2.06.B3C	1	Set-up & Purge B8	06/13/96.01:00P	06/13/96.02:00P	
1.2.2.06.B3D	2	Fit Stiffeners B8	06/13/96.02:00P	06/13/96.04:00P	
1.2.2.06.B3E	4	Weld Stiffeners B8	06/13/96.04:00P	06/14/96.11:00A	
1.2.2.06.B3F	1	Move to Exp.Bellows Stat. B8	06/14/96.11:00A	06/14/96.12:00P	
1.2.2.06.B3G	3	Fit,Purge,Weld Exp. Bellows B8	06/14/96.01:00P	06/14/96.04:00P	
1.2.2.06.B3H	1	Inspect, Install End Caps B8	06/14/96.04:00P	06/14/96.05:00P	
1.2.2.06.B3J	1	Move to Test Area B8	06/17/96.09:00A	06/17/96.10:00A	
1.2.2.06.B3K	1	Pre-Clean & Black Light B8	06/17/96.10:00A	06/17/96.11:00A	
1.2.2.06.B3L	30	Leak Test B8	06/17/96.11:00A	06/18/96.05:00P	
1.2.2.06.B3O	1	Move to Post Test Storage B8	06/19/96.08:00A	06/19/96.09:00A	
1.2.2.06.B3P	1	Clean, Dry & End Cap B8	06/19/96.09:00A	06/19/96.10:00A	
1.2.2.06.B3R	1	Transport to Erection B8	07/15/96.04:00P	07/15/96.05:00P	
1.2.2.06.B3S	1	Set & Align B8	07/16/96.08:00A	07/16/96.09:00A	
1.2.2.06.B3T	1	Set Clean Room, Purge & Fit B8	07/16/96.09:00A	07/16/96.10:00A	
1.2.2.06.B3U	2	Weld Joint B8	07/16/96.10:00A	07/16/96.12:00P	
1.2.2.06.B3V	2	Leak Test Joint B8	07/16/96.01:00P	07/16/96.03:00P	
1.2.2.06.B3W	2	Install Tube Supports B8	07/16/96.01:00P	07/16/96.03:00P	
1.2.2.06.B3X	2	Remove Equip'mt, Clean & Cap B8	07/16/96.03:00P	07/16/96.05:00P	
1.2.2.06.B4A	1	Unload,Rec/Insp Tube B9	06/11/96.11:00A	06/11/96.12:00P	
1.2.2.06.B4B	1	Move to Stiff Fit Up Stat. B9	06/14/96.01:00P	06/14/96.02:00P	
1.2.2.06.B4C	1	Set-up & Purge B9	06/14/96.02:00P	06/14/96.03:00P	
1.2.2.06.B4D	2	Fit Stiffeners B9	06/14/96.03:00P	06/14/96.05:00P	
1.2.2.06.B4E	4	Weld Stiffeners B9	06/17/96.08:00A	06/17/96.12:00P	
1.2.2.06.B4F	1	Move to Exp.Bellows Stat. B9	06/17/96.01:00P	06/17/96.02:00P	
1.2.2.06.B4G	3	Fit,Purge,Weld Exp. Bellows B9	06/17/96.02:00P	06/17/96.05:00P	
1.2.2.06.B4H	1	Inspect, Install End Caps B9	06/18/96.08:00A	06/18/96.09:00A	
1.2.2.06.B4J	1	Move to Test Area B9	06/19/96.09:00A	06/19/96.10:00A	
1.2.2.06.B4K	1	Pre-Clean & Black Light B9	06/19/96.10:00A	06/19/96.11:00A	
1.2.2.06.B4L	30	Leak Test B9	06/19/96.11:00A	06/20/96.05:00P	
1.2.2.06.B4O	1	Move to Post Test Storage B9	06/21/96.08:00A	06/21/96.09:00A	
1.2.2.06.B4P	1	Clean, Dry & End Cap B9	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.06.B4R	1	Transport to Erection B9	07/17/96.02:00P	07/17/96.03:00P	
1.2.2.06.B4S	1	Set & Align B9	07/17/96.03:00P	07/17/96.04:00P	
1.2.2.06.B4T	1	Set Clean Room, Purge & Fit B9	07/17/96.04:00P	07/17/96.05:00P	
1.2.2.06.B4U	2	Weld Joint B9	07/18/96.08:00A	07/18/96.10:00A	
1.2.2.06.B4V	2	Leak Test Joint B9	07/18/96.10:00A	07/18/96.12:00P	
1.2.2.06.B4W	2	Install Tube Supports B9	07/18/96.10:00A	07/18/96.12:00P	
1.2.2.06.B4X	2	Remove Equip'mt, Clean & Cap B9	07/18/96.01:00P	07/18/96.03:00P	
1.2.2.06.B5A	1	Unload,Rec/Insp Tube B10	06/11/96.01:00P	06/11/96.02:00P	
1.2.2.06.B5B	1	Move to Stiff Fit Up Stat. B10	06/17/96.02:00P	06/17/96.03:00P	
1.2.2.06.B5C	1	Set-up & Purge B10	06/17/96.03:00P	06/17/96.04:00P	
1.2.2.06.B5D	2	Fit Stiffeners B10	06/17/96.04:00P	06/18/96.09:00A	
1.2.2.06.B5E	4	Weld Stiffeners B10	06/18/96.09:00A	06/18/96.02:00P	
1.2.2.06.B5F	1	Move to Exp.Bellows Stat. B10	06/19/96.10:00A	06/19/96.11:00A	
1.2.2.06.B5G	3	Fit,Purge,Weld Exp. Bellows B10	06/19/96.11:00A	06/19/96.03:00P	
1.2.2.06.B5H	1	Inspect, Install End Caps B10	06/19/96.03:00P	06/19/96.04:00P	
1.2.2.06.B5J	1	Move to Test Area B10	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.06.B5K	1	Pre-Clean & Black Light B10	06/21/96.10:00A	06/21/96.11:00A	
1.2.2.06.B5L	30	Leak Test B10	06/21/96.11:00A	06/22/96.05:00P	
1.2.2.06.B5O	1	Move to Post Test Storage B10	06/24/96.08:00A	06/24/96.09:00A	
1.2.2.06.B5P	1	Clean, Dry & End Cap B10	06/24/96.09:00A	06/24/96.10:00A	
1.2.2.06.B5R	1	Transport to Erection B10	07/19/96.11:00A	07/19/96.12:00P	
1.2.2.06.B5S	1	Set & Align B10	07/19/96.01:00P	07/19/96.02:00P	
1.2.2.06.B5T	1	Set Clean Room, Purge & Fit B10	07/19/96.02:00P	07/19/96.03:00P	
1.2.2.06.B5U	2	Weld Joint B10	07/19/96.03:00P	07/19/96.05:00P	
1.2.2.06.B5V	2	Leak Test Joint B10	07/22/96.08:00A	07/22/96.10:00A	
1.2.2.06.B5W	2	Install Tube Supports B10	07/22/96.08:00A	07/22/96.10:00A	
1.2.2.06.B5X	2	Remove Equip'mt, Clean & Cap B10	07/22/96.10:00A	07/22/96.12:00P	
1.2.2.11	236	Cans 11-15	06/24/96.04:00P	08/05/96.11:00A	
1.2.2.11.1A	1	Unload,Rec/Insp Tube 11	06/25/96.08:00A	06/25/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.11.1B	1	Move to Stiff Fit Up Stat. 11	06/25/96.09:00A	06/25/96.10:00A	
1.2.2.11.1C	1	Set-up & Purge 11	06/25/96.10:00A	06/25/96.11:00A	
1.2.2.11.1D	2	Fit Stiffeners 11	06/25/96.11:00A	06/25/96.02:00P	
1.2.2.11.1E	4	Weld Stiffeners 11	06/25/96.02:00P	06/26/96.09:00A	
1.2.2.11.1F	1	Inspect, Install End Caps 11	06/26/96.09:00A	06/26/96.10:00A	
1.2.2.11.1H	1	Move to Test Area 1 1	06/26/96.10:00A	06/26/96.11:00A	
1.2.2.11.1I	1	Pre-Clean & Black Light 11	06/26/96.11:00A	06/26/96.12:00P	
1.2.2.11.1J	30	Leak Test 11	06/26/96.12:00P	06/27/96.06:00P	
1.2.2.11.1M	1	Move to Post Test Storage 1 1	06/28/96.08:00A	06/28/96.09:00A	
1.2.2.11.1N	1	Clean, Dry & End Cap 11	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.11.1P	1	Transport to Erection 11	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.11.1Q	1	Set & Align 11	07/24/96.11:00A	07/24/96.12:00P	
1.2.2.11.1R	1	Set Clean Room, Purge & Fit 11	07/24/96.01:00P	07/24/96.02:00P	
1.2.2.11.1S	2	Weld Joint 11	07/24/96.02:00P	07/24/96.04:00P	
1.2.2.11.1T	2	Leak Test Joint 11	07/24/96.04:00P	07/25/96.09:00A	
1.2.2.11.1U	2	Install Tube Supports 11	07/24/96.04:00P	07/25/96.09:00A	
1.2.2.11.1V	2	Remove Equip'mt, Clean & Cap 11	07/25/96.09:00A	07/25/96.11:00A	
1.2.2.11.2A	1	Unload,Rec. & Inspect 12	06/25/96.09:00A	06/25/96.10:00A	
1.2.2.11.2B	1	Move to Stiff Fit Up Stat. 12	06/26/96.11:00A	06/26/96.12:00P	
1.2.2.11.2C	1	Set-up & Purge 12	06/26/96.01:00P	06/26/96.02:00P	
1.2.2.11.2D	2	Fit Stiffeners 12	06/26/96.02:00P	06/26/96.04:00P	
1.2.2.11.2E	4	Weld Stiffeners 12	06/26/96.04:00P	06/27/96.11:00A	
1.2.2.11.2F	1	Inspect, Install End Caps 12	06/27/96.11:00A	06/27/96.12:00P	
1.2.2.11.2H	1	Move to Test Area 12	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.11.2I	1	Pre-Clean & Black Light 12	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.11.2J	30	Leak Test 12	06/28/96.11:00A	06/29/96.05:00P	
1.2.2.11.2M	1	Move to Post Test Storage 12	07/01/96.08:00A	07/01/96.09:00A	
1.2.2.11.2N	1	Clean, Dry & End Cap 12	07/01/96.09:00A	07/01/96.10:00A	
1.2.2.11.2P	1	Transport to Erection 12	07/26/96.08:00A	07/26/96.09:00A	
1.2.2.11.2Q	1	Set & Align 12	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.11.2R	1	Set Clean Room, Purge & Fit 12	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.11.2S	2	Weld Joint 12	07/26/96.11:00A	07/26/96.02:00P	
1.2.2.11.2T	2	Leak Test Joint 12	07/26/96.02:00P	07/26/96.04:00P	
1.2.2.11.2U	2	Install Tube Supports 12	07/26/96.02:00P	07/26/96.04:00P	
1.2.2.11.2V	2	Remove Equip'mt, Clean & Cap 12	07/26/96.04:00P	07/29/96.09:00A	
1.2.2.11.3A	1	Unload,Rec/Insp Tube 13	06/25/96.10:00A	06/25/96.11:00A	
1.2.2.11.3B	1	Move to Stiff Fit Up Stat. 13	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.11.3C	1	Set-up & Purge 13	06/28/96.11:00A	06/28/96.12:00P	
1.2.2.11.3D	2	Fit Stiffeners 13	06/28/96.01:00P	06/28/96.03:00P	
1.2.2.11.3E	4	Weld Stiffeners 13	06/28/96.03:00P	07/01/96.10:00A	
1.2.2.11.3F	1	Inspect, Install End Caps 13	07/01/96.10:00A	07/01/96.11:00A	
1.2.2.11.3H	1	Move to Test Area 13	07/01/96.11:00A	07/01/96.12:00P	
1.2.2.11.3I	1	Pre-Clean & Black Light 13	07/01/96.01:00P	07/01/96.02:00P	
1.2.2.11.3J	30	Leak Test 13	07/01/96.02:00P	07/02/96.08:00P	
1.2.2.11.3M	1	Move to Post Test Storage 13	07/03/96.08:00A	07/03/96.09:00A	
1.2.2.11.3N	1	Clean, Dry & End Cap 13	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.11.3P	1	Transport to Erection 13	07/29/96.03:00P	07/29/96.04:00P	
1.2.2.11.3Q	1	Set & Align 13	07/29/96.04:00P	07/29/96.05:00P	
1.2.2.11.3R	1	Set Clean Room, Purge & Fit 13	07/30/96.08:00A	07/30/96.09:00A	
1.2.2.11.3S	2	Weld Joint 13	07/30/96.09:00A	07/30/96.11:00A	
1.2.2.11.3T	2	Leak Test Joint 13	07/30/96.11:00A	07/30/96.02:00P	
1.2.2.11.3U	2	Install Tube Supports 13	07/30/96.11:00A	07/30/96.02:00P	
1.2.2.11.3V	2	Remove Equip'mt, Clean & Cap 13	07/30/96.02:00P	07/30/96.04:00P	
1.2.2.11.4A	1	Unload,Rec/Insp Tube 14	06/25/96.11:00A	06/25/96.12:00P	
1.2.2.11.4B	1	Move to Stiff Fit Up Stat.14	07/01/96.01:00P	07/01/96.02:00P	
1.2.2.11.4C	1	Set-up & Purge 14	07/01/96.02:00P	07/01/96.03:00P	
1.2.2.11.4D	2	Fit Stiffeners 14	07/01/96.03:00P	07/01/96.05:00P	
1.2.2.11.4E	4	Weld Stiffeners 14	07/02/96.08:00A	07/02/96.12:00P	
1.2.2.11.4F	1	Inspect, Install End Caps 14	07/02/96.01:00P	07/02/96.02:00P	
1.2.2.11.4H	1	Move to Test Area 14	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.11.4I	1	Pre-Clean & Black Light 14	07/03/96.10:00A	07/03/96.11:00A	
1.2.2.11.4J	30	Leak Test 14	07/03/96.11:00A	07/04/96.05:00P	
1.2.2.11.4M	1	Move to Post Test Storage 14	07/05/96.08:00A	07/05/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.11.4N	1	Clean, Dry & End Cap 14	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.11.4P	1	Transport to Erection 14	07/31/96.01:00P	07/31/96.02:00P	
1.2.2.11.4Q	1	Set & Align 14	07/31/96.02:00P	07/31/96.03:00P	
1.2.2.11.4R	1	Set Clean Room, Purge & Fit 14	07/31/96.03:00P	07/31/96.04:00P	
1.2.2.11.4S	2	Weld Joint14	07/31/96.04:00P	08/01/96.09:00A	
1.2.2.11.4T	2	Leak Test Joint 4	08/01/96.09:00A	08/01/96.11:00A	
1.2.2.11.4U	2	Install Tube Supports 14	08/01/96.09:00A	08/01/96.11:00A	
1.2.2.11.4V	2	Remove Equip'mt, Clean & Cap 14	08/01/96.11:00A	08/01/96.02:00P	
1.2.2.11.5A	1	Unload,Rec/Insp Tube 1	06/25/96.01:00P	06/25/96.02:00P	
1.2.2.11.5B	1	Move to Stiff Fit Up Stat. 15	07/03/96.10:00A	07/03/96.11:00A	
1.2.2.11.5C	1	Set-up & Purge 15	07/03/96.11:00A	07/03/96.12:00P	
1.2.2.11.5D	1	F/W Pump Port Reinf. 15	07/03/96.01:00P	07/03/96.02:00P	
1.2.2.11.5E	2	Fit Stiffeners 15	07/03/96.02:00P	07/03/96.04:00P	
1.2.2.11.5F	4	Weld Stiffeners15	07/03/96.04:00P	07/04/96.11:00A	
1.2.2.11.5G	1	Move to P.Port Stat. 15	07/04/96.11:00A	07/04/96.12:00P	
1.2.2.11.5H	1	Setup & Bore 10" Inlet15	07/04/96.01:00P	07/04/96.02:00P	
1.2.2.11.5I	2	Purge/F/W Pump Port 15	07/04/96.02:00P	07/04/96.04:00P	
1.2.2.11.5J	1	Inspect, Install End Caps 15	07/04/96.04:00P	07/04/96.05:00P	
1.2.2.11.5L	1	Move to Test Area 115	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.11.5M	1	Pre-Clean & Black Light 15	07/05/96.10:00A	07/05/96.11:00A	
1.2.2.11.5N	30	Leak Test 15	07/05/96.11:00A	07/06/96.05:00P	
1.2.2.11.5Q	1	Move to Post Test Storage 15	07/08/96.08:00A	07/08/96.09:00A	
1.2.2.11.5R	1	Clean, Dry & End Cap 15	07/08/96.09:00A	07/08/96.10:00A	
1.2.2.11.5T	1	Transport to Erection 15	08/02/96.10:00A	08/02/96.11:00A	
1.2.2.11.5U	1	Set & Align 15	08/02/96.11:00A	08/02/96.12:00P	
1.2.2.11.5V	1	Set Clean Room, Purge & Fit 15	08/02/96.01:00P	08/02/96.02:00P	
1.2.2.11.5W	2	Weld Joint 15	08/02/96.02:00P	08/02/96.04:00P	
1.2.2.11.5X	2	Leak Test Joint 15	08/02/96.04:00P	08/05/96.09:00A	
1.2.2.11.5Y	2	Install Tube Supports 15	08/02/96.04:00P	08/05/96.09:00A	
1.2.2.11.5Z	2	Remove Equip'mt, Clean & Cap 15	08/05/96.09:00A	08/05/96.11:00A	
1.2.2.11.B1A	1	Unload,Rec/Insp Tube B11	06/25/96.08:00A	06/25/96.09:00A	
1.2.2.11.B1B	1	Move to Stiff Fit Up Stat. B11	06/25/96.09:00A	06/25/96.10:00A	
1.2.2.11.B1C	1	Set-up & Purge B11	06/25/96.10:00A	06/25/96.11:00A	
1.2.2.11.B1D	2	Fit Stiffeners B11	06/25/96.11:00A	06/25/96.02:00P	
1.2.2.11.B1E	4	Weld Stiffeners B11	06/25/96.02:00P	06/26/96.09:00A	
1.2.2.11.B1F	1	Move to Exp.Bellows Stat. B11	06/26/96.09:00A	06/26/96.10:00A	
1.2.2.11.B1G	3	Fit,Purge,Weld Exp. Bellows B11	06/26/96.10:00A	06/26/96.02:00P	
1.2.2.11.B1H	1	Inspect, Install End Caps B11	06/26/96.02:00P	06/26/96.03:00P	
1.2.2.11.B1J	1	Move to Test Area B11	06/26/96.03:00P	06/26/96.04:00P	
1.2.2.11.B1K	1	Pre-Clean & Black Light B11	06/26/96.04:00P	06/26/96.05:00P	
1.2.2.11.B1L	30	Leak Test B11	06/26/96.05:00P	06/27/96.11:00P	
1.2.2.11.B1O	1	Move to Post Test Storage B11	06/28/96.08:00A	06/28/96.09:00A	
1.2.2.11.B1P	1	Clean, Dry & End Cap B11	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.11.B1R	1	Transport to Erection B11	07/23/96.11:00A	07/23/96.12:00P	
1.2.2.11.B1S	1	Set & Align B11	07/23/96.01:00P	07/23/96.02:00P	
1.2.2.11.B1T	1	Set Clean Room, Purge & Fit B11	07/23/96.02:00P	07/23/96.03:00P	
1.2.2.11.B1U	2	Weld Joint B11	07/23/96.03:00P	07/23/96.05:00P	
1.2.2.11.B1V	2	Leak Test Joint B11	07/24/96.08:00A	07/24/96.10:00A	
1.2.2.11.B1W	2	Install Tube Supports B11	07/24/96.08:00A	07/24/96.10:00A	
1.2.2.11.B1X	2	Remove Equip'mt, Clean & Cap B11	07/24/96.10:00A	07/24/96.12:00P	
1.2.2.11.B2A	1	Unload,Rec/Insp Tube B12	06/25/96.09:00A	06/25/96.10:00A	
1.2.2.11.B2B	1	Move to Stiff Fit Up Stat. B12	06/26/96.10:00A	06/26/96.11:00A	
1.2.2.11.B2C	1	Set-up & Purge B12	06/26/96.11:00A	06/26/96.12:00P	
1.2.2.11.B2D	2	Fit Stiffeners B12	06/26/96.01:00P	06/26/96.03:00P	
1.2.2.11.B2E	4	Weld Stiffeners B12	06/26/96.03:00P	06/27/96.10:00A	
1.2.2.11.B2F	1	Move to Exp.Bellows Stat. B12	06/27/96.10:00A	06/27/96.11:00A	
1.2.2.11.B2G	3	Fit,Purge,Weld Exp. Bellows B12	06/27/96.11:00A	06/27/96.03:00P	
1.2.2.11.B2H	1	Inspect, Install End Caps B12	06/27/96.03:00P	06/27/96.04:00P	
1.2.2.11.B2J	1	Move to Test Area B12	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.11.B2K	1	Pre-Clean & Black Light B12	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.11.B2L	30	Leak Test B12	06/28/96.11:00A	06/29/96.05:00P	
1.2.2.11.B2O	1	Move to Post Test Storage B12	07/01/96.08:00A	07/01/96.09:00A	
1.2.2.11.B2P	1	Clean, Dry & End Cap B12	07/01/96.09:00A	07/01/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.11.B2R	1	Transport to Erection B12	07/25/96.09:00A	07/25/96.10:00A	
1.2.2.11.B2S	1	Set & Align B12	07/25/96.10:00A	07/25/96.11:00A	
1.2.2.11.B2T	1	Set Clean Room, Purge & Fit B12	07/25/96.11:00A	07/25/96.12:00P	
1.2.2.11.B2U	2	Weld Joint B12	07/25/96.01:00P	07/25/96.03:00P	
1.2.2.11.B2V	2	Leak Test Joint B12	07/25/96.03:00P	07/25/96.05:00P	
1.2.2.11.B2W	2	Install Tube Supports B12	07/25/96.03:00P	07/25/96.05:00P	
1.2.2.11.B2X	2	Remove Equip'mt, Clean & Cap B12	07/26/96.08:00A	07/26/96.10:00A	
1.2.2.11.B3A	1	Unload,Rec/Insp Tube B13	06/25/96.10:00A	06/25/96.11:00A	
1.2.2.11.B3B	1	Move to Stiff Fit Up Stat. B13	06/27/96.11:00A	06/27/96.12:00P	
1.2.2.11.B3C	1	Set-up & Purge B13	06/27/96.01:00P	06/27/96.02:00P	
1.2.2.11.B3D	2	Fit Stiffeners B3	06/27/96.02:00P	06/27/96.04:00P	
1.2.2.11.B3E	4	Weld Stiffeners B3	06/27/96.04:00P	06/28/96.11:00A	
1.2.2.11.B3F	1	Move to Exp.Bellows Stat. B13	06/28/96.11:00A	06/28/96.12:00P	
1.2.2.11.B3G	3	Fit,Purge,Weld Exp. Bellows B13	06/28/96.01:00P	06/28/96.04:00P	
1.2.2.11.B3H	1	Inspect, Install End Caps B13	06/28/96.04:00P	06/28/96.05:00P	
1.2.2.11.B3J	1	Move to Test Area B13	07/01/96.09:00A	07/01/96.10:00A	
1.2.2.11.B3K	1	Pre-Clean & Black Light B13	07/01/96.10:00A	07/01/96.11:00A	
1.2.2.11.B3L	30	Leak Test B13	07/01/96.11:00A	07/02/96.05:00P	
1.2.2.11.B3O	1	Move to Post Test Storage B13	07/03/96.08:00A	07/03/96.09:00A	
1.2.2.11.B3P	1	Clean, Dry & End Cap B13	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.11.B3R	1	Transport to Erection B13	07/26/96.04:00P	07/26/96.05:00P	
1.2.2.11.B3S	1	Set & Align B13	07/29/96.08:00A	07/29/96.09:00A	
1.2.2.11.B3T	1	Set Clean Room, Purge & Fit B13	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.11.B3U	2	Weld Joint B13	07/29/96.10:00A	07/29/96.12:00P	
1.2.2.11.B3V	2	Leak Test Joint B13	07/29/96.01:00P	07/29/96.03:00P	
1.2.2.11.B3W	2	Install Tube Supports B13	07/29/96.01:00P	07/29/96.03:00P	
1.2.2.11.B3X	2	Remove Equip'mt, Clean & Cap B13	07/29/96.03:00P	07/29/96.05:00P	
1.2.2.11.B4A	1	Unload,Rec/Insp Tube B14	06/25/96.11:00A	06/25/96.12:00P	
1.2.2.11.B4B	1	Move to Stiff Fit Up Stat. B14	06/28/96.01:00P	06/28/96.02:00P	
1.2.2.11.B4C	1	Set-up & Purge B14	06/28/96.02:00P	06/28/96.03:00P	
1.2.2.11.B4D	2	Fit Stiffeners B14	06/28/96.03:00P	06/28/96.05:00P	
1.2.2.11.B4E	4	Weld Stiffeners B14	07/01/96.08:00A	07/01/96.12:00P	
1.2.2.11.B4F	1	Move to Exp.Bellows Stat. B14	07/01/96.01:00P	07/01/96.02:00P	
1.2.2.11.B4G	3	Fit,Purge,Weld Exp. Bellows B14	07/01/96.02:00P	07/01/96.05:00P	
1.2.2.11.B4H	1	Inspect, Install End Caps B14	07/02/96.08:00A	07/02/96.09:00A	
1.2.2.11.B4J	1	Move to Test Area B14	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.11.B4K	1	Pre-Clean & Black Light B14	07/03/96.10:00A	07/03/96.11:00A	
1.2.2.11.B4L	30	Leak Test B14	07/03/96.11:00A	07/04/96.05:00P	
1.2.2.11.B4O	1	Move to Post Test Storage B14	07/05/96.08:00A	07/05/96.09:00A	
1.2.2.11.B4P	1	Clean, Dry & End Cap B14	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.11.B4R	1	Transport to Erection B14	07/30/96.02:00P	07/30/96.03:00P	
1.2.2.11.B4S	1	Set & Align B14	07/30/96.03:00P	07/30/96.04:00P	
1.2.2.11.B4T	1	Set Clean Room, Purge & Fit B14	07/30/96.04:00P	07/30/96.05:00P	
1.2.2.11.B4U	2	Weld Joint B14	07/31/96.08:00A	07/31/96.10:00A	
1.2.2.11.B4V	2	Leak Test Joint B14	07/31/96.10:00A	07/31/96.12:00P	
1.2.2.11.B4W	2	Install Tube Supports B14	07/31/96.10:00A	07/31/96.12:00P	
1.2.2.11.B4X	2	Remove Equip'mt, Clean & Cap B14	07/31/96.01:00P	07/31/96.03:00P	
1.2.2.11.B5A	1	Unload,Rec/Insp Tube B15	06/25/96.01:00P	06/25/96.02:00P	
1.2.2.11.B5B	1	Move to Stiff Fit Up Stat. B15	07/01/96.02:00P	07/01/96.03:00P	
1.2.2.11.B5C	1	Set-up & Purge B15	07/01/96.03:00P	07/01/96.04:00P	
1.2.2.11.B5D	2	Fit Stiffeners B15	07/01/96.04:00P	07/02/96.09:00A	
1.2.2.11.B5E	4	Weld Stiffeners B15	07/02/96.09:00A	07/02/96.02:00P	
1.2.2.11.B5F	1	Move to Exp.Bellows Stat. B15	07/03/96.10:00A	07/03/96.11:00A	
1.2.2.11.B5G	3	Fit,Purge,Weld Exp. Bellows B15	07/03/96.11:00A	07/03/96.03:00P	
1.2.2.11.B5H	1	Inspect, Install End Caps B15	07/03/96.03:00P	07/03/96.04:00P	
1.2.2.11.B5J	1	Move to Test Area B15	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.11.B5K	1	Pre-Clean & Black Light B15	07/05/96.10:00A	07/05/96.11:00A	
1.2.2.11.B5L	30	Leak Test B15	07/05/96.11:00A	07/06/96.05:00P	
1.2.2.11.B5O	1	Move to Post Test Storage B15	07/08/96.08:00A	07/08/96.09:00A	
1.2.2.11.B5P	1	Clean, Dry & End Cap B15	07/08/96.09:00A	07/08/96.10:00A	
1.2.2.11.B5R	1	Transport to Erection B15	08/01/96.11:00A	08/01/96.12:00P	
1.2.2.11.B5S	1	Set & Align B15	08/01/96.01:00P	08/01/96.02:00P	
1.2.2.11.B5T	1	Set Clean Room, Purge & Fit B15	08/01/96.02:00P	08/01/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.11.B5U	2	Weld Joint B15	08/01/96.03:00P	08/01/96.05:00P	
1.2.2.11.B5V	2	Leak Test Joint B15	08/02/96.08:00A	08/02/96.10:00A	
1.2.2.11.B5W	2	Install Tube Supports B15	08/02/96.08:00A	08/02/96.10:00A	
1.2.2.11.B5X	2	Remove Equip'mt, Clean & Cap B15	08/02/96.10:00A	08/02/96.12:00P	
1.2.2.16	228	Cans 16-20	07/08/96.04:00P	08/16/96.11:00A	
1.2.2.16.1A	1	Unload,Rec/Insp Tube 16	07/09/96.08:00A	07/09/96.09:00A	
1.2.2.16.1B	1	Move to Stiff Fit Up Stat. 16	07/09/96.09:00A	07/09/96.10:00A	
1.2.2.16.1C	1	Set-up & Purge 16	07/09/96.10:00A	07/09/96.11:00A	
1.2.2.16.1D	2	Fit Stiffeners 16	07/09/96.11:00A	07/09/96.02:00P	
1.2.2.16.1E	4	Weld Stiffeners 16	07/09/96.02:00P	07/10/96.09:00A	
1.2.2.16.1F	1	Inspect, Install End Caps 16	07/10/96.09:00A	07/10/96.10:00A	
1.2.2.16.1H	1	Move to Test Area 16	07/10/96.10:00A	07/10/96.11:00A	
1.2.2.16.1I	1	Pre-Clean & Black Light 16	07/10/96.11:00A	07/10/96.12:00P	
1.2.2.16.1J	30	Leak Test 16	07/10/96.12:00P	07/11/96.06:00P	
1.2.2.16.1M	1	Move to Post Test Storage 16	07/12/96.08:00A	07/12/96.09:00A	
1.2.2.16.1N	1	Clean, Dry & End Cap 16	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.16.1P	1	Transport to Erection 16	08/06/96.10:00A	08/06/96.11:00A	
1.2.2.16.1Q	1	Set & Align 16	08/06/96.11:00A	08/06/96.12:00P	
1.2.2.16.1R	1	Set Clean Room, Purge & Fit 16	08/06/96.01:00P	08/06/96.02:00P	
1.2.2.16.1S	2	Weld Joint 16	08/06/96.02:00P	08/06/96.04:00P	
1.2.2.16.1T	2	Leak Test Joint 16	08/06/96.04:00P	08/07/96.09:00A	
1.2.2.16.1U	2	Install Tube Supports 16	08/06/96.04:00P	08/07/96.09:00A	
1.2.2.16.1V	2	Remove Equip'mt, Clean & Cap 16	08/07/96.09:00A	08/07/96.11:00A	
1.2.2.16.2A	1	Unload,Rec. & Inspect 17	07/09/96.09:00A	07/09/96.10:00A	
1.2.2.16.2B	1	Move to Stiff Fit Up Stat. 17	07/10/96.11:00A	07/10/96.12:00P	
1.2.2.16.2C	1	Set-up & Purge 17	07/10/96.01:00P	07/10/96.02:00P	
1.2.2.16.2D	2	Fit Stiffeners 17	07/10/96.02:00P	07/10/96.04:00P	
1.2.2.16.2E	4	Weld Stiffeners 17	07/10/96.04:00P	07/11/96.11:00A	
1.2.2.16.2F	1	Inspect, Install End Caps 17	07/11/96.11:00A	07/11/96.12:00P	
1.2.2.16.2H	1	Move to Test Area 17	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.16.2I	1	Pre-Clean & Black Light 17	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.16.2J	30	Leak Test 17	07/12/96.11:00A	07/13/96.05:00P	
1.2.2.16.2M	1	Move to Post Test Storage 17	07/15/96.08:00A	07/15/96.09:00A	
1.2.2.16.2N	1	Clean, Dry & End Cap 17	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.16.2P	1	Transport to Erection 17	08/08/96.08:00A	08/08/96.09:00A	
1.2.2.16.2Q	1	Set & Align 17	08/08/96.09:00A	08/08/96.10:00A	
1.2.2.16.2R	1	Set Clean Room, Purge & Fit 17	08/08/96.10:00A	08/08/96.11:00A	
1.2.2.16.2S	2	Weld Joint 17	08/08/96.11:00A	08/08/96.02:00P	
1.2.2.16.2T	2	Leak Test Joint 17	08/08/96.02:00P	08/08/96.04:00P	
1.2.2.16.2U	2	Install Tube Supports 17	08/08/96.02:00P	08/08/96.04:00P	
1.2.2.16.2V	2	Remove Equip'mt, Clean & Cap 17	08/08/96.04:00P	08/09/96.09:00A	
1.2.2.16.3A	1	Unload,Rec/Insp Tube 18	07/09/96.10:00A	07/09/96.11:00A	
1.2.2.16.3B	1	Move to Stiff Fit Up Stat. 18	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.16.3C	1	Set-up & Purge 18	07/12/96.11:00A	07/12/96.12:00P	
1.2.2.16.3D	2	Fit Stiffeners 18	07/12/96.01:00P	07/12/96.03:00P	
1.2.2.16.3E	4	Weld Stiffeners 18	07/12/96.03:00P	07/15/96.10:00A	
1.2.2.16.3F	1	Inspect, Install End Caps 18	07/15/96.10:00A	07/15/96.11:00A	
1.2.2.16.3H	1	Move to Test Area 18	07/15/96.11:00A	07/15/96.12:00P	
1.2.2.16.3I	1	Pre-Clean & Black Light 18	07/15/96.01:00P	07/15/96.02:00P	
1.2.2.16.3J	30	Leak Test 18	07/15/96.02:00P	07/16/96.08:00P	
1.2.2.16.3M	1	Move to Post Test Storage 18	07/17/96.08:00A	07/17/96.09:00A	
1.2.2.16.3N	1	Clean, Dry & End Cap 18	07/17/96.09:00A	07/17/96.10:00A	
1.2.2.16.3P	1	Transport to Erection 18	08/09/96.03:00P	08/09/96.04:00P	
1.2.2.16.3Q	1	Set & Align 18	08/09/96.04:00P	08/09/96.05:00P	
1.2.2.16.3R	1	Set Clean Room, Purge & Fit 18	08/12/96.08:00A	08/12/96.09:00A	
1.2.2.16.3S	2	Weld Joint 18	08/12/96.09:00A	08/12/96.11:00A	
1.2.2.16.3T	2	Leak Test Joint 18	08/12/96.11:00A	08/12/96.02:00P	
1.2.2.16.3U	2	Install Tube Supports 18	08/12/96.11:00A	08/12/96.02:00P	
1.2.2.16.3V	2	Remove Equip'mt, Clean & Cap 18	08/12/96.02:00P	08/12/96.04:00P	
1.2.2.16.4A	1	Unload,Rec/Insp Tube 19	07/09/96.11:00A	07/09/96.12:00P	
1.2.2.16.4B	1	Move to Stiff Fit Up Stat. 19	07/15/96.01:00P	07/15/96.02:00P	
1.2.2.16.4C	1	Set-up & Purge 19	07/15/96.02:00P	07/15/96.03:00P	
1.2.2.16.4D	2	Fit Stiffeners 19	07/15/96.03:00P	07/15/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.16.4E	4	Weld Stiffeners 19	07/16/96.08:00A	07/16/96.12:00P	
1.2.2.16.4F	1	Inspect, Install End Caps 19	07/16/96.01:00P	07/16/96.02:00P	
1.2.2.16.4H	1	Move to Test Area 19	07/17/96.09:00A	07/17/96.10:00A	
1.2.2.16.4I	1	Pre-Clean & Black Light 19	07/17/96.10:00A	07/17/96.11:00A	
1.2.2.16.4J	30	Leak Test 19	07/17/96.11:00A	07/18/96.05:00P	
1.2.2.16.4M	1	Move to Post Test Storage 19	07/19/96.08:00A	07/19/96.09:00A	
1.2.2.16.4N	1	Clean, Dry & End Cap 19	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.16.4P	1	Transport to Erection 19	08/13/96.01:00P	08/13/96.02:00P	
1.2.2.16.4Q	1	Set & Align 19	08/13/96.02:00P	08/13/96.03:00P	
1.2.2.16.4R	1	Set Clean Room, Purge & Fit 19	08/13/96.03:00P	08/13/96.04:00P	
1.2.2.16.4S	2	Weld Joint 19	08/13/96.04:00P	08/14/96.09:00A	
1.2.2.16.4T	2	Leak Test Joint 19	08/14/96.09:00A	08/14/96.11:00A	
1.2.2.16.4U	2	Install Tube Supports 19	08/14/96.09:00A	08/14/96.11:00A	
1.2.2.16.4V	2	Remove Equip'mt, Clean & Cap 19	08/14/96.11:00A	08/14/96.02:00P	
1.2.2.16.5A	1	Unload,Rec/Insp Tube 20	07/09/96.01:00P	07/09/96.02:00P	
1.2.2.16.5B	1	Move to Stiff Fit Up Stat. 20	07/17/96.10:00A	07/17/96.11:00A	
1.2.2.16.5C	1	Set-up & Purge 20	07/17/96.11:00A	07/17/96.12:00P	
1.2.2.16.5D	1	F/W Pump Port Reinf. 20	07/17/96.01:00P	07/17/96.02:00P	
1.2.2.16.5E	2	Fit Stiffeners 20	07/17/96.02:00P	07/17/96.04:00P	
1.2.2.16.5F	4	Weld Stiffeners 20	07/17/96.04:00P	07/18/96.11:00A	
1.2.2.16.5G	1	Move to P.Port Stat. 20	07/18/96.11:00A	07/18/96.12:00P	
1.2.2.16.5H	1	Setup & Bore 10" Inlet 20	07/18/96.01:00P	07/18/96.02:00P	
1.2.2.16.5I	2	Purge/F/W Pump Port 20	07/18/96.02:00P	07/18/96.04:00P	
1.2.2.16.5J	1	Inspect, Install End Caps 20	07/18/96.04:00P	07/18/96.05:00P	
1.2.2.16.5L	1	Move to Test Area 20	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.16.5M	1	Pre-Clean & Black Light 20	07/19/96.10:00A	07/19/96.11:00A	
1.2.2.16.5N	30	Leak Test 20	07/19/96.11:00A	07/20/96.05:00P	
1.2.2.16.5Q	1	Move to Post Test Storage 20	07/22/96.08:00A	07/22/96.09:00A	
1.2.2.16.5R	1	Clean, Dry & End Cap 20	07/22/96.09:00A	07/22/96.10:00A	
1.2.2.16.5T	1	Transport to Erection 20	08/15/96.10:00A	08/15/96.11:00A	
1.2.2.16.5U	1	Set & Align 20	08/15/96.11:00A	08/15/96.12:00P	
1.2.2.16.5V	1	Set Clean Room, Purge & Fit 20	08/15/96.01:00P	08/15/96.02:00P	
1.2.2.16.5W	2	Weld Joint 20	08/15/96.02:00P	08/15/96.04:00P	
1.2.2.16.5X	2	Leak Test Joint 20	08/15/96.04:00P	08/16/96.09:00A	
1.2.2.16.5Y	2	Install Tube Supports 20	08/15/96.04:00P	08/16/96.09:00A	
1.2.2.16.5Z	2	Remove Equip'mt, Clean & Cap 20	08/16/96.09:00A	08/16/96.11:00A	
1.2.2.16.B1A	1	Unload,Rec/Insp Tube B15	07/09/96.08:00A	07/09/96.09:00A	
1.2.2.16.B1B	1	Move to Stiff Fit Up Stat. B16	07/09/96.09:00A	07/09/96.10:00A	
1.2.2.16.B1C	1	Set-up & Purge B16	07/09/96.10:00A	07/09/96.11:00A	
1.2.2.16.B1D	2	Fit Stiffeners B6	07/09/96.11:00A	07/09/96.02:00P	
1.2.2.16.B1E	4	Weld Stiffeners B16	07/09/96.02:00P	07/10/96.09:00A	
1.2.2.16.B1F	1	Move to Exp.Bellows Stat. B16	07/10/96.09:00A	07/10/96.10:00A	
1.2.2.16.B1G	3	Fit,Purge,Weld Exp. Bellows B16	07/10/96.10:00A	07/10/96.02:00P	
1.2.2.16.B1H	1	Inspect, Install End Caps B16	07/10/96.02:00P	07/10/96.03:00P	
1.2.2.16.B1J	1	Move to Test Area B16	07/10/96.03:00P	07/10/96.04:00P	
1.2.2.16.B1K	1	Pre-Clean & Black Light B16	07/10/96.04:00P	07/10/96.05:00P	
1.2.2.16.B1L	30	Leak Test B16	07/10/96.05:00P	07/11/96.11:00P	
1.2.2.16.B1O	1	Move to Post Test Storage B16	07/12/96.08:00A	07/12/96.09:00A	
1.2.2.16.B1P	1	Clean, Dry & End Cap B16	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.16.B1R	1	Transport to Erection B16	08/05/96.11:00A	08/05/96.12:00P	
1.2.2.16.B1S	1	Set & Align B16	08/05/96.01:00P	08/05/96.02:00P	
1.2.2.16.B1T	1	Set Clean Room, Purge & Fit B16	08/05/96.02:00P	08/05/96.03:00P	
1.2.2.16.B1U	2	Weld Joint B16	08/05/96.03:00P	08/05/96.05:00P	
1.2.2.16.B1V	2	Leak Test Joint B16	08/06/96.08:00A	08/06/96.10:00A	
1.2.2.16.B1W	2	Install Tube Supports B16	08/06/96.08:00A	08/06/96.10:00A	
1.2.2.16.B1X	2	Remove Equip'mt, Clean & Cap B16	08/06/96.10:00A	08/06/96.12:00P	
1.2.2.16.B2A	1	Unload,Rec/Insp Tube B17	07/09/96.09:00A	07/09/96.10:00A	
1.2.2.16.B2B	1	Move to Stiff Fit Up Stat. B17	07/10/96.10:00A	07/10/96.11:00A	
1.2.2.16.B2C	1	Set-up & Purge B17	07/10/96.11:00A	07/10/96.12:00P	
1.2.2.16.B2D	2	Fit Stiffeners B17	07/10/96.01:00P	07/10/96.03:00P	
1.2.2.16.B2E	4	Weld Stiffeners B17	07/10/96.03:00P	07/11/96.10:00A	
1.2.2.16.B2F	1	Move to Exp.Bellows Stat. B17	07/11/96.10:00A	07/11/96.11:00A	
1.2.2.16.B2G	3	Fit,Purge,Weld Exp. Bellows B17	07/11/96.11:00A	07/11/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.16.B2H	1	Inspect, Install End Caps B17	07/11/96.03:00P	07/11/96.04:00P	
1.2.2.16.B2J	1	Move to Test Area B17	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.16.B2K	1	Pre-Clean & Black Light B17	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.16.B2L	30	Leak Test B17	07/12/96.11:00A	07/13/96.05:00P	
1.2.2.16.B2O	1	Move to Post Test Storage B17	07/15/96.08:00A	07/15/96.09:00A	
1.2.2.16.B2P	1	Clean, Dry & End Cap B17	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.16.B2R	1	Transport to Erection B17	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.16.B2S	1	Set & Align B17	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.16.B2T	1	Set Clean Room, Purge & Fit B17	08/07/96.11:00A	08/07/96.12:00P	
1.2.2.16.B2U	2	Weld Joint B17	08/07/96.01:00P	08/07/96.03:00P	
1.2.2.16.B2V	2	Leak Test Joint B17	08/07/96.03:00P	08/07/96.05:00P	
1.2.2.16.B2W	2	Install Tube SupportsB17	08/07/96.03:00P	08/07/96.05:00P	
1.2.2.16.B2X	2	Remove Equip'mt, Clean & Cap B17	08/08/96.08:00A	08/08/96.10:00A	
1.2.2.16.B3A	1	Unload,Rec/Insp Tube B18	07/09/96.10:00A	07/09/96.11:00A	
1.2.2.16.B3B	1	Move to Stiff Fit Up Stat. B18	07/11/96.11:00A	07/11/96.12:00P	
1.2.2.16.B3C	1	Set-up & Purge B18	07/11/96.01:00P	07/11/96.02:00P	
1.2.2.16.B3D	2	Fit Stiffeners B18	07/11/96.02:00P	07/11/96.04:00P	
1.2.2.16.B3E	4	Weld Stiffeners B18	07/11/96.04:00P	07/12/96.11:00A	
1.2.2.16.B3F	1	Move to Exp.Bellows Stat. B18	07/12/96.11:00A	07/12/96.12:00P	
1.2.2.16.B3G	3	Fit,Purge,Weld Exp. Bellows B18	07/12/96.01:00P	07/12/96.04:00P	
1.2.2.16.B3H	1	Inspect, Install End Caps B18	07/12/96.04:00P	07/12/96.05:00P	
1.2.2.16.B3J	1	Move to Test Area B18	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.16.B3K	1	Pre-Clean & Black Light B18	07/15/96.10:00A	07/15/96.11:00A	
1.2.2.16.B3L	30	Leak Test B18	07/15/96.11:00A	07/16/96.05:00P	
1.2.2.16.B3O	1	Move to Post Test Storage B18	07/17/96.08:00A	07/17/96.09:00A	
1.2.2.16.B3P	1	Clean, Dry & End Cap B18	07/17/96.09:00A	07/17/96.10:00A	
1.2.2.16.B3R	1	Transport to Erection B18	08/08/96.04:00P	08/08/96.05:00P	
1.2.2.16.B3S	1	Set & Align B18	08/09/96.08:00A	08/09/96.09:00A	
1.2.2.16.B3T	1	Set Clean Room, Purge & Fit B18	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.16.B3U	2	Weld Joint B18	08/09/96.10:00A	08/09/96.12:00P	
1.2.2.16.B3V	2	Leak Test Joint B18	08/09/96.01:00P	08/09/96.03:00P	
1.2.2.16.B3W	2	Install Tube Supports B18	08/09/96.01:00P	08/09/96.03:00P	
1.2.2.16.B3X	2	Remove Equip'mt, Clean & Cap B18	08/09/96.03:00P	08/09/96.05:00P	
1.2.2.16.B4A	1	Unload,Rec/Insp Tube B19	07/09/96.11:00A	07/09/96.12:00P	
1.2.2.16.B4B	1	Move to Stiff Fit Up Stat. B19	07/12/96.01:00P	07/12/96.02:00P	
1.2.2.16.B4C	1	Set-up & Purge B19	07/12/96.02:00P	07/12/96.03:00P	
1.2.2.16.B4D	2	Fit Stiffeners B19	07/12/96.03:00P	07/12/96.05:00P	
1.2.2.16.B4E	4	Weld Stiffeners B19	07/15/96.08:00A	07/15/96.12:00P	
1.2.2.16.B4F	1	Move to Exp.Bellows Stat. B19	07/15/96.01:00P	07/15/96.02:00P	
1.2.2.16.B4G	3	Fit,Purge,Weld Exp. Bellows B19	07/15/96.02:00P	07/15/96.05:00P	
1.2.2.16.B4H	1	Inspect, Install End Caps B19	07/16/96.08:00A	07/16/96.09:00A	
1.2.2.16.B4J	1	Move to Test Area B19	07/17/96.09:00A	07/17/96.10:00A	
1.2.2.16.B4K	1	Pre-Clean & Black Light B19	07/17/96.10:00A	07/17/96.11:00A	
1.2.2.16.B4L	30	Leak Test B19	07/17/96.11:00A	07/18/96.05:00P	
1.2.2.16.B4O	1	Move to Post Test Storage B19	07/19/96.08:00A	07/19/96.09:00A	
1.2.2.16.B4P	1	Clean, Dry & End Cap B19	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.16.B4R	1	Transport to Erection B19	08/12/96.02:00P	08/12/96.03:00P	
1.2.2.16.B4S	1	Set & Align B19	08/12/96.03:00P	08/12/96.04:00P	
1.2.2.16.B4T	1	Set Clean Room, Purge & Fit B19	08/12/96.04:00P	08/12/96.05:00P	
1.2.2.16.B4U	2	Weld Joint B19	08/13/96.08:00A	08/13/96.10:00A	
1.2.2.16.B4V	2	Leak Test Joint B19	08/13/96.10:00A	08/13/96.12:00P	
1.2.2.16.B4W	2	Install Tube Supports B19	08/13/96.10:00A	08/13/96.12:00P	
1.2.2.16.B4X	2	Remove Equip'mt, Clean & Cap B19	08/13/96.01:00P	08/13/96.03:00P	
1.2.2.16.B5A	1	Unload,Rec/Insp Tube B19	07/09/96.01:00P	07/09/96.02:00P	
1.2.2.16.B5B	1	Move to Stiff Fit Up Stat. B19	07/15/96.02:00P	07/15/96.03:00P	
1.2.2.16.B5C	1	Set-up & Purge B20	07/15/96.03:00P	07/15/96.04:00P	
1.2.2.16.B5D	2	Fit Stiffeners B20	07/15/96.04:00P	07/16/96.09:00A	
1.2.2.16.B5E	4	Weld Stiffeners B20	07/16/96.09:00A	07/16/96.02:00P	
1.2.2.16.B5F	1	Move to Exp.Bellows Stat. B20	07/17/96.10:00A	07/17/96.11:00A	
1.2.2.16.B5G	3	Fit,Purge,Weld Exp. Bellows B20	07/17/96.11:00A	07/17/96.03:00P	
1.2.2.16.B5H	1	Inspect, Install End Caps B20	07/17/96.03:00P	07/17/96.04:00P	
1.2.2.16.B5J	1	Move to Test Area B20	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.16.B5K	1	Pre-Clean & Black Light B20	07/19/96.10:00A	07/19/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.16.B5L	30	Leak Test B20	07/19/96.11:00A	07/20/96.05:00P	
1.2.2.16.B5O	1	Move to Post Test Storage B20	07/22/96.08:00A	07/22/96.09:00A	
1.2.2.16.B5P	1	Clean, Dry & End Cap B20	07/22/96.09:00A	07/22/96.10:00A	
1.2.2.16.B5R	1	Transport to Erection B20	08/14/96.11:00A	08/14/96.12:00P	
1.2.2.16.B5S	1	Set & Align B20	08/14/96.01:00P	08/14/96.02:00P	
1.2.2.16.B5T	1	Set Clean Room, Purge & Fit B20	08/14/96.02:00P	08/14/96.03:00P	
1.2.2.16.B5U	2	Weld Joint B20	08/14/96.03:00P	08/14/96.05:00P	
1.2.2.16.B5V	2	Leak Test Joint B20	08/15/96.08:00A	08/15/96.10:00A	
1.2.2.16.B5W	2	Install Tube Supports B20	08/15/96.08:00A	08/15/96.10:00A	
1.2.2.16.B5X	2	Remove Equip'mt, Clean & Cap B20	08/15/96.10:00A	08/15/96.12:00P	
1.2.2.21	220	Cans 21-25	07/22/96.04:00P	08/29/96.11:00A	
1.2.2.21.1A	1	Unload,Rec/Insp Tube 21	07/23/96.08:00A	07/23/96.09:00A	
1.2.2.21.1B	1	Move to Stiff Fit Up Stat. 21	07/23/96.09:00A	07/23/96.10:00A	
1.2.2.21.1C	1	Set-up & Purge 21	07/23/96.10:00A	07/23/96.11:00A	
1.2.2.21.1D	2	Fit Stiffeners 21	07/23/96.11:00A	07/23/96.02:00P	
1.2.2.21.1E	4	Weld Stiffeners 21	07/23/96.02:00P	07/24/96.09:00A	
1.2.2.21.1F	1	Inspect, Install End Caps 21	07/24/96.09:00A	07/24/96.10:00A	
1.2.2.21.1H	1	Move to Test Area 21	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.21.1I	1	Pre-Clean & Black Light 21	07/24/96.11:00A	07/24/96.12:00P	
1.2.2.21.1J	30	Leak Test 21	07/24/96.12:00P	07/25/96.06:00P	
1.2.2.21.1M	1	Move to Post Test Storage 21	07/26/96.08:00A	07/26/96.09:00A	
1.2.2.21.1N	1	Clean, Dry & End Cap 21	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.21.1P	1	Transport to Erection 210	08/19/96.10:00A	08/19/96.11:00A	
1.2.2.21.1Q	1	Set & Align 21	08/19/96.11:00A	08/19/96.12:00P	
1.2.2.21.1R	1	Set Clean Room, Purge & Fit 21	08/19/96.01:00P	08/19/96.02:00P	
1.2.2.21.1S	2	Weld Joint 21	08/19/96.02:00P	08/19/96.04:00P	
1.2.2.21.1T	2	Leak Test Joint 21	08/19/96.04:00P	08/20/96.09:00A	
1.2.2.21.1U	2	Install Tube Supports 21	08/19/96.04:00P	08/20/96.09:00A	
1.2.2.21.1V	2	Remove Equip'mt, Clean & Cap 21	08/20/96.09:00A	08/20/96.11:00A	
1.2.2.21.2A	1	Unload,Rec. & Insp 22	07/23/96.09:00A	07/23/96.10:00A	
1.2.2.21.2B	1	Move to Stiff Fit Up Stat. 22	07/24/96.11:00A	07/24/96.12:00P	
1.2.2.21.2C	1	Set-up & Purge 22	07/24/96.01:00P	07/24/96.02:00P	
1.2.2.21.2D	2	Fit Stiffeners 22	07/24/96.02:00P	07/24/96.04:00P	
1.2.2.21.2E	4	Weld Stiffeners 22	07/24/96.04:00P	07/25/96.11:00A	
1.2.2.21.2F	1	Inspect, Install End Caps 22	07/25/96.11:00A	07/25/96.12:00P	
1.2.2.21.2H	1	Move to Test Area 22	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.21.2I	1	Pre-Clean & Black Light 22	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.21.2J	30	Leak Test 22	07/26/96.11:00A	07/27/96.05:00P	
1.2.2.21.2M	1	Move to Post Test Storage 22	07/29/96.08:00A	07/29/96.09:00A	
1.2.2.21.2N	1	Clean, Dry & End Cap 22	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.21.2P	1	Transport to Erection 22	08/21/96.08:00A	08/21/96.09:00A	
1.2.2.21.2Q	1	Set & Align 22	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.21.2R	1	Set Clean Room, Purge & Fit 22	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.21.2S	2	Weld Joint 22	08/21/96.11:00A	08/21/96.02:00P	
1.2.2.21.2T	2	Leak Test Joint 22	08/21/96.02:00P	08/21/96.04:00P	
1.2.2.21.2U	2	Install Tube Supports 22	08/21/96.02:00P	08/21/96.04:00P	
1.2.2.21.2V	2	Remove Equip'mt, Clean & Cap 22	08/21/96.04:00P	08/22/96.09:00A	
1.2.2.21.3A	1	Unload,Rec/Insp Tube 23	07/23/96.10:00A	07/23/96.11:00A	
1.2.2.21.3B	1	Move to Stiff Fit Up Stat. 23	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.21.3C	1	Set-up & Purge 23	07/26/96.11:00A	07/26/96.12:00P	
1.2.2.21.3D	2	Fit Stiffeners 23	07/26/96.01:00P	07/26/96.03:00P	
1.2.2.21.3E	4	Weld Stiffeners 23	07/26/96.03:00P	07/29/96.10:00A	
1.2.2.21.3F	1	Inspect, Install End Caps 23	07/29/96.10:00A	07/29/96.11:00A	
1.2.2.21.3H	1	Move to Test Area 23	07/29/96.11:00A	07/29/96.12:00P	
1.2.2.21.3I	1	Pre-Clean & Black Light 23	07/29/96.01:00P	07/29/96.02:00P	
1.2.2.21.3J	30	Leak Test 23	07/29/96.02:00P	07/30/96.08:00P	
1.2.2.21.3M	1	Move to Post Test Storage 23	07/31/96.08:00A	07/31/96.09:00A	
1.2.2.21.3N	1	Clean, Dry & End Cap 23	07/31/96.09:00A	07/31/96.10:00A	
1.2.2.21.3P	1	Transport to Erection 23	08/22/96.03:00P	08/22/96.04:00P	
1.2.2.21.3Q	1	Set & Align 23	08/22/96.04:00P	08/22/96.05:00P	
1.2.2.21.3R	1	Set Clean Room, Purge & Fit 23	08/23/96.08:00A	08/23/96.09:00A	
1.2.2.21.3S	2	Weld Joint 23	08/23/96.09:00A	08/23/96.11:00A	
1.2.2.21.3T	2	Leak Test Joint 23	08/23/96.11:00A	08/23/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.21.3U	2	Install Tube Supports 23	08/23/96.11:00A	08/23/96.02:00P	
1.2.2.21.3V	2	Remove Equip'mt, Clean & Cap 23	08/23/96.02:00P	08/23/96.04:00P	
1.2.2.21.4A	1	Unload,Rec/Insp Tube 24	07/23/96.11:00A	07/23/96.12:00P	
1.2.2.21.4B	1	Move to Stiff Fit Up Stat. 24	07/29/96.01:00P	07/29/96.02:00P	
1.2.2.21.4C	1	Set-up & Purge 24	07/29/96.02:00P	07/29/96.03:00P	
1.2.2.21.4D	2	Fit Stiffeners 24	07/29/96.03:00P	07/29/96.05:00P	
1.2.2.21.4E	4	Weld Stiffeners 24	07/30/96.08:00A	07/30/96.12:00P	
1.2.2.21.4F	1	Inspect, Install End Caps 24	07/30/96.01:00P	07/30/96.02:00P	
1.2.2.21.4H	1	Move to Test Area2 4	07/31/96.09:00A	07/31/96.10:00A	
1.2.2.21.4I	1	Pre-Clean & Black Light 24	07/31/96.10:00A	07/31/96.11:00A	
1.2.2.21.4J	30	Leak Test 24	07/31/96.11:00A	08/01/96.05:00P	
1.2.2.21.4M	1	Move to Post Test Storage 24	08/02/96.08:00A	08/02/96.09:00A	
1.2.2.21.4N	1	Clean, Dry & End Cap 24	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.21.4P	1	Transport to Erection 24	08/26/96.01:00P	08/26/96.02:00P	
1.2.2.21.4Q	1	Set & Align 24	08/26/96.02:00P	08/26/96.03:00P	
1.2.2.21.4R	1	Set Clean Room, Purge & Fit 24	08/26/96.03:00P	08/26/96.04:00P	
1.2.2.21.4S	2	Weld Joint 24	08/26/96.04:00P	08/27/96.09:00A	
1.2.2.21.4T	2	Leak Test Joint 24	08/27/96.09:00A	08/27/96.11:00A	
1.2.2.21.4U	2	Install Tube Supports 24	08/27/96.09:00A	08/27/96.11:00A	
1.2.2.21.4V	2	Remove Equip'mt, Clean & Cap 24	08/27/96.11:00A	08/27/96.02:00P	
1.2.2.21.5A	1	Unload,Rec/Insp Tube 25	07/23/96.01:00P	07/23/96.02:00P	
1.2.2.21.5B	1	Move to Stiff Fit Up Stat. 25	07/31/96.10:00A	07/31/96.11:00A	
1.2.2.21.5C	1	Set-up & Purge 25	07/31/96.11:00A	07/31/96.12:00P	
1.2.2.21.5D	1	F/W Pump Port Reinf. 25	07/31/96.01:00P	07/31/96.02:00P	
1.2.2.21.5E	2	Fit Stiffeners 25	07/31/96.02:00P	07/31/96.04:00P	
1.2.2.21.5F	4	Weld Stiffeners 25	07/31/96.04:00P	08/01/96.11:00A	
1.2.2.21.5G	1	Move to P.Port Stat.25	08/01/96.11:00A	08/01/96.12:00P	
1.2.2.21.5H	1	Setup & Bore 10" Inlet 25	08/01/96.01:00P	08/01/96.02:00P	
1.2.2.21.5I	2	Purge/F/W Pump Port 25	08/01/96.02:00P	08/01/96.04:00P	
1.2.2.21.5J	1	Inspect, Install End Caps 25	08/01/96.04:00P	08/01/96.05:00P	
1.2.2.21.5L	1	Move to Test Area 25	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.21.5M	1	Pre-Clean & Black Light 25	08/02/96.10:00A	08/02/96.11:00A	
1.2.2.21.5N	30	Leak Test 25	08/02/96.11:00A	08/03/96.05:00P	
1.2.2.21.5Q	1	Move to Post Test Storage 25	08/05/96.08:00A	08/05/96.09:00A	
1.2.2.21.5R	1	Clean, Dry & End Cap 25	08/05/96.09:00A	08/05/96.10:00A	
1.2.2.21.5T	1	Transport to Erection 25	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.21.5U	1	Set & Align 25	08/28/96.11:00A	08/28/96.12:00P	
1.2.2.21.5V	1	Set Clean Room, Purge & Fit 25	08/28/96.01:00P	08/28/96.02:00P	
1.2.2.21.5W	2	Weld Joint25	08/28/96.02:00P	08/28/96.04:00P	
1.2.2.21.5X	2	Leak Test Joint 25	08/28/96.04:00P	08/29/96.09:00A	
1.2.2.21.5Y	2	Install Tube Supports 250	08/28/96.04:00P	08/29/96.09:00A	
1.2.2.21.5Z	2	Remove Equip'mt, Clean & Cap 25	08/29/96.09:00A	08/29/96.11:00A	
1.2.2.21.B1A	1	Unload,Rec/Insp Tube B21	07/23/96.08:00A	07/23/96.09:00A	
1.2.2.21.B1B	1	Move to Stiff Fit Up Stat. B21	07/23/96.09:00A	07/23/96.10:00A	
1.2.2.21.B1C	1	Set-up & Purge B21	07/23/96.10:00A	07/23/96.11:00A	
1.2.2.21.B1D	2	Fit Stiffeners B21	07/23/96.11:00A	07/23/96.02:00P	
1.2.2.21.B1E	4	Weld Stiffeners B21	07/23/96.02:00P	07/24/96.09:00A	
1.2.2.21.B1F	1	Move to Exp.Bellows Stat. B21	07/24/96.09:00A	07/24/96.10:00A	
1.2.2.21.B1G	3	Fit,Purge,Weld Exp. Bellows B21	07/24/96.10:00A	07/24/96.02:00P	
1.2.2.21.B1H	1	Inspect, Install End Caps B21	07/24/96.02:00P	07/24/96.03:00P	
1.2.2.21.B1J	1	Move to Test Area B21	07/24/96.03:00P	07/24/96.04:00P	
1.2.2.21.B1K	1	Pre-Clean & Black Light B21	07/24/96.04:00P	07/24/96.05:00P	
1.2.2.21.B1L	30	Leak Test B21	07/24/96.05:00P	07/25/96.11:00P	
1.2.2.21.B1O	1	Move to Post Test Storage B21	07/26/96.08:00A	07/26/96.09:00A	
1.2.2.21.B1P	1	Clean, Dry & End Cap B21	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.21.B1R	1	Transport to Erection 21	08/16/96.11:00A	08/16/96.12:00P	
1.2.2.21.B1S	1	Set & Align B21	08/16/96.01:00P	08/16/96.02:00P	
1.2.2.21.B1T	1	Set Clean Room, Purge & Fit B21	08/16/96.02:00P	08/16/96.03:00P	
1.2.2.21.B1U	2	Weld Joint B21	08/16/96.03:00P	08/16/96.05:00P	
1.2.2.21.B1V	2	Leak Test Joint B21	08/19/96.08:00A	08/19/96.10:00A	
1.2.2.21.B1W	2	Install Tube Supports B21	08/19/96.08:00A	08/19/96.10:00A	
1.2.2.21.B1X	2	Remove Equip'mt, Clean & Cap B21	08/19/96.10:00A	08/19/96.12:00P	
1.2.2.21.B2A	1	Unload,Rec/Insp Tube B22	07/23/96.09:00A	07/23/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.21.B2B	1	Move to Stiff Fit Up Stat. B22	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.21.B2C	1	Set-up & Purge B22	07/24/96.11:00A	07/24/96.12:00P	
1.2.2.21.B2D	2	Fit Stiffeners B22	07/24/96.01:00P	07/24/96.03:00P	
1.2.2.21.B2E	4	Weld Stiffeners B22	07/24/96.03:00P	07/25/96.10:00A	
1.2.2.21.B2F	1	Move to Exp.Bellows Stat. B22	07/25/96.10:00A	07/25/96.11:00A	
1.2.2.21.B2G	3	Fit,Purge,Weld Exp. Bellows B22	07/25/96.11:00A	07/25/96.03:00P	
1.2.2.21.B2H	1	Inspect, Install End Caps B22	07/25/96.03:00P	07/25/96.04:00P	
1.2.2.21.B2J	1	Move to Test Area B2	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.21.B2K	1	Pre-Clean & Black Light B22	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.21.B2L	30	Leak Test B22	07/26/96.11:00A	07/27/96.05:00P	
1.2.2.21.B2O	1	Move to Post Test Storage B22	07/29/96.08:00A	07/29/96.09:00A	
1.2.2.21.B2P	1	Clean, Dry & End Cap B22	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.21.B2R	1	Transport to Erection B22	08/20/96.09:00A	08/20/96.10:00A	
1.2.2.21.B2S	1	Set & Align B22	08/20/96.10:00A	08/20/96.11:00A	
1.2.2.21.B2T	1	Set Clean Room, Purge & Fit B22	08/20/96.11:00A	08/20/96.12:00P	
1.2.2.21.B2U	2	Weld Joint B22	08/20/96.01:00P	08/20/96.03:00P	
1.2.2.21.B2V	2	Leak Test Joint B22	08/20/96.03:00P	08/20/96.05:00P	
1.2.2.21.B2W	2	Install Tube SupportsB22	08/20/96.03:00P	08/20/96.05:00P	
1.2.2.21.B2X	2	Remove Equip'mt, Clean & Cap B22	08/21/96.08:00A	08/21/96.10:00A	
1.2.2.21.B3A	1	Unload,Rec/Insp Tube B23	07/23/96.10:00A	07/23/96.11:00A	
1.2.2.21.B3B	1	Move to Stiff Fit Up Stat. B23	07/25/96.11:00A	07/25/96.12:00P	
1.2.2.21.B3C	1	Set-up & Purge B23	07/25/96.01:00P	07/25/96.02:00P	
1.2.2.21.B3D	2	Fit Stiffeners B23	07/25/96.02:00P	07/25/96.04:00P	
1.2.2.21.B3E	4	Weld Stiffeners B223	07/25/96.04:00P	07/26/96.11:00A	
1.2.2.21.B3F	1	Move to Exp.Bellows Stat. 23	07/26/96.11:00A	07/26/96.12:00P	
1.2.2.21.B3G	3	Fit,Purge,Weld Exp. Bellows B23	07/26/96.01:00P	07/26/96.04:00P	
1.2.2.21.B3H	1	Inspect, Install End Caps B23	07/26/96.04:00P	07/26/96.05:00P	
1.2.2.21.B3J	1	Move to Test Area B23	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.21.B3K	1	Pre-Clean & Black Light B23	07/29/96.10:00A	07/29/96.11:00A	
1.2.2.21.B3L	30	Leak Test B23	07/29/96.11:00A	07/30/96.05:00P	
1.2.2.21.B3O	1	Move to Post Test Storage B23	07/31/96.08:00A	07/31/96.09:00A	
1.2.2.21.B3P	1	Clean, Dry & End Cap B23	07/31/96.09:00A	07/31/96.10:00A	
1.2.2.21.B3R	1	Transport to Erection B23	08/21/96.04:00P	08/21/96.05:00P	
1.2.2.21.B3S	1	Set & Align B23	08/22/96.08:00A	08/22/96.09:00A	
1.2.2.21.B3T	1	Set Clean Room, Purge & Fit B23	08/22/96.09:00A	08/22/96.10:00A	
1.2.2.21.B3U	2	Weld Joint B23	08/22/96.10:00A	08/22/96.12:00P	
1.2.2.21.B3V	2	Leak Test Joint B23	08/22/96.01:00P	08/22/96.03:00P	
1.2.2.21.B3W	2	Install Tube Supports B23	08/22/96.01:00P	08/22/96.03:00P	
1.2.2.21.B3X	2	Remove Equip'mt, Clean & Cap B23	08/22/96.03:00P	08/22/96.05:00P	
1.2.2.21.B4A	1	Unload,Rec/Insp Tube B20	07/23/96.11:00A	07/23/96.12:00P	
1.2.2.21.B4B	1	Move to Stiff Fit Up Stat. B24	07/26/96.01:00P	07/26/96.02:00P	
1.2.2.21.B4C	1	Set-up & Purge B24	07/26/96.02:00P	07/26/96.03:00P	
1.2.2.21.B4D	2	Fit Stiffeners B2	07/26/96.03:00P	07/26/96.05:00P	
1.2.2.21.B4E	4	Weld Stiffeners B24	07/29/96.08:00A	07/29/96.12:00P	
1.2.2.21.B4F	1	Move to Exp.Bellows Stat. B24	07/29/96.01:00P	07/29/96.02:00P	
1.2.2.21.B4G	3	Fit,Purge,Weld Exp. Bellows B24	07/29/96.02:00P	07/29/96.05:00P	
1.2.2.21.B4H	1	Inspect, Install End Caps B24	07/30/96.08:00A	07/30/96.09:00A	
1.2.2.21.B4J	1	Move to Test Area B224	07/31/96.09:00A	07/31/96.10:00A	
1.2.2.21.B4K	1	Pre-Clean & Black Light B24	07/31/96.10:00A	07/31/96.11:00A	
1.2.2.21.B4L	30	Leak Test B24	07/31/96.11:00A	08/01/96.05:00P	
1.2.2.21.B4O	1	Move to Post Test Storage B24	08/02/96.08:00A	08/02/96.09:00A	
1.2.2.21.B4P	1	Clean, Dry & End Cap B24	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.21.B4R	1	Transport to Erection B24	08/23/96.02:00P	08/23/96.03:00P	
1.2.2.21.B4S	1	Set & Align B24	08/23/96.03:00P	08/23/96.04:00P	
1.2.2.21.B4T	1	Set Clean Room, Purge & Fit B24	08/23/96.04:00P	08/23/96.05:00P	
1.2.2.21.B4U	2	Weld Joint B24	08/26/96.08:00A	08/26/96.10:00A	
1.2.2.21.B4V	2	Leak Test Joint B24	08/26/96.10:00A	08/26/96.12:00P	
1.2.2.21.B4W	2	Install Tube Supports B24	08/26/96.10:00A	08/26/96.12:00P	
1.2.2.21.B4X	2	Remove Equip'mt, Clean & Cap B24	08/26/96.01:00P	08/26/96.03:00P	
1.2.2.21.B5A	1	Unload,Rec/Insp Tube B2	07/23/96.01:00P	07/23/96.02:00P	
1.2.2.21.B5B	1	Move to Stiff Fit Up Stat. B25	07/29/96.02:00P	07/29/96.03:00P	
1.2.2.21.B5C	1	Set-up & Purge B25	07/29/96.03:00P	07/29/96.04:00P	
1.2.2.21.B5D	2	Fit Stiffeners B25	07/29/96.04:00P	07/30/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.21.B5E	4	Weld Stiffeners B25	07/30/96.09:00A	07/30/96.02:00P	
1.2.2.21.B5F	1	Move to Exp.Bellows Stat. B25	07/31/96.10:00A	07/31/96.11:00A	
1.2.2.21.B5G	3	Fit,Purge,Weld Exp. Bellows B25	07/31/96.11:00A	07/31/96.03:00P	
1.2.2.21.B5H	1	Inspect, Install End Caps B25	07/31/96.03:00P	07/31/96.04:00P	
1.2.2.21.B5J	1	Move to Test Area B25	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.21.B5K	1	Pre-Clean & Black Light B25	08/02/96.10:00A	08/02/96.11:00A	
1.2.2.21.B5L	30	Leak Test B25	08/02/96.11:00A	08/03/96.05:00P	
1.2.2.21.B5O	1	Move to Post Test Storage B25	08/05/96.08:00A	08/05/96.09:00A	
1.2.2.21.B5P	1	Clean, Dry & End Cap B25	08/05/96.09:00A	08/05/96.10:00A	
1.2.2.21.B5R	1	Transport to Erection B25	08/27/96.11:00A	08/27/96.12:00P	
1.2.2.21.B5S	1	Set & Align B25	08/27/96.01:00P	08/27/96.02:00P	
1.2.2.21.B5T	1	Set Clean Room, Purge & Fit B25	08/27/96.02:00P	08/27/96.03:00P	
1.2.2.21.B5U	2	Weld Joint B25	08/27/96.03:00P	08/27/96.05:00P	
1.2.2.21.B5V	2	Leak Test Joint B25	08/28/96.08:00A	08/28/96.10:00A	
1.2.2.21.B5W	2	Install Tube Supports 25	08/28/96.08:00A	08/28/96.10:00A	
1.2.2.21.B5X	2	Remove Equip'mt, Clean & Cap B25	08/28/96.10:00A	08/28/96.12:00P	
1.2.2.26	212	Cans 26-30	08/05/96.04:00P	09/11/96.11:00A	
1.2.2.26.1A	1	Unload,Rec/Insp Tube 26	08/06/96.08:00A	08/06/96.09:00A	
1.2.2.26.1B	1	Move to Stiff Fit Up Stat. 26	08/06/96.09:00A	08/06/96.10:00A	
1.2.2.26.1C	1	Set-up & Purge 26	08/06/96.10:00A	08/06/96.11:00A	
1.2.2.26.1D	2	Fit Stiffeners 26	08/06/96.11:00A	08/06/96.02:00P	
1.2.2.26.1E	4	Weld Stiffeners 26	08/06/96.02:00P	08/07/96.09:00A	
1.2.2.26.1F	1	Inspect, Install End Caps 26	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.26.1H	1	Move to Test Area 26	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.26.1I	1	Pre-Clean & Black Light 26	08/07/96.11:00A	08/07/96.12:00P	
1.2.2.26.1J	30	Leak Test 26	08/07/96.12:00P	08/08/96.06:00P	
1.2.2.26.1M	1	Move to Post Test Storage 26	08/09/96.08:00A	08/09/96.09:00A	
1.2.2.26.1N	1	Clean, Dry & End Cap 26	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.26.1P	1	Transport to Erection 26	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.26.1Q	1	Set & Align 26	08/30/96.11:00A	08/30/96.12:00P	
1.2.2.26.1R	1	Set Clean Room, Purge & Fit 26	08/30/96.01:00P	08/30/96.02:00P	
1.2.2.26.1S	2	Weld Joint 26	08/30/96.02:00P	08/30/96.04:00P	
1.2.2.26.1T	2	Leak Test Joint 26	08/30/96.04:00P	09/02/96.09:00A	
1.2.2.26.1U	2	Install Tube Supports 26	08/30/96.04:00P	09/02/96.09:00A	
1.2.2.26.1V	2	Remove Equip'mt, Clean & Cap 26	09/02/96.09:00A	09/02/96.11:00A	
1.2.2.26.2A	1	Unload,Rec. & Inspect 27	08/06/96.09:00A	08/06/96.10:00A	
1.2.2.26.2B	1	Move to Stiff Fit Up Stat. 27	08/07/96.11:00A	08/07/96.12:00P	
1.2.2.26.2C	1	Set-up & Purge 27	08/07/96.01:00P	08/07/96.02:00P	
1.2.2.26.2D	2	Fit Stiffeners 27	08/07/96.02:00P	08/07/96.04:00P	
1.2.2.26.2E	4	Weld Stiffeners 27	08/07/96.04:00P	08/08/96.11:00A	
1.2.2.26.2F	1	Inspect, Install End Caps 27	08/08/96.11:00A	08/08/96.12:00P	
1.2.2.26.2H	1	Move to Test Area 27	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.26.2I	1	Pre-Clean & Black Light 27	08/09/96.10:00A	08/09/96.11:00A	
1.2.2.26.2J	30	Leak Test 27	08/09/96.11:00A	08/10/96.05:00P	
1.2.2.26.2M	1	Move to Post Test Storage 27	08/12/96.08:00A	08/12/96.09:00A	
1.2.2.26.2N	1	Clean, Dry & End Cap 27	08/12/96.09:00A	08/12/96.10:00A	
1.2.2.26.2P	1	Transport to Erection 27	09/03/96.08:00A	09/03/96.09:00A	
1.2.2.26.2Q	1	Set & Align 27	09/03/96.09:00A	09/03/96.10:00A	
1.2.2.26.2R	1	Set Clean Room, Purge & Fit 27	09/03/96.10:00A	09/03/96.11:00A	
1.2.2.26.2S	2	Weld Joint 27	09/03/96.11:00A	09/03/96.02:00P	
1.2.2.26.2T	2	Leak Test Joint 27	09/03/96.02:00P	09/03/96.04:00P	
1.2.2.26.2U	2	Install Tube Supports 27	09/03/96.02:00P	09/03/96.04:00P	
1.2.2.26.2V	2	Remove Equip'mt, Clean & Cap 27	09/03/96.04:00P	09/04/96.09:00A	
1.2.2.26.3A	1	Unload,Rec/Insp Tube 28	08/06/96.10:00A	08/06/96.11:00A	
1.2.2.26.3B	1	Move to Stiff Fit Up Stat. 28	08/09/96.10:00A	08/09/96.11:00A	
1.2.2.26.3C	1	Set-up & Purge 28	08/09/96.11:00A	08/09/96.12:00P	
1.2.2.26.3D	2	Fit Stiffeners 28	08/09/96.01:00P	08/09/96.03:00P	
1.2.2.26.3E	4	Weld Stiffeners 28	08/09/96.03:00P	08/12/96.10:00A	
1.2.2.26.3F	1	Inspect, Install End Caps 28	08/12/96.10:00A	08/12/96.11:00A	
1.2.2.26.3H	1	Move to Test Area 28	08/12/96.11:00A	08/12/96.12:00P	
1.2.2.26.3I	1	Pre-Clean & Black Light 28	08/12/96.01:00P	08/12/96.02:00P	
1.2.2.26.3J	30	Leak Test 28	08/12/96.02:00P	08/13/96.08:00P	
1.2.2.26.3M	1	Move to Post Test Storage 28	08/14/96.08:00A	08/14/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.26.3N	1	Clean, Dry & End Cap 28	08/14/96.09:00A	08/14/96.10:00A	
1.2.2.26.3P	1	Transport to Erection 28	09/04/96.03:00P	09/04/96.04:00P	
1.2.2.26.3Q	1	Set & Align 28	09/04/96.04:00P	09/04/96.05:00P	
1.2.2.26.3R	1	Set Clean Room, Purge & Fit 28	09/05/96.08:00A	09/05/96.09:00A	
1.2.2.26.3S	2	Weld Joint 28	09/05/96.09:00A	09/05/96.11:00A	
1.2.2.26.3T	2	Leak Test Joint 28	09/05/96.11:00A	09/05/96.02:00P	
1.2.2.26.3U	2	Install Tube Supports 28	09/05/96.11:00A	09/05/96.02:00P	
1.2.2.26.3V	2	Remove Equip'mt, Clean & Cap 58	09/05/96.02:00P	09/05/96.04:00P	
1.2.2.26.4A	1	Unload,Rec/Insp Tube 29	08/06/96.11:00A	08/06/96.12:00P	
1.2.2.26.4B	1	Move to Stiff Fit Up Stat. 29	08/12/96.01:00P	08/12/96.02:00P	
1.2.2.26.4C	1	Set-up & Purge 29	08/12/96.02:00P	08/12/96.03:00P	
1.2.2.26.4D	2	Fit Stiffeners 29	08/12/96.03:00P	08/12/96.05:00P	
1.2.2.26.4E	4	Weld Stiffeners 29	08/13/96.08:00A	08/13/96.12:00P	
1.2.2.26.4F	1	Inspect, Install End Caps 29	08/13/96.01:00P	08/13/96.02:00P	
1.2.2.26.4H	1	Move to Test Area 29	08/14/96.09:00A	08/14/96.10:00A	
1.2.2.26.4I	1	Pre-Clean & Black Light 29	08/14/96.10:00A	08/14/96.11:00A	
1.2.2.26.4J	30	Leak Test 29	08/14/96.11:00A	08/15/96.05:00P	
1.2.2.26.4M	1	Move to Post Test Storage 29	08/16/96.08:00A	08/16/96.09:00A	
1.2.2.26.4N	1	Clean, Dry & End Cap 29	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.26.4P	1	Transport to Erection 29	09/06/96.01:00P	09/06/96.02:00P	
1.2.2.26.4Q	1	Set & Align 29	09/06/96.02:00P	09/06/96.03:00P	
1.2.2.26.4R	1	Set Clean Room, Purge & Fit 29	09/06/96.03:00P	09/06/96.04:00P	
1.2.2.26.4S	2	Weld Joint 29	09/06/96.04:00P	09/09/96.09:00A	
1.2.2.26.4T	2	Leak Test Joint 29	09/09/96.09:00A	09/09/96.11:00A	
1.2.2.26.4U	2	Install Tube Supports 29	09/09/96.09:00A	09/09/96.11:00A	
1.2.2.26.4V	2	Remove Equip'mt, Clean & Cap 29	09/09/96.11:00A	09/09/96.02:00P	
1.2.2.26.5A	1	Unload,Rec/Insp Tube 30	08/06/96.01:00P	08/06/96.02:00P	
1.2.2.26.5B	1	Move to Stiff Fit Up Stat. 30	08/14/96.10:00A	08/14/96.11:00A	
1.2.2.26.5C	1	Set-up & Purge 30	08/14/96.11:00A	08/14/96.12:00P	
1.2.2.26.5D	1	F/W Pump Port Reinf. 30	08/14/96.01:00P	08/14/96.02:00P	
1.2.2.26.5E	2	Fit Stiffeners 30	08/14/96.02:00P	08/14/96.04:00P	
1.2.2.26.5F	4	Weld Stiffeners 30	08/14/96.04:00P	08/15/96.11:00A	
1.2.2.26.5G	1	Move to P.Port Stat.30	08/15/96.11:00A	08/15/96.12:00P	
1.2.2.26.5H	1	Setup & Bore 10" Inlet 30	08/15/96.01:00P	08/15/96.02:00P	
1.2.2.26.5I	2	Purge/F/W Pump Port 30	08/15/96.02:00P	08/15/96.04:00P	
1.2.2.26.5J	1	Inspect, Install End Caps 30	08/15/96.04:00P	08/15/96.05:00P	
1.2.2.26.5L	1	Move to Test Area 30	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.26.5M	1	Pre-Clean & Black Light 30	08/16/96.10:00A	08/16/96.11:00A	
1.2.2.26.5N	30	Leak Test 30	08/16/96.11:00A	08/17/96.05:00P	
1.2.2.26.5Q	1	Move to Post Test Storage 30	08/19/96.08:00A	08/19/96.09:00A	
1.2.2.26.5R	1	Clean, Dry & End Cap 30	08/19/96.09:00A	08/19/96.10:00A	
1.2.2.26.5T	1	Transport to Erection 30	09/10/96.10:00A	09/10/96.11:00A	
1.2.2.26.5U	1	Set & Align 30	09/10/96.11:00A	09/10/96.12:00P	
1.2.2.26.5V	1	Set Clean Room, Purge & Fit 30	09/10/96.01:00P	09/10/96.02:00P	
1.2.2.26.5W	2	Weld Joint 30	09/10/96.02:00P	09/10/96.04:00P	
1.2.2.26.5X	2	Leak Test Joint 30	09/10/96.04:00P	09/11/96.09:00A	
1.2.2.26.5Y	2	Install Tube Supports 30	09/10/96.04:00P	09/11/96.09:00A	
1.2.2.26.5Z	2	Remove Equip'mt, Clean & Cap 30	09/11/96.09:00A	09/11/96.11:00A	
1.2.2.26.B1A	1	Unload,Rec/Insp Tube B26	08/06/96.08:00A	08/06/96.09:00A	
1.2.2.26.B1B	1	Move to Stiff Fit Up Stat. B26	08/06/96.09:00A	08/06/96.10:00A	
1.2.2.26.B1C	1	Set-up & Purge B26	08/06/96.10:00A	08/06/96.11:00A	
1.2.2.26.B1D	2	Fit Stiffeners B26	08/06/96.11:00A	08/06/96.02:00P	
1.2.2.26.B1E	4	Weld Stiffeners B26	08/06/96.02:00P	08/07/96.09:00A	
1.2.2.26.B1F	1	Move to Exp.Bellows Stat. B26	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.26.B1G	3	Fit,Purge,Weld Exp. Bellows B26	08/07/96.10:00A	08/07/96.02:00P	
1.2.2.26.B1H	1	Inspect, Install End Caps B26	08/07/96.02:00P	08/07/96.03:00P	
1.2.2.26.B1J	1	Move to Test Area B26	08/07/96.03:00P	08/07/96.04:00P	
1.2.2.26.B1K	1	Pre-Clean & Black Light B26	08/07/96.04:00P	08/07/96.05:00P	
1.2.2.26.B1L	30	Leak Test B26	08/07/96.05:00P	08/08/96.11:00P	
1.2.2.26.B1O	1	Move to Post Test Storage B26	08/09/96.08:00A	08/09/96.09:00A	
1.2.2.26.B1P	1	Clean, Dry & End Cap B26	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.26.B1R	1	Transport to Erection B26	08/29/96.11:00A	08/29/96.12:00P	
1.2.2.26.B1S	1	Set & Align B26	08/29/96.01:00P	08/29/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.26.B1T	1	Set Clean Room, Purge & Fit B26	08/29/96.02:00P	08/29/96.03:00P	
1.2.2.26.B1U	2	Weld Joint B26	08/29/96.03:00P	08/29/96.05:00P	
1.2.2.26.B1V	2	Leak Test Joint B26	08/30/96.08:00A	08/30/96.10:00A	
1.2.2.26.B1W	2	Install Tube Supports B26	08/30/96.08:00A	08/30/96.10:00A	
1.2.2.26.B1X	2	Remove Equip'mt, Clean & Cap B26	08/30/96.10:00A	08/30/96.12:00P	
1.2.2.26.B2A	1	Unload,Rec/Insp Tube B27	08/06/96.09:00A	08/06/96.10:00A	
1.2.2.26.B2B	1	Move to Stiff Fit Up Stat. B27	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.26.B2C	1	Set-up & Purge B27	08/07/96.11:00A	08/07/96.12:00P	
1.2.2.26.B2D	2	Fit Stiffeners B27	08/07/96.01:00P	08/07/96.03:00P	
1.2.2.26.B2E	4	Weld Stiffeners B27	08/07/96.03:00P	08/08/96.10:00A	
1.2.2.26.B2F	1	Move to Exp.Bellows Stat. B27	08/08/96.10:00A	08/08/96.11:00A	
1.2.2.26.B2G	3	Fit,Purge,Weld Exp. Bellows B27	08/08/96.11:00A	08/08/96.03:00P	
1.2.2.26.B2H	1	Inspect, Install End Caps B27	08/08/96.03:00P	08/08/96.04:00P	
1.2.2.26.B2J	1	Move to Test Area B27	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.26.B2K	1	Pre-Clean & Black Light B27	08/09/96.10:00A	08/09/96.11:00A	
1.2.2.26.B2L	30	Leak Test B27	08/09/96.11:00A	08/10/96.05:00P	
1.2.2.26.B2O	1	Move to Post Test Storage B27	08/12/96.08:00A	08/12/96.09:00A	
1.2.2.26.B2P	1	Clean, Dry & End Cap B27	08/12/96.09:00A	08/12/96.10:00A	
1.2.2.26.B2R	1	Transport to Erection B27	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.26.B2S	1	Set & Align B27	09/02/96.10:00A	09/02/96.11:00A	
1.2.2.26.B2T	1	Set Clean Room, Purge & Fit B27	09/02/96.11:00A	09/02/96.12:00P	
1.2.2.26.B2U	2	Weld Joint B27	09/02/96.01:00P	09/02/96.03:00P	
1.2.2.26.B2V	2	Leak Test Joint B27	09/02/96.03:00P	09/02/96.05:00P	
1.2.2.26.B2W	2	Install Tube Supports B27	09/02/96.03:00P	09/02/96.05:00P	
1.2.2.26.B2X	2	Remove Equip'mt, Clean & Cap B27	09/03/96.08:00A	09/03/96.10:00A	
1.2.2.26.B3A	1	Unload,Rec/Insp Tube B280	08/06/96.10:00A	08/06/96.11:00A	
1.2.2.26.B3B	1	Move to Stiff Fit Up Stat. B28	08/08/96.11:00A	08/08/96.12:00P	
1.2.2.26.B3C	1	Set-up & Purge B28	08/08/96.01:00P	08/08/96.02:00P	
1.2.2.26.B3D	2	Fit Stiffeners B28	08/08/96.02:00P	08/08/96.04:00P	
1.2.2.26.B3E	4	Weld Stiffeners B28	08/08/96.04:00P	08/09/96.11:00A	
1.2.2.26.B3F	1	Move to Exp.Bellows Stat. B28	08/09/96.11:00A	08/09/96.12:00P	
1.2.2.26.B3G	3	Fit,Purge,Weld Exp. Bellows B28	08/09/96.01:00P	08/09/96.04:00P	
1.2.2.26.B3H	1	Inspect, Install End Caps B28	08/09/96.04:00P	08/09/96.05:00P	
1.2.2.26.B3J	1	Move to Test Area B28	08/12/96.09:00A	08/12/96.10:00A	
1.2.2.26.B3K	1	Pre-Clean & Black Light B28	08/12/96.10:00A	08/12/96.11:00A	
1.2.2.26.B3L	30	Leak Test B28	08/12/96.11:00A	08/13/96.05:00P	
1.2.2.26.B3O	1	Move to Post Test Storage B28	08/14/96.08:00A	08/14/96.09:00A	
1.2.2.26.B3P	1	Clean, Dry & End Cap B28	08/14/96.09:00A	08/14/96.10:00A	
1.2.2.26.B3R	1	Transport to Erection B28	09/03/96.04:00P	09/03/96.05:00P	
1.2.2.26.B3S	1	Set & Align B28	09/04/96.08:00A	09/04/96.09:00A	
1.2.2.26.B3T	1	Set Clean Room, Purge & Fit B28	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.26.B3U	2	Weld Joint B28	09/04/96.10:00A	09/04/96.12:00P	
1.2.2.26.B3V	2	Leak Test Joint B28	09/04/96.01:00P	09/04/96.03:00P	
1.2.2.26.B3W	2	Install Tube Supports B28	09/04/96.01:00P	09/04/96.03:00P	
1.2.2.26.B3X	2	Remove Equip'mt, Clean & Cap B28	09/04/96.03:00P	09/04/96.05:00P	
1.2.2.26.B4A	1	Unload,Rec/Insp Tube B28	08/06/96.11:00A	08/06/96.12:00P	
1.2.2.26.B4B	1	Move to Stiff Fit Up Stat. B29	08/09/96.01:00P	08/09/96.02:00P	
1.2.2.26.B4C	1	Set-up & Purge B29	08/09/96.02:00P	08/09/96.03:00P	
1.2.2.26.B4D	2	Fit Stiffeners B29	08/09/96.03:00P	08/09/96.05:00P	
1.2.2.26.B4E	4	Weld Stiffeners B29	08/12/96.08:00A	08/12/96.12:00P	
1.2.2.26.B4F	1	Move to Exp.Bellows Stat. B29	08/12/96.01:00P	08/12/96.02:00P	
1.2.2.26.B4G	3	Fit,Purge,Weld Exp. Bellows B29	08/12/96.02:00P	08/12/96.05:00P	
1.2.2.26.B4H	1	Inspect, Install End Caps B29	08/13/96.08:00A	08/13/96.09:00A	
1.2.2.26.B4J	1	Move to Test Area B29	08/14/96.09:00A	08/14/96.10:00A	
1.2.2.26.B4K	1	Pre-Clean & Black Light B29	08/14/96.10:00A	08/14/96.11:00A	
1.2.2.26.B4L	30	Leak Test B29	08/14/96.11:00A	08/15/96.05:00P	
1.2.2.26.B4O	1	Move to Post Test Storage B29	08/16/96.08:00A	08/16/96.09:00A	
1.2.2.26.B4P	1	Clean, Dry & End Cap B29	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.26.B4R	1	Transport to Erection B29	09/05/96.02:00P	09/05/96.03:00P	
1.2.2.26.B4S	1	Set & Align B29	09/05/96.03:00P	09/05/96.04:00P	
1.2.2.26.B4T	1	Set Clean Room, Purge & Fit B29	09/05/96.04:00P	09/05/96.05:00P	
1.2.2.26.B4U	2	Weld Joint B29	09/06/96.08:00A	09/06/96.10:00A	
1.2.2.26.B4V	2	Leak Test Joint B29	09/06/96.10:00A	09/06/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.26.B4W	2	Install Tube Supports B29	09/06/96.10:00A	09/06/96.12:00P	
1.2.2.26.B4X	2	Remove Equip'mt, Clean & Cap B29	09/06/96.01:00P	09/06/96.03:00P	
1.2.2.26.B5A	1	Unload,Rec/Insp Tube B30	08/06/96.01:00P	08/06/96.02:00P	
1.2.2.26.B5B	1	Move to Stiff Fit Up Stat. B30	08/12/96.02:00P	08/12/96.03:00P	
1.2.2.26.B5C	1	Set-up & Purge B30	08/12/96.03:00P	08/12/96.04:00P	
1.2.2.26.B5D	2	Fit Stiffeners B30	08/12/96.04:00P	08/13/96.09:00A	
1.2.2.26.B5E	4	Weld Stiffeners B30	08/13/96.09:00A	08/13/96.02:00P	
1.2.2.26.B5F	1	Move to Exp.Bellows Stat. B30	08/14/96.10:00A	08/14/96.11:00A	
1.2.2.26.B5G	3	Fit,Purge,Weld Exp. Bellows B30	08/14/96.11:00A	08/14/96.03:00P	
1.2.2.26.B5H	1	Inspect, Install End Caps B30	08/14/96.03:00P	08/14/96.04:00P	
1.2.2.26.B5J	1	Move to Test Area B30	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.26.B5K	1	Pre-Clean & Black Light B30	08/16/96.10:00A	08/16/96.11:00A	
1.2.2.26.B5L	30	Leak Test B30	08/16/96.11:00A	08/17/96.05:00P	
1.2.2.26.B5O	1	Move to Post Test Storage B30	08/19/96.08:00A	08/19/96.09:00A	
1.2.2.26.B5P	1	Clean, Dry & End Cap B30	08/19/96.09:00A	08/19/96.10:00A	
1.2.2.26.B5R	1	Transport to Erection B30	09/09/96.11:00A	09/09/96.12:00P	
1.2.2.26.B5S	1	Set & Align B30	09/09/96.01:00P	09/09/96.02:00P	
1.2.2.26.B5T	1	Set Clean Room, Purge & Fit B30	09/09/96.02:00P	09/09/96.03:00P	
1.2.2.26.B5U	2	Weld Joint B30	09/09/96.03:00P	09/09/96.05:00P	
1.2.2.26.B5V	2	Leak Test Joint B30	09/10/96.08:00A	09/10/96.10:00A	
1.2.2.26.B5W	2	Install Tube Supports B30	09/10/96.08:00A	09/10/96.10:00A	
1.2.2.26.B5X	2	Remove Equip'mt, Clean & Cap B30	09/10/96.10:00A	09/10/96.12:00P	
1.2.2.31	204	Cans 31-35	08/19/96.04:00P	09/24/96.11:00A	
1.2.2.31.1A	1	Unload,Rec/Insp Tube 31	08/20/96.08:00A	08/20/96.09:00A	
1.2.2.31.1B	1	Move to Stiff Fit Up Stat. 31	08/20/96.09:00A	08/20/96.10:00A	
1.2.2.31.1C	1	Set-up & Purge 31	08/20/96.10:00A	08/20/96.11:00A	
1.2.2.31.1D	2	Fit Stiffeners 31	08/20/96.11:00A	08/20/96.02:00P	
1.2.2.31.1E	4	Weld Stiffeners 31	08/20/96.02:00P	08/21/96.09:00A	
1.2.2.31.1F	1	Inspect, Install End Caps 31	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.31.1H	1	Move to Test Area 31	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.31.1I	1	Pre-Clean & Black Light 31	08/21/96.11:00A	08/21/96.12:00P	
1.2.2.31.1J	30	Leak Test 31	08/21/96.12:00P	08/22/96.06:00P	
1.2.2.31.1M	1	Move to Post Test Storage 31	08/23/96.08:00A	08/23/96.09:00A	
1.2.2.31.1N	1	Clean, Dry & End Cap 31	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.31.1P	1	Transport to Erection 31	09/12/96.10:00A	09/12/96.11:00A	
1.2.2.31.1Q	1	Set & Align 31	09/12/96.11:00A	09/12/96.12:00P	
1.2.2.31.1R	1	Set Clean Room, Purge & Fit 31	09/12/96.01:00P	09/12/96.02:00P	
1.2.2.31.1S	2	Weld Joint 31	09/12/96.02:00P	09/12/96.04:00P	
1.2.2.31.1T	2	Leak Test Joint 31	09/12/96.04:00P	09/13/96.09:00A	
1.2.2.31.1U	2	Install Tube Supports 31	09/12/96.04:00P	09/13/96.09:00A	
1.2.2.31.1V	2	Remove Equip'mt, Clean & Cap 31	09/13/96.09:00A	09/13/96.11:00A	
1.2.2.31.2A	1	Unload,Rec. & Insp 32	08/20/96.09:00A	08/20/96.10:00A	
1.2.2.31.2B	1	Move to Stiff Fit Up Stat. 32	08/21/96.11:00A	08/21/96.12:00P	
1.2.2.31.2C	1	Set-up & Purge32	08/21/96.01:00P	08/21/96.02:00P	
1.2.2.31.2D	2	Fit Stiffeners 32	08/21/96.02:00P	08/21/96.04:00P	
1.2.2.31.2E	4	Weld Stiffeners 32	08/21/96.04:00P	08/22/96.11:00A	
1.2.2.31.2F	1	Inspect, Install End Caps 32	08/22/96.11:00A	08/22/96.12:00P	
1.2.2.31.2H	1	Move to Test Area 32	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.31.2I	1	Pre-Clean & Black Light 32	08/23/96.10:00A	08/23/96.11:00A	
1.2.2.31.2J	30	Leak Test 32	08/23/96.11:00A	08/24/96.05:00P	
1.2.2.31.2M	1	Move to Post Test Storage 3 2	08/26/96.08:00A	08/26/96.09:00A	
1.2.2.31.2N	1	Clean, Dry & End Cap 32	08/26/96.09:00A	08/26/96.10:00A	
1.2.2.31.2P	1	Transport to Erection 32	09/16/96.08:00A	09/16/96.09:00A	
1.2.2.31.2Q	1	Set & Align 32	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.31.2R	1	Set Clean Room, Purge & Fit 32	09/16/96.10:00A	09/16/96.11:00A	
1.2.2.31.2S	2	Weld Joint 32	09/16/96.11:00A	09/16/96.02:00P	
1.2.2.31.2T	2	Leak Test Joint 32	09/16/96.02:00P	09/16/96.04:00P	
1.2.2.31.2U	2	Install Tube Supports 32	09/16/96.02:00P	09/16/96.04:00P	
1.2.2.31.2V	2	Remove Equip'mt, Clean & Cap 32	09/16/96.04:00P	09/17/96.09:00A	
1.2.2.31.3A	1	Unload,Rec/Insp Tube 33	08/20/96.10:00A	08/20/96.11:00A	
1.2.2.31.3B	1	Move to Stiff Fit Up Stat. 33	08/23/96.10:00A	08/23/96.11:00A	
1.2.2.31.3C	1	Set-up & Purge 33	08/23/96.11:00A	08/23/96.12:00P	
1.2.2.31.3D	2	Fit Stiffeners 33	08/23/96.01:00P	08/23/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.31.3E	4	Weld Stiffeners 33	08/23/96.03:00P	08/26/96.10:00A	
1.2.2.31.3F	1	Inspect, Install End Caps 33	08/26/96.10:00A	08/26/96.11:00A	
1.2.2.31.3H	1	Move to Test Area 33	08/26/96.11:00A	08/26/96.12:00P	
1.2.2.31.3I	1	Pre-Clean & Black Light 33	08/26/96.01:00P	08/26/96.02:00P	
1.2.2.31.3J	30	Leak Test 33	08/26/96.02:00P	08/27/96.08:00P	
1.2.2.31.3M	1	Move to Post Test Storage 3	08/28/96.08:00A	08/28/96.09:00A	
1.2.2.31.3N	1	Clean, Dry & End Cap 33 3	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.31.3P	1	Transport to Erection 33	09/17/96.03:00P	09/17/96.04:00P	
1.2.2.31.3Q	1	Set & Align 33	09/17/96.04:00P	09/17/96.05:00P	
1.2.2.31.3R	1	Set Clean Room, Purge & Fit 33	09/18/96.08:00A	09/18/96.09:00A	
1.2.2.31.3S	2	Weld Joint 33	09/18/96.09:00A	09/18/96.11:00A	
1.2.2.31.3T	2	Leak Test Joint 33	09/18/96.11:00A	09/18/96.02:00P	
1.2.2.31.3U	2	Install Tube Supports 33	09/18/96.11:00A	09/18/96.02:00P	
1.2.2.31.3V	2	Remove Equip'mt, Clean & Cap 33	09/18/96.02:00P	09/18/96.04:00P	
1.2.2.31.4A	1	Unload,Rec/Insp Tube 34	08/20/96.11:00A	08/20/96.12:00P	
1.2.2.31.4B	1	Move to Stiff Fit Up Stat.34	08/26/96.01:00P	08/26/96.02:00P	
1.2.2.31.4C	1	Set-up & Purge 34	08/26/96.02:00P	08/26/96.03:00P	
1.2.2.31.4D	2	Fit Stiffeners 34	08/26/96.03:00P	08/26/96.05:00P	
1.2.2.31.4E	4	Weld Stiffeners 34	08/27/96.08:00A	08/27/96.12:00P	
1.2.2.31.4F	1	Inspect, Install End Caps 334	08/27/96.01:00P	08/27/96.02:00P	
1.2.2.31.4H	1	Move to Test Area 34	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.31.4I	1	Pre-Clean & Black Light 34	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.31.4J	30	Leak Test 34	08/28/96.11:00A	08/29/96.05:00P	
1.2.2.31.4M	1	Move to Post Test Storage 34	08/30/96.08:00A	08/30/96.09:00A	
1.2.2.31.4N	1	Clean, Dry & End Cap 34	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.31.4P	1	Transport to Erection 34	09/19/96.01:00P	09/19/96.02:00P	
1.2.2.31.4Q	1	Set & Align 34	09/19/96.02:00P	09/19/96.03:00P	
1.2.2.31.4R	1	Set Clean Room, Purge & Fit 34	09/19/96.03:00P	09/19/96.04:00P	
1.2.2.31.4S	2	Weld Joint 34	09/19/96.04:00P	09/20/96.09:00A	
1.2.2.31.4T	2	Leak Test Joint 34	09/20/96.09:00A	09/20/96.11:00A	
1.2.2.31.4U	2	Install Tube Supports 34	09/20/96.09:00A	09/20/96.11:00A	
1.2.2.31.4V	2	Remove Equip'mt, Clean & Cap 34	09/20/96.11:00A	09/20/96.02:00P	
1.2.2.31.5A	1	Unload,Rec/Insp Tube 35	08/20/96.01:00P	08/20/96.02:00P	
1.2.2.31.5B	1	Move to Stiff Fit Up Stat. 35	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.31.5C	1	Set-up & Purge 35	08/28/96.11:00A	08/28/96.12:00P	
1.2.2.31.5D	1	F/W Pump Port Reinf. 35	08/28/96.01:00P	08/28/96.02:00P	
1.2.2.31.5E	2	Fit Stiffeners 35	08/28/96.02:00P	08/28/96.04:00P	
1.2.2.31.5F	4	Weld Stiffeners 35	08/28/96.04:00P	08/29/96.11:00A	
1.2.2.31.5G	1	Move to P.Port Stat. 35	08/29/96.11:00A	08/29/96.12:00P	
1.2.2.31.5H	1	Setup & Bore 10" Inlet 35	08/29/96.01:00P	08/29/96.02:00P	
1.2.2.31.5I	2	Purge/F/W Pump Port 35	08/29/96.02:00P	08/29/96.04:00P	
1.2.2.31.5J	1	Inspect, Install End Caps 35	08/29/96.04:00P	08/29/96.05:00P	
1.2.2.31.5L	1	Move to Test Area 35	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.31.5M	1	Pre-Clean & Black Light 35	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.31.5N	30	Leak Test 35	08/30/96.11:00A	08/31/96.05:00P	
1.2.2.31.5Q	1	Move to Post Test Storage 35	09/02/96.08:00A	09/02/96.09:00A	
1.2.2.31.5R	1	Clean, Dry & End Cap 35	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.31.5T	1	Transport to Erection 35	09/23/96.10:00A	09/23/96.11:00A	
1.2.2.31.5U	1	Set & Align 35	09/23/96.11:00A	09/23/96.12:00P	
1.2.2.31.5V	1	Set Clean Room, Purge & Fit 35	09/23/96.01:00P	09/23/96.02:00P	
1.2.2.31.5W	2	Weld Joint 35	09/23/96.02:00P	09/23/96.04:00P	
1.2.2.31.5X	2	Leak Test Joint 35	09/23/96.04:00P	09/24/96.09:00A	
1.2.2.31.5Y	2	Install Tube Supports 35	09/23/96.04:00P	09/24/96.09:00A	
1.2.2.31.5Z	2	Remove Equip'mt, Clean & Cap 35	09/24/96.09:00A	09/24/96.11:00A	
1.2.2.31.B1A	1	Unload,Rec/Insp Tube B31	08/20/96.08:00A	08/20/96.09:00A	
1.2.2.31.B1B	1	Move to Stiff Fit Up Stat. B31	08/20/96.09:00A	08/20/96.10:00A	
1.2.2.31.B1C	1	Set-up & Purge B31	08/20/96.10:00A	08/20/96.11:00A	
1.2.2.31.B1D	2	Fit Stiffeners B31	08/20/96.11:00A	08/20/96.02:00P	
1.2.2.31.B1E	4	Weld Stiffeners B31	08/20/96.02:00P	08/21/96.09:00A	
1.2.2.31.B1F	1	Move to Exp.Bellows Stat. B31	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.31.B1G	3	Fit,Purge,Weld Exp. Bellows B31	08/21/96.10:00A	08/21/96.02:00P	
1.2.2.31.B1H	1	Inspect, Install End Caps B31	08/21/96.02:00P	08/21/96.03:00P	
1.2.2.31.B1J	1	Move to Test Area B31	08/21/96.03:00P	08/21/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.31.B1K	1	Pre-Clean & Black Light B31	08/21/96.04:00P	08/21/96.05:00P	
1.2.2.31.B1L	30	Leak Test B31	08/21/96.05:00P	08/22/96.11:00P	
1.2.2.31.B1O	1	Move to Post Test Storage B31	08/23/96.08:00A	08/23/96.09:00A	
1.2.2.31.B1P	1	Clean, Dry & End Cap B31	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.31.B1R	1	Transport to Erection B31	09/11/96.11:00A	09/11/96.12:00P	
1.2.2.31.B1S	1	Set & Align B31	09/11/96.01:00P	09/11/96.02:00P	
1.2.2.31.B1T	1	Set Clean Room, Purge & Fit B31	09/11/96.02:00P	09/11/96.03:00P	
1.2.2.31.B1U	2	Weld Joint B31	09/11/96.03:00P	09/11/96.05:00P	
1.2.2.31.B1V	2	Leak Test Joint B31	09/12/96.08:00A	09/12/96.10:00A	
1.2.2.31.B1W	2	Install Tube Supports B31	09/12/96.08:00A	09/12/96.10:00A	
1.2.2.31.B1X	2	Remove Equip'mt, Clean & Cap B31	09/12/96.10:00A	09/12/96.12:00P	
1.2.2.31.B2A	1	Unload,Rec/Insp Tube B32	08/20/96.09:00A	08/20/96.10:00A	
1.2.2.31.B2B	1	Move to Stiff Fit Up Stat. B32	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.31.B2C	1	Set-up & Purge B32	08/21/96.11:00A	08/21/96.12:00P	
1.2.2.31.B2D	2	Fit Stiffeners B32	08/21/96.01:00P	08/21/96.03:00P	
1.2.2.31.B2E	4	Weld Stiffeners B32	08/21/96.03:00P	08/22/96.10:00A	
1.2.2.31.B2F	1	Move to Exp.Bellows Stat. B32	08/22/96.10:00A	08/22/96.11:00A	
1.2.2.31.B2G	3	Fit,Purge,Weld Exp. Bellows B32	08/22/96.11:00A	08/22/96.03:00P	
1.2.2.31.B2H	1	Inspect, Install End Caps B332	08/22/96.03:00P	08/22/96.04:00P	
1.2.2.31.B2J	1	Move to Test Area B32	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.31.B2K	1	Pre-Clean & Black Light B32	08/23/96.10:00A	08/23/96.11:00A	
1.2.2.31.B2L	30	Leak Test B32	08/23/96.11:00A	08/24/96.05:00P	
1.2.2.31.B2O	1	Move to Post Test Storage B32	08/26/96.08:00A	08/26/96.09:00A	
1.2.2.31.B2P	1	Clean, Dry & End Cap B32	08/26/96.09:00A	08/26/96.10:00A	
1.2.2.31.B2R	1	Transport to Erection B32	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.31.B2S	1	Set & Align B32	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.31.B2T	1	Set Clean Room, Purge & Fit B32	09/13/96.11:00A	09/13/96.12:00P	
1.2.2.31.B2U	2	Weld Joint B32	09/13/96.01:00P	09/13/96.03:00P	
1.2.2.31.B2V	2	Leak Test Joint B32	09/13/96.03:00P	09/13/96.05:00P	
1.2.2.31.B2W	2	Install Tube Supports B32	09/13/96.03:00P	09/13/96.05:00P	
1.2.2.31.B2X	2	Remove Equip'mt, Clean & Cap B32	09/16/96.08:00A	09/16/96.10:00A	
1.2.2.31.B3A	1	Unload,Rec/Insp Tube B33	08/20/96.10:00A	08/20/96.11:00A	
1.2.2.31.B3B	1	Move to Stiff Fit Up Stat. B33	08/22/96.11:00A	08/22/96.12:00P	
1.2.2.31.B3C	1	Set-up & Purge B33	08/22/96.01:00P	08/22/96.02:00P	
1.2.2.31.B3D	2	Fit Stiffeners B33	08/22/96.02:00P	08/22/96.04:00P	
1.2.2.31.B3E	4	Weld Stiffeners B33	08/22/96.04:00P	08/23/96.11:00A	
1.2.2.31.B3F	1	Move to Exp.Bellows Stat. B33	08/23/96.11:00A	08/23/96.12:00P	
1.2.2.31.B3G	3	Fit,Purge,Weld Exp. Bellows B33	08/23/96.01:00P	08/23/96.04:00P	
1.2.2.31.B3H	1	Inspect, Install End Caps B33	08/23/96.04:00P	08/23/96.05:00P	
1.2.2.31.B3J	1	Move to Test Area B33	08/26/96.09:00A	08/26/96.10:00A	
1.2.2.31.B3K	1	Pre-Clean & Black Light B33	08/26/96.10:00A	08/26/96.11:00A	
1.2.2.31.B3L	30	Leak Test B33	08/26/96.11:00A	08/27/96.05:00P	
1.2.2.31.B3O	1	Move to Post Test Storage B33	08/28/96.08:00A	08/28/96.09:00A	
1.2.2.31.B3P	1	Clean, Dry & End Cap B33	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.31.B3R	1	Transport to Erection B33	09/16/96.04:00P	09/16/96.05:00P	
1.2.2.31.B3S	1	Set & Align B33	09/17/96.08:00A	09/17/96.09:00A	
1.2.2.31.B3T	1	Set Clean Room, Purge & Fit B33	09/17/96.09:00A	09/17/96.10:00A	
1.2.2.31.B3U	2	Weld Joint B33	09/17/96.10:00A	09/17/96.12:00P	
1.2.2.31.B3V	2	Leak Test Joint B33	09/17/96.01:00P	09/17/96.03:00P	
1.2.2.31.B3W	2	Install Tube Supports B33	09/17/96.01:00P	09/17/96.03:00P	
1.2.2.31.B3X	2	Remove Equip'mt, Clean & Cap B33	09/17/96.03:00P	09/17/96.05:00P	
1.2.2.31.B4A	1	Unload,Rec/Insp Tube B34	08/20/96.11:00A	08/20/96.12:00P	
1.2.2.31.B4B	1	Move to Stiff Fit Up Stat. B34	08/23/96.01:00P	08/23/96.02:00P	
1.2.2.31.B4C	1	Set-up & Purge B34	08/23/96.02:00P	08/23/96.03:00P	
1.2.2.31.B4D	2	Fit Stiffeners B34	08/23/96.03:00P	08/23/96.05:00P	
1.2.2.31.B4E	4	Weld Stiffeners B34	08/26/96.08:00A	08/26/96.12:00P	
1.2.2.31.B4F	1	Move to Exp.Bellows Stat. B34	08/26/96.01:00P	08/26/96.02:00P	
1.2.2.31.B4G	3	Fit,Purge,Weld Exp. Bellows B34	08/26/96.02:00P	08/26/96.05:00P	
1.2.2.31.B4H	1	Inspect, Install End Caps B34	08/27/96.08:00A	08/27/96.09:00A	
1.2.2.31.B4J	1	Move to Test Area B34	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.31.B4K	1	Pre-Clean & Black Light B34	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.31.B4L	30	Leak Test B34	08/28/96.11:00A	08/29/96.05:00P	
1.2.2.31.B4O	1	Move to Post Test Storage B34	08/30/96.08:00A	08/30/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.31.B4P	1	Clean, Dry & End Cap B3	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.31.B4R	1	Transport to Erection B34	09/18/96.02:00P	09/18/96.03:00P	
1.2.2.31.B4S	1	Set & Align B34	09/18/96.03:00P	09/18/96.04:00P	
1.2.2.31.B4T	1	Set Clean Room, Purge & Fit B34	09/18/96.04:00P	09/18/96.05:00P	
1.2.2.31.B4U	2	Weld Joint B34	09/19/96.08:00A	09/19/96.10:00A	
1.2.2.31.B4V	2	Leak Test Joint B34	09/19/96.10:00A	09/19/96.12:00P	
1.2.2.31.B4W	2	Install Tube Supports B34	09/19/96.10:00A	09/19/96.12:00P	
1.2.2.31.B4X	2	Remove Equip'mt, Clean & Cap B34	09/19/96.01:00P	09/19/96.03:00P	
1.2.2.31.B5A	1	Unload,Rec/Insp Tube B35	08/20/96.01:00P	08/20/96.02:00P	
1.2.2.31.B5B	1	Move to Stiff Fit Up Stat. B35	08/26/96.02:00P	08/26/96.03:00P	
1.2.2.31.B5C	1	Set-up & Purge B35	08/26/96.03:00P	08/26/96.04:00P	
1.2.2.31.B5D	2	Fit Stiffeners B35	08/26/96.04:00P	08/27/96.09:00A	
1.2.2.31.B5E	4	Weld Stiffeners B35	08/27/96.09:00A	08/27/96.02:00P	
1.2.2.31.B5F	1	Move to Exp.Bellows Stat. B35	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.31.B5G	3	Fit,Purge,Weld Exp. Bellows B35	08/28/96.11:00A	08/28/96.03:00P	
1.2.2.31.B5H	1	Inspect, Install End Caps B35	08/28/96.03:00P	08/28/96.04:00P	
1.2.2.31.B5J	1	Move to Test Area B35	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.31.B5K	1	Pre-Clean & Black Light B35	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.31.B5L	30	Leak Test B35	08/30/96.11:00A	08/31/96.05:00P	
1.2.2.31.B5O	1	Move to Post Test Storage B35	09/02/96.08:00A	09/02/96.09:00A	
1.2.2.31.B5P	1	Clean, Dry & End Cap B35	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.31.B5R	1	Transport to Erection B35	09/20/96.11:00A	09/20/96.12:00P	
1.2.2.31.B5S	1	Set & Align B35	09/20/96.01:00P	09/20/96.02:00P	
1.2.2.31.B5T	1	Set Clean Room, Purge & Fit B35	09/20/96.02:00P	09/20/96.03:00P	
1.2.2.31.B5U	2	Weld Joint B35	09/20/96.03:00P	09/20/96.05:00P	
1.2.2.31.B5V	2	Leak Test Joint B35	09/23/96.08:00A	09/23/96.10:00A	
1.2.2.31.B5W	2	Install Tube Supports B35	09/23/96.08:00A	09/23/96.10:00A	
1.2.2.31.B5X	2	Remove Equip'mt, Clean & Cap B35	09/23/96.10:00A	09/23/96.12:00P	
1.2.2.36	196	Cans 36-40	09/02/96.04:00P	10/07/96.11:00A	
1.2.2.36.1A	1	Unload,Rec/Insp Tube 36	09/03/96.08:00A	09/03/96.09:00A	
1.2.2.36.1B	1	Move to Stiff Fit Up Stat. 36	09/03/96.09:00A	09/03/96.10:00A	
1.2.2.36.1C	1	Set-up & Purge 36	09/03/96.10:00A	09/03/96.11:00A	
1.2.2.36.1D	2	Fit Stiffeners 36	09/03/96.11:00A	09/03/96.02:00P	
1.2.2.36.1E	4	Weld Stiffeners 36	09/03/96.02:00P	09/04/96.09:00A	
1.2.2.36.1F	1	Inspect, Install End Caps 36	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.36.1H	1	Move to Test Area 36	09/04/96.10:00A	09/04/96.11:00A	
1.2.2.36.1I	1	Pre-Clean & Black Light 36	09/04/96.11:00A	09/04/96.12:00P	
1.2.2.36.1J	30	Leak Test 36	09/04/96.12:00P	09/05/96.06:00P	
1.2.2.36.1M	1	Move to Post Test Storage 36	09/06/96.08:00A	09/06/96.09:00A	
1.2.2.36.1N	1	Clean, Dry & End Cap 36	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.36.1P	1	Transport to Erection 36	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.36.1Q	1	Set & Align 36	09/25/96.11:00A	09/25/96.12:00P	
1.2.2.36.1R	1	Set Clean Room, Purge & Fit 36	09/25/96.01:00P	09/25/96.02:00P	
1.2.2.36.1S	2	Weld Joint 36	09/25/96.02:00P	09/25/96.04:00P	
1.2.2.36.1T	2	Leak Test Joint 36	09/25/96.04:00P	09/26/96.09:00A	
1.2.2.36.1U	2	Install Tube Supports 36	09/25/96.04:00P	09/26/96.09:00A	
1.2.2.36.1V	2	Remove Equip'mt, Clean & Cap 36	09/26/96.09:00A	09/26/96.11:00A	
1.2.2.36.2A	1	Unload,Rec. & Inspect 37	09/03/96.09:00A	09/03/96.10:00A	
1.2.2.36.2B	1	Move to Stiff Fit Up Stat. 37	09/04/96.11:00A	09/04/96.12:00P	
1.2.2.36.2C	1	Set-up & Purge 37	09/04/96.01:00P	09/04/96.02:00P	
1.2.2.36.2D	2	Fit Stiffeners 37	09/04/96.02:00P	09/04/96.04:00P	
1.2.2.36.2E	4	Weld Stiffeners 37	09/04/96.04:00P	09/05/96.11:00A	
1.2.2.36.2F	1	Inspect, Install End Caps 37	09/05/96.11:00A	09/05/96.12:00P	
1.2.2.36.2H	1	Move to Test Area 37	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.36.2I	1	Pre-Clean & Black Light 37	09/06/96.10:00A	09/06/96.11:00A	
1.2.2.36.2J	30	Leak Test 37	09/06/96.11:00A	09/07/96.05:00P	
1.2.2.36.2M	1	Move to Post Test Storage 37	09/09/96.08:00A	09/09/96.09:00A	
1.2.2.36.2N	1	Clean, Dry & End Cap 37	09/09/96.09:00A	09/09/96.10:00A	
1.2.2.36.2P	1	Transport to Erection 37	09/27/96.08:00A	09/27/96.09:00A	
1.2.2.36.2Q	1	Set & Align 37	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.36.2R	1	Set Clean Room, Purge & Fit 37	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.36.2S	2	Weld Joint 37	09/27/96.11:00A	09/27/96.02:00P	
1.2.2.36.2T	2	Leak Test Joint 37	09/27/96.02:00P	09/27/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.36.2U	2	Install Tube Supports 37	09/27/96.02:00P	09/27/96.04:00P	
1.2.2.36.2V	2	Remove Equip'mt, Clean & Cap 37	09/27/96.04:00P	09/30/96.09:00A	
1.2.2.36.3A	1	Unload,Rec/Insp Tube 38	09/03/96.10:00A	09/03/96.11:00A	
1.2.2.36.3B	1	Move to Stiff Fit Up Stat. 38	09/06/96.10:00A	09/06/96.11:00A	
1.2.2.36.3C	1	Set-up & Purge 38	09/06/96.11:00A	09/06/96.12:00P	
1.2.2.36.3D	2	Fit Stiffeners 38	09/06/96.01:00P	09/06/96.03:00P	
1.2.2.36.3E	4	Weld Stiffeners 38	09/06/96.03:00P	09/09/96.10:00A	
1.2.2.36.3F	1	Inspect, Install End Caps 38	09/09/96.10:00A	09/09/96.11:00A	
1.2.2.36.3H	1	Move to Test Area 38	09/09/96.11:00A	09/09/96.12:00P	
1.2.2.36.3I	1	Pre-Clean & Black Light 8	09/09/96.01:00P	09/09/96.02:00P	
1.2.2.36.3J	30	Leak Test 38	09/09/96.02:00P	09/10/96.08:00P	
1.2.2.36.3M	1	Move to Post Test Storage 38	09/11/96.08:00A	09/11/96.09:00A	
1.2.2.36.3N	1	Clean, Dry & End Cap 38	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.36.3P	1	Transport to Erection 38	09/30/96.03:00P	09/30/96.04:00P	
1.2.2.36.3Q	1	Set & Align 38	09/30/96.04:00P	09/30/96.05:00P	
1.2.2.36.3R	1	Set Clean Room, Purge & Fit 38	10/01/96.08:00A	10/01/96.09:00A	
1.2.2.36.3S	2	Weld Joint 38	10/01/96.09:00A	10/01/96.11:00A	
1.2.2.36.3T	2	Leak Test Joint 38	10/01/96.11:00A	10/01/96.02:00P	
1.2.2.36.3U	2	Install Tube Supports 38	10/01/96.11:00A	10/01/96.02:00P	
1.2.2.36.3V	2	Remove Equip'mt, Clean & Cap 38	10/01/96.02:00P	10/01/96.04:00P	
1.2.2.36.4A	1	Unload,Rec/Insp Tube 39	09/03/96.11:00A	09/03/96.12:00P	
1.2.2.36.4B	1	Move to Stiff Fit Up Stat. 39	09/09/96.01:00P	09/09/96.02:00P	
1.2.2.36.4C	1	Set-up & Purge 39	09/09/96.02:00P	09/09/96.03:00P	
1.2.2.36.4D	2	Fit Stiffeners 39	09/09/96.03:00P	09/09/96.05:00P	
1.2.2.36.4E	4	Weld Stiffeners 39	09/10/96.08:00A	09/10/96.12:00P	
1.2.2.36.4F	1	Inspect, Install End Caps 39	09/10/96.01:00P	09/10/96.02:00P	
1.2.2.36.4H	1	Move to Test Area 39	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.36.4I	1	Pre-Clean & Black Light 39	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.36.4J	30	Leak Test 39	09/11/96.11:00A	09/12/96.05:00P	
1.2.2.36.4M	1	Move to Post Test Storage 39	09/13/96.08:00A	09/13/96.09:00A	
1.2.2.36.4N	1	Clean, Dry & End Cap 39	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.36.4P	1	Transport to Erection 39	10/02/96.01:00P	10/02/96.02:00P	
1.2.2.36.4Q	1	Set & Align 39	10/02/96.02:00P	10/02/96.03:00P	
1.2.2.36.4R	1	Set Clean Room, Purge & Fit 39	10/02/96.03:00P	10/02/96.04:00P	
1.2.2.36.4S	2	Weld Joint 39	10/02/96.04:00P	10/03/96.09:00A	
1.2.2.36.4T	2	Leak Test Joint 39	10/03/96.09:00A	10/03/96.11:00A	
1.2.2.36.4U	2	Install Tube Supports 39	10/03/96.09:00A	10/03/96.11:00A	
1.2.2.36.4V	2	Remove Equip'mt, Clean & Cap 39	10/03/96.11:00A	10/03/96.02:00P	
1.2.2.36.5A	1	Unload,Rec/Insp Tube 40	09/03/96.01:00P	09/03/96.02:00P	
1.2.2.36.5B	1	Move to Stiff Fit Up Stat. 40	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.36.5C	1	Set-up & Purge 40	09/11/96.11:00A	09/11/96.12:00P	
1.2.2.36.5D	1	F/W Pump Port Reinf. 40	09/11/96.01:00P	09/11/96.02:00P	
1.2.2.36.5E	2	Fit Stiffeners 40	09/11/96.02:00P	09/11/96.04:00P	
1.2.2.36.5F	4	Weld Stiffeners 40	09/11/96.04:00P	09/12/96.11:00A	
1.2.2.36.5G	1	Move to P.Port Stat.	09/12/96.11:00A	09/12/96.12:00P	
1.2.2.36.5H	1	Setup & Bore 10" Inlet 40	09/12/96.01:00P	09/12/96.02:00P	
1.2.2.36.5I	2	Purge/F/W Pump Port 40	09/12/96.02:00P	09/12/96.04:00P	
1.2.2.36.5J	1	Inspect, Install End Caps 40	09/12/96.04:00P	09/12/96.05:00P	
1.2.2.36.5L	1	Move to Test Area 40	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.36.5M	1	Pre-Clean & Black Light 40	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.36.5N	30	Leak Test 40	09/13/96.11:00A	09/14/96.05:00P	
1.2.2.36.5Q	1	Move to Post Test Storage 40	09/16/96.08:00A	09/16/96.09:00A	
1.2.2.36.5R	1	Clean, Dry & End Cap 40	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.36.5T	1	Transport to Erection 40	10/04/96.10:00A	10/04/96.11:00A	
1.2.2.36.5U	1	Set & Align 40	10/04/96.11:00A	10/04/96.12:00P	
1.2.2.36.5V	1	Set Clean Room, Purge & Fit 40	10/04/96.01:00P	10/04/96.02:00P	
1.2.2.36.5W	2	Weld Joint 40	10/04/96.02:00P	10/04/96.04:00P	
1.2.2.36.5X	2	Leak Test Joint 40	10/04/96.04:00P	10/07/96.09:00A	
1.2.2.36.5Y	2	Install Tube Supports 40	10/04/96.04:00P	10/07/96.09:00A	
1.2.2.36.5Z	2	Remove Equip'mt, Clean & Cap 40	10/07/96.09:00A	10/07/96.11:00A	
1.2.2.36.81A	1	Unload,Rec/Insp Tube B36	09/03/96.08:00A	09/03/96.09:00A	
1.2.2.36.81B	1	Move to Stiff Fit Up Stat. B36	09/03/96.09:00A	09/03/96.10:00A	
1.2.2.36.81C	1	Set-up & Purge B36	09/03/96.10:00A	09/03/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.36.B1D	2	Fit Stiffeners B36	09/03/96.11:00A	09/03/96.02:00P	
1.2.2.36.B1E	4	Weld Stiffeners B36	09/03/96.02:00P	09/04/96.09:00A	
1.2.2.36.B1F	1	Move to Exp.Bellows Stat. B36	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.36.B1G	3	Fit,Purge,Weld Exp. Bellows B36	09/04/96.10:00A	09/04/96.02:00P	
1.2.2.36.B1H	1	Inspect, Install End Caps B36	09/04/96.02:00P	09/04/96.03:00P	
1.2.2.36.B1J	1	Move to Test Area B36	09/04/96.03:00P	09/04/96.04:00P	
1.2.2.36.B1K	1	Pre-Clean & Black Light B36	09/04/96.04:00P	09/04/96.05:00P	
1.2.2.36.B1L	30	Leak Test B36	09/04/96.05:00P	09/05/96.11:00P	
1.2.2.36.B1O	1	Move to Post Test Storage B36	09/06/96.08:00A	09/06/96.09:00A	
1.2.2.36.B1P	1	Clean, Dry & End Cap B36	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.36.B1R	1	Transport to Erection B363	09/24/96.11:00A	09/24/96.12:00P	
1.2.2.36.B1S	1	Set & Align B36	09/24/96.01:00P	09/24/96.02:00P	
1.2.2.36.B1T	1	Set Clean Room, Purge & Fit B36	09/24/96.02:00P	09/24/96.03:00P	
1.2.2.36.B1U	2	Weld Joint B36	09/24/96.03:00P	09/24/96.05:00P	
1.2.2.36.B1V	2	Leak Test Joint B36	09/25/96.08:00A	09/25/96.10:00A	
1.2.2.36.B1W	2	Install Tube Supports B36	09/25/96.08:00A	09/25/96.10:00A	
1.2.2.36.B1X	2	Remove Equip'mt, Clean & Cap B36	09/25/96.10:00A	09/25/96.12:00P	
1.2.2.36.B2A	1	Unload,Rec/Insp Tube B37	09/03/96.09:00A	09/03/96.10:00A	
1.2.2.36.B2B	1	Move to Stiff Fit Up Stat. B373	09/04/96.10:00A	09/04/96.11:00A	
1.2.2.36.B2C	1	Set-up & Purge B37	09/04/96.11:00A	09/04/96.12:00P	
1.2.2.36.B2D	2	Fit Stiffeners B37	09/04/96.01:00P	09/04/96.03:00P	
1.2.2.36.B2E	4	Weld Stiffeners B373	09/04/96.03:00P	09/05/96.10:00A	
1.2.2.36.B2F	1	Move to Exp.Bellows Stat. 37	09/05/96.10:00A	09/05/96.11:00A	
1.2.2.36.B2G	3	Fit,Purge,Weld Exp. Bellows B37	09/05/96.11:00A	09/05/96.03:00P	
1.2.2.36.B2H	1	Inspect, Install End Caps B37	09/05/96.03:00P	09/05/96.04:00P	
1.2.2.36.B2J	1	Move to Test Area B37	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.36.B2K	1	Pre-Clean & Black Light B37	09/06/96.10:00A	09/06/96.11:00A	
1.2.2.36.B2L	30	Leak Test B37	09/06/96.11:00A	09/07/96.05:00P	
1.2.2.36.B2O	1	Move to Post Test Storage B37	09/09/96.08:00A	09/09/96.09:00A	
1.2.2.36.B2P	1	Clean, Dry & End Cap B37	09/09/96.09:00A	09/09/96.10:00A	
1.2.2.36.B2R	1	Transport to Erection B37	09/26/96.09:00A	09/26/96.10:00A	
1.2.2.36.B2S	1	Set & Align B37	09/26/96.10:00A	09/26/96.11:00A	
1.2.2.36.B2T	1	Set Clean Room, Purge & Fit B37	09/26/96.11:00A	09/26/96.12:00P	
1.2.2.36.B2U	2	Weld Joint B37	09/26/96.01:00P	09/26/96.03:00P	
1.2.2.36.B2V	2	Leak Test Joint B37	09/26/96.03:00P	09/26/96.05:00P	
1.2.2.36.B2W	2	Install Tube SupportsB37	09/26/96.03:00P	09/26/96.05:00P	
1.2.2.36.B2X	2	Remove Equip'mt, Clean & Cap B37	09/27/96.08:00A	09/27/96.10:00A	
1.2.2.36.B3A	1	Unload,Rec/Insp Tube B38	09/03/96.10:00A	09/03/96.11:00A	
1.2.2.36.B3B	1	Move to Stiff Fit Up Stat. B38	09/05/96.11:00A	09/05/96.12:00P	
1.2.2.36.B3C	1	Set-up & Purge B38	09/05/96.01:00P	09/05/96.02:00P	
1.2.2.36.B3D	2	Fit Stiffeners B38	09/05/96.02:00P	09/05/96.04:00P	
1.2.2.36.B3E	4	Weld Stiffeners B38	09/05/96.04:00P	09/06/96.11:00A	
1.2.2.36.B3F	1	Move to Exp.Bellows Stat. B38	09/06/96.11:00A	09/06/96.12:00P	
1.2.2.36.B3G	3	Fit,Purge,Weld Exp. Bellows B38	09/06/96.01:00P	09/06/96.04:00P	
1.2.2.36.B3H	1	Inspect, Install End Caps B38	09/06/96.04:00P	09/06/96.05:00P	
1.2.2.36.B3J	1	Move to Test Area B38	09/09/96.09:00A	09/09/96.10:00A	
1.2.2.36.B3K	1	Pre-Clean & Black Light B38	09/09/96.10:00A	09/09/96.11:00A	
1.2.2.36.B3L	30	Leak Test B38	09/09/96.11:00A	09/10/96.05:00P	
1.2.2.36.B3O	1	Move to Post Test Storage B38	09/11/96.08:00A	09/11/96.09:00A	
1.2.2.36.B3P	1	Clean, Dry & End Cap B38	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.36.B3R	1	Transport to Erection B38	09/27/96.04:00P	09/27/96.05:00P	
1.2.2.36.B3S	1	Set & Align B38	09/30/96.08:00A	09/30/96.09:00A	
1.2.2.36.B3T	1	Set Clean Room, Purge & Fit B38	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.36.B3U	2	Weld Joint B38	09/30/96.10:00A	09/30/96.12:00P	
1.2.2.36.B3V	2	Leak Test Joint B38	09/30/96.01:00P	09/30/96.03:00P	
1.2.2.36.B3W	2	Install Tube Supports B38	09/30/96.01:00P	09/30/96.03:00P	
1.2.2.36.B3X	2	Remove Equip'mt, Clean & Cap B38	09/30/96.03:00P	09/30/96.05:00P	
1.2.2.36.B4A	1	Unload,Rec/Insp Tube B39	09/03/96.11:00A	09/03/96.12:00P	
1.2.2.36.B4B	1	Move to Stiff Fit Up Stat. B39	09/06/96.01:00P	09/06/96.02:00P	
1.2.2.36.B4C	1	Set-up & Purge B39	09/06/96.02:00P	09/06/96.03:00P	
1.2.2.36.B4D	2	Fit Stiffeners B39	09/06/96.03:00P	09/06/96.05:00P	
1.2.2.36.B4E	4	Weld Stiffeners B39	09/09/96.08:00A	09/09/96.12:00P	
1.2.2.36.B4F	1	Move to Exp.Bellows Stat. B39	09/09/96.01:00P	09/09/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.36.B4G	3	Fit,Purge,Weld Exp. Bellows B39	09/09/96.02:00P	09/09/96.05:00P	
1.2.2.36.B4H	1	Inspect, Install End Caps B39	09/10/96.08:00A	09/10/96.09:00A	
1.2.2.36.B4J	1	Move to Test Area B39	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.36.B4K	1	Pre-Clean & Black Light B39	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.36.B4L	30	Leak Test B39	09/11/96.11:00A	09/12/96.05:00P	
1.2.2.36.B4O	1	Move to Post Test Storage B39	09/13/96.08:00A	09/13/96.09:00A	
1.2.2.36.B4P	1	Clean, Dry & End Cap B39	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.36.B4R	1	Transport to Erection B39	10/01/96.02:00P	10/01/96.03:00P	
1.2.2.36.B4S	1	Set & Align B39	10/01/96.03:00P	10/01/96.04:00P	
1.2.2.36.B4T	1	Set Clean Room, Purge & Fit B39	10/01/96.04:00P	10/01/96.05:00P	
1.2.2.36.B4U	2	Weld Joint B39	10/02/96.08:00A	10/02/96.10:00A	
1.2.2.36.B4V	2	Leak Test Joint B39	10/02/96.10:00A	10/02/96.12:00P	
1.2.2.36.B4W	2	Install Tube Supports B39	10/02/96.10:00A	10/02/96.12:00P	
1.2.2.36.B4X	2	Remove Equip'mt, Clean & Cap B39	10/02/96.01:00P	10/02/96.03:00P	
1.2.2.36.B5A	1	Unload,Rec/Insp Tube B40	09/03/96.01:00P	09/03/96.02:00P	
1.2.2.36.B5B	1	Move to Stiff Fit Up Stat. B40	09/09/96.02:00P	09/09/96.03:00P	
1.2.2.36.B5C	1	Set-up & Purge B40	09/09/96.03:00P	09/09/96.04:00P	
1.2.2.36.B5D	2	Fit Stiffeners B40	09/09/96.04:00P	09/10/96.09:00A	
1.2.2.36.B5E	4	Weld Stiffeners B40	09/10/96.09:00A	09/10/96.02:00P	
1.2.2.36.B5F	1	Move to Exp.Bellows Stat. B40	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.36.B5G	3	Fit,Purge,Weld Exp. Bellows B40	09/11/96.11:00A	09/11/96.03:00P	
1.2.2.36.B5H	1	Inspect, Install End Caps B40	09/11/96.03:00P	09/11/96.04:00P	
1.2.2.36.B5J	1	Move to Test Area B40	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.36.B5K	1	Pre-Clean & Black Light B40	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.36.B5L	30	Leak Test B40	09/13/96.11:00A	09/14/96.05:00P	
1.2.2.36.B5O	1	Move to Post Test Storage B40	09/16/96.08:00A	09/16/96.09:00A	
1.2.2.36.B5P	1	Clean, Dry & End Cap B40	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.36.B5R	1	Transport to Erection B40	10/03/96.11:00A	10/03/96.12:00P	
1.2.2.36.B5S	1	Set & Align B40	10/03/96.01:00P	10/03/96.02:00P	
1.2.2.36.B5T	1	Set Clean Room, Purge & Fit B40	10/03/96.02:00P	10/03/96.03:00P	
1.2.2.36.B5U	2	Weld Joint B40	10/03/96.03:00P	10/03/96.05:00P	
1.2.2.36.B5V	2	Leak Test Joint B40	10/04/96.08:00A	10/04/96.10:00A	
1.2.2.36.B5W	2	Install Tube Supports B40	10/04/96.08:00A	10/04/96.10:00A	
1.2.2.36.B5X	2	Remove Equip'mt, Clean & Cap B40	10/04/96.10:00A	10/04/96.12:00P	
1.2.2.41	188	Cans 41-45	09/16/96.04:00P	10/18/96.11:00A	
1.2.2.41.1A	1	Unload,Rec/Insp Tube 41	09/17/96.08:00A	09/17/96.09:00A	
1.2.2.41.1B	1	Move to Stiff Fit Up Stat. 41	09/17/96.09:00A	09/17/96.10:00A	
1.2.2.41.1C	1	Set-up & Purge 41	09/17/96.10:00A	09/17/96.11:00A	
1.2.2.41.1D	2	Fit Stiffeners 41	09/17/96.11:00A	09/17/96.02:00P	
1.2.2.41.1E	4	Weld Stiffeners 41	09/17/96.02:00P	09/18/96.09:00A	
1.2.2.41.1F	1	Inspect, Install End Caps 41	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.41.1H	1	Move to Test Area 41	09/18/96.10:00A	09/18/96.11:00A	
1.2.2.41.1I	1	Pre-Clean & Black Light 41	09/18/96.11:00A	09/18/96.12:00P	
1.2.2.41.1J	30	Leak Test 41	09/18/96.12:00P	09/19/96.06:00P	
1.2.2.41.1M	1	Move to Post Test Storage 41	09/20/96.08:00A	09/20/96.09:00A	
1.2.2.41.1N	1	Clean, Dry & End Cap 41	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.41.1P	1	Transport to Erection 41	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.41.1Q	1	Set & Align 41	10/08/96.11:00A	10/08/96.12:00P	
1.2.2.41.1R	1	Set Clean Room, Purge & Fit 41	10/08/96.01:00P	10/08/96.02:00P	
1.2.2.41.1S	2	Weld Joint 41	10/08/96.02:00P	10/08/96.04:00P	
1.2.2.41.1T	2	Leak Test Joint 41	10/08/96.04:00P	10/09/96.09:00A	
1.2.2.41.1U	2	Install Tube Supports 41	10/08/96.04:00P	10/09/96.09:00A	
1.2.2.41.1V	2	Remove Equip'mt, Clean & Cap 41	10/09/96.09:00A	10/09/96.11:00A	
1.2.2.41.2A	1	Unload,Rec. & Inspect 42	09/17/96.09:00A	09/17/96.10:00A	
1.2.2.41.2B	1	Move to Stiff Fit Up Stat. 42	09/18/96.11:00A	09/18/96.12:00P	
1.2.2.41.2C	1	Set-up & Purge 42	09/18/96.01:00P	09/18/96.02:00P	
1.2.2.41.2D	2	Fit Stiffeners 42	09/18/96.02:00P	09/18/96.04:00P	
1.2.2.41.2E	4	Weld Stiffeners 42	09/18/96.04:00P	09/19/96.11:00A	
1.2.2.41.2F	1	Inspect, Install End Caps 42	09/19/96.11:00A	09/19/96.12:00P	
1.2.2.41.2H	1	Move to Test Area 42	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.41.2I	1	Pre-Clean & Black Light 42	09/20/96.10:00A	09/20/96.11:00A	
1.2.2.41.2J	30	Leak Test 42	09/20/96.11:00A	09/21/96.05:00P	
1.2.2.41.2M	1	Move to Post Test Storage 42	09/23/96.08:00A	09/23/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.41.2N	1	Clean, Dry & End Cap 42	09/23/96.09:00A	09/23/96.10:00A	
1.2.2.41.2P	1	Transport to Erection42	10/10/96.08:00A	10/10/96.09:00A	
1.2.2.41.2Q	1	Set & Align 42	10/10/96.09:00A	10/10/96.10:00A	
1.2.2.41.2R	1	Set Clean Room, Purge & Fit 42	10/10/96.10:00A	10/10/96.11:00A	
1.2.2.41.2S	2	Weld Joint 42	10/10/96.11:00A	10/10/96.02:00P	
1.2.2.41.2T	2	Leak Test Joint 42	10/10/96.02:00P	10/10/96.04:00P	
1.2.2.41.2U	2	Install Tube Supports 42	10/10/96.02:00P	10/10/96.04:00P	
1.2.2.41.2V	2	Remove Equip'mt, Clean & Cap 42	10/10/96.04:00P	10/11/96.09:00A	
1.2.2.41.3A	1	Unload,Rec/Insp Tube 43	09/17/96.10:00A	09/17/96.11:00A	
1.2.2.41.3B	1	Move to Stiff Fit Up Stat. 43	09/20/96.10:00A	09/20/96.11:00A	
1.2.2.41.3C	1	Set-up & Purge 43	09/20/96.11:00A	09/20/96.12:00P	
1.2.2.41.3D	2	Fit Stiffeners 43	09/20/96.01:00P	09/20/96.03:00P	
1.2.2.41.3E	4	Weld Stiffeners 43	09/20/96.03:00P	09/23/96.10:00A	
1.2.2.41.3F	1	Inspect, Install End Caps 43	09/23/96.10:00A	09/23/96.11:00A	
1.2.2.41.3H	1	Move to Test Area 43	09/23/96.11:00A	09/23/96.12:00P	
1.2.2.41.3I	1	Pre-Clean & Black Light 43	09/23/96.01:00P	09/23/96.02:00P	
1.2.2.41.3J	30	Leak Test 43	09/23/96.02:00P	09/24/96.08:00P	
1.2.2.41.3M	1	Move to Post Test Storage 43	09/25/96.08:00A	09/25/96.09:00A	
1.2.2.41.3N	1	Clean, Dry & End Cap 43	09/25/96.09:00A	09/25/96.10:00A	
1.2.2.41.3P	1	Transport to Erection 43	10/11/96.03:00P	10/11/96.04:00P	
1.2.2.41.3Q	1	Set & Align 43	10/11/96.04:00P	10/11/96.05:00P	
1.2.2.41.3R	1	Set Clean Room, Purge & Fit43	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.41.3S	2	Weld Joint 43	10/14/96.09:00A	10/14/96.11:00A	
1.2.2.41.3T	2	Leak Test Joint 43	10/14/96.11:00A	10/14/96.02:00P	
1.2.2.41.3U	2	Install Tube Supports43	10/14/96.11:00A	10/14/96.02:00P	
1.2.2.41.3V	2	Remove Equip'mt, Clean & Cap 43	10/14/96.02:00P	10/14/96.04:00P	
1.2.2.41.4A	1	Unload,Rec/Insp Tube 44	09/17/96.11:00A	09/17/96.12:00P	
1.2.2.41.4B	1	Move to Stiff Fit Up Stat. 44	09/23/96.01:00P	09/23/96.02:00P	
1.2.2.41.4C	1	Set-up & Purge 44	09/23/96.02:00P	09/23/96.03:00P	
1.2.2.41.4D	2	Fit Stiffeners 44	09/23/96.03:00P	09/23/96.05:00P	
1.2.2.41.4E	4	Weld Stiffeners 44	09/24/96.08:00A	09/24/96.12:00P	
1.2.2.41.4F	1	Inspect, Install End Caps 44	09/24/96.01:00P	09/24/96.02:00P	
1.2.2.41.4H	1	Move to Test Area 44	09/25/96.09:00A	09/25/96.10:00A	
1.2.2.41.4I	1	Pre-Clean & Black Light 44	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.41.4J	30	Leak Test 44	09/25/96.11:00A	09/26/96.05:00P	
1.2.2.41.4M	1	Move to Post Test Storage 44	09/27/96.08:00A	09/27/96.09:00A	
1.2.2.41.4N	1	Clean, Dry & End Cap 44	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.41.4P	1	Transport to Erection 44	10/15/96.01:00P	10/15/96.02:00P	
1.2.2.41.4Q	1	Set & Align 44	10/15/96.02:00P	10/15/96.03:00P	
1.2.2.41.4R	1	Set Clean Room, Purge & Fit 44	10/15/96.03:00P	10/15/96.04:00P	
1.2.2.41.4S	2	Weld Joint 4 4	10/15/96.04:00P	10/16/96.09:00A	
1.2.2.41.4T	2	Leak Test Joint 44	10/16/96.09:00A	10/16/96.11:00A	
1.2.2.41.4U	2	Install Tube Supports 44	10/16/96.09:00A	10/16/96.11:00A	
1.2.2.41.4V	2	Remove Equip'mt, Clean & Cap 44	10/16/96.11:00A	10/16/96.02:00P	
1.2.2.41.5A	1	Unload,Rec/Insp Tube 4	09/17/96.01:00P	09/17/96.02:00P	
1.2.2.41.5B	1	Move to Stiff Fit Up Stat. 45	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.41.5C	1	Set-up & Purge 45	09/25/96.11:00A	09/25/96.12:00P	
1.2.2.41.5D	1	F/W Pump Port Reinf. 45	09/25/96.01:00P	09/25/96.02:00P	
1.2.2.41.5E	2	Fit Stiffeners 45	09/25/96.02:00P	09/25/96.04:00P	
1.2.2.41.5F	4	Weld Stiffeners 45	09/25/96.04:00P	09/26/96.11:00A	
1.2.2.41.5G	1	Move to P.Port Stat.45	09/26/96.11:00A	09/26/96.12:00P	
1.2.2.41.5H	1	Setup & Bore 10" Inlet 45	09/26/96.01:00P	09/26/96.02:00P	
1.2.2.41.5I	2	Purge/F/W Pump Port 45	09/26/96.02:00P	09/26/96.04:00P	
1.2.2.41.5J	1	Inspect, Install End Caps 45	09/26/96.04:00P	09/26/96.05:00P	
1.2.2.41.5L	1	Move to Test Area 45	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.41.5M	1	Pre-Clean & Black Light 55	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.41.5N	30	Leak Test 45	09/27/96.11:00A	09/28/96.05:00P	
1.2.2.41.5Q	1	Move to Post Test Storage 45	09/30/96.08:00A	09/30/96.09:00A	
1.2.2.41.5R	1	Clean, Dry & End Cap 45	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.41.5T	1	Transport to Erection 45	10/17/96.10:00A	10/17/96.11:00A	
1.2.2.41.5U	1	Set & Align 45	10/17/96.11:00A	10/17/96.12:00P	
1.2.2.41.5V	1	Set Clean Room, Purge & Fit 45	10/17/96.01:00P	10/17/96.02:00P	
1.2.2.41.5W	2	Weld Joint 45	10/17/96.02:00P	10/17/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.41.5X	2	Leak Test Joint 45	10/17/96.04:00P	10/18/96.09:00A	
1.2.2.41.5Y	2	Install Tube Supports 45	10/17/96.04:00P	10/18/96.09:00A	
1.2.2.41.5Z	2	Remove Equip'mt, Clean & Cap 45	10/18/96.09:00A	10/18/96.11:00A	
1.2.2.41.B1A	1	Unload,Rec/Insp Tube B41	09/17/96.08:00A	09/17/96.09:00A	
1.2.2.41.B1B	1	Move to Stiff Fit Up Stat. B41	09/17/96.09:00A	09/17/96.10:00A	
1.2.2.41.B1C	1	Set-up & Purge B41	09/17/96.10:00A	09/17/96.11:00A	
1.2.2.41.B1D	2	Fit Stiffeners B41	09/17/96.11:00A	09/17/96.02:00P	
1.2.2.41.B1E	4	Weld Stiffeners B41	09/17/96.02:00P	09/18/96.09:00A	
1.2.2.41.B1F	1	Move to Exp.Bellows Stat. B41	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.41.B1G	3	Fit,Purge,Weld Exp. Bellows B41	09/18/96.10:00A	09/18/96.02:00P	
1.2.2.41.B1H	1	Inspect, Install End Caps B41	09/18/96.02:00P	09/18/96.03:00P	
1.2.2.41.B1J	1	Move to Test Area B41	09/18/96.03:00P	09/18/96.04:00P	
1.2.2.41.B1K	1	Pre-Clean & Black Light B41	09/18/96.04:00P	09/18/96.05:00P	
1.2.2.41.B1L	30	Leak Test B41	09/18/96.05:00P	09/19/96.11:00P	
1.2.2.41.B1O	1	Move to Post Test Storage B41	09/20/96.08:00A	09/20/96.09:00A	
1.2.2.41.B1P	1	Clean, Dry & End Cap B41	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.41.B1R	1	Transport to Erection B41	10/07/96.11:00A	10/07/96.12:00P	
1.2.2.41.B1S	1	Set & Align B41	10/07/96.01:00P	10/07/96.02:00P	
1.2.2.41.B1T	1	Set Clean Room, Purge & Fit B41	10/07/96.02:00P	10/07/96.03:00P	
1.2.2.41.B1U	2	Weld Joint B41	10/07/96.03:00P	10/07/96.05:00P	
1.2.2.41.B1V	2	Leak Test Joint B41	10/08/96.08:00A	10/08/96.10:00A	
1.2.2.41.B1W	2	Install Tube Supports B41	10/08/96.08:00A	10/08/96.10:00A	
1.2.2.41.B1X	2	Remove Equip'mt, Clean & Cap B41	10/08/96.10:00A	10/08/96.12:00P	
1.2.2.41.B2A	1	Unload,Rec/Insp Tube B42	09/17/96.09:00A	09/17/96.10:00A	
1.2.2.41.B2B	1	Move to Stiff Fit Up Stat. B42	09/18/96.10:00A	09/18/96.11:00A	
1.2.2.41.B2C	1	Set-up & Purge B42	09/18/96.11:00A	09/18/96.12:00P	
1.2.2.41.B2D	2	Fit Stiffeners B42	09/18/96.01:00P	09/18/96.03:00P	
1.2.2.41.B2E	4	Weld Stiffeners B42	09/18/96.03:00P	09/19/96.10:00A	
1.2.2.41.B2F	1	Move to Exp.Bellows Stat. B42	09/19/96.10:00A	09/19/96.11:00A	
1.2.2.41.B2G	3	Fit,Purge,Weld Exp. Bellows B42	09/19/96.11:00A	09/19/96.03:00P	
1.2.2.41.B2H	1	Inspect, Install End Caps B42	09/19/96.03:00P	09/19/96.04:00P	
1.2.2.41.B2J	1	Move to Test Area B42	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.41.B2K	1	Pre-Clean & Black Light B42	09/20/96.10:00A	09/20/96.11:00A	
1.2.2.41.B2L	30	Leak Test B42	09/20/96.11:00A	09/21/96.05:00P	
1.2.2.41.B2O	1	Move to Post Test Storage B42	09/23/96.08:00A	09/23/96.09:00A	
1.2.2.41.B2P	1	Clean, Dry & End Cap B42	09/23/96.09:00A	09/23/96.10:00A	
1.2.2.41.B2R	1	Transport to Erection B42	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.41.B2S	1	Set & Align B42	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.41.B2T	1	Set Clean Room, Purge & Fit B42	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.41.B2U	2	Weld Joint B42	10/09/96.01:00P	10/09/96.03:00P	
1.2.2.41.B2V	2	Leak Test Joint B42	10/09/96.03:00P	10/09/96.05:00P	
1.2.2.41.B2W	2	Install Tube SupportsB42	10/09/96.03:00P	10/09/96.05:00P	
1.2.2.41.B2X	2	Remove Equip'mt, Clean & Cap B42	10/10/96.08:00A	10/10/96.10:00A	
1.2.2.41.B3A	1	Unload,Rec/Insp Tube B43	09/17/96.10:00A	09/17/96.11:00A	
1.2.2.41.B3B	1	Move to Stiff Fit Up Stat. B43	09/19/96.11:00A	09/19/96.12:00P	
1.2.2.41.B3C	1	Set-up & Purge B43	09/19/96.01:00P	09/19/96.02:00P	
1.2.2.41.B3D	2	Fit Stiffeners B43	09/19/96.02:00P	09/19/96.04:00P	
1.2.2.41.B3E	4	Weld Stiffeners B43	09/19/96.04:00P	09/20/96.11:00A	
1.2.2.41.B3F	1	Move to Exp.Bellows Stat. B43	09/20/96.11:00A	09/20/96.12:00P	
1.2.2.41.B3G	3	Fit,Purge,Weld Exp. Bellows B43	09/20/96.01:00P	09/20/96.04:00P	
1.2.2.41.B3H	1	Inspect, Install End Caps B43	09/20/96.04:00P	09/20/96.05:00P	
1.2.2.41.B3J	1	Move to Test Area B43	09/23/96.09:00A	09/23/96.10:00A	
1.2.2.41.B3K	1	Pre-Clean & Black Light B43	09/23/96.10:00A	09/23/96.11:00A	
1.2.2.41.B3L	30	Leak Test B43	09/23/96.11:00A	09/24/96.05:00P	
1.2.2.41.B3O	1	Move to Post Test Storage B43	09/25/96.08:00A	09/25/96.09:00A	
1.2.2.41.B3P	1	Clean, Dry & End Cap B43	09/25/96.09:00A	09/25/96.10:00A	
1.2.2.41.B3R	1	Transport to Erection B43	10/10/96.04:00P	10/10/96.05:00P	
1.2.2.41.B3S	1	Set & Align B43	10/11/96.08:00A	10/11/96.09:00A	
1.2.2.41.B3T	1	Set Clean Room, Purge & Fit B43	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.41.B3U	2	Weld Joint B43	10/11/96.10:00A	10/11/96.12:00P	
1.2.2.41.B3V	2	Leak Test Joint B43	10/11/96.01:00P	10/11/96.03:00P	
1.2.2.41.B3W	2	Install Tube Supports B43	10/11/96.01:00P	10/11/96.03:00P	
1.2.2.41.B3X	2	Remove Equip'mt, Clean & Cap B43	10/11/96.03:00P	10/11/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.41.B4A	1	Unload,Rec/Insp Tube B44	09/17/96.11:00A	09/17/96.12:00P	
1.2.2.41.B4B	1	Move to Stiff Fit Up Stat. B44	09/20/96.01:00P	09/20/96.02:00P	
1.2.2.41.B4C	1	Set-up & Purge B44	09/20/96.02:00P	09/20/96.03:00P	
1.2.2.41.B4D	2	Fit Stiffeners B44	09/20/96.03:00P	09/20/96.05:00P	
1.2.2.41.B4E	4	Weld Stiffeners B44	09/23/96.08:00A	09/23/96.12:00P	
1.2.2.41.B4F	1	Move to Exp.Bellows Stat. B44	09/23/96.01:00P	09/23/96.02:00P	
1.2.2.41.B4G	3	Fit,Purge,Weld Exp. Bellows B44	09/23/96.02:00P	09/23/96.05:00P	
1.2.2.41.B4H	1	Inspect, Install End Caps B44	09/24/96.08:00A	09/24/96.09:00A	
1.2.2.41.B4J	1	Move to Test Area B44	09/25/96.09:00A	09/25/96.10:00A	
1.2.2.41.B4K	1	Pre-Clean & Black Light B44	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.41.B4L	30	Leak Test B44	09/25/96.11:00A	09/26/96.05:00P	
1.2.2.41.B4O	1	Move to Post Test Storage B44	09/27/96.08:00A	09/27/96.09:00A	
1.2.2.41.B4P	1	Clean, Dry & End Cap B44	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.41.B4R	1	Transport to Erection B44	10/14/96.02:00P	10/14/96.03:00P	
1.2.2.41.B4S	1	Set & Align B44	10/14/96.03:00P	10/14/96.04:00P	
1.2.2.41.B4T	1	Set Clean Room, Purge & Fit B44	10/14/96.04:00P	10/14/96.05:00P	
1.2.2.41.B4U	2	Weld Joint B44	10/15/96.08:00A	10/15/96.10:00A	
1.2.2.41.B4V	2	Leak Test Joint B44	10/15/96.10:00A	10/15/96.12:00P	
1.2.2.41.B4W	2	Install Tube Supports B44	10/15/96.10:00A	10/15/96.12:00P	
1.2.2.41.B4X	2	Remove Equip'mt, Clean & Cap B44	10/15/96.01:00P	10/15/96.03:00P	
1.2.2.41.B5A	1	Unload,Rec/Insp Tube B45	09/17/96.01:00P	09/17/96.02:00P	
1.2.2.41.B5B	1	Move to Stiff Fit Up Stat. B45	09/23/96.02:00P	09/23/96.03:00P	
1.2.2.41.B5C	1	Set-up & Purge B45	09/23/96.03:00P	09/23/96.04:00P	
1.2.2.41.B5D	2	Fit Stiffeners B45	09/23/96.04:00P	09/24/96.09:00A	
1.2.2.41.B5E	4	Weld Stiffeners B45	09/24/96.09:00A	09/24/96.02:00P	
1.2.2.41.B5F	1	Move to Exp.Bellows Stat. B45	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.41.B5G	3	Fit,Purge,Weld Exp. Bellows B45	09/25/96.11:00A	09/25/96.03:00P	
1.2.2.41.B5H	1	Inspect, Install End Caps B45	09/25/96.03:00P	09/25/96.04:00P	
1.2.2.41.B5J	1	Move to Test Area B45	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.41.B5K	1	Pre-Clean & Black Light B45	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.41.B5L	30	Leak Test B45	09/27/96.11:00A	09/28/96.05:00P	
1.2.2.41.B5O	1	Move to Post Test Storage B45	09/30/96.08:00A	09/30/96.09:00A	
1.2.2.41.B5P	1	Clean, Dry & End Cap B45	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.41.B5R	1	Transport to Erection B45	10/16/96.11:00A	10/16/96.12:00P	
1.2.2.41.B5S	1	Set & Align B45	10/16/96.01:00P	10/16/96.02:00P	
1.2.2.41.B5T	1	Set Clean Room, Purge & Fit B45	10/16/96.02:00P	10/16/96.03:00P	
1.2.2.41.B5U	2	Weld Joint B45	10/16/96.03:00P	10/16/96.05:00P	
1.2.2.41.B5V	2	Leak Test Joint B45	10/17/96.08:00A	10/17/96.10:00A	
1.2.2.41.B5W	2	Install Tube Supports B45	10/17/96.08:00A	10/17/96.10:00A	
1.2.2.41.B5X	2	Remove Equip'mt, Clean & Cap B45	10/17/96.10:00A	10/17/96.12:00P	
1.2.2.46	846	Cans 46-50	06/03/96.04:00P	10/29/96.02:00P	
1.2.2.46.1A	1	Unload,Rec/Insp Tube 46	06/04/96.08:00A	06/04/96.09:00A	
1.2.2.46.1B	1	Move to Stiff Fit Up Stat. 46	06/04/96.09:00A	06/04/96.10:00A	
1.2.2.46.1C	1	Set-up & Purge 46	06/04/96.10:00A	06/04/96.11:00A	
1.2.2.46.1D	2	Fit Stiffeners 46	06/04/96.11:00A	06/04/96.02:00P	
1.2.2.46.1E	4	Weld Stiffeners 46	06/04/96.02:00P	06/05/96.09:00A	
1.2.2.46.1F	1	Inspect, Install End Caps 46	06/05/96.09:00A	06/05/96.10:00A	
1.2.2.46.1H	1	Move to Test Area 46	06/05/96.10:00A	06/05/96.11:00A	
1.2.2.46.1I	1	Pre-Clean & Black Light 46	06/05/96.11:00A	06/05/96.12:00P	
1.2.2.46.1J	30	Leak Test 46	06/05/96.12:00P	06/06/96.06:00P	
1.2.2.46.1M	1	Move to Post Test Storage 46	06/07/96.08:00A	06/07/96.09:00A	
1.2.2.46.1N	1	Clean, Dry & End Cap 46	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.46.1P	1	Transport to Erection 46	10/21/96.10:00A	10/21/96.11:00A	
1.2.2.46.1Q	1	Set & Align 46	10/21/96.11:00A	10/21/96.12:00P	
1.2.2.46.1R	1	Set Clean Room, Purge & Fit 46	10/21/96.01:00P	10/21/96.02:00P	
1.2.2.46.1S	2	Weld Joint 46	10/21/96.02:00P	10/21/96.04:00P	
1.2.2.46.1T	2	Leak Test Joint 46	10/21/96.04:00P	10/22/96.09:00A	
1.2.2.46.1U	2	Install Tube Supports 46	10/21/96.04:00P	10/22/96.09:00A	
1.2.2.46.1V	2	Remove Equip'mt, Clean & Cap 46	10/22/96.09:00A	10/22/96.11:00A	
1.2.2.46.2A	1	Unload,Rec. & Inspect 47	06/04/96.09:00A	06/04/96.10:00A	
1.2.2.46.2B	1	Move to Stiff Fit Up Stat. 47	06/05/96.11:00A	06/05/96.12:00P	
1.2.2.46.2C	1	Set-up & Purge 47	06/05/96.01:00P	06/05/96.02:00P	
1.2.2.46.2D	2	Fit Stiffeners 47	06/05/96.02:00P	06/05/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.46.2E	4	Weld Stiffeners 47	06/05/96.04:00P	06/06/96.11:00A	
1.2.2.46.2F	1	Inspect, Install End Caps 47	06/06/96.11:00A	06/06/96.12:00P	
1.2.2.46.2H	1	Move to Test Area 47	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.46.2I	1	Pre-Clean & Black Light 47	06/07/96.10:00A	06/07/96.11:00A	
1.2.2.46.2J	30	Leak Test 47	06/07/96.11:00A	06/08/96.05:00P	
1.2.2.46.2M	1	Move to Post Test Storage 47	06/10/96.08:00A	06/10/96.09:00A	
1.2.2.46.2N	1	Clean, Dry & End Cap 47	06/10/96.09:00A	06/10/96.10:00A	
1.2.2.46.2P	1	Transport to Erection 47	10/23/96.08:00A	10/23/96.09:00A	
1.2.2.46.2Q	1	Set & Align 47	10/23/96.09:00A	10/23/96.10:00A	
1.2.2.46.2R	1	Set Clean Room, Purge & Fit 47	10/23/96.10:00A	10/23/96.11:00A	
1.2.2.46.2S	2	Weld Joint 47	10/23/96.11:00A	10/23/96.02:00P	
1.2.2.46.2T	2	Leak Test Joint 47	10/23/96.02:00P	10/23/96.04:00P	
1.2.2.46.2U	2	Install Tube Supports 47	10/23/96.02:00P	10/23/96.04:00P	
1.2.2.46.2V	2	Remove Equip'mt, Clean & Cap 47	10/23/96.04:00P	10/24/96.09:00A	
1.2.2.46.3A	1	Unload,Rec/Insp Tube 48	06/04/96.10:00A	06/04/96.11:00A	
1.2.2.46.3B	1	Move to Stiff Fit Up Stat. 48	06/07/96.10:00A	06/07/96.11:00A	
1.2.2.46.3C	1	Set-up & Purge 48	06/07/96.11:00A	06/07/96.12:00P	
1.2.2.46.3D	2	Fit Stiffeners 48	06/07/96.01:00P	06/07/96.03:00P	
1.2.2.46.3E	4	Weld Stiffeners 48	06/07/96.03:00P	06/10/96.10:00A	
1.2.2.46.3F	1	Inspect, Install End Caps 48	06/10/96.10:00A	06/10/96.11:00A	
1.2.2.46.3H	1	Move to Test Area 48	06/10/96.11:00A	06/10/96.12:00P	
1.2.2.46.3I	1	Pre-Clean & Black Light 48	06/10/96.01:00P	06/10/96.02:00P	
1.2.2.46.3J	30	Leak Test 48	06/10/96.02:00P	06/11/96.08:00P	
1.2.2.46.3M	1	Move to Post Test Storage 48	06/12/96.08:00A	06/12/96.09:00A	
1.2.2.46.3N	1	Clean, Dry & End Cap 48	06/12/96.09:00A	06/12/96.10:00A	
1.2.2.46.3P	1	Transport to Erection 48	10/24/96.03:00P	10/24/96.04:00P	
1.2.2.46.3Q	1	Set & Align 48	10/24/96.04:00P	10/24/96.05:00P	
1.2.2.46.3R	1	Set Clean Room, Purge & Fit 48	10/25/96.08:00A	10/25/96.09:00A	
1.2.2.46.3S	2	Weld Joint 48	10/25/96.09:00A	10/25/96.11:00A	
1.2.2.46.3T	2	Leak Test Joint 48	10/25/96.11:00A	10/25/96.02:00P	
1.2.2.46.3U	2	Install Tube Supports 48	10/25/96.11:00A	10/25/96.02:00P	
1.2.2.46.3V	2	Remove Equip'mt, Clean & Cap 48	10/25/96.02:00P	10/25/96.04:00P	
1.2.2.46.4A	1	Unload,Rec/Insp Tube 49	06/04/96.11:00A	06/04/96.12:00P	
1.2.2.46.4B	1	Move to Stiff Fit Up Stat. 49	06/10/96.01:00P	06/10/96.02:00P	
1.2.2.46.4C	1	Set-up & Purge 49	06/10/96.02:00P	06/10/96.03:00P	
1.2.2.46.4D	2	Fit Stiffeners 49	06/10/96.03:00P	06/10/96.05:00P	
1.2.2.46.4E	4	Weld Stiffeners 49	06/11/96.08:00A	06/11/96.12:00P	
1.2.2.46.4F	1	Inspect, Install End Caps 49	06/11/96.01:00P	06/11/96.02:00P	
1.2.2.46.4H	1	Move to Test Area 49	06/12/96.09:00A	06/12/96.10:00A	
1.2.2.46.4I	1	Pre-Clean & Black Light 49	06/12/96.10:00A	06/12/96.11:00A	
1.2.2.46.4J	30	Leak Test 49	06/12/96.11:00A	06/13/96.05:00P	
1.2.2.46.4M	1	Move to Post Test Storage 49	06/14/96.08:00A	06/14/96.09:00A	
1.2.2.46.4N	1	Clean, Dry & End Cap 49	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.46.4P	1	Transport to Erection 49	10/28/96.01:00P	10/28/96.02:00P	
1.2.2.46.4Q	1	Set & Align 49	10/28/96.02:00P	10/28/96.03:00P	
1.2.2.46.4R	1	Set Clean Room, Purge & Fit 49	10/28/96.03:00P	10/28/96.04:00P	
1.2.2.46.4S	2	Weld Joint 49	10/28/96.04:00P	10/29/96.09:00A	
1.2.2.46.4T	2	Leak Test Joint 49	10/29/96.09:00A	10/29/96.11:00A	
1.2.2.46.4U	2	Install Tube Supports 49	10/29/96.09:00A	10/29/96.11:00A	
1.2.2.46.4V	2	Remove Equip'mt, Clean & Cap 49	10/29/96.11:00A	10/29/96.02:00P	
1.2.2.46.5A	1	Unload,Rec/Insp Tube 50	06/04/96.01:00P	06/04/96.02:00P	
1.2.2.46.5B	1	Move to Stiff Fit Up Stat. 50	06/12/96.10:00A	06/12/96.11:00A	
1.2.2.46.5C	1	Set-up & Purge 50	06/12/96.11:00A	06/12/96.12:00P	
1.2.2.46.5D	1	F/W Pump Port Reinf. 50	06/12/96.01:00P	06/12/96.02:00P	
1.2.2.46.5E	2	Fit Stiffeners 50	06/12/96.02:00P	06/12/96.04:00P	
1.2.2.46.5F	4	Weld Stiffeners 50	06/12/96.04:00P	06/13/96.11:00A	
1.2.2.46.5G	1	Move to P.Port Stat.50	06/13/96.11:00A	06/13/96.12:00P	
1.2.2.46.5H	1	Setup & Bore 10" Inlet 50	06/13/96.01:00P	06/13/96.02:00P	
1.2.2.46.5I	2	Purge/F/W Pump Port 50	06/13/96.02:00P	06/13/96.04:00P	
1.2.2.46.5J	1	Inspect, Install End Caps 50	06/13/96.04:00P	06/13/96.05:00P	
1.2.2.46.5L	1	Move to Test Area 50	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.46.5M	1	Pre-Clean & Black Light 50	06/14/96.10:00A	06/14/96.11:00A	
1.2.2.46.5N	30	Leak Test 50	06/14/96.11:00A	06/15/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.46.5Q	1	Move to Post Test Storage 50	06/17/96.08:00A	06/17/96.09:00A	
1.2.2.46.5R	1	Clean, Dry & End Cap 50	06/17/96.09:00A	06/17/96.10:00A	
1.2.2.46.5T	1	Transport to Erection 50	06/25/96.11:00A	06/25/96.12:00P	
1.2.2.46.5U	1	Set & Align 50	06/25/96.01:00P	06/25/96.02:00P	
1.2.2.46.5V	1	Set Clean Room, Purge & Fit 50	06/25/96.02:00P	06/25/96.03:00P	
1.2.2.46.5W	2	Weld Joint 50	06/25/96.03:00P	06/25/96.05:00P	
1.2.2.46.5X	2	Leak Test Joint 50	06/26/96.08:00A	06/26/96.10:00A	
1.2.2.46.5Y	2	Install Tube Supports 50	06/26/96.08:00A	06/26/96.10:00A	
1.2.2.46.5Z	2	Remove Equip'mt, Clean & Cap 50	06/26/96.10:00A	06/26/96.12:00P	
1.2.2.46.B1A	1	Unload,Rec/Insp Tube B46	06/04/96.08:00A	06/04/96.09:00A	
1.2.2.46.B1B	1	Move to Stiff Fit Up Stat. B46	06/04/96.09:00A	06/04/96.10:00A	
1.2.2.46.B1C	1	Set-up & Purge B46	06/04/96.10:00A	06/04/96.11:00A	
1.2.2.46.B1D	2	Fit Stiffeners B46	06/04/96.11:00A	06/04/96.02:00P	
1.2.2.46.B1E	4	Weld Stiffeners B46	06/04/96.02:00P	06/05/96.09:00P	
1.2.2.46.B1F	1	Move to Exp.Bellows Stat. B46	06/05/96.09:00A	06/05/96.10:00A	
1.2.2.46.B1G	3	Fit,Purge,Weld Exp. Bellows B46	06/05/96.10:00A	06/05/96.02:00P	
1.2.2.46.B1H	1	Inspect, Install End Caps B46	06/05/96.02:00P	06/05/96.03:00P	
1.2.2.46.B1J	1	Move to Test Area B46	06/05/96.03:00P	06/05/96.04:00P	
1.2.2.46.B1K	1	Pre-Clean & Black Light B46	06/05/96.04:00P	06/05/96.05:00P	
1.2.2.46.B1L	30	Leak Test B46	06/05/96.05:00P	06/06/96.11:00P	
1.2.2.46.B1O	1	Move to Post Test Storage B46	06/07/96.08:00A	06/07/96.09:00A	
1.2.2.46.B1P	1	Clean, Dry & End Cap B46	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.46.B1R	1	Transport to Erection B46	10/18/96.11:00A	10/18/96.12:00P	
1.2.2.46.B1S	1	Set & Align B46	10/18/96.01:00P	10/18/96.02:00P	
1.2.2.46.B1T	1	Set Clean Room, Purge & Fit B46	10/18/96.02:00P	10/18/96.03:00P	
1.2.2.46.B1U	2	Weld Joint B46	10/18/96.03:00P	10/18/96.05:00P	
1.2.2.46.B1V	2	Leak Test Joint B46	10/21/96.08:00A	10/21/96.10:00A	
1.2.2.46.B1W	2	Install Tube Supports B46	10/21/96.08:00A	10/21/96.10:00A	
1.2.2.46.B1X	2	Remove Equip'mt, Clean & Cap B46	10/21/96.10:00A	10/21/96.12:00P	
1.2.2.46.B2A	1	Unload,Rec/Insp Tube B47	06/04/96.09:00A	06/04/96.10:00A	
1.2.2.46.B2B	1	Move to Stiff Fit Up Stat. B47	06/05/96.10:00A	06/05/96.11:00A	
1.2.2.46.B2C	1	Set-up & Purge B47	06/05/96.11:00A	06/05/96.12:00P	
1.2.2.46.B2D	2	Fit Stiffeners B47	06/05/96.01:00P	06/05/96.03:00P	
1.2.2.46.B2E	4	Weld Stiffeners B47	06/05/96.03:00P	06/06/96.10:00A	
1.2.2.46.B2F	1	Move to Exp.Bellows Stat. B47	06/06/96.10:00A	06/06/96.11:00A	
1.2.2.46.B2G	3	Fit,Purge,Weld Exp. Bellows B47	06/06/96.11:00A	06/06/96.03:00P	
1.2.2.46.B2H	1	Inspect, Install End Caps B47	06/06/96.03:00P	06/06/96.04:00P	
1.2.2.46.B2J	1	Move to Test Area B47	06/07/96.09:00A	06/07/96.10:00A	
1.2.2.46.B2K	1	Pre-Clean & Black Light B47	06/07/96.10:00A	06/07/96.11:00A	
1.2.2.46.B2L	30	Leak Test B47	06/07/96.11:00A	06/08/96.05:00P	
1.2.2.46.B2O	1	Move to Post Test Storage B47	06/10/96.08:00A	06/10/96.09:00A	
1.2.2.46.B2P	1	Clean, Dry & End Cap B47	06/10/96.09:00A	06/10/96.10:00A	
1.2.2.46.B2R	1	Transport to Erection B47	10/22/96.09:00A	10/22/96.10:00A	
1.2.2.46.B2S	1	Set & Align B47	10/22/96.10:00A	10/22/96.11:00A	
1.2.2.46.B2T	1	Set Clean Room, Purge & Fit B47	10/22/96.11:00A	10/22/96.12:00P	
1.2.2.46.B2U	2	Weld Joint B47	10/22/96.01:00P	10/22/96.03:00P	
1.2.2.46.B2V	2	Leak Test Joint B47	10/22/96.03:00P	10/22/96.05:00P	
1.2.2.46.B2W	2	Install Tube Supports B47	10/22/96.03:00P	10/22/96.05:00P	
1.2.2.46.B2X	2	Remove Equip'mt, Clean & Cap B47	10/23/96.08:00A	10/23/96.10:00A	
1.2.2.46.B3A	1	Unload,Rec/Insp Tube B48	06/04/96.10:00A	06/04/96.11:00A	
1.2.2.46.B3B	1	Move to Stiff Fit Up Stat. B48	06/06/96.11:00A	06/06/96.12:00P	
1.2.2.46.B3C	1	Set-up & Purge B48	06/06/96.01:00P	06/06/96.02:00P	
1.2.2.46.B3D	2	Fit Stiffeners B48	06/06/96.02:00P	06/06/96.04:00P	
1.2.2.46.B3E	4	Weld Stiffeners B48	06/06/96.04:00P	06/07/96.11:00A	
1.2.2.46.B3F	1	Move to Exp.Bellows Stat. B48	06/07/96.11:00A	06/07/96.12:00P	
1.2.2.46.B3G	3	Fit,Purge,Weld Exp. Bellows B48	06/07/96.01:00P	06/07/96.04:00P	
1.2.2.46.B3H	1	Inspect, Install End Caps B48	06/07/96.04:00P	06/07/96.05:00P	
1.2.2.46.B3J	1	Move to Test Area B48	06/10/96.09:00A	06/10/96.10:00A	
1.2.2.46.B3K	1	Pre-Clean & Black Light B48	06/10/96.10:00A	06/10/96.11:00A	
1.2.2.46.B3L	30	Leak Test B48	06/10/96.11:00A	06/11/96.05:00P	
1.2.2.46.B3O	1	Move to Post Test Storage B48	06/12/96.08:00A	06/12/96.09:00A	
1.2.2.46.B3P	1	Clean, Dry & End Cap B484	06/12/96.09:00A	06/12/96.10:00A	
1.2.2.46.B3R	1	Transport to Erection B48	10/23/96.04:00P	10/23/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.46.B3S	1	Set & Align B48	10/24/96.08:00A	10/24/96.09:00A	
1.2.2.46.B3T	1	Set Clean Room, Purge & Fit B48	10/24/96.09:00A	10/24/96.10:00A	
1.2.2.46.B3U	2	Weld Joint B48	10/24/96.10:00A	10/24/96.12:00P	
1.2.2.46.B3V	2	Leak Test Joint B48	10/24/96.01:00P	10/24/96.03:00P	
1.2.2.46.B3W	2	Install Tube Supports B48	10/24/96.01:00P	10/24/96.03:00P	
1.2.2.46.B3X	2	Remove Equip'mt, Clean & Cap B48	10/24/96.03:00P	10/24/96.05:00P	
1.2.2.46.B4A	1	Unload,Rec/Insp Tube B49	06/04/96.11:00A	06/04/96.12:00P	
1.2.2.46.B4B	1	Move to Stiff Fit Up Stat. B49	06/07/96.01:00P	06/07/96.02:00P	
1.2.2.46.B4C	1	Set-up & Purge B49	06/07/96.02:00P	06/07/96.03:00P	
1.2.2.46.B4D	2	Fit Stiffeners B49	06/07/96.03:00P	06/07/96.05:00P	
1.2.2.46.B4E	4	Weld Stiffeners B49	06/10/96.08:00A	06/10/96.12:00P	
1.2.2.46.B4F	1	Move to Exp.Bellows Stat. B49	06/10/96.01:00P	06/10/96.02:00P	
1.2.2.46.B4G	3	Fit,Purge,Weld Exp. Bellows B49	06/10/96.02:00P	06/10/96.05:00P	
1.2.2.46.B4H	1	Inspect, Install End Caps B49	06/11/96.08:00A	06/11/96.09:00A	
1.2.2.46.B4J	1	Move to Test Area B49	06/12/96.09:00A	06/12/96.10:00A	
1.2.2.46.B4K	1	Pre-Clean & Black Light B49	06/12/96.10:00A	06/12/96.11:00A	
1.2.2.46.B4L	30	Leak Test B49	06/12/96.11:00A	06/13/96.05:00P	
1.2.2.46.B4O	1	Move to Post Test Storage B49	06/14/96.08:00A	06/14/96.09:00A	
1.2.2.46.B4P	1	Clean, Dry & End Cap B49	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.46.B4R	1	Transport to Erection B49	10/25/96.02:00P	10/25/96.03:00P	
1.2.2.46.B4S	1	Set & Align B49	10/25/96.03:00P	10/25/96.04:00P	
1.2.2.46.B4T	1	Set Clean Room, Purge & Fit B49	10/25/96.04:00P	10/25/96.05:00P	
1.2.2.46.B4U	2	Weld Joint B49	10/28/96.08:00A	10/28/96.10:00A	
1.2.2.46.B4V	2	Leak Test Joint B49	10/28/96.10:00A	10/28/96.12:00P	
1.2.2.46.B4W	2	Install Tube Supports B49	10/28/96.10:00A	10/28/96.12:00P	
1.2.2.46.B4X	2	Remove Equip'mt, Clean & Cap B49	10/28/96.01:00P	10/28/96.03:00P	
1.2.2.46.B5A	1	Unload,Rec/Insp Tube B50	06/04/96.01:00P	06/04/96.02:00P	
1.2.2.46.B5B	1	Move to Stiff Fit Up Stat. B50	06/10/96.02:00P	06/10/96.03:00P	
1.2.2.46.B5C	1	Set-up & Purge B50	06/10/96.03:00P	06/10/96.04:00P	
1.2.2.46.B5D	2	Fit Stiffeners B50	06/10/96.04:00P	06/11/96.09:00A	
1.2.2.46.B5E	4	Weld Stiffeners B50	06/11/96.09:00A	06/11/96.02:00P	
1.2.2.46.B5F	1	Move to Exp.Bellows Stat. B50	06/12/96.10:00A	06/12/96.11:00A	
1.2.2.46.B5G	3	Fit,Purge,Weld Exp. Bellows B50	06/12/96.11:00A	06/12/96.03:00P	
1.2.2.46.B5H	1	Inspect, Install End Caps B50	06/12/96.03:00P	06/12/96.04:00P	
1.2.2.46.B5J	1	Move to Test Area B50	06/14/96.09:00A	06/14/96.10:00A	
1.2.2.46.B5K	1	Pre-Clean & Black Light B50	06/14/96.10:00A	06/14/96.11:00A	
1.2.2.46.B5L	30	Leak Test B50	06/14/96.11:00A	06/15/96.05:00P	
1.2.2.46.B5O	1	Move to Post Test Storage B50	06/17/96.08:00A	06/17/96.09:00A	
1.2.2.46.B5P	1	Clean, Dry & End Cap B50	06/17/96.09:00A	06/17/96.10:00A	
1.2.2.46.B5R	1	Transport to Erection B50	06/24/96.01:00P	06/24/96.02:00P	
1.2.2.46.B5S	1	Set & Align B50	06/24/96.02:00P	06/24/96.03:00P	
1.2.2.46.B5T	1	Set Clean Room, Purge & Fit B50	06/24/96.03:00P	06/24/96.04:00P	
1.2.2.46.B5U	2	Weld Joint B50	06/24/96.04:00P	06/25/96.09:00A	
1.2.2.46.B5V	2	Leak Test Joint B50	06/25/96.09:00A	06/25/96.11:00A	
1.2.2.46.B5W	2	Install Tube Supports B50	06/25/96.09:00A	06/25/96.11:00A	
1.2.2.46.B5X	2	Remove Equip'mt, Clean & Cap B50	06/25/96.11:00A	06/25/96.02:00P	
1.2.2.51	125	Cans 51-55	06/17/96.04:00P	07/09/96.12:00P	
1.2.2.51.1A	1	Unload,Rec/Insp Tube 51	06/18/96.08:00A	06/18/96.09:00A	
1.2.2.51.1B	1	Move to Stiff Fit Up Stat. 51	06/18/96.09:00A	06/18/96.10:00A	
1.2.2.51.1C	1	Set-up & Purge 51	06/18/96.10:00A	06/18/96.11:00A	
1.2.2.51.1D	2	Fit Stiffeners 51	06/18/96.11:00A	06/18/96.02:00P	
1.2.2.51.1E	4	Weld Stiffeners 51	06/18/96.02:00P	06/19/96.09:00A	
1.2.2.51.1F	1	Inspect, Install End Caps 51	06/19/96.09:00A	06/19/96.10:00A	
1.2.2.51.1H	1	Move to Test Area 51	06/19/96.10:00A	06/19/96.11:00A	
1.2.2.51.1I	1	Pre-Clean & Black Light 51	06/19/96.11:00A	06/19/96.12:00P	
1.2.2.51.1J	30	Leak Test 51	06/19/96.12:00P	06/20/96.06:00P	
1.2.2.51.1M	1	Move to Post Test Storage 51	06/21/96.08:00A	06/21/96.09:00A	
1.2.2.51.1N	1	Clean, Dry & End Cap 51	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.51.1P	1	Transport to Erection 51	06/27/96.11:00A	06/27/96.12:00P	
1.2.2.51.1Q	1	Set & Align 51	06/27/96.01:00P	06/27/96.02:00P	
1.2.2.51.1R	1	Set Clean Room, Purge & Fit 51	06/27/96.02:00P	06/27/96.03:00P	
1.2.2.51.1S	2	Weld Joint 51	06/27/96.03:00P	06/27/96.05:00P	
1.2.2.51.1T	2	Leak Test Joint 51	06/28/96.08:00A	06/28/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.51.1U	2	Install Tube Supports 51	06/28/96.08:00A	06/28/96.10:00A	
1.2.2.51.1V	2	Remove Equip'mt, Clean & Cap 51	06/28/96.10:00A	06/28/96.12:00P	
1.2.2.51.2A	1	Unload,Rec. & Inspect 52	06/18/96.09:00A	06/18/96.10:00A	
1.2.2.51.2B	1	Move to Stiff Fit Up Stat. 52	06/19/96.11:00A	06/19/96.12:00P	
1.2.2.51.2C	1	Set-up & Purge 52	06/19/96.01:00P	06/19/96.02:00P	
1.2.2.51.2D	2	Fit Stiffeners 52	06/19/96.02:00P	06/19/96.04:00P	
1.2.2.51.2E	4	Weld Stiffeners 52	06/19/96.04:00P	06/20/96.11:00A	
1.2.2.51.2F	1	Inspect, Install End Caps 52	06/20/96.11:00A	06/20/96.12:00P	
1.2.2.51.2H	1	Move to Test Area 52	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.51.2I	1	Pre-Clean & Black Light 52	06/21/96.10:00A	06/21/96.11:00A	
1.2.2.51.2J	30	Leak Test 52	06/21/96.11:00A	06/22/96.05:00P	
1.2.2.51.2M	1	Move to Post Test Storage 52	06/24/96.08:00A	06/24/96.09:00A	
1.2.2.51.2N	1	Clean, Dry & End Cap 52	06/24/96.09:00A	06/24/96.10:00A	
1.2.2.51.2P	1	Transport to Erection 52	07/01/96.09:00A	07/01/96.10:00A	
1.2.2.51.2Q	1	Set & Align 52	07/01/96.10:00A	07/01/96.11:00A	
1.2.2.51.2R	1	Set Clean Room, Purge & Fit 52	07/01/96.11:00A	07/01/96.12:00P	
1.2.2.51.2S	2	Weld Joint 52	07/01/96.01:00P	07/01/96.03:00P	
1.2.2.51.2T	2	Leak Test Joint 52	07/01/96.03:00P	07/01/96.05:00P	
1.2.2.51.2U	2	Install Tube Supports 52	07/01/96.03:00P	07/01/96.05:00P	
1.2.2.51.2V	2	Remove Equip'mt, Clean & Cap 52	07/02/96.08:00A	07/02/96.10:00A	
1.2.2.51.3A	1	Unload,Rec/Insp Tube 53	06/18/96.10:00A	06/18/96.11:00A	
1.2.2.51.3B	1	Move to Stiff Fit Up Stat. 53	06/21/96.10:00A	06/21/96.11:00A	
1.2.2.51.3C	1	Set-up & Purge 53	06/21/96.11:00A	06/21/96.12:00P	
1.2.2.51.3D	2	Fit Stiffeners 53	06/21/96.01:00P	06/21/96.03:00P	
1.2.2.51.3E	4	Weld Stiffeners 53	06/21/96.03:00P	06/24/96.10:00A	
1.2.2.51.3F	1	Inspect, Install End Caps 53	06/24/96.10:00A	06/24/96.11:00A	
1.2.2.51.3H	1	Move to Test Area 53	06/24/96.11:00A	06/24/96.12:00P	
1.2.2.51.3I	1	Pre-Clean & Black Light 53	06/24/96.01:00P	06/24/96.02:00P	
1.2.2.51.3J	30	Leak Test 53	06/24/96.02:00P	06/25/96.08:00P	
1.2.2.51.3M	1	Move to Post Test Storage 53	06/26/96.08:00A	06/26/96.09:00A	
1.2.2.51.3N	1	Clean, Dry & End Cap 53	06/26/96.09:00A	06/26/96.10:00A	
1.2.2.51.3P	1	Transport to Erection 53	07/02/96.04:00P	07/02/96.05:00P	
1.2.2.51.3Q	1	Set & Align 53	07/03/96.08:00A	07/03/96.09:00A	
1.2.2.51.3R	1	Set Clean Room, Purge & Fit 53	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.51.3S	2	Weld Joint 53	07/03/96.10:00A	07/03/96.12:00P	
1.2.2.51.3T	2	Leak Test Joint 53	07/03/96.01:00P	07/03/96.03:00P	
1.2.2.51.3U	2	Install Tube Supports 53	07/03/96.01:00P	07/03/96.03:00P	
1.2.2.51.3V	2	Remove Equip'mt, Clean & Cap 53	07/03/96.03:00P	07/03/96.05:00P	
1.2.2.51.4A	1	Unload,Rec/Insp Tube 54	06/18/96.11:00A	06/18/96.12:00P	
1.2.2.51.4B	1	Move to Stiff Fit Up Stat. 54	06/24/96.01:00P	06/24/96.02:00P	
1.2.2.51.4C	1	Set-up & Purge 54	06/24/96.02:00P	06/24/96.03:00P	
1.2.2.51.4D	2	Fit Stiffeners 54	06/24/96.03:00P	06/24/96.05:00P	
1.2.2.51.4E	4	Weld Stiffeners 54	06/25/96.08:00A	06/25/96.12:00P	
1.2.2.51.4F	1	Inspect, Install End Caps 54	06/25/96.01:00P	06/25/96.02:00P	
1.2.2.51.4H	1	Move to Test Area 54	06/26/96.09:00A	06/26/96.10:00A	
1.2.2.51.4I	1	Pre-Clean & Black Light 54	06/26/96.10:00A	06/26/96.11:00A	
1.2.2.51.4J	30	Leak Test 54	06/26/96.11:00A	06/27/96.05:00P	
1.2.2.51.4M	1	Move to Post Test Storage 54	06/28/96.08:00A	06/28/96.09:00A	
1.2.2.51.4N	1	Clean, Dry & End Cap 54	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.51.4P	1	Transport to Erection 54	07/04/96.02:00P	07/04/96.03:00P	
1.2.2.51.4Q	1	Set & Align 54	07/04/96.03:00P	07/04/96.04:00P	
1.2.2.51.4R	1	Set Clean Room, Purge & Fit 54	07/04/96.04:00P	07/04/96.05:00P	
1.2.2.51.4S	2	Weld Joint 54	07/05/96.08:00A	07/05/96.10:00A	
1.2.2.51.4T	2	Leak Test Joint 54	07/05/96.10:00A	07/05/96.12:00P	
1.2.2.51.4U	2	Install Tube Supports 540	07/05/96.10:00A	07/05/96.12:00P	
1.2.2.51.4V	2	Remove Equip'mt, Clean & Cap 54	07/05/96.01:00P	07/05/96.03:00P	
1.2.2.51.5A	1	Unload,Rec/Insp Tube 55	06/18/96.01:00P	06/18/96.02:00P	
1.2.2.51.5B	1	Move to Stiff Fit Up Stat. 55	06/26/96.10:00A	06/26/96.11:00A	
1.2.2.51.5C	1	Set-up & Purge 55	06/26/96.11:00A	06/26/96.12:00P	
1.2.2.51.5D	1	F/W Pump Port Reinf. 55	06/26/96.01:00P	06/26/96.02:00P	
1.2.2.51.5E	2	Fit Stiffeners 55	06/26/96.02:00P	06/26/96.04:00P	
1.2.2.51.5F	4	Weld Stiffeners 55	06/26/96.04:00P	06/27/96.11:00A	
1.2.2.51.5G	1	Move to P.Port Stat. 55	06/27/96.11:00A	06/27/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.51.5H	1	Setup & Bore 10" Inlet 55	06/27/96.01:00P	06/27/96.02:00P	
1.2.2.51.5I	2	Purge/F/W Pump Port 55	06/27/96.02:00P	06/27/96.04:00P	
1.2.2.51.5J	1	Inspect, Install End Caps 55	06/27/96.04:00P	06/27/96.05:00P	
1.2.2.51.5L	1	Move to Test Area 55	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.51.5M	1	Pre-Clean & Black Light 55	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.51.5N	30	Leak Test 55	06/28/96.11:00A	06/29/96.05:00P	
1.2.2.51.5Q	1	Move to Post Test Storage 55	07/01/96.08:00A	07/01/96.09:00A	
1.2.2.51.5R	1	Clean, Dry & End Cap 55	07/01/96.09:00A	07/01/96.10:00A	
1.2.2.51.5T	1	Transport to Erection 55	07/08/96.11:00A	07/08/96.12:00P	
1.2.2.51.5U	1	Set & Align 55	07/08/96.01:00P	07/08/96.02:00P	
1.2.2.51.5V	1	Set Clean Room, Purge & Fit 55	07/08/96.02:00P	07/08/96.03:00P	
1.2.2.51.5W	2	Weld Joint 55	07/08/96.03:00P	07/08/96.05:00P	
1.2.2.51.5X	2	Leak Test Joint 55	07/09/96.08:00A	07/09/96.10:00A	
1.2.2.51.5Y	2	Install Tube Supports 55	07/09/96.08:00A	07/09/96.10:00A	
1.2.2.51.5Z	2	Remove Equip'mt, Clean & Cap 55	07/09/96.10:00A	07/09/96.12:00P	
1.2.2.51.B1A	1	Unload,Rec/Insp Tube B51	06/18/96.08:00A	06/18/96.09:00A	
1.2.2.51.B1B	1	Move to Stiff Fit Up Stat. B51	06/18/96.09:00A	06/18/96.10:00A	
1.2.2.51.B1C	1	Set-up & Purge B51	06/18/96.10:00A	06/18/96.11:00A	
1.2.2.51.B1D	2	Fit Stiffeners B51	06/18/96.11:00A	06/18/96.02:00P	
1.2.2.51.B1E	4	Weld Stiffeners B51	06/18/96.02:00P	06/19/96.09:00A	
1.2.2.51.B1F	1	Move to Exp.Bellows Stat. B51	06/19/96.09:00A	06/19/96.10:00A	
1.2.2.51.B1G	3	Fit,Purge,Weld Exp. Bellows B51	06/19/96.10:00A	06/19/96.02:00P	
1.2.2.51.B1H	1	Inspect, Install End Caps B51	06/19/96.02:00P	06/19/96.03:00P	
1.2.2.51.B1J	1	Move to Test Area B51	06/19/96.03:00P	06/19/96.04:00P	
1.2.2.51.B1K	1	Pre-Clean & Black Light B51	06/19/96.04:00P	06/19/96.05:00P	
1.2.2.51.B1L	30	Leak Test B51	06/19/96.05:00P	06/20/96.11:00P	
1.2.2.51.B1O	1	Move to Post Test Storage B51	06/21/96.08:00A	06/21/96.09:00A	
1.2.2.51.B1P	1	Clean, Dry & End Cap B51	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.51.B1R	1	Transport to Erection B51	06/26/96.01:00P	06/26/96.02:00P	
1.2.2.51.B1S	1	Set & Align B51	06/26/96.02:00P	06/26/96.03:00P	
1.2.2.51.B1T	1	Set Clean Room, Purge & Fit B51	06/26/96.03:00P	06/26/96.04:00P	
1.2.2.51.B1U	2	Weld Joint B51	06/26/96.04:00P	06/27/96.09:00A	
1.2.2.51.B1V	2	Leak Test Joint B51	06/27/96.09:00A	06/27/96.11:00A	
1.2.2.51.B1W	2	Install Tube Supports B51	06/27/96.09:00A	06/27/96.11:00A	
1.2.2.51.B1X	2	Remove Equip'mt, Clean & Cap B51	06/27/96.11:00A	06/27/96.02:00P	
1.2.2.51.B2A	1	Unload,Rec/Insp Tube B52	06/18/96.09:00A	06/18/96.10:00A	
1.2.2.51.B2B	1	Move to Stiff Fit Up Stat. B52	06/19/96.10:00A	06/19/96.11:00A	
1.2.2.51.B2C	1	Set-up & Purge B52	06/19/96.11:00A	06/19/96.12:00P	
1.2.2.51.B2D	2	Fit Stiffeners B52	06/19/96.01:00P	06/19/96.03:00P	
1.2.2.51.B2E	4	Weld Stiffeners B52	06/19/96.03:00P	06/20/96.10:00A	
1.2.2.51.B2F	1	Move to Exp.Bellows Stat. B52	06/20/96.10:00A	06/20/96.11:00A	
1.2.2.51.B2G	3	Fit,Purge,Weld Exp. Bellows B52	06/20/96.11:00A	06/20/96.03:00P	
1.2.2.51.B2H	1	Inspect, Install End Caps B52	06/20/96.03:00P	06/20/96.04:00P	
1.2.2.51.B2J	1	Move to Test Area B52	06/21/96.09:00A	06/21/96.10:00A	
1.2.2.51.B2K	1	Pre-Clean & Black Light B52	06/21/96.10:00A	06/21/96.11:00A	
1.2.2.51.B2L	30	Leak Test B52	06/21/96.11:00A	06/22/96.05:00P	
1.2.2.51.B2O	1	Move to Post Test Storage B52	06/24/96.08:00A	06/24/96.09:00A	
1.2.2.51.B2P	1	Clean, Dry & End Cap B52	06/24/96.09:00A	06/24/96.10:00A	
1.2.2.51.B2R	1	Transport to Erection B52	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.51.B2S	1	Set & Align B52	06/28/96.11:00A	06/28/96.12:00P	
1.2.2.51.B2T	1	Set Clean Room, Purge & Fit B52	06/28/96.01:00P	06/28/96.02:00P	
1.2.2.51.B2U	2	Weld Joint B52	06/28/96.02:00P	06/28/96.04:00P	
1.2.2.51.B2V	2	Leak Test Joint B52	06/28/96.04:00P	07/01/96.09:00A	
1.2.2.51.B2W	2	Install Tube Supports B52	06/28/96.04:00P	07/01/96.09:00A	
1.2.2.51.B2X	2	Remove Equip'mt, Clean & Cap B52	07/01/96.09:00A	07/01/96.11:00A	
1.2.2.51.B3A	1	Unload,Rec/Insp Tube B53	06/18/96.10:00A	06/18/96.11:00A	
1.2.2.51.B3B	1	Move to Stiff Fit Up Stat. B53	06/20/96.11:00A	06/20/96.12:00P	
1.2.2.51.B3C	1	Set-up & Purge B53	06/20/96.01:00P	06/20/96.02:00P	
1.2.2.51.B3D	2	Fit Stiffeners B53	06/20/96.02:00P	06/20/96.04:00P	
1.2.2.51.B3E	4	Weld Stiffeners B53	06/20/96.04:00P	06/21/96.11:00A	
1.2.2.51.B3F	1	Move to Exp.Bellows Stat. B53	06/21/96.11:00A	06/21/96.12:00P	
1.2.2.51.B3G	3	Fit,Purge,Weld Exp. Bellows B53	06/21/96.01:00P	06/21/96.04:00P	
1.2.2.51.B3H	1	Inspect, Install End Caps B53	06/21/96.04:00P	06/21/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.51.B3J	1	Move to Test Area B53	06/24/96.09:00A	06/24/96.10:00A	
1.2.2.51.B3K	1	Pre-Clean & Black Light B53	06/24/96.10:00A	06/24/96.11:00A	
1.2.2.51.B3L	30	Leak Test B53	06/24/96.11:00A	06/25/96.05:00P	
1.2.2.51.B3O	1	Move to Post Test Storage B53	06/26/96.08:00A	06/26/96.09:00A	
1.2.2.51.B3P	1	Clean, Dry & End Cap B53	06/26/96.09:00A	06/26/96.10:00A	
1.2.2.51.B3R	1	Transport to Erection B53	07/02/96.08:00A	07/02/96.09:00A	
1.2.2.51.B3S	1	Set & Align B53	07/02/96.09:00A	07/02/96.10:00A	
1.2.2.51.B3T	1	Set Clean Room, Purge & Fit B53	07/02/96.10:00A	07/02/96.11:00A	
1.2.2.51.B3U	2	Weld Joint B53	07/02/96.11:00A	07/02/96.02:00P	
1.2.2.51.B3V	2	Leak Test Joint B53	07/02/96.02:00P	07/02/96.04:00P	
1.2.2.51.B3W	2	Install Tube Supports B53	07/02/96.02:00P	07/02/96.04:00P	
1.2.2.51.B3X	2	Remove Equip'mt, Clean & Cap B53	07/02/96.04:00P	07/03/96.09:00A	
1.2.2.51.B4A	1	Unload,Rec/Insp Tube B54	06/18/96.11:00A	06/18/96.12:00P	
1.2.2.51.B4B	1	Move to Stiff Fit Up Stat. B54	06/21/96.01:00P	06/21/96.02:00P	
1.2.2.51.B4C	1	Set-up & Purge B54	06/21/96.02:00P	06/21/96.03:00P	
1.2.2.51.B4D	2	Fit Stiffeners B54	06/21/96.03:00P	06/21/96.05:00P	
1.2.2.51.B4E	4	Weld Stiffeners B54	06/24/96.08:00A	06/24/96.12:00P	
1.2.2.51.B4F	1	Move to Exp.Bellows Stat. B54	06/24/96.01:00P	06/24/96.02:00P	
1.2.2.51.B4G	3	Fit,Purge,Weld Exp. Bellows B54	06/24/96.02:00P	06/24/96.05:00P	
1.2.2.51.B4H	1	Inspect, Install End Caps B54	06/25/96.08:00A	06/25/96.09:00A	
1.2.2.51.B4J	1	Move to Test Area B54	06/26/96.09:00A	06/26/96.10:00A	
1.2.2.51.B4K	1	Pre-Clean & Black Light B54	06/26/96.10:00A	06/26/96.11:00A	
1.2.2.51.B4L	30	Leak Test B54	06/26/96.11:00A	06/27/96.05:00P	
1.2.2.51.B4O	1	Move to Post Test Storage B54	06/28/96.08:00A	06/28/96.09:00A	
1.2.2.51.B4P	1	Clean, Dry & End Cap B54	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.51.B4R	1	Transport to Erection B54	07/03/96.03:00P	07/03/96.04:00P	
1.2.2.51.B4S	1	Set & Align B54	07/03/96.04:00P	07/03/96.05:00P	
1.2.2.51.B4T	1	Set Clean Room, Purge & Fit B54	07/04/96.08:00A	07/04/96.09:00A	
1.2.2.51.B4U	2	Weld Joint B54	07/04/96.09:00A	07/04/96.11:00A	
1.2.2.51.B4V	2	Leak Test Joint B54	07/04/96.11:00A	07/04/96.02:00P	
1.2.2.51.B4W	2	Install Tube Supports 54	07/04/96.11:00A	07/04/96.02:00P	
1.2.2.51.B4X	2	Remove Equip'mt, Clean & Cap B54	07/04/96.02:00P	07/04/96.04:00P	
1.2.2.51.B5A	1	Unload,Rec/Insp Tube B55	06/18/96.01:00P	06/18/96.02:00P	
1.2.2.51.B5B	1	Move to Stiff Fit Up Stat. B55	06/24/96.02:00P	06/24/96.03:00P	
1.2.2.51.B5C	1	Set-up & Purge B55	06/24/96.03:00P	06/24/96.04:00P	
1.2.2.51.B5D	2	Fit Stiffeners B55	06/24/96.04:00P	06/25/96.09:00A	
1.2.2.51.B5E	4	Weld Stiffeners B55	06/25/96.09:00A	06/25/96.02:00P	
1.2.2.51.B5F	1	Move to Exp.Bellows Stat. B55	06/26/96.10:00A	06/26/96.11:00A	
1.2.2.51.B5G	3	Fit,Purge,Weld Exp. Bellows B55	06/26/96.11:00A	06/26/96.03:00P	
1.2.2.51.B5H	1	Inspect, Install End Caps B55	06/26/96.03:00P	06/26/96.04:00P	
1.2.2.51.B5J	1	Move to Test Area B55	06/28/96.09:00A	06/28/96.10:00A	
1.2.2.51.B5K	1	Pre-Clean & Black Light B55	06/28/96.10:00A	06/28/96.11:00A	
1.2.2.51.B5L	30	Leak Test B55	06/28/96.11:00A	06/29/96.05:00P	
1.2.2.51.B5O	1	Move to Post Test Storage B55	07/01/96.08:00A	07/01/96.09:00A	
1.2.2.51.B5P	1	Clean, Dry & End Cap B55	07/01/96.09:00A	07/01/96.10:00A	
1.2.2.51.B5R	1	Transport to Erection B55	07/05/96.01:00P	07/05/96.02:00P	
1.2.2.51.B5S	1	Set & Align B55	07/05/96.02:00P	07/05/96.03:00P	
1.2.2.51.B5T	1	Set Clean Room, Purge & Fit B55	07/05/96.03:00P	07/05/96.04:00P	
1.2.2.51.B5U	2	Weld Joint B55	07/05/96.04:00P	07/08/96.09:00A	
1.2.2.51.B5V	2	Leak Test Joint B55	07/08/96.09:00A	07/08/96.11:00A	
1.2.2.51.B5W	2	Install Tube Supports B55	07/08/96.09:00A	07/08/96.11:00A	
1.2.2.51.B5X	2	Remove Equip'mt, Clean & Cap B55	07/08/96.11:00A	07/08/96.02:00P	
1.2.2.56	117	Cans 56-60	07/01/96.04:00P	07/22/96.12:00P	
1.2.2.56.1A	1	Unload,Rec/Insp Tube 56	07/02/96.08:00A	07/02/96.09:00A	
1.2.2.56.1B	1	Move to Stiff Fit Up Stat. 65	07/02/96.09:00A	07/02/96.10:00A	
1.2.2.56.1C	1	Set-up & Purge 56	07/02/96.10:00A	07/02/96.11:00A	
1.2.2.56.1D	2	Fit Stiffeners 56	07/02/96.11:00A	07/02/96.02:00P	
1.2.2.56.1E	4	Weld Stiffeners 56	07/02/96.02:00P	07/03/96.09:00A	
1.2.2.56.1F	1	Inspect, Install End Caps 56	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.56.1H	1	Move to Test Area 56	07/03/96.10:00A	07/03/96.11:00A	
1.2.2.56.1I	1	Pre-Clean & Black Light 56	07/03/96.11:00A	07/03/96.12:00P	
1.2.2.56.1J	30	Leak Test 56	07/03/96.12:00P	07/04/96.06:00P	
1.2.2.56.1M	1	Move to Post Test Storage56	07/05/96.08:00A	07/05/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.56.1N	1	Clean, Dry & End Cap 56	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.56.1P	1	Transport to Erection 56	07/10/96.11:00A	07/10/96.12:00P	
1.2.2.56.1Q	1	Set & Align 56	07/10/96.01:00P	07/10/96.02:00P	
1.2.2.56.1R	1	Set Clean Room, Purge & Fit 56	07/10/96.02:00P	07/10/96.03:00P	
1.2.2.56.1S	2	Weld Joint 56	07/10/96.03:00P	07/10/96.05:00P	
1.2.2.56.1T	2	Leak Test Joint 56	07/11/96.08:00A	07/11/96.10:00A	
1.2.2.56.1U	2	Install Tube Supports 56	07/11/96.08:00A	07/11/96.10:00A	
1.2.2.56.1V	2	Remove Equip'mt, Clean & Cap 56	07/11/96.10:00A	07/11/96.12:00P	
1.2.2.56.2A	1	Unload,Rec. & Inspct 57	07/02/96.09:00A	07/02/96.10:00A	
1.2.2.56.2B	1	Move to Stiff Fit Up Stat. 57	07/03/96.11:00A	07/03/96.12:00P	
1.2.2.56.2C	1	Set-up & Purge 57	07/03/96.01:00P	07/03/96.02:00P	
1.2.2.56.2D	2	Fit Stiffeners 57	07/03/96.02:00P	07/03/96.04:00P	
1.2.2.56.2E	4	Weld Stiffeners 57	07/03/96.04:00P	07/04/96.11:00A	
1.2.2.56.2F	1	Inspect, Install End Caps 57	07/04/96.11:00A	07/04/96.12:00P	
1.2.2.56.2H	1	Move to Test Area 57	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.56.2I	1	Pre-Clean & Black Light 57	07/05/96.10:00A	07/05/96.11:00A	
1.2.2.56.2J	30	Leak Test 57	07/05/96.11:00A	07/06/96.05:00P	
1.2.2.56.2M	1	Move to Post Test Storage 57	07/08/96.08:00A	07/08/96.09:00A	
1.2.2.56.2N	1	Clean, Dry & End Cap 57	07/08/96.09:00A	07/08/96.10:00A	
1.2.2.56.2P	1	Transport to Erection 57	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.56.2Q	1	Set & Align 57	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.56.2R	1	Set Clean Room, Purge & Fit 57	07/12/96.11:00A	07/12/96.12:00P	
1.2.2.56.2S	2	Weld Joint 57	07/12/96.01:00P	07/12/96.03:00P	
1.2.2.56.2T	2	Leak Test Joint 57	07/12/96.03:00P	07/12/96.05:00P	
1.2.2.56.2U	2	Install Tube Supports 57	07/12/96.03:00P	07/12/96.05:00P	
1.2.2.56.2V	2	Remove Equip'mt, Clean & Cap 57	07/15/96.08:00A	07/15/96.10:00A	
1.2.2.56.3A	1	Unload,Rec/Insp Tube 58	07/02/96.10:00A	07/02/96.11:00A	
1.2.2.56.3B	1	Move to Stiff Fit Up Stat. 58	07/05/96.10:00A	07/05/96.11:00A	
1.2.2.56.3C	1	Set-up & Purge 58	07/05/96.11:00A	07/05/96.12:00P	
1.2.2.56.3D	2	Fit Stiffeners 58	07/05/96.01:00P	07/05/96.03:00P	
1.2.2.56.3E	4	Weld Stiffeners 58	07/05/96.03:00P	07/08/96.10:00A	
1.2.2.56.3F	1	Inspect, Install End Caps 58	07/08/96.10:00A	07/08/96.11:00A	
1.2.2.56.3H	1	Move to Test Area 58	07/08/96.11:00A	07/08/96.12:00P	
1.2.2.56.3I	1	Pre-Clean & Black Light 58	07/08/96.01:00P	07/08/96.02:00P	
1.2.2.56.3J	30	Leak Test 58	07/08/96.02:00P	07/09/96.08:00P	
1.2.2.56.3M	1	Move to Post Test Storage 58	07/10/96.08:00A	07/10/96.09:00A	
1.2.2.56.3N	1	Clean, Dry & End Cap 58	07/10/96.09:00A	07/10/96.10:00A	
1.2.2.56.3P	1	Transport to Erection 58	07/15/96.04:00P	07/15/96.05:00P	
1.2.2.56.3Q	1	Set & Align 58	07/16/96.08:00A	07/16/96.09:00A	
1.2.2.56.3R	1	Set Clean Room, Purge & Fit 58	07/16/96.09:00A	07/16/96.10:00A	
1.2.2.56.3S	2	Weld Joint 58	07/16/96.10:00A	07/16/96.12:00P	
1.2.2.56.3T	2	Leak Test Joint 58	07/16/96.01:00P	07/16/96.03:00P	
1.2.2.56.3U	2	Install Tube Supports 58	07/16/96.01:00P	07/16/96.03:00P	
1.2.2.56.3V	2	Remove Equip'mt, Clean & Cap 58	07/16/96.03:00P	07/16/96.05:00P	
1.2.2.56.4A	1	Unload,Rec/Insp Tube 59	07/02/96.11:00A	07/02/96.12:00P	
1.2.2.56.4B	1	Move to Stiff Fit Up Stat. 59	07/08/96.01:00P	07/08/96.02:00P	
1.2.2.56.4C	1	Set-up & Purge 59	07/08/96.02:00P	07/08/96.03:00P	
1.2.2.56.4D	2	Fit Stiffeners 59	07/08/96.03:00P	07/08/96.05:00P	
1.2.2.56.4E	4	Weld Stiffeners 59	07/09/96.08:00A	07/09/96.12:00P	
1.2.2.56.4F	1	Inspect, Install End Caps 59	07/09/96.01:00P	07/09/96.02:00P	
1.2.2.56.4H	1	Move to Test Area 59	07/10/96.09:00A	07/10/96.10:00A	
1.2.2.56.4I	1	Pre-Clean & Black Light 59	07/10/96.10:00A	07/10/96.11:00A	
1.2.2.56.4J	30	Leak Test 59	07/10/96.11:00A	07/11/96.05:00P	
1.2.2.56.4M	1	Move to Post Test Storage 59	07/12/96.08:00A	07/12/96.09:00A	
1.2.2.56.4N	1	Clean, Dry & End Cap 59	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.56.4P	1	Transport to Erection 59	07/17/96.02:00P	07/17/96.03:00P	
1.2.2.56.4Q	1	Set & Align 59	07/17/96.03:00P	07/17/96.04:00P	
1.2.2.56.4R	1	Set Clean Room, Purge & Fit 59	07/17/96.04:00P	07/17/96.05:00P	
1.2.2.56.4S	2	Weld Joint 59	07/18/96.08:00A	07/18/96.10:00A	
1.2.2.56.4T	2	Leak Test Joint 59	07/18/96.10:00A	07/18/96.12:00P	
1.2.2.56.4U	2	Install Tube Supports 59	07/18/96.10:00A	07/18/96.12:00P	
1.2.2.56.4V	2	Remove Equip'mt, Clean & Cap 59	07/18/96.01:00P	07/18/96.03:00P	
1.2.2.56.5A	1	Unload,Rec/Insp Tube 62	07/02/96.01:00P	07/02/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.56.5B	1	Move to Stiff Fit Up Stat. 60	07/10/96.10:00A	07/10/96.11:00A	
1.2.2.56.5C	1	Set-up & Purge 60	07/10/96.11:00A	07/10/96.12:00P	
1.2.2.56.5D	1	F/W Pump Port Reinf. 60	07/10/96.01:00P	07/10/96.02:00P	
1.2.2.56.5E	2	Fit Stiffeners 60	07/10/96.02:00P	07/10/96.04:00P	
1.2.2.56.5F	4	Weld Stiffeners 60	07/10/96.04:00P	07/11/96.11:00A	
1.2.2.56.5G	1	Move to P.Port Stat. 60	07/11/96.11:00A	07/11/96.12:00P	
1.2.2.56.5H	1	Setup & Bore 10" Inlet 60	07/11/96.01:00P	07/11/96.02:00P	
1.2.2.56.5I	2	Purge/F/W Pump Port 60	07/11/96.02:00P	07/11/96.04:00P	
1.2.2.56.5J	1	Inspect, Install End Caps 60	07/11/96.04:00P	07/11/96.05:00P	
1.2.2.56.5L	1	Move to Test Area 60	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.56.5M	1	Pre-Clean & Black Light 60	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.56.5N	30	Leak Test 60	07/12/96.11:00A	07/13/96.05:00P	
1.2.2.56.5Q	1	Move to Post Test Storage 60	07/15/96.08:00A	07/15/96.09:00A	
1.2.2.56.5R	1	Clean, Dry & End Cap 60	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.56.5T	1	Transport to Erection 60	07/19/96.11:00A	07/19/96.12:00P	
1.2.2.56.5U	1	Set & Align 60	07/19/96.01:00P	07/19/96.02:00P	
1.2.2.56.5V	1	Set Clean Room, Purge & Fit 60	07/19/96.02:00P	07/19/96.03:00P	
1.2.2.56.5W	2	Weld Joint 60	07/19/96.03:00P	07/19/96.05:00P	
1.2.2.56.5X	2	Leak Test Joint 60	07/22/96.08:00A	07/22/96.10:00A	
1.2.2.56.5Y	2	Install Tube Supports 60	07/22/96.08:00A	07/22/96.10:00A	
1.2.2.56.5Z	2	Remove Equip'mt, Clean & Cap 60	07/22/96.10:00A	07/22/96.12:00P	
1.2.2.56.B1A	1	Unload,Rec/Insp Tube B56	07/02/96.08:00A	07/02/96.09:00A	
1.2.2.56.B1B	1	Move to Stiff Fit Up Stat. B56	07/02/96.09:00A	07/02/96.10:00A	
1.2.2.56.B1C	1	Set-up & Purge B56	07/02/96.10:00A	07/02/96.11:00A	
1.2.2.56.B1D	2	Fit Stiffeners B56	07/02/96.11:00A	07/02/96.02:00P	
1.2.2.56.B1E	4	Weld Stiffeners B56	07/02/96.02:00P	07/03/96.09:00A	
1.2.2.56.B1F	1	Move to Exp.Bellows Stat. B56	07/03/96.09:00A	07/03/96.10:00A	
1.2.2.56.B1G	3	Fit,Purge,Weld Exp. Bellows B56	07/03/96.10:00A	07/03/96.02:00P	
1.2.2.56.B1H	1	Inspect, Install End Caps B56	07/03/96.02:00P	07/03/96.03:00P	
1.2.2.56.B1J	1	Move to Test Area B56	07/03/96.03:00P	07/03/96.04:00P	
1.2.2.56.B1K	1	Pre-Clean & Black Light B56	07/03/96.04:00P	07/03/96.05:00P	
1.2.2.56.B1L	30	Leak Test B56	07/03/96.05:00P	07/04/96.11:00P	
1.2.2.56.B1O	1	Move to Post Test Storage B56	07/05/96.08:00A	07/05/96.09:00A	
1.2.2.56.B1P	1	Clean, Dry & End Cap B56	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.56.B1R	1	Transport to Erection B56	07/09/96.01:00P	07/09/96.02:00P	
1.2.2.56.B1S	1	Set & Align B56	07/09/96.02:00P	07/09/96.03:00P	
1.2.2.56.B1T	1	Set Clean Room, Purge & Fit B56	07/09/96.03:00P	07/09/96.04:00P	
1.2.2.56.B1U	2	Weld Joint B56	07/09/96.04:00P	07/10/96.09:00A	
1.2.2.56.B1V	2	Leak Test Joint B56	07/10/96.09:00A	07/10/96.11:00A	
1.2.2.56.B1W	2	Install Tube Supports B56	07/10/96.09:00A	07/10/96.11:00A	
1.2.2.56.B1X	2	Remove Equip'mt, Clean & Cap B56	07/10/96.11:00A	07/10/96.02:00P	
1.2.2.56.B2A	1	Unload,Rec/Insp Tube B57	07/02/96.09:00A	07/02/96.10:00A	
1.2.2.56.B2B	1	Move to Stiff Fit Up Stat. B57	07/03/96.10:00A	07/03/96.11:00A	
1.2.2.56.B2C	1	Set-up & Purge B57	07/03/96.11:00A	07/03/96.12:00P	
1.2.2.56.B2D	2	Fit Stiffeners B57	07/03/96.01:00P	07/03/96.03:00P	
1.2.2.56.B2E	4	Weld Stiffeners B57	07/03/96.03:00P	07/04/96.10:00A	
1.2.2.56.B2F	1	Move to Exp.Bellows Stat. B57	07/04/96.10:00A	07/04/96.11:00A	
1.2.2.56.B2G	3	Fit,Purge,Weld Exp. Bellows B57	07/04/96.11:00A	07/04/96.03:00P	
1.2.2.56.B2H	1	Inspect, Install End Caps B57	07/04/96.03:00P	07/04/96.04:00P	
1.2.2.56.B2J	1	Move to Test Area B57	07/05/96.09:00A	07/05/96.10:00A	
1.2.2.56.B2K	1	Pre-Clean & Black Light B57	07/05/96.10:00A	07/05/96.11:00A	
1.2.2.56.B2L	30	Leak Test B57	07/05/96.11:00A	07/06/96.05:00P	
1.2.2.56.B2O	1	Move to Post Test Storage B57	07/08/96.08:00A	07/08/96.09:00A	
1.2.2.56.B2P	1	Clean, Dry & End Cap B57	07/08/96.09:00A	07/08/96.10:00A	
1.2.2.56.B2R	1	Transport to Erection B57	07/11/96.10:00A	07/11/96.11:00A	
1.2.2.56.B2S	1	Set & Align B57	07/11/96.11:00A	07/11/96.12:00P	
1.2.2.56.B2T	1	Set Clean Room, Purge & Fit B57	07/11/96.01:00P	07/11/96.02:00P	
1.2.2.56.B2U	2	Weld Joint B57	07/11/96.02:00P	07/11/96.04:00P	
1.2.2.56.B2V	2	Leak Test Joint B57	07/11/96.04:00P	07/12/96.09:00A	
1.2.2.56.B2W	2	Install Tube Supports B57	07/11/96.04:00P	07/12/96.09:00A	
1.2.2.56.B2X	2	Remove Equip'mt, Clean & Cap B58	07/12/96.09:00A	07/12/96.11:00A	
1.2.2.56.B3A	1	Unload,Rec/Insp Tube B58	07/02/96.10:00A	07/02/96.11:00A	
1.2.2.56.B3B	1	Move to Stiff Fit Up Stat. B58	07/04/96.11:00A	07/04/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.56.B3C	1	Set-up & Purge B58	07/04/96.01:00P	07/04/96.02:00P	
1.2.2.56.B3D	2	Fit Stiffeners B58	07/04/96.02:00P	07/04/96.04:00P	
1.2.2.56.B3E	4	Weld Stiffeners B58	07/04/96.04:00P	07/05/96.11:00A	
1.2.2.56.B3F	1	Move to Exp.Bellows Stat. B58	07/05/96.11:00A	07/05/96.12:00P	
1.2.2.56.B3G	3	Fit,Purge,Weld Exp. Bellows B58	07/05/96.01:00P	07/05/96.04:00P	
1.2.2.56.B3H	1	Inspect, Install End Caps B58	07/05/96.04:00P	07/05/96.05:00P	
1.2.2.56.B3J	1	Move to Test Area B58	07/08/96.09:00A	07/08/96.10:00A	
1.2.2.56.B3K	1	Pre-Clean & Black Light B58	07/08/96.10:00A	07/08/96.11:00A	
1.2.2.56.B3L	30	Leak Test B58	07/08/96.11:00A	07/09/96.05:00P	
1.2.2.56.B3O	1	Move to Post Test Storage B58	07/10/96.08:00A	07/10/96.09:00A	
1.2.2.56.B3P	1	Clean, Dry & End Cap B58	07/10/96.09:00A	07/10/96.10:00A	
1.2.2.56.B3R	1	Transport to Erection B58	07/15/96.08:00A	07/15/96.09:00A	
1.2.2.56.B3S	1	Set & Align B58	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.56.B3T	1	Set Clean Room, Purge & Fit B58	07/15/96.10:00A	07/15/96.11:00A	
1.2.2.56.B3U	2	Weld Joint B58	07/15/96.11:00A	07/15/96.02:00P	
1.2.2.56.B3V	2	Leak Test Joint B58	07/15/96.02:00P	07/15/96.04:00P	
1.2.2.56.B3W	2	Install Tube Supports 58	07/15/96.02:00P	07/15/96.04:00P	
1.2.2.56.B3X	2	Remove Equip'mt, Clean & Cap B58	07/15/96.04:00P	07/16/96.09:00A	
1.2.2.56.B4A	1	Unload,Rec/Insp Tube B59	07/02/96.11:00A	07/02/96.12:00P	
1.2.2.56.B4B	1	Move to Stiff Fit Up Stat. B59	07/05/96.01:00P	07/05/96.02:00P	
1.2.2.56.B4C	1	Set-up & Purge B59	07/05/96.02:00P	07/05/96.03:00P	
1.2.2.56.B4D	2	Fit Stiffeners B59	07/05/96.03:00P	07/05/96.05:00P	
1.2.2.56.B4E	4	Weld Stiffeners B59	07/08/96.08:00A	07/08/96.12:00P	
1.2.2.56.B4F	1	Move to Exp.Bellows Stat. B59	07/08/96.01:00P	07/08/96.02:00P	
1.2.2.56.B4G	3	Fit,Purge,Weld Exp. Bellows B59	07/08/96.02:00P	07/08/96.05:00P	
1.2.2.56.B4H	1	Inspect, Install End Caps B59	07/09/96.08:00A	07/09/96.09:00A	
1.2.2.56.B4J	1	Move to Test Area B59	07/10/96.09:00A	07/10/96.10:00A	
1.2.2.56.B4K	1	Pre-Clean & Black Light B59	07/10/96.10:00A	07/10/96.11:00A	
1.2.2.56.B4L	30	Leak Test B59	07/10/96.11:00A	07/11/96.05:00P	
1.2.2.56.B4O	1	Move to Post Test Storage B59	07/12/96.08:00A	07/12/96.09:00A	
1.2.2.56.B4P	1	Clean, Dry & End Cap B59	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.56.B4R	1	Transport to Erection B59	07/16/96.03:00P	07/16/96.04:00P	
1.2.2.56.B4S	1	Set & Align B59	07/16/96.04:00P	07/16/96.05:00P	
1.2.2.56.B4T	1	Set Clean Room, Purge & Fit B59	07/17/96.08:00A	07/17/96.09:00A	
1.2.2.56.B4U	2	Weld Joint B59	07/17/96.09:00A	07/17/96.11:00A	
1.2.2.56.B4V	2	Leak Test Joint B59	07/17/96.11:00A	07/17/96.02:00P	
1.2.2.56.B4W	2	Install Tube Supports B59	07/17/96.11:00A	07/17/96.02:00P	
1.2.2.56.B4X	2	Remove Equip'mt, Clean & Cap B59	07/17/96.02:00P	07/17/96.04:00P	
1.2.2.56.B5A	1	Unload,Rec/Insp Tube B60	07/02/96.01:00P	07/02/96.02:00P	
1.2.2.56.B5B	1	Move to Stiff Fit Up Stat. B60	07/08/96.02:00P	07/08/96.03:00P	
1.2.2.56.B5C	1	Set-up & Purge B60	07/08/96.03:00P	07/08/96.04:00P	
1.2.2.56.B5D	2	Fit Stiffeners B60	07/08/96.04:00P	07/09/96.09:00A	
1.2.2.56.B5E	4	Weld Stiffeners B60	07/09/96.09:00A	07/09/96.02:00P	
1.2.2.56.B5F	1	Move to Exp.Bellows Stat. B60	07/10/96.10:00A	07/10/96.11:00A	
1.2.2.56.B5G	3	Fit,Purge,Weld Exp. Bellows B60	07/10/96.11:00A	07/10/96.03:00P	
1.2.2.56.B5H	1	Inspect, Install End Caps B60	07/10/96.03:00P	07/10/96.04:00P	
1.2.2.56.B5J	1	Move to Test Area B60	07/12/96.09:00A	07/12/96.10:00A	
1.2.2.56.B5K	1	Pre-Clean & Black Light B60	07/12/96.10:00A	07/12/96.11:00A	
1.2.2.56.B5L	30	Leak Test B60	07/12/96.11:00A	07/13/96.05:00P	
1.2.2.56.B5O	1	Move to Post Test Storage B60	07/15/96.08:00A	07/15/96.09:00A	
1.2.2.56.B5P	1	Clean, Dry & End Cap B60	07/15/96.09:00A	07/15/96.10:00A	
1.2.2.56.B5R	1	Transport to Erection B60	07/18/96.01:00P	07/18/96.02:00P	
1.2.2.56.B5S	1	Set & Align B60	07/18/96.02:00P	07/18/96.03:00P	
1.2.2.56.B5T	1	Set Clean Room, Purge & Fit B60	07/18/96.03:00P	07/18/96.04:00P	
1.2.2.56.B5U	2	Weld Joint B60	07/18/96.04:00P	07/19/96.09:00A	
1.2.2.56.B5V	2	Leak Test Joint B60	07/19/96.09:00A	07/19/96.11:00A	
1.2.2.56.B5W	2	Install Tube Supports B60	07/19/96.09:00A	07/19/96.11:00A	
1.2.2.56.B5X	2	Remove Equip'mt, Clean & Cap B60	07/19/96.11:00A	07/19/96.02:00P	
1.2.2.61	109	Cans 61-65	07/15/96.04:00P	08/02/96.12:00P	
1.2.2.61.1A	1	Unload,Rec/Insp Tube 61	07/16/96.08:00A	07/16/96.09:00A	
1.2.2.61.1B	1	Move to Stiff Fit Up Stat. 61	07/16/96.09:00A	07/16/96.10:00A	
1.2.2.61.1C	1	Set-up & Purge 61	07/16/96.10:00A	07/16/96.11:00A	
1.2.2.61.1D	2	Fit Stiffeners 61	07/16/96.11:00A	07/16/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.61.1E	4	Weld Stiffeners 61	07/16/96.02:00P	07/17/96.09:00A	
1.2.2.61.1F	1	Inspect, Install End Caps 61	07/17/96.09:00A	07/17/96.10:00A	
1.2.2.61.1H	1	Move to Test Area 61	07/17/96.10:00A	07/17/96.11:00A	
1.2.2.61.1I	1	Pre-Clean & Black Light 61	07/17/96.11:00A	07/17/96.12:00P	
1.2.2.61.1J	30	Leak Test 61	07/17/96.12:00P	07/18/96.06:00P	
1.2.2.61.1M	1	Move to Post Test Storage 61	07/19/96.08:00A	07/19/96.09:00A	
1.2.2.61.1N	1	Clean, Dry & End Cap 61	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.61.1P	1	Transport to Erection 61	07/23/96.11:00A	07/23/96.12:00P	
1.2.2.61.1Q	1	Set & Align 61	07/23/96.01:00P	07/23/96.02:00P	
1.2.2.61.1R	1	Set Clean Room, Purge & Fit 61	07/23/96.02:00P	07/23/96.03:00P	
1.2.2.61.1S	2	Weld Joint 61	07/23/96.03:00P	07/23/96.05:00P	
1.2.2.61.1T	2	Leak Test Joint 61	07/24/96.08:00A	07/24/96.10:00A	
1.2.2.61.1U	2	Install Tube Supports 61	07/24/96.08:00A	07/24/96.10:00A	
1.2.2.61.1V	2	Remove Equip'mt, Clean & Cap 61	07/24/96.10:00A	07/24/96.12:00P	
1.2.2.61.2A	1	Unload,Rec. & Inspct 62	07/16/96.09:00A	07/16/96.10:00A	
1.2.2.61.2B	1	Move to Stiff Fit Up Stat. 62	07/17/96.11:00A	07/17/96.12:00P	
1.2.2.61.2C	1	Set-up & Purge 62	07/17/96.01:00P	07/17/96.02:00P	
1.2.2.61.2D	2	Fit Stiffeners 62	07/17/96.02:00P	07/17/96.04:00P	
1.2.2.61.2E	4	Weld Stiffeners 62	07/17/96.04:00P	07/18/96.11:00A	
1.2.2.61.2F	1	Inspect, Install End Caps 62	07/18/96.11:00A	07/18/96.12:00P	
1.2.2.61.2H	1	Move to Test Area 62	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.61.2I	1	Pre-Clean & Black Light 62	07/19/96.10:00A	07/19/96.11:00A	
1.2.2.61.2J	30	Leak Test 62	07/19/96.11:00A	07/20/96.05:00P	
1.2.2.61.2M	1	Move to Post Test Storage 62	07/22/96.08:00A	07/22/96.09:00A	
1.2.2.61.2N	1	Clean, Dry & End Cap 62	07/22/96.09:00A	07/22/96.10:00A	
1.2.2.61.2P	1	Transport to Erection 62	07/25/96.09:00A	07/25/96.10:00A	
1.2.2.61.2Q	1	Set & Align 62	07/25/96.10:00A	07/25/96.11:00A	
1.2.2.61.2R	1	Set Clean Room, Purge & Fit 62	07/25/96.11:00A	07/25/96.12:00P	
1.2.2.61.2S	2	Weld Joint 62	07/25/96.01:00P	07/25/96.03:00P	
1.2.2.61.2T	2	Leak Test Joint62	07/25/96.03:00P	07/25/96.05:00P	
1.2.2.61.2U	2	Install Tube Supports 62	07/25/96.03:00P	07/25/96.05:00P	
1.2.2.61.2V	2	Remove Equip'mt, Clean & Cap 62	07/26/96.08:00A	07/26/96.10:00A	
1.2.2.61.3A	1	Unload,Rec/Insp Tube 63	07/16/96.10:00A	07/16/96.11:00A	
1.2.2.61.3B	1	Move to Stiff Fit Up Stat. 63	07/19/96.10:00A	07/19/96.11:00A	
1.2.2.61.3C	1	Set-up & Purge 63	07/19/96.11:00A	07/19/96.12:00P	
1.2.2.61.3D	2	Fit Stiffeners 63	07/19/96.01:00P	07/19/96.03:00P	
1.2.2.61.3E	4	Weld Stiffeners 63	07/19/96.03:00P	07/22/96.10:00A	
1.2.2.61.3F	1	Inspect, Install End Caps 63	07/22/96.10:00A	07/22/96.11:00A	
1.2.2.61.3H	1	Move to Test Area 63	07/22/96.11:00A	07/22/96.12:00P	
1.2.2.61.3I	1	Pre-Clean & Black Light 63	07/22/96.01:00P	07/22/96.02:00P	
1.2.2.61.3J	30	Leak Test 63	07/22/96.02:00P	07/23/96.08:00P	
1.2.2.61.3M	1	Move to Post Test Storage 63	07/24/96.08:00A	07/24/96.09:00A	
1.2.2.61.3N	1	Clean, Dry & End Cap 63	07/24/96.09:00A	07/24/96.10:00A	
1.2.2.61.3P	1	Transport to Erection 63	07/26/96.04:00P	07/26/96.05:00P	
1.2.2.61.3Q	1	Set & Align 63	07/29/96.08:00A	07/29/96.09:00A	
1.2.2.61.3R	1	Set Clean Room, Purge & Fit 63	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.61.3S	2	Weld Joint 63	07/29/96.10:00A	07/29/96.12:00P	
1.2.2.61.3T	2	Leak Test Joint 63	07/29/96.01:00P	07/29/96.03:00P	
1.2.2.61.3U	2	Install Tube Supports 63	07/29/96.01:00P	07/29/96.03:00P	
1.2.2.61.3V	2	Remove Equip'mt, Clean & Cap 63	07/29/96.03:00P	07/29/96.05:00P	
1.2.2.61.4A	1	Unload,Rec/Insp Tube 64	07/16/96.11:00A	07/16/96.12:00P	
1.2.2.61.4B	1	Move to Stiff Fit Up Stat. 64	07/22/96.01:00P	07/22/96.02:00P	
1.2.2.61.4C	1	Set-up & Purge 64	07/22/96.02:00P	07/22/96.03:00P	
1.2.2.61.4D	2	Fit Stiffeners 64	07/22/96.03:00P	07/22/96.05:00P	
1.2.2.61.4E	4	Weld Stiffeners 64	07/23/96.08:00A	07/23/96.12:00P	
1.2.2.61.4F	1	Inspect, Install End Caps 64	07/23/96.01:00P	07/23/96.02:00P	
1.2.2.61.4H	1	Move to Test Area 64	07/24/96.09:00A	07/24/96.10:00A	
1.2.2.61.4I	1	Pre-Clean & Black Light 64	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.61.4J	30	Leak Test 64	07/24/96.11:00A	07/25/96.05:00P	
1.2.2.61.4M	1	Move to Post Test Storage 64	07/26/96.08:00A	07/26/96.09:00A	
1.2.2.61.4N	1	Clean, Dry & End Cap 64	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.61.4P	1	Transport to Erection 64	07/30/96.02:00P	07/30/96.03:00P	
1.2.2.61.4Q	1	Set & Align 64	07/30/96.03:00P	07/30/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.61.4R	1	Set Clean Room, Purge & Fit 64	07/30/96.04:00P	07/30/96.05:00P	
1.2.2.61.4S	2	Weld Joint 64	07/31/96.08:00A	07/31/96.10:00A	
1.2.2.61.4T	2	Leak Test Joint 64	07/31/96.10:00A	07/31/96.12:00P	
1.2.2.61.4U	2	Install Tube Supports 64	07/31/96.10:00A	07/31/96.12:00P	
1.2.2.61.4V	2	Remove Equip'mt, Clean & Cap 64	07/31/96.01:00P	07/31/96.03:00P	
1.2.2.61.5A	1	Unload,Rec/Insp Tube 6	07/16/96.01:00P	07/16/96.02:00P	
1.2.2.61.5B	1	Move to Stiff Fit Up Stat. 65	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.61.5C	1	Set-up & Purge 6 5	07/24/96.11:00A	07/24/96.12:00P	
1.2.2.61.5D	1	F/W Pump Port Reinf. 65	07/24/96.01:00P	07/24/96.02:00P	
1.2.2.61.5E	2	Fit Stiffeners 65	07/24/96.02:00P	07/24/96.04:00P	
1.2.2.61.5F	4	Weld Stiffeners 65	07/24/96.04:00P	07/25/96.11:00A	
1.2.2.61.5G	1	Move to P.Port Stat.65	07/25/96.11:00A	07/25/96.12:00P	
1.2.2.61.5H	1	Setup & Bore 10" Inlet 65	07/25/96.01:00P	07/25/96.02:00P	
1.2.2.61.5I	2	Purge/F/W Pump Port 65	07/25/96.02:00P	07/25/96.04:00P	
1.2.2.61.5J	1	Inspect, Install End Caps 65	07/25/96.04:00P	07/25/96.05:00P	
1.2.2.61.5L	1	Move to Test Area 65	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.61.5M	1	Pre-Clean & Black Light 65	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.61.5N	30	Leak Test 65	07/26/96.11:00A	07/27/96.05:00P	
1.2.2.61.5Q	1	Move to Post Test Storage 65	07/29/96.08:00A	07/29/96.09:00A	
1.2.2.61.5R	1	Clean, Dry & End Cap 65	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.61.5T	1	Transport to Erection 65	08/01/96.11:00A	08/01/96.12:00P	
1.2.2.61.5U	1	Set & Align 65	08/01/96.01:00P	08/01/96.02:00P	
1.2.2.61.5V	1	Set Clean Room, Purge & Fit 65	08/01/96.02:00P	08/01/96.03:00P	
1.2.2.61.5W	2	Weld Joint 65	08/01/96.03:00P	08/01/96.05:00P	
1.2.2.61.5X	2	Leak Test Joint 65	08/02/96.08:00A	08/02/96.10:00A	
1.2.2.61.5Y	2	Install Tube Supports 65	08/02/96.08:00A	08/02/96.10:00A	
1.2.2.61.5Z	2	Remove Equip'mt, Clean & Cap 65	08/02/96.10:00A	08/02/96.12:00P	
1.2.2.61.B1A	1	Unload,Rec/Insp Tube B61	07/16/96.08:00A	07/16/96.09:00A	
1.2.2.61.B1B	1	Move to Stiff Fit Up Stat. B61	07/16/96.09:00A	07/16/96.10:00A	
1.2.2.61.B1C	1	Set-up & Purge B61	07/16/96.10:00A	07/16/96.11:00A	
1.2.2.61.B1D	2	Fit Stiffeners B61	07/16/96.11:00A	07/16/96.02:00P	
1.2.2.61.B1E	4	Weld Stiffeners B61	07/16/96.02:00P	07/17/96.09:00A	
1.2.2.61.B1F	1	Move to Exp.Bellows Stat. B61	07/17/96.09:00A	07/17/96.10:00A	
1.2.2.61.B1G	3	Fit,Purge,Weld Exp. Bellows B61	07/17/96.10:00A	07/17/96.02:00P	
1.2.2.61.B1H	1	Inspect, Install End Caps B61	07/17/96.02:00P	07/17/96.03:00P	
1.2.2.61.B1J	1	Move to Test Area B61	07/17/96.03:00P	07/17/96.04:00P	
1.2.2.61.B1K	1	Pre-Clean & Black Light B61	07/17/96.04:00P	07/17/96.05:00P	
1.2.2.61.B1L	30	Leak Test B61	07/17/96.05:00P	07/18/96.11:00P	
1.2.2.61.B1O	1	Move to Post Test Storage B61	07/19/96.08:00A	07/19/96.09:00A	
1.2.2.61.B1P	1	Clean, Dry & End Cap B61	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.61.B1R	1	Transport to Erection B61	07/22/96.01:00P	07/22/96.02:00P	
1.2.2.61.B1S	1	Set & Align B61	07/22/96.02:00P	07/22/96.03:00P	
1.2.2.61.B1T	1	Set Clean Room, Purge & Fit B61	07/22/96.03:00P	07/22/96.04:00P	
1.2.2.61.B1U	2	Weld Joint B61	07/22/96.04:00P	07/23/96.09:00A	
1.2.2.61.B1V	2	Leak Test Joint B61	07/23/96.09:00A	07/23/96.11:00A	
1.2.2.61.B1W	2	Install Tube Supports B6	07/23/96.09:00A	07/23/96.11:00A	
1.2.2.61.B1X	2	Remove Equip'mt, Clean & Cap B61	07/23/96.11:00A	07/23/96.02:00P	
1.2.2.61.B2A	1	Unload,Rec/Insp Tube B62	07/16/96.09:00A	07/16/96.10:00A	
1.2.2.61.B2B	1	Move to Stiff Fit Up Stat. B62	07/17/96.10:00A	07/17/96.11:00A	
1.2.2.61.B2C	1	Set-up & Purge B62	07/17/96.11:00A	07/17/96.12:00P	
1.2.2.61.B2D	2	Fit Stiffeners B62	07/17/96.01:00P	07/17/96.03:00P	
1.2.2.61.B2E	4	Weld Stiffeners B62	07/17/96.03:00P	07/18/96.10:00A	
1.2.2.61.B2F	1	Move to Exp.Bellows Stat. B62	07/18/96.10:00A	07/18/96.11:00A	
1.2.2.61.B2G	3	Fit,Purge,Weld Exp. Bellows B62	07/18/96.11:00A	07/18/96.03:00P	
1.2.2.61.B2H	1	Inspect, Install End Caps B62	07/18/96.03:00P	07/18/96.04:00P	
1.2.2.61.B2J	1	Move to Test Area B62	07/19/96.09:00A	07/19/96.10:00A	
1.2.2.61.B2K	1	Pre-Clean & Black Light B62	07/19/96.10:00A	07/19/96.11:00A	
1.2.2.61.B2L	30	Leak Test B62	07/19/96.11:00A	07/20/96.05:00P	
1.2.2.61.B2O	1	Move to Post Test Storage B62	07/22/96.08:00A	07/22/96.09:00A	
1.2.2.61.B2P	1	Clean, Dry & End Cap B62	07/22/96.09:00A	07/22/96.10:00A	
1.2.2.61.B2R	1	Transport to Erection B62	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.61.B2S	1	Set & Align B62	07/24/96.11:00A	07/24/96.12:00P	
1.2.2.61.B2T	1	Set Clean Room, Purge & Fit B62	07/24/96.01:00P	07/24/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.61.B2U	2	Weld Joint B62	07/24/96.02:00P	07/24/96.04:00P	
1.2.2.61.B2V	2	Leak Test Joint B62	07/24/96.04:00P	07/25/96.09:00A	
1.2.2.61.B2W	2	Install Tube SupportsB62	07/24/96.04:00P	07/25/96.09:00A	
1.2.2.61.B2X	2	Remove Equip'mt, Clean & Cap B62	07/25/96.09:00A	07/25/96.11:00A	
1.2.2.61.B3A	1	Unload,Rec/Insp Tube B63	07/16/96.10:00A	07/16/96.11:00A	
1.2.2.61.B3B	1	Move to Stiff Fit Up Stat. B63	07/18/96.11:00A	07/18/96.12:00P	
1.2.2.61.B3C	1	Set-up & Purge B63	07/18/96.01:00P	07/18/96.02:00P	
1.2.2.61.B3D	2	Fit Stiffeners B63	07/18/96.02:00P	07/18/96.04:00P	
1.2.2.61.B3E	4	Weld Stiffeners B63	07/18/96.04:00P	07/19/96.11:00A	
1.2.2.61.B3F	1	Move to Exp.Bellows Stat. B63	07/19/96.11:00A	07/19/96.12:00P	
1.2.2.61.B3G	3	Fit,Purge,Weld Exp. Bellows B63	07/19/96.01:00P	07/19/96.04:00P	
1.2.2.61.B3H	1	Inspect, Install End Caps B63	07/19/96.04:00P	07/19/96.05:00P	
1.2.2.61.B3J	1	Move to Test Area B63	07/22/96.09:00A	07/22/96.10:00A	
1.2.2.61.B3K	1	Pre-Clean & Black Light B63	07/22/96.10:00A	07/22/96.11:00A	
1.2.2.61.B3L	30	Leak Test B63	07/22/96.11:00A	07/23/96.05:00P	
1.2.2.61.B3O	1	Move to Post Test Storage B63	07/24/96.08:00A	07/24/96.09:00A	
1.2.2.61.B3P	1	Clean, Dry & End Cap B63	07/24/96.09:00A	07/24/96.10:00A	
1.2.2.61.B3R	1	Transport to Erection B63	07/26/96.08:00A	07/26/96.09:00A	
1.2.2.61.B3S	1	Set & Align B63	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.61.B3T	1	Set Clean Room, Purge & Fit B63	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.61.B3U	2	Weld Joint B63	07/26/96.11:00A	07/26/96.02:00P	
1.2.2.61.B3V	2	Leak Test Joint B63	07/26/96.02:00P	07/26/96.04:00P	
1.2.2.61.B3W	2	Install Tube Supports B63	07/26/96.02:00P	07/26/96.04:00P	
1.2.2.61.B3X	2	Remove Equip'mt, Clean & Cap B63	07/26/96.04:00P	07/29/96.09:00A	
1.2.2.61.B4A	1	Unload,Rec/Insp Tube B64	07/16/96.11:00A	07/16/96.12:00P	
1.2.2.61.B4B	1	Move to Stiff Fit Up Stat. B64	07/19/96.01:00P	07/19/96.02:00P	
1.2.2.61.B4C	1	Set-up & Purge B64	07/19/96.02:00P	07/19/96.03:00P	
1.2.2.61.B4D	2	Fit Stiffeners B64	07/19/96.03:00P	07/19/96.05:00P	
1.2.2.61.B4E	4	Weld Stiffeners B64	07/22/96.08:00A	07/22/96.12:00P	
1.2.2.61.B4F	1	Move to Exp.Bellows Stat. B64	07/22/96.01:00P	07/22/96.02:00P	
1.2.2.61.B4G	3	Fit,Purge,Weld Exp. Bellows B64	07/22/96.02:00P	07/22/96.05:00P	
1.2.2.61.B4H	1	Inspect, Install End Caps B64	07/23/96.08:00A	07/23/96.09:00A	
1.2.2.61.B4J	1	Move to Test Area B64	07/24/96.09:00A	07/24/96.10:00A	
1.2.2.61.B4K	1	Pre-Clean & Black Light B64	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.61.B4L	30	Leak Test B64	07/24/96.11:00A	07/25/96.05:00P	
1.2.2.61.B4O	1	Move to Post Test Storage B64	07/26/96.08:00A	07/26/96.09:00A	
1.2.2.61.B4P	1	Clean, Dry & End Cap B64	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.61.B4R	1	Transport to Erection B64	07/29/96.03:00P	07/29/96.04:00P	
1.2.2.61.B4S	1	Set & Align B64	07/29/96.04:00P	07/29/96.05:00P	
1.2.2.61.B4T	1	Set Clean Room, Purge & Fit B64	07/30/96.08:00A	07/30/96.09:00A	
1.2.2.61.B4U	2	Weld Joint B64	07/30/96.09:00A	07/30/96.11:00A	
1.2.2.61.B4V	2	Leak Test Joint B64	07/30/96.11:00A	07/30/96.02:00P	
1.2.2.61.B4W	2	Install Tube Supports B64	07/30/96.11:00A	07/30/96.02:00P	
1.2.2.61.B4X	2	Remove Equip'mt, Clean & Cap B64	07/30/96.02:00P	07/30/96.04:00P	
1.2.2.61.B5A	1	Unload,Rec/Insp Tube B65	07/16/96.01:00P	07/16/96.02:00P	
1.2.2.61.B5B	1	Move to Stiff Fit Up Stat. B65	07/22/96.02:00P	07/22/96.03:00P	
1.2.2.61.B5C	1	Set-up & Purge B65	07/22/96.03:00P	07/22/96.04:00P	
1.2.2.61.B5D	2	Fit Stiffeners B65	07/22/96.04:00P	07/23/96.09:00A	
1.2.2.61.B5E	4	Weld Stiffeners B65	07/23/96.09:00A	07/23/96.02:00P	
1.2.2.61.B5F	1	Move to Exp.Bellows Stat. B65	07/24/96.10:00A	07/24/96.11:00A	
1.2.2.61.B5G	3	Fit,Purge,Weld Exp. Bellows B65	07/24/96.11:00A	07/24/96.03:00P	
1.2.2.61.B5H	1	Inspect, Install End Caps B65	07/24/96.03:00P	07/24/96.04:00P	
1.2.2.61.B5J	1	Move to Test Area B65	07/26/96.09:00A	07/26/96.10:00A	
1.2.2.61.B5K	1	Pre-Clean & Black Light B65	07/26/96.10:00A	07/26/96.11:00A	
1.2.2.61.B5L	30	Leak Test B65	07/26/96.11:00A	07/27/96.05:00P	
1.2.2.61.B5O	1	Move to Post Test Storage B65	07/29/96.08:00A	07/29/96.09:00A	
1.2.2.61.B5P	1	Clean, Dry & End Cap B65	07/29/96.09:00A	07/29/96.10:00A	
1.2.2.61.B5R	1	Transport to Erection B65	07/31/96.01:00P	07/31/96.02:00P	
1.2.2.61.B5S	1	Set & Align B65	07/31/96.02:00P	07/31/96.03:00P	
1.2.2.61.B5T	1	Set Clean Room, Purge & Fit B65	07/31/96.03:00P	07/31/96.04:00P	
1.2.2.61.B5U	2	Weld Joint B65	07/31/96.04:00P	08/01/96.09:00A	
1.2.2.61.B5V	2	Leak Test Joint B65	08/01/96.09:00A	08/01/96.11:00A	
1.2.2.61.B5W	2	Install Tube Supports B65	08/01/96.09:00A	08/01/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.61.B5X	2	Remove Equip'mt, Clean & Cap B65	08/01/96.11:00A	08/01/96.02:00P	
1.2.2.66	101	Cans 66-70	07/29/96.04:00P	08/15/96.12:00P	
1.2.2.66.1A	1	Unload,Rec/Insp Tube 66	07/30/96.08:00A	07/30/96.09:00A	
1.2.2.66.1B	1	Move to Stiff Fit Up Stat. 666	07/30/96.09:00A	07/30/96.10:00A	
1.2.2.66.1C	1	Set-up & Purge 66	07/30/96.10:00A	07/30/96.11:00A	
1.2.2.66.1D	2	Fit Stiffeners 66	07/30/96.11:00A	07/30/96.02:00P	
1.2.2.66.1E	4	Weld Stiffeners 66	07/30/96.02:00P	07/31/96.09:00A	
1.2.2.66.1F	1	Inspect, Install End Caps 66	07/31/96.09:00A	07/31/96.10:00A	
1.2.2.66.1H	1	Move to Test Area 66	07/31/96.10:00A	07/31/96.11:00A	
1.2.2.66.1I	1	Pre-Clean & Black Light 66	07/31/96.11:00A	07/31/96.12:00P	
1.2.2.66.1J	30	Leak Test 66	07/31/96.12:00P	08/01/96.06:00P	
1.2.2.66.1M	1	Move to Post Test Storage 66	08/02/96.08:00A	08/02/96.09:00A	
1.2.2.66.1N	1	Clean, Dry & End Cap 66	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.66.1P	1	Transport to Erection 66	08/05/96.11:00A	08/05/96.12:00P	
1.2.2.66.1q	1	Set & Align 66	08/05/96.01:00P	08/05/96.02:00P	
1.2.2.66.1R	1	Set Clean Room, Purge & Fit 66	08/05/96.02:00P	08/05/96.03:00P	
1.2.2.66.1S	2	Weld Joint 66	08/05/96.03:00P	08/05/96.05:00P	
1.2.2.66.1T	2	Leak Test Joint 66	08/06/96.08:00A	08/06/96.10:00A	
1.2.2.66.1U	2	Install Tube Supports 66	08/06/96.08:00A	08/06/96.10:00A	
1.2.2.66.1V	2	Remove Equip'mt, Clean & Cap 66	08/06/96.10:00A	08/06/96.12:00P	
1.2.2.66.2A	1	Unload,Rec. & Inspect 67	07/30/96.09:00A	07/30/96.10:00A	
1.2.2.66.2B	1	Move to Stiff Fit Up Stat. 67	07/31/96.11:00A	07/31/96.12:00P	
1.2.2.66.2C	1	Set-up & Purge 676	07/31/96.01:00P	07/31/96.02:00P	
1.2.2.66.2D	2	Fit Stiffeners 67	07/31/96.02:00P	07/31/96.04:00P	
1.2.2.66.2E	4	Weld Stiffeners 67	07/31/96.04:00P	08/01/96.11:00A	
1.2.2.66.2F	1	Inspect, Install End Caps 67	08/01/96.11:00A	08/01/96.12:00P	
1.2.2.66.2H	1	Move to Test Area 67	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.66.2I	1	Pre-Clean & Black Light 67	08/02/96.10:00A	08/02/96.11:00A	
1.2.2.66.2J	30	Leak Test 67	08/02/96.11:00A	08/03/96.05:00P	
1.2.2.66.2M	1	Move to Post Test Storage 67	08/05/96.08:00A	08/05/96.09:00A	
1.2.2.66.2N	1	Clean, Dry & End Cap 67	08/05/96.09:00A	08/05/96.10:00A	
1.2.2.66.2P	1	Transport to Erection 67	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.66.2Q	1	Set & Align 67	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.66.2R	1	Set Clean Room, Purge & Fit 67	08/07/96.11:00A	08/07/96.12:00P	
1.2.2.66.2S	2	Weld Joint 67	08/07/96.01:00P	08/07/96.03:00P	
1.2.2.66.2T	2	Leak Test Joint 67	08/07/96.03:00P	08/07/96.05:00P	
1.2.2.66.2U	2	Install Tube Supports 67	08/07/96.03:00P	08/07/96.05:00P	
1.2.2.66.2V	2	Remove Equip'mt, Clean & Cap 67	08/08/96.08:00A	08/08/96.10:00A	
1.2.2.66.3A	1	Unload,Rec/Insp Tube 68	07/30/96.10:00A	07/30/96.11:00A	
1.2.2.66.3B	1	Move to Stiff Fit Up Stat. 68	08/02/96.10:00A	08/02/96.11:00A	
1.2.2.66.3C	1	Set-up & Purge 68	08/02/96.11:00A	08/02/96.12:00P	
1.2.2.66.3D	2	Fit Stiffeners 68	08/02/96.01:00P	08/02/96.03:00P	
1.2.2.66.3E	4	Weld Stiffeners 68	08/02/96.03:00P	08/05/96.10:00A	
1.2.2.66.3F	1	Inspect, Install End Caps 68	08/05/96.10:00A	08/05/96.11:00A	
1.2.2.66.3H	1	Move to Test Area 68	08/05/96.11:00A	08/05/96.12:00P	
1.2.2.66.3I	1	Pre-Clean & Black Light 68	08/05/96.01:00P	08/05/96.02:00P	
1.2.2.66.3J	30	Leak Test 68	08/05/96.02:00P	08/06/96.08:00P	
1.2.2.66.3M	1	Move to Post Test Storage 68	08/07/96.08:00A	08/07/96.09:00A	
1.2.2.66.3N	1	Clean, Dry & End Cap 68	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.66.3P	1	Transport to Erection 68	08/08/96.04:00P	08/08/96.05:00P	
1.2.2.66.3Q	1	Set & Align 68	08/09/96.08:00A	08/09/96.09:00A	
1.2.2.66.3R	1	Set Clean Room, Purge & Fit 68	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.66.3S	2	Weld Joint 68	08/09/96.10:00A	08/09/96.12:00P	
1.2.2.66.3T	2	Leak Test Joint 68	08/09/96.01:00P	08/09/96.03:00P	
1.2.2.66.3U	2	Install Tube Supports 68	08/09/96.01:00P	08/09/96.03:00P	
1.2.2.66.3V	2	Remove Equip'mt, Clean & Cap 68	08/09/96.03:00P	08/09/96.05:00P	
1.2.2.66.4A	1	Unload,Rec/Insp Tube 69	07/30/96.11:00A	07/30/96.12:00P	
1.2.2.66.4B	1	Move to Stiff Fit Up Stat. 688	08/05/96.01:00P	08/05/96.02:00P	
1.2.2.66.4C	1	Set-up & Purge 69	08/05/96.02:00P	08/05/96.03:00P	
1.2.2.66.4D	2	Fit Stiffeners 69	08/05/96.03:00P	08/05/96.05:00P	
1.2.2.66.4E	4	Weld Stiffeners 69	08/06/96.08:00A	08/06/96.12:00P	
1.2.2.66.4F	1	Inspect, Install End Caps 69	08/06/96.01:00P	08/06/96.02:00P	
1.2.2.66.4H	1	Move to Test Area 69	08/07/96.09:00A	08/07/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.66.4I	1	Pre-Clean & Black Light 69	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.66.4J	30	Leak Test 69	08/07/96.11:00A	08/08/96.05:00P	
1.2.2.66.4M	1	Move to Post Test Storage 69	08/09/96.08:00A	08/09/96.09:00A	
1.2.2.66.4N	1	Clean, Dry & End Cap 69	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.66.4P	1	Transport to Erection 69	08/12/96.02:00P	08/12/96.03:00P	
1.2.2.66.4Q	1	Set & Align 69	08/12/96.03:00P	08/12/96.04:00P	
1.2.2.66.4R	1	Set Clean Room, Purge & Fit 69	08/12/96.04:00P	08/12/96.05:00P	
1.2.2.66.4S	2	Weld Joint 69	08/13/96.08:00A	08/13/96.10:00A	
1.2.2.66.4T	2	Leak Test Joint 69	08/13/96.10:00A	08/13/96.12:00P	
1.2.2.66.4U	2	Install Tube Supports 69	08/13/96.10:00A	08/13/96.12:00P	
1.2.2.66.4V	2	Remove Equip'mt, Clean & Cap 69	08/13/96.01:00P	08/13/96.03:00P	
1.2.2.66.5A	1	Unload,Rec/Insp Tube 70	07/30/96.01:00P	07/30/96.02:00P	
1.2.2.66.5B	1	Move to Stiff Fit Up Stat. 70	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.66.5C	1	Set-up & Purge 70	08/07/96.11:00A	08/07/96.12:00P	
1.2.2.66.5D	1	F/W Pump Port Reinf. 70	08/07/96.01:00P	08/07/96.02:00P	
1.2.2.66.5E	2	Fit Stiffeners 700	08/07/96.02:00P	08/07/96.04:00P	
1.2.2.66.5F	4	Weld Stiffeners 70	08/07/96.04:00P	08/08/96.11:00A	
1.2.2.66.5G	1	Move to P.Port Stat.70	08/08/96.11:00A	08/08/96.12:00P	
1.2.2.66.5H	1	Setup & Bore 10" Inlet 70	08/08/96.01:00P	08/08/96.02:00P	
1.2.2.66.5I	2	Purge/F/W Pump Port 70	08/08/96.02:00P	08/08/96.04:00P	
1.2.2.66.5J	1	Inspect, Install End Caps 70	08/08/96.04:00P	08/08/96.05:00P	
1.2.2.66.5L	1	Move to Test Area 70	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.66.5M	1	Pre-Clean & Black Light 70	08/09/96.10:00A	08/09/96.11:00A	
1.2.2.66.5N	30	Leak Test 70	08/09/96.11:00A	08/10/96.05:00P	
1.2.2.66.5Q	1	Move to Post Test Storage 70	08/12/96.08:00A	08/12/96.09:00A	
1.2.2.66.5R	1	Clean, Dry & End Cap 70	08/12/96.09:00A	08/12/96.10:00A	
1.2.2.66.5T	1	Transport to Erection 70	08/14/96.11:00A	08/14/96.12:00P	
1.2.2.66.5U	1	Set & Align 70	08/14/96.01:00P	08/14/96.02:00P	
1.2.2.66.5V	1	Set Clean Room, Purge & Fit 70	08/14/96.02:00P	08/14/96.03:00P	
1.2.2.66.5W	2	Weld Joint 70	08/14/96.03:00P	08/14/96.05:00P	
1.2.2.66.5X	2	Leak Test Joint 70	08/15/96.08:00A	08/15/96.10:00A	
1.2.2.66.5Y	2	Install Tube Supports 70	08/15/96.08:00A	08/15/96.10:00A	
1.2.2.66.5Z	2	Remove Equip'mt, Clean & Cap 70	08/15/96.10:00A	08/15/96.12:00P	
1.2.2.66.B1A	1	Unload,Rec/Insp Tube B66	07/30/96.08:00A	07/30/96.09:00A	
1.2.2.66.B1B	1	Move to Stiff Fit Up Stat. B66	07/30/96.09:00A	07/30/96.10:00A	
1.2.2.66.B1C	1	Set-up & Purge B66	07/30/96.10:00A	07/30/96.11:00A	
1.2.2.66.B1D	2	Fit Stiffeners B66	07/30/96.11:00A	07/30/96.02:00P	
1.2.2.66.B1E	4	Weld Stiffeners B66	07/30/96.02:00P	07/31/96.09:00A	
1.2.2.66.B1F	1	Move to Exp.Bellows Stat. B66	07/31/96.09:00A	07/31/96.10:00A	
1.2.2.66.B1G	3	Fit,Purge,Weld Exp. Bellows B66	07/31/96.10:00A	07/31/96.02:00P	
1.2.2.66.B1H	1	Inspect, Install End Caps B66	07/31/96.02:00P	07/31/96.03:00P	
1.2.2.66.B1J	1	Move to Test Area B66	07/31/96.03:00P	07/31/96.04:00P	
1.2.2.66.B1K	1	Pre-Clean & Black Light B66	07/31/96.04:00P	07/31/96.05:00P	
1.2.2.66.B1L	30	Leak Test B66	07/31/96.05:00P	08/01/96.11:00P	
1.2.2.66.B1O	1	Move to Post Test Storage B66	08/02/96.08:00A	08/02/96.09:00A	
1.2.2.66.B1P	1	Clean, Dry & End Cap B66	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.66.B1R	1	Transport to Erection B66	08/02/96.01:00P	08/02/96.02:00P	
1.2.2.66.B1S	1	Set & Align B66	08/02/96.02:00P	08/02/96.03:00P	
1.2.2.66.B1T	1	Set Clean Room, Purge & Fit B66	08/02/96.03:00P	08/02/96.04:00P	
1.2.2.66.B1U	2	Weld Joint B66	08/02/96.04:00P	08/05/96.09:00A	
1.2.2.66.B1V	2	Leak Test Joint B66	08/05/96.09:00A	08/05/96.11:00A	
1.2.2.66.B1W	2	Install Tube Supports B66	08/05/96.09:00A	08/05/96.11:00A	
1.2.2.66.B1X	2	Remove Equip'mt, Clean & Cap B66	08/05/96.11:00A	08/05/96.02:00P	
1.2.2.66.B2A	1	Unload,Rec/Insp Tube B67	07/30/96.09:00A	07/30/96.10:00A	
1.2.2.66.B2B	1	Move to Stiff Fit Up Stat. B67	07/31/96.10:00A	07/31/96.11:00A	
1.2.2.66.B2C	1	Set-up & Purge B67	07/31/96.11:00A	07/31/96.12:00P	
1.2.2.66.B2D	2	Fit Stiffeners B67	07/31/96.01:00P	07/31/96.03:00P	
1.2.2.66.B2E	4	Weld Stiffeners B67	07/31/96.03:00P	08/01/96.10:00A	
1.2.2.66.B2F	1	Move to Exp.Bellows Stat. B67	08/01/96.10:00A	08/01/96.11:00A	
1.2.2.66.B2G	3	Fit,Purge,Weld Exp. Bellows B67	08/01/96.11:00A	08/01/96.03:00P	
1.2.2.66.B2H	1	Inspect, Install End Caps B67	08/01/96.03:00P	08/01/96.04:00P	
1.2.2.66.B2J	1	Move to Test Area B67	08/02/96.09:00A	08/02/96.10:00A	
1.2.2.66.B2K	1	Pre-Clean & Black Light B67	08/02/96.10:00A	08/02/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.66.B2L	30	Leak Test B67	08/02/96.11:00A	08/03/96.05:00P	
1.2.2.66.B2O	1	Move to Post Test Storage B67	08/05/96.08:00A	08/05/96.09:00A	
1.2.2.66.B2P	1	Clean, Dry & End Cap B67	08/05/96.09:00A	08/05/96.10:00A	
1.2.2.66.B2R	1	Transport to Erection B67	08/06/96.10:00A	08/06/96.11:00A	
1.2.2.66.B2S	1	Set & Align B67	08/06/96.11:00A	08/06/96.12:00P	
1.2.2.66.B2T	1	Set Clean Room, Purge & Fit B67	08/06/96.01:00P	08/06/96.02:00P	
1.2.2.66.B2U	2	Weld Joint B67	08/06/96.02:00P	08/06/96.04:00P	
1.2.2.66.B2V	2	Leak Test Joint B67	08/06/96.04:00P	08/07/96.09:00A	
1.2.2.66.B2W	2	Install Tube SupportsB67	08/06/96.04:00P	08/07/96.09:00A	
1.2.2.66.B2X	2	Remove Equip'mt, Clean & Cap B67	08/07/96.09:00A	08/07/96.11:00A	
1.2.2.66.B3A	1	Unload,Rec/Insp Tube B68	07/30/96.10:00A	07/30/96.11:00A	
1.2.2.66.B3B	1	Move to Stiff Fit Up Stat. B68	08/01/96.11:00A	08/01/96.12:00P	
1.2.2.66.B3C	1	Set-up & Purge B68	08/01/96.01:00P	08/01/96.02:00P	
1.2.2.66.B3D	2	Fit Stiffeners B68	08/01/96.02:00P	08/01/96.04:00P	
1.2.2.66.B3E	4	Weld Stiffeners B68	08/01/96.04:00P	08/02/96.11:00A	
1.2.2.66.B3F	1	Move to Exp.Bellows Stat. B68	08/02/96.11:00A	08/02/96.12:00P	
1.2.2.66.B3G	3	Fit,Purge,Weld Exp. Bellows B68	08/02/96.01:00P	08/02/96.04:00P	
1.2.2.66.B3H	1	Inspect, Install End Caps B68	08/02/96.04:00P	08/02/96.05:00P	
1.2.2.66.B3J	1	Move to Test Area B68	08/05/96.09:00A	08/05/96.10:00A	
1.2.2.66.B3K	1	Pre-Clean & Black Light B68	08/05/96.10:00A	08/05/96.11:00A	
1.2.2.66.B3L	30	Leak Test B68	08/05/96.11:00A	08/06/96.05:00P	
1.2.2.66.B3O	1	Move to Post Test Storage B68	08/07/96.08:00A	08/07/96.09:00A	
1.2.2.66.B3P	1	Clean, Dry & End Cap B68	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.66.B3R	1	Transport to Erection B68	08/08/96.08:00A	08/08/96.09:00A	
1.2.2.66.B3S	1	Set & Align B68	08/08/96.09:00A	08/08/96.10:00A	
1.2.2.66.B3T	1	Set Clean Room, Purge & Fit B68	08/08/96.10:00A	08/08/96.11:00A	
1.2.2.66.B3U	2	Weld Joint B68	08/08/96.11:00A	08/08/96.02:00P	
1.2.2.66.B3V	2	Leak Test Joint B68	08/08/96.02:00P	08/08/96.04:00P	
1.2.2.66.B3W	2	Install Tube Supports B68	08/08/96.02:00P	08/08/96.04:00P	
1.2.2.66.B3X	2	Remove Equip'mt, Clean & Cap B686	08/08/96.04:00P	08/09/96.09:00A	
1.2.2.66.B4A	1	Unload,Rec/Insp Tube B69	07/30/96.11:00A	07/30/96.12:00P	
1.2.2.66.B4B	1	Move to Stiff Fit Up Stat. B69	08/02/96.01:00P	08/02/96.02:00P	
1.2.2.66.B4C	1	Set-up & Purge B69	08/02/96.02:00P	08/02/96.03:00P	
1.2.2.66.B4D	2	Fit Stiffeners B69	08/02/96.03:00P	08/02/96.05:00P	
1.2.2.66.B4E	4	Weld Stiffeners B69	08/05/96.08:00A	08/05/96.12:00P	
1.2.2.66.B4F	1	Move to Exp.Bellows Stat. B69	08/05/96.01:00P	08/05/96.02:00P	
1.2.2.66.B4G	3	Fit,Purge,Weld Exp. Bellows B69	08/05/96.02:00P	08/05/96.05:00P	
1.2.2.66.B4H	1	Inspect, Install End Caps B69	08/06/96.08:00A	08/06/96.09:00A	
1.2.2.66.B4J	1	Move to Test Area B69	08/07/96.09:00A	08/07/96.10:00A	
1.2.2.66.B4K	1	Pre-Clean & Black Light B69	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.66.B4L	30	Leak Test B69	08/07/96.11:00A	08/08/96.05:00P	
1.2.2.66.B4O	1	Move to Post Test Storage B69	08/09/96.08:00A	08/09/96.09:00A	
1.2.2.66.B4P	1	Clean, Dry & End Cap B69	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.66.B4R	1	Transport to Erection B69	08/09/96.03:00P	08/09/96.04:00P	
1.2.2.66.B4S	1	Set & Align B69	08/09/96.04:00P	08/09/96.05:00P	
1.2.2.66.B4T	1	Set Clean Room, Purge & Fit B69	08/12/96.08:00A	08/12/96.09:00A	
1.2.2.66.B4U	2	Weld Joint B69	08/12/96.09:00A	08/12/96.11:00A	
1.2.2.66.B4V	2	Leak Test Joint B69	08/12/96.11:00A	08/12/96.02:00P	
1.2.2.66.B4W	2	Install Tube Supports B69	08/12/96.11:00A	08/12/96.02:00P	
1.2.2.66.B4X	2	Remove Equip'mt, Clean & Cap B69	08/12/96.02:00P	08/12/96.04:00P	
1.2.2.66.B5A	1	Unload,Rec/Insp Tube B70	07/30/96.01:00P	07/30/96.02:00P	
1.2.2.66.B5B	1	Move to Stiff Fit Up Stat. B70	08/05/96.02:00P	08/05/96.03:00P	
1.2.2.66.B5C	1	Set-up & Purge B70	08/05/96.03:00P	08/05/96.04:00P	
1.2.2.66.B5D	2	Fit Stiffeners 70	08/05/96.04:00P	08/06/96.09:00A	
1.2.2.66.B5E	4	Weld Stiffeners B70	08/06/96.09:00A	08/06/96.02:00P	
1.2.2.66.B5F	1	Move to Exp.Bellows Stat. B70	08/07/96.10:00A	08/07/96.11:00A	
1.2.2.66.B5G	3	Fit,Purge,Weld Exp. Bellows B70	08/07/96.11:00A	08/07/96.03:00P	
1.2.2.66.B5H	1	Inspect, Install End Caps B707	08/07/96.03:00P	08/07/96.04:00P	
1.2.2.66.B5J	1	Move to Test Area B70	08/09/96.09:00A	08/09/96.10:00A	
1.2.2.66.B5K	1	Pre-Clean & Black Light B70	08/09/96.10:00A	08/09/96.11:00A	
1.2.2.66.B5L	30	Leak Test B70	08/09/96.11:00A	08/10/96.05:00P	
1.2.2.66.B5O	1	Move to Post Test Storage B70	08/12/96.08:00A	08/12/96.09:00A	
1.2.2.66.B5P	1	Clean, Dry & End Cap B70	08/12/96.09:00A	08/12/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.66.B5R	1	Transport to Erection B70	08/13/96.01:00P	08/13/96.02:00P	
1.2.2.66.B5S	1	Set & Align B70	08/13/96.02:00P	08/13/96.03:00P	
1.2.2.66.B5T	1	Set Clean Room, Purge & Fit B70	08/13/96.03:00P	08/13/96.04:00P	
1.2.2.66.B5U	2	Weld Joint B5	08/13/96.04:00P	08/14/96.09:00A	
1.2.2.66.B5V	2	Leak Test Joint B70	08/14/96.09:00A	08/14/96.11:00A	
1.2.2.66.B5W	2	Install Tube Supports B70	08/14/96.09:00A	08/14/96.11:00A	
1.2.2.66.B5X	2	Remove Equip'mt, Clean & Cap B70	08/14/96.11:00A	08/14/96.02:00P	
1.2.2.71	99	Cans 71-75	08/12/96.04:00P	08/29/96.10:00A	
1.2.2.71.1A	1	Unload,Rec/Insp Tube 71	08/13/96.08:00A	08/13/96.09:00A	
1.2.2.71.1B	1	Move to Stiff Fit Up Stat. 71	08/13/96.09:00A	08/13/96.10:00A	
1.2.2.71.1C	1	Set-up & Purge 71	08/13/96.10:00A	08/13/96.11:00A	
1.2.2.71.1D	2	Fit Stiffeners 71	08/13/96.11:00A	08/13/96.02:00P	
1.2.2.71.1E	4	Weld Stiffeners 71	08/13/96.02:00P	08/14/96.09:00A	
1.2.2.71.1F	1	Inspect, Install End Caps 71	08/14/96.09:00A	08/14/96.10:00A	
1.2.2.71.1H	1	Move to Test Area 71	08/14/96.10:00A	08/14/96.11:00A	
1.2.2.71.1I	1	Pre-Clean & Black Light 71	08/14/96.11:00A	08/14/96.12:00P	
1.2.2.71.1J	30	Leak Test 71	08/14/96.12:00P	08/15/96.06:00P	
1.2.2.71.1M	1	Move to Post Test Storage 71	08/16/96.08:00A	08/16/96.09:00A	
1.2.2.71.1N	1	Clean, Dry & End Cap 71	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.71.1P	1	Transport to Erection 71	08/19/96.09:00A	08/19/96.10:00A	
1.2.2.71.1Q	1	Set & Align 71	08/19/96.10:00A	08/19/96.11:00A	
1.2.2.71.1R	1	Set Clean Room, Purge & Fit 71	08/19/96.11:00A	08/19/96.12:00P	
1.2.2.71.1S	2	Weld Joint 71	08/19/96.01:00P	08/19/96.03:00P	
1.2.2.71.1T	2	Leak Test Joint 71	08/19/96.03:00P	08/19/96.05:00P	
1.2.2.71.1U	2	Install Tube Supports 71	08/19/96.03:00P	08/19/96.05:00P	
1.2.2.71.1V	2	Remove Equip'mt, Clean & Cap 71	08/20/96.08:00A	08/20/96.10:00A	
1.2.2.71.2A	1	Unload,Rec. & Inspect 72	08/13/96.09:00A	08/13/96.10:00A	
1.2.2.71.2B	1	Move to Stiff Fit Up Stat. 72	08/14/96.11:00A	08/14/96.12:00P	
1.2.2.71.2C	1	Set-up & Purge 72	08/14/96.01:00P	08/14/96.02:00P	
1.2.2.71.2D	2	Fit Stiffeners 72	08/14/96.02:00P	08/14/96.04:00P	
1.2.2.71.2E	4	Weld Stiffeners 72	08/14/96.04:00P	08/15/96.11:00A	
1.2.2.71.2F	1	Inspect, Install End Caps 72	08/15/96.11:00A	08/15/96.12:00P	
1.2.2.71.2H	1	Move to Test Area 72	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.71.2I	1	Pre-Clean & Black Light 72	08/16/96.10:00A	08/16/96.11:00A	
1.2.2.71.2J	30	Leak Test 72	08/16/96.11:00A	08/17/96.05:00P	
1.2.2.71.2M	1	Move to Post Test Storage 72	08/19/96.08:00A	08/19/96.09:00A	
1.2.2.71.2N	1	Clean, Dry & End Cap 72	08/19/96.09:00A	08/19/96.10:00A	
1.2.2.71.2P	1	Transport to Erection 72	08/20/96.04:00P	08/20/96.05:00P	
1.2.2.71.2Q	1	Set & Align 72	08/21/96.08:00A	08/21/96.09:00A	
1.2.2.71.2R	1	Set Clean Room, Purge & Fit 72	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.71.2S	2	Weld Joint 72	08/21/96.10:00A	08/21/96.12:00P	
1.2.2.71.2T	2	Leak Test Joint 72	08/21/96.01:00P	08/21/96.03:00P	
1.2.2.71.2U	2	Install Tube Supports 72	08/21/96.01:00P	08/21/96.03:00P	
1.2.2.71.2V	2	Remove Equip'mt, Clean & Cap 72	08/21/96.03:00P	08/21/96.05:00P	
1.2.2.71.3A	1	Unload,Rec/Insp Tube 73	08/13/96.10:00A	08/13/96.11:00A	
1.2.2.71.3B	1	Move to Stiff Fit Up Stat. 73	08/16/96.10:00A	08/16/96.11:00A	
1.2.2.71.3C	1	Set-up & Purge 73	08/16/96.11:00A	08/16/96.12:00P	
1.2.2.71.3D	2	Fit Stiffeners 73	08/16/96.01:00P	08/16/96.03:00P	
1.2.2.71.3E	4	Weld Stiffeners 73	08/16/96.03:00P	08/19/96.10:00A	
1.2.2.71.3F	1	Inspect, Install End Caps 73	08/19/96.10:00A	08/19/96.11:00A	
1.2.2.71.3H	1	Move to Test Area 73	08/19/96.11:00A	08/19/96.12:00P	
1.2.2.71.3I	1	Pre-Clean & Black Light 73	08/19/96.01:00P	08/19/96.02:00P	
1.2.2.71.3J	30	Leak Test 73	08/19/96.02:00P	08/20/96.08:00P	
1.2.2.71.3M	1	Move to Post Test Storage 73	08/21/96.08:00A	08/21/96.09:00A	
1.2.2.71.3N	1	Clean, Dry & End Cap 73	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.71.3P	1	Transport to Erection 73	08/22/96.02:00P	08/22/96.03:00P	
1.2.2.71.3Q	1	Set & Align 73	08/22/96.03:00P	08/22/96.04:00P	
1.2.2.71.3R	1	Set Clean Room, Purge & Fit 73	08/22/96.04:00P	08/22/96.05:00P	
1.2.2.71.3S	2	Weld Joint 73	08/23/96.08:00A	08/23/96.10:00A	
1.2.2.71.3T	2	Leak Test Joint 73	08/23/96.10:00A	08/23/96.12:00P	
1.2.2.71.3U	2	Install Tube Supports73	08/23/96.10:00A	08/23/96.12:00P	
1.2.2.71.3V	2	Remove Equip'mt, Clean & Cap 73	08/23/96.01:00P	08/23/96.03:00P	
1.2.2.71.4A	1	Unload,Rec/Insp Tube 74	08/13/96.11:00A	08/13/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.71.4B	1	Move to Stiff Fit Up Stat. 74	08/19/96.01:00P	08/19/96.02:00P	
1.2.2.71.4C	1	Set-up & Purge 74	08/19/96.02:00P	08/19/96.03:00P	
1.2.2.71.4D	2	Fit Stiffeners 74	08/19/96.03:00P	08/19/96.05:00P	
1.2.2.71.4E	4	Weld Stiffeners 74	08/20/96.08:00A	08/20/96.12:00P	
1.2.2.71.4F	1	Inspect, Install End Caps 74	08/20/96.01:00P	08/20/96.02:00P	
1.2.2.71.4H	1	Move to Test Area 74	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.71.4I	1	Pre-Clean & Black Light 74	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.71.4J	30	Leak Test 74	08/21/96.11:00A	08/22/96.05:00P	
1.2.2.71.4M	1	Move to Post Test Storage 74	08/23/96.08:00A	08/23/96.09:00A	
1.2.2.71.4N	1	Clean, Dry & End Cap 74	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.71.4P	1	Transport to Erection 74	08/26/96.11:00A	08/26/96.12:00P	
1.2.2.71.4Q	1	Set & Align 74	08/26/96.01:00P	08/26/96.02:00P	
1.2.2.71.4R	1	Set Clean Room, Purge & Fit 74	08/26/96.02:00P	08/26/96.03:00P	
1.2.2.71.4S	2	Weld Joint 7	08/26/96.03:00P	08/26/96.05:00P	
1.2.2.71.4T	2	Leak Test Joint 74	08/27/96.08:00A	08/27/96.10:00A	
1.2.2.71.4U	2	Install Tube Supports 74	08/27/96.08:00A	08/27/96.10:00A	
1.2.2.71.4V	2	Remove Equip'mt, Clean & Cap 74	08/27/96.10:00A	08/27/96.12:00P	
1.2.2.71.5A	1	Unload,Rec/Insp Tube 57	08/13/96.01:00P	08/13/96.02:00P	
1.2.2.71.5B	1	Move to Stiff Fit Up Stat. 75	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.71.5C	1	Set-up & Purge 75	08/21/96.11:00A	08/21/96.12:00P	
1.2.2.71.5D	1	F/W Pump Port Reinf. 75	08/21/96.01:00P	08/21/96.02:00P	
1.2.2.71.5E	2	Fit Stiffeners 75	08/21/96.02:00P	08/21/96.04:00P	
1.2.2.71.5F	4	Weld Stiffeners 75	08/21/96.04:00P	08/22/96.11:00A	
1.2.2.71.5G	1	Move to P.Port Stat. 75	08/22/96.11:00A	08/22/96.12:00P	
1.2.2.71.5H	1	Setup & Bore 10" Inlet 75	08/22/96.01:00P	08/22/96.02:00P	
1.2.2.71.5I	2	Purge/F/W Pump Port 75	08/22/96.02:00P	08/22/96.04:00P	
1.2.2.71.5J	1	Inspect, Install End Caps 75	08/22/96.04:00P	08/22/96.05:00P	
1.2.2.71.5L	1	Move to Test Area 75	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.71.5M	1	Pre-Clean & Black Light 75	08/23/96.10:00A	08/23/96.11:00A	
1.2.2.71.5N	30	Leak Test 75	08/23/96.11:00A	08/24/96.05:00P	
1.2.2.71.5Q	1	Move to Post Test Storage 75	08/26/96.08:00A	08/26/96.09:00A	
1.2.2.71.5R	1	Clean, Dry & End Cap 75	08/26/96.09:00A	08/26/96.10:00A	
1.2.2.71.5T	1	Transport to Erection 75	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.71.5U	1	Set & Align 75	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.71.5V	1	Set Clean Room, Purge & Fit 75	08/28/96.11:00A	08/28/96.12:00P	
1.2.2.71.5W	2	Weld Joint 75	08/28/96.01:00P	08/28/96.03:00P	
1.2.2.71.5X	2	Leak Test Joint 75	08/28/96.03:00P	08/28/96.05:00P	
1.2.2.71.5Y	2	Install Tube Supports 75	08/28/96.03:00P	08/28/96.05:00P	
1.2.2.71.5Z	2	Remove Equip'mt, Clean & Cap 75	08/29/96.08:00A	08/29/96.10:00A	
1.2.2.71.B1A	1	Unload,Rec/Insp Tube B71	08/13/96.08:00A	08/13/96.09:00A	
1.2.2.71.B1B	1	Move to Stiff Fit Up Stat. B71	08/13/96.09:00A	08/13/96.10:00A	
1.2.2.71.B1C	1	Set-up & Purge B71	08/13/96.10:00A	08/13/96.11:00A	
1.2.2.71.B1D	2	Fit Stiffeners B71	08/13/96.11:00A	08/13/96.02:00P	
1.2.2.71.B1E	4	Weld Stiffeners B71	08/13/96.02:00P	08/14/96.09:00A	
1.2.2.71.B1F	1	Move to Exp.Bellows Stat. B71	08/14/96.09:00A	08/14/96.10:00A	
1.2.2.71.B1G	3	Fit,Purge,Weld Exp. Bellows B71	08/14/96.10:00A	08/14/96.02:00P	
1.2.2.71.B1H	1	Inspect, Install End Caps B71	08/14/96.02:00P	08/14/96.03:00P	
1.2.2.71.B1J	1	Move to Test Area B71	08/14/96.03:00P	08/14/96.04:00P	
1.2.2.71.B1K	1	Pre-Clean & Black Light B71	08/14/96.04:00P	08/14/96.05:00P	
1.2.2.71.B1L	30	Leak Test B71	08/14/96.05:00P	08/15/96.11:00P	
1.2.2.71.B1O	1	Move to Post Test Storage B71	08/16/96.08:00A	08/16/96.09:00A	
1.2.2.71.B1P	1	Clean, Dry & End Cap B71	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.71.B1R	1	Transport to Erection B71	08/16/96.10:00A	08/16/96.11:00A	
1.2.2.71.B1S	1	Set & Align B71	08/16/96.11:00A	08/16/96.12:00P	
1.2.2.71.B1T	1	Set Clean Room, Purge & Fit B71	08/16/96.01:00P	08/16/96.02:00P	
1.2.2.71.B1U	2	Weld Joint B71	08/16/96.02:00P	08/16/96.04:00P	
1.2.2.71.B1V	2	Leak Test Joint B71	08/16/96.04:00P	08/19/96.09:00A	
1.2.2.71.B1W	2	Install Tube Supports B71	08/16/96.04:00P	08/19/96.09:00A	
1.2.2.71.B1X	2	Remove Equip'mt, Clean & Cap B71	08/19/96.09:00A	08/19/96.11:00A	
1.2.2.71.B2A	1	Unload,Rec/Insp Tube B72	08/13/96.09:00A	08/13/96.10:00A	
1.2.2.71.B2B	1	Move to Stiff Fit Up Stat. B72	08/14/96.10:00A	08/14/96.11:00A	
1.2.2.71.B2C	1	Set-up & Purge B72	08/14/96.11:00A	08/14/96.12:00P	
1.2.2.71.B2D	2	Fit Stiffeners B72	08/14/96.01:00P	08/14/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.71.B2E	4	Weld Stiffeners B72	08/14/96.03:00P	08/15/96.10:00A	
1.2.2.71.B2F	1	Move to Exp.Bellows Stat. B72	08/15/96.10:00A	08/15/96.11:00A	
1.2.2.71.B2G	3	Fit,Purge,Weld Exp. Bellows B72	08/15/96.11:00A	08/15/96.03:00P	
1.2.2.71.B2H	1	Inspect, Install End Caps B72	08/15/96.03:00P	08/15/96.04:00P	
1.2.2.71.B2J	1	Move to Test Area B72	08/16/96.09:00A	08/16/96.10:00A	
1.2.2.71.B2K	1	Pre-Clean & Black Light B72	08/16/96.10:00A	08/16/96.11:00A	
1.2.2.71.B2L	30	Leak Test B72	08/16/96.11:00A	08/17/96.05:00P	
1.2.2.71.B2O	1	Move to Post Test Storage B72	08/19/96.08:00A	08/19/96.09:00A	
1.2.2.71.B2P	1	Clean, Dry & End Cap B72	08/19/96.09:00A	08/19/96.10:00A	
1.2.2.71.B2R	1	Transport to Erection B72	08/20/96.08:00A	08/20/96.09:00A	
1.2.2.71.B2S	1	Set & Align B72	08/20/96.09:00A	08/20/96.10:00A	
1.2.2.71.B2T	1	Set Clean Room, Purge & Fit B72	08/20/96.10:00A	08/20/96.11:00A	
1.2.2.71.B2U	2	Weld Joint B72	08/20/96.11:00A	08/20/96.02:00P	
1.2.2.71.B2V	2	Leak Test Joint B72	08/20/96.02:00P	08/20/96.04:00P	
1.2.2.71.B2W	2	Install Tube Supports B72	08/20/96.02:00P	08/20/96.04:00P	
1.2.2.71.B2X	2	Remove Equip'mt, Clean & Cap B72	08/20/96.04:00P	08/21/96.09:00A	
1.2.2.71.B3A	1	Unload,Rec/Insp Tube B73	08/13/96.10:00A	08/13/96.11:00A	
1.2.2.71.B3B	1	Move to Stiff Fit Up Stat. B73	08/15/96.11:00A	08/15/96.12:00P	
1.2.2.71.B3C	1	Set-up & Purge B73	08/15/96.01:00P	08/15/96.02:00P	
1.2.2.71.B3D	2	Fit Stiffeners B73	08/15/96.02:00P	08/15/96.04:00P	
1.2.2.71.B3E	4	Weld Stiffeners B73	08/15/96.04:00P	08/16/96.11:00A	
1.2.2.71.B3F	1	Move to Exp.Bellows Stat. B73	08/16/96.11:00A	08/16/96.12:00P	
1.2.2.71.B3G	3	Fit,Purge,Weld Exp. Bellows B73	08/16/96.01:00P	08/16/96.04:00P	
1.2.2.71.B3H	1	Inspect, Install End Caps B73	08/16/96.04:00P	08/16/96.05:00P	
1.2.2.71.B3J	1	Move to Test Area B73	08/19/96.09:00A	08/19/96.10:00A	
1.2.2.71.B3K	1	Pre-Clean & Black Light B3	08/19/96.10:00A	08/19/96.11:00A	
1.2.2.71.B3L	30	Leak Test B3	08/19/96.11:00A	08/20/96.05:00P	
1.2.2.71.B3O	1	Move to Post Test Storage B73	08/21/96.08:00A	08/21/96.09:00A	
1.2.2.71.B3P	1	Clean, Dry & End Cap B73	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.71.B3R	1	Transport to Erection B73	08/21/96.03:00P	08/21/96.04:00P	
1.2.2.71.B3S	1	Set & Align B73	08/21/96.04:00P	08/21/96.05:00P	
1.2.2.71.B3T	1	Set Clean Room, Purge & Fit B73	08/22/96.08:00A	08/22/96.09:00A	
1.2.2.71.B3U	2	Weld Joint B73	08/22/96.09:00A	08/22/96.11:00A	
1.2.2.71.B3V	2	Leak Test Joint B73	08/22/96.11:00A	08/22/96.02:00P	
1.2.2.71.B3W	2	Install Tube Supports B73	08/22/96.11:00A	08/22/96.02:00P	
1.2.2.71.B3X	2	Remove Equip'mt, Clean & Cap B73	08/22/96.02:00P	08/22/96.04:00P	
1.2.2.71.B4A	1	Unload,Rec/Insp Tube B74	08/13/96.11:00A	08/13/96.12:00P	
1.2.2.71.B4B	1	Move to Stiff Fit Up Stat. B74	08/16/96.01:00P	08/16/96.02:00P	
1.2.2.71.B4C	1	Set-up & Purge B74	08/16/96.02:00P	08/16/96.03:00P	
1.2.2.71.B4D	2	Fit Stiffeners B74	08/16/96.03:00P	08/16/96.05:00P	
1.2.2.71.B4E	4	Weld Stiffeners B74	08/19/96.08:00A	08/19/96.12:00P	
1.2.2.71.B4F	1	Move to Exp.Bellows Stat. B74	08/19/96.01:00P	08/19/96.02:00P	
1.2.2.71.B4G	3	Fit,Purge,Weld Exp. Bellows B74	08/19/96.02:00P	08/19/96.05:00P	
1.2.2.71.B4H	1	Inspect, Install End Caps B74	08/20/96.08:00A	08/20/96.09:00A	
1.2.2.71.B4J	1	Move to Test Area B74	08/21/96.09:00A	08/21/96.10:00A	
1.2.2.71.B4K	1	Pre-Clean & Black Light B74	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.71.B4L	30	Leak Test B74	08/21/96.11:00A	08/22/96.05:00P	
1.2.2.71.B4O	1	Move to Post Test Storage B74	08/23/96.08:00A	08/23/96.09:00A	
1.2.2.71.B4P	1	Clean, Dry & End Cap B74	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.71.B4R	1	Transport to Erection B74	08/23/96.01:00P	08/23/96.02:00P	
1.2.2.71.B4S	1	Set & Align B74	08/23/96.02:00P	08/23/96.03:00P	
1.2.2.71.B4T	1	Set Clean Room, Purge & Fit B74	08/23/96.03:00P	08/23/96.04:00P	
1.2.2.71.B4U	2	Weld Joint B74	08/23/96.04:00P	08/26/96.09:00A	
1.2.2.71.B4V	2	Leak Test Joint B74	08/26/96.09:00A	08/26/96.11:00A	
1.2.2.71.B4W	2	Install Tube Supports B74	08/26/96.09:00A	08/26/96.11:00A	
1.2.2.71.B4X	2	Remove Equip'mt, Clean & Cap B74	08/26/96.11:00A	08/26/96.02:00P	
1.2.2.71.B5A	1	Unload,Rec/Insp Tube B75	08/13/96.01:00P	08/13/96.02:00P	
1.2.2.71.B5B	1	Move to Stiff Fit Up Stat. B75	08/19/96.02:00P	08/19/96.03:00P	
1.2.2.71.B5C	1	Set-up & Purge B75	08/19/96.03:00P	08/19/96.04:00P	
1.2.2.71.B5D	2	Fit Stiffeners B75	08/19/96.04:00P	08/20/96.09:00A	
1.2.2.71.B5E	4	Weld Stiffeners B75	08/20/96.09:00A	08/20/96.02:00P	
1.2.2.71.B5F	1	Move to Exp.Bellows Stat. B75	08/21/96.10:00A	08/21/96.11:00A	
1.2.2.71.B5G	3	Fit,Purge,Weld Exp. Bellows B75	08/21/96.11:00A	08/21/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.71.B5H	1	Inspect, Install End Caps B75	08/21/96.03:00P	08/21/96.04:00P	
1.2.2.71.B5J	1	Move to Test Area B75	08/23/96.09:00A	08/23/96.10:00A	
1.2.2.71.B5K	1	Pre-Clean & Black Light B75	08/23/96.10:00A	08/23/96.11:00A	
1.2.2.71.B5L	30	Leak Test B75	08/23/96.11:00A	08/24/96.05:00P	
1.2.2.71.B5O	1	Move to Post Test Storage B75	08/26/96.08:00A	08/26/96.09:00A	
1.2.2.71.B5P	1	Clean, Dry & End Cap B75	08/26/96.09:00A	08/26/96.10:00A	
1.2.2.71.B5R	1	Transport to Erection B75	08/27/96.10:00A	08/27/96.11:00A	
1.2.2.71.B5S	1	Set & Align B75	08/27/96.11:00A	08/27/96.12:00P	
1.2.2.71.B5T	1	Set Clean Room, Purge & Fit B75	08/27/96.01:00P	08/27/96.02:00P	
1.2.2.71.B5U	2	Weld Joint B75	08/27/96.02:00P	08/27/96.04:00P	
1.2.2.71.B5V	2	Leak Test Joint B75	08/27/96.04:00P	08/28/96.09:00A	
1.2.2.71.B5W	2	Install Tube Supports B75	08/27/96.04:00P	08/28/96.09:00A	
1.2.2.71.B5X	2	Remove Equip'mt, Clean & Cap B75	08/28/96.09:00A	08/28/96.11:00A	
1.2.2.76	99	Cans 76-80	08/26/96.04:00P	09/12/96.10:00A	
1.2.2.76.1A	1	Unload,Rec/Insp Tube 76	08/27/96.08:00A	08/27/96.09:00A	
1.2.2.76.1B	1	Move to Stiff Fit Up Stat. 76	08/27/96.09:00A	08/27/96.10:00A	
1.2.2.76.1C	1	Set-up & Purge 76	08/27/96.10:00A	08/27/96.11:00A	
1.2.2.76.1D	2	Fit Stiffeners 76	08/27/96.11:00A	08/27/96.02:00P	
1.2.2.76.1E	4	Weld Stiffeners 76	08/27/96.02:00P	08/28/96.09:00A	
1.2.2.76.1F	1	Inspect, Install End Caps 76	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.76.1H	1	Move to Test Area 76	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.76.1I	1	Pre-Clean & Black Light 76	08/28/96.11:00A	08/28/96.12:00P	
1.2.2.76.1J	30	Leak Test 76	08/28/96.12:00P	08/29/96.06:00P	
1.2.2.76.1M	1	Move to Post Test Storage 76	08/30/96.08:00A	08/30/96.09:00A	
1.2.2.76.1N	1	Clean, Dry & End Cap 76	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.76.1P	1	Transport to Erection 76	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.76.1Q	1	Set & Align 76	09/02/96.10:00A	09/02/96.11:00A	
1.2.2.76.1R	1	Set Clean Room, Purge & Fit 76	09/02/96.11:00A	09/02/96.12:00P	
1.2.2.76.1S	2	Weld Joint 76	09/02/96.01:00P	09/02/96.03:00P	
1.2.2.76.1T	2	Leak Test Joint 76	09/02/96.03:00P	09/02/96.05:00P	
1.2.2.76.1U	2	Install Tube Supports 76	09/02/96.03:00P	09/02/96.05:00P	
1.2.2.76.1V	2	Remove Equip'mt, Clean & Cap 76	09/03/96.08:00A	09/03/96.10:00A	
1.2.2.76.2A	1	Unload,Rec. & Insp 77	08/27/96.09:00A	08/27/96.10:00A	
1.2.2.76.2B	1	Move to Stiff Fit Up Stat. 77	08/28/96.11:00A	08/28/96.12:00P	
1.2.2.76.2C	1	Set-up & Purge 77	08/28/96.01:00P	08/28/96.02:00P	
1.2.2.76.2D	2	Fit Stiffeners 77	08/28/96.02:00P	08/28/96.04:00P	
1.2.2.76.2E	4	Weld Stiffeners 77	08/28/96.04:00P	08/29/96.11:00A	
1.2.2.76.2F	1	Inspect, Install End Caps 77	08/29/96.11:00A	08/29/96.12:00P	
1.2.2.76.2H	1	Move to Test Area 77	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.76.2I	1	Pre-Clean & Black Light 77	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.76.2J	30	Leak Test 77	08/30/96.11:00A	08/31/96.05:00P	
1.2.2.76.2M	1	Move to Post Test Storage 77	09/02/96.08:00A	09/02/96.09:00A	
1.2.2.76.2N	1	Clean, Dry & End Cap 77	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.76.2P	1	Transport to Erection 77	09/03/96.04:00P	09/03/96.05:00P	
1.2.2.76.2Q	1	Set & Align 77	09/04/96.08:00A	09/04/96.09:00A	
1.2.2.76.2R	1	Set Clean Room, Purge & Fit 77	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.76.2S	2	Weld Joint 77	09/04/96.10:00A	09/04/96.12:00P	
1.2.2.76.2T	2	Leak Test Joint 77	09/04/96.01:00P	09/04/96.03:00P	
1.2.2.76.2U	2	Install Tube Supports 77	09/04/96.01:00P	09/04/96.03:00P	
1.2.2.76.2V	2	Remove Equip'mt, Clean & Cap 77	09/04/96.03:00P	09/04/96.05:00P	
1.2.2.76.3A	1	Unload,Rec/Insp Tube 78	08/27/96.10:00A	08/27/96.11:00A	
1.2.2.76.3B	1	Move to Stiff Fit Up Stat. 78	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.76.3C	1	Set-up & Purge 78	08/30/96.11:00A	08/30/96.12:00P	
1.2.2.76.3D	2	Fit Stiffeners 78	08/30/96.01:00P	08/30/96.03:00P	
1.2.2.76.3E	4	Weld Stiffeners 78	08/30/96.03:00P	09/02/96.10:00A	
1.2.2.76.3F	1	Inspect, Install End Caps 78	09/02/96.10:00A	09/02/96.11:00A	
1.2.2.76.3H	1	Move to Test Area 78	09/02/96.11:00A	09/02/96.12:00P	
1.2.2.76.3I	1	Pre-Clean & Black Light 78	09/02/96.01:00P	09/02/96.02:00P	
1.2.2.76.3J	30	Leak Test 78	09/02/96.02:00P	09/03/96.08:00P	
1.2.2.76.3M	1	Move to Post Test Storage 78	09/04/96.08:00A	09/04/96.09:00A	
1.2.2.76.3N	1	Clean, Dry & End Cap 78	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.76.3P	1	Transport to Erection 78	09/05/96.02:00P	09/05/96.03:00P	
1.2.2.76.3Q	1	Set & Align 78	09/05/96.03:00P	09/05/96.04:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.76.3R	1	Set Clean Room, Purge & Fit 78	09/05/96.04:00P	09/05/96.05:00P	
1.2.2.76.3S	2	Weld Joint 78	09/06/96.08:00A	09/06/96.10:00A	
1.2.2.76.3T	2	Leak Test Joint 78	09/06/96.10:00A	09/06/96.12:00P	
1.2.2.76.3U	2	Install Tube Supports 78	09/06/96.10:00A	09/06/96.12:00P	
1.2.2.76.3V	2	Remove Equip'mt, Clean & Cap 78	09/06/96.01:00P	09/06/96.03:00P	
1.2.2.76.4A	1	Unload,Rec/Insp Tube 790	08/27/96.11:00A	08/27/96.12:00P	
1.2.2.76.4B	1	Move to Stiff Fit Up Stat. 790	09/02/96.01:00P	09/02/96.02:00P	
1.2.2.76.4C	1	Set-up & Purge 79	09/02/96.02:00P	09/02/96.03:00P	
1.2.2.76.4D	2	Fit Stiffeners 79	09/02/96.03:00P	09/02/96.05:00P	
1.2.2.76.4E	4	Weld Stiffeners 79	09/03/96.08:00A	09/03/96.12:00P	
1.2.2.76.4F	1	Inspect, Install End Caps 79	09/03/96.01:00P	09/03/96.02:00P	
1.2.2.76.4H	1	Move to Test Area 79	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.76.4I	1	Pre-Clean & Black Light 79	09/04/96.10:00A	09/04/96.11:00A	
1.2.2.76.4J	30	Leak Test 79	09/04/96.11:00A	09/05/96.05:00P	
1.2.2.76.4M	1	Move to Post Test Storage 79	09/06/96.08:00A	09/06/96.09:00A	
1.2.2.76.4N	1	Clean, Dry & End Cap 79	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.76.4P	1	Transport to Erection 79	09/09/96.11:00A	09/09/96.12:00P	
1.2.2.76.4Q	1	Set & Align 79	09/09/96.01:00P	09/09/96.02:00P	
1.2.2.76.4R	1	Set Clean Room, Purge & Fit 79	09/09/96.02:00P	09/09/96.03:00P	
1.2.2.76.4S	2	Weld Joint 79	09/09/96.03:00P	09/09/96.05:00P	
1.2.2.76.4T	2	Leak Test Joint 79	09/10/96.08:00A	09/10/96.10:00A	
1.2.2.76.4U	2	Install Tube Supports 79	09/10/96.08:00A	09/10/96.10:00A	
1.2.2.76.4V	2	Remove Equip'mt, Clean & Cap 79	09/10/96.10:00A	09/10/96.12:00P	
1.2.2.76.5A	1	Unload,Rec/Insp Tube 79	08/27/96.01:00P	08/27/96.02:00P	
1.2.2.76.5B	1	Move to Stiff Fit Up Stat. 79	09/04/96.10:00A	09/04/96.11:00A	
1.2.2.76.5C	1	Set-up & Purge 80	09/04/96.11:00A	09/04/96.12:00P	
1.2.2.76.5D	1	F/W Pump Port Reinf. 80	09/04/96.01:00P	09/04/96.02:00P	
1.2.2.76.5E	2	Fit Stiffeners 80	09/04/96.02:00P	09/04/96.04:00P	
1.2.2.76.5F	4	Weld Stiffeners 80	09/04/96.04:00P	09/05/96.11:00A	
1.2.2.76.5G	1	Move to P.Port Stat. 80	09/05/96.11:00A	09/05/96.12:00P	
1.2.2.76.5H	1	Setup & Bore 10" Inlet 80	09/05/96.01:00P	09/05/96.02:00P	
1.2.2.76.5I	2	Purge/F/W Pump Port 80	09/05/96.02:00P	09/05/96.04:00P	
1.2.2.76.5J	1	Inspect, Install End Caps 80	09/05/96.04:00P	09/05/96.05:00P	
1.2.2.76.5L	1	Move to Test Area 80	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.76.5M	1	Pre-Clean & Black Light 80	09/06/96.10:00A	09/06/96.11:00A	
1.2.2.76.5N	30	Leak Test 80	09/06/96.11:00A	09/07/96.05:00P	
1.2.2.76.5Q	1	Move to Post Test Storage 80	09/09/96.08:00A	09/09/96.09:00A	
1.2.2.76.5R	1	Clean, Dry & End Cap 80	09/09/96.09:00A	09/09/96.10:00A	
1.2.2.76.5T	1	Transport to Erection 80	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.76.5U	1	Set & Align 80	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.76.5V	1	Set Clean Room, Purge & Fit 80	09/11/96.11:00A	09/11/96.12:00P	
1.2.2.76.5W	2	Weld Joint 80	09/11/96.01:00P	09/11/96.03:00P	
1.2.2.76.5X	2	Leak Test Joint 80	09/11/96.03:00P	09/11/96.05:00P	
1.2.2.76.5Y	2	Install Tube Supports 80	09/11/96.03:00P	09/11/96.05:00P	
1.2.2.76.5Z	2	Remove Equip'mt, Clean & Cap 80	09/12/96.08:00A	09/12/96.10:00A	
1.2.2.76.B1A	1	Unload,Rec/Insp Tube B76	08/27/96.08:00A	08/27/96.09:00A	
1.2.2.76.B1B	1	Move to Stiff Fit Up Stat. B76	08/27/96.09:00A	08/27/96.10:00A	
1.2.2.76.B1C	1	Set-up & Purge B76	08/27/96.10:00A	08/27/96.11:00A	
1.2.2.76.B1D	2	Fit Stiffeners B76	08/27/96.11:00A	08/27/96.02:00P	
1.2.2.76.B1E	4	Weld Stiffeners B76	08/27/96.02:00P	08/28/96.09:00A	
1.2.2.76.B1F	1	Move to Exp.Bellows Stat. B76	08/28/96.09:00A	08/28/96.10:00A	
1.2.2.76.B1G	3	Fit,Purge,Weld Exp. Bellows B76	08/28/96.10:00A	08/28/96.02:00P	
1.2.2.76.B1H	1	Inspect, Install End Caps B76	08/28/96.02:00P	08/28/96.03:00P	
1.2.2.76.B1J	1	Move to Test Area B76	08/28/96.03:00P	08/28/96.04:00P	
1.2.2.76.B1K	1	Pre-Clean & Black Light B76	08/28/96.04:00P	08/28/96.05:00P	
1.2.2.76.B1L	30	Leak Test B76	08/28/96.05:00P	08/29/96.11:00P	
1.2.2.76.B1O	1	Move to Post Test Storage B76	08/30/96.08:00A	08/30/96.09:00A	
1.2.2.76.B1P	1	Clean, Dry & End Cap B76	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.76.B1R	1	Transport to Erection B76	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.76.B1S	1	Set & Align B76	08/30/96.11:00A	08/30/96.12:00P	
1.2.2.76.B1T	1	Set Clean Room, Purge & Fit B76	08/30/96.01:00P	08/30/96.02:00P	
1.2.2.76.B1U	2	Weld Joint B76	08/30/96.02:00P	08/30/96.04:00P	
1.2.2.76.B1V	2	Leak Test Joint B76	08/30/96.04:00P	09/02/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.76.B1W	2	Install Tube Supports B76	08/30/96.04:00P	09/02/96.09:00A	
1.2.2.76.B1X	2	Remove Equip'mt, Clean & Cap B76	09/02/96.09:00A	09/02/96.11:00A	
1.2.2.76.B2A	1	Unload,Rec/Insp Tube B77	08/27/96.09:00A	08/27/96.10:00A	
1.2.2.76.B2B	1	Move to Stiff Fit Up Stat. B77	08/28/96.10:00A	08/28/96.11:00A	
1.2.2.76.B2C	1	Set-up & Purge B77	08/28/96.11:00A	08/28/96.12:00P	
1.2.2.76.B2D	2	Fit Stiffeners B77	08/28/96.01:00P	08/28/96.03:00P	
1.2.2.76.B2E	4	Weld Stiffeners B77	08/28/96.03:00P	08/29/96.10:00A	
1.2.2.76.B2F	1	Move to Exp.Bellows Stat. B77	08/29/96.10:00A	08/29/96.11:00A	
1.2.2.76.B2G	3	Fit,Purge,Weld Exp. Bellows B77	08/29/96.11:00A	08/29/96.03:00P	
1.2.2.76.B2H	1	Inspect, Install End Caps B77	08/29/96.03:00P	08/29/96.04:00P	
1.2.2.76.B2J	1	Move to Test Area B77	08/30/96.09:00A	08/30/96.10:00A	
1.2.2.76.B2K	1	Pre-Clean & Black Light B77	08/30/96.10:00A	08/30/96.11:00A	
1.2.2.76.B2L	30	Leak Test B77	08/30/96.11:00A	08/31/96.05:00P	
1.2.2.76.B2O	1	Move to Post Test Storage B77	09/02/96.08:00A	09/02/96.09:00A	
1.2.2.76.B2P	1	Clean, Dry & End Cap B77	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.76.B2R	1	Transport to Erection B77	09/03/96.08:00A	09/03/96.09:00A	
1.2.2.76.B2S	1	Set & Align B77	09/03/96.09:00A	09/03/96.10:00A	
1.2.2.76.B2T	1	Set Clean Room, Purge & Fit B77	09/03/96.10:00A	09/03/96.11:00A	
1.2.2.76.B2U	2	Weld Joint B77	09/03/96.11:00A	09/03/96.02:00P	
1.2.2.76.B2V	2	Leak Test Joint B77	09/03/96.02:00P	09/03/96.04:00P	
1.2.2.76.B2W	2	Install Tube SupportsB77	09/03/96.02:00P	09/03/96.04:00P	
1.2.2.76.B2X	2	Remove Equip'mt, Clean & Cap B77	09/03/96.04:00P	09/04/96.09:00A	
1.2.2.76.B3A	1	Unload,Rec/Insp Tube B78	08/27/96.10:00A	08/27/96.11:00A	
1.2.2.76.B3B	1	Move to Stiff Fit Up Stat. B78	08/29/96.11:00A	08/29/96.12:00P	
1.2.2.76.B3C	1	Set-up & Purge B78	08/29/96.01:00P	08/29/96.02:00P	
1.2.2.76.B3D	2	Fit Stiffeners B3	08/29/96.02:00P	08/29/96.04:00P	
1.2.2.76.B3E	4	Weld Stiffeners B3	08/29/96.04:00P	08/30/96.11:00A	
1.2.2.76.B3F	1	Move to Exp.Bellows Stat. B78	08/30/96.11:00A	08/30/96.12:00P	
1.2.2.76.B3G	3	Fit,Purge,Weld Exp. Bellows B78	08/30/96.01:00P	08/30/96.04:00P	
1.2.2.76.B3H	1	Inspect, Install End Caps B78	08/30/96.04:00P	08/30/96.05:00P	
1.2.2.76.B3J	1	Move to Test Area B78	09/02/96.09:00A	09/02/96.10:00A	
1.2.2.76.B3K	1	Pre-Clean & Black Light B78	09/02/96.10:00A	09/02/96.11:00A	
1.2.2.76.B3L	30	Leak Test B78	09/02/96.11:00A	09/03/96.05:00P	
1.2.2.76.B3O	1	Move to Post Test Storage B78	09/04/96.08:00A	09/04/96.09:00A	
1.2.2.76.B3P	1	Clean, Dry & End Cap B78	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.76.B3R	1	Transport to Erection B78	09/04/96.03:00P	09/04/96.04:00P	
1.2.2.76.B3S	1	Set & Align B78	09/04/96.04:00P	09/04/96.05:00P	
1.2.2.76.B3T	1	Set Clean Room, Purge & Fit B78	09/05/96.08:00A	09/05/96.09:00A	
1.2.2.76.B3U	2	Weld Joint B78	09/05/96.09:00A	09/05/96.11:00A	
1.2.2.76.B3V	2	Leak Test Joint B78	09/05/96.11:00A	09/05/96.02:00P	
1.2.2.76.B3W	2	Install Tube Supports B78	09/05/96.11:00A	09/05/96.02:00P	
1.2.2.76.B3X	2	Remove Equip'mt, Clean & Cap B78	09/05/96.02:00P	09/05/96.04:00P	
1.2.2.76.B4A	1	Unload,Rec/Insp Tube B79	08/27/96.11:00A	08/27/96.12:00P	
1.2.2.76.B4B	1	Move to Stiff Fit Up Stat. B79	08/30/96.01:00P	08/30/96.02:00P	
1.2.2.76.B4C	1	Set-up & Purge B79	08/30/96.02:00P	08/30/96.03:00P	
1.2.2.76.B4D	2	Fit Stiffeners B79	08/30/96.03:00P	08/30/96.05:00P	
1.2.2.76.B4E	4	Weld Stiffeners B79	09/02/96.08:00A	09/02/96.12:00P	
1.2.2.76.B4F	1	Move to Exp.Bellows Stat. B79	09/02/96.01:00P	09/02/96.02:00P	
1.2.2.76.B4G	3	Fit,Purge,Weld Exp. Bellows B79	09/02/96.02:00P	09/02/96.05:00P	
1.2.2.76.B4H	1	Inspect, Install End Caps B79	09/03/96.08:00A	09/03/96.09:00A	
1.2.2.76.B4J	1	Move to Test Area B79	09/04/96.09:00A	09/04/96.10:00A	
1.2.2.76.B4K	1	Pre-Clean & Black Light B79	09/04/96.10:00A	09/04/96.11:00A	
1.2.2.76.B4L	30	Leak Test B79	09/04/96.11:00A	09/05/96.05:00P	
1.2.2.76.B4O	1	Move to Post Test Storage B79	09/06/96.08:00A	09/06/96.09:00A	
1.2.2.76.B4P	1	Clean, Dry & End Cap B79	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.76.B4R	1	Transport to Erection B79	09/06/96.01:00P	09/06/96.02:00P	
1.2.2.76.B4S	1	Set & Align B4	09/06/96.02:00P	09/06/96.03:00P	
1.2.2.76.B4T	1	Set Clean Room, Purge & Fit B79	09/06/96.03:00P	09/06/96.04:00P	
1.2.2.76.B4U	2	Weld Joint B79	09/06/96.04:00P	09/09/96.09:00A	
1.2.2.76.B4V	2	Leak Test Joint B79	09/09/96.09:00A	09/09/96.11:00A	
1.2.2.76.B4W	2	Install Tube Supports B79	09/09/96.09:00A	09/09/96.11:00A	
1.2.2.76.B4X	2	Remove Equip'mt, Clean & Cap B79	09/09/96.11:00A	09/09/96.02:00P	
1.2.2.76.B5A	1	Unload,Rec/Insp Tube B80	08/27/96.01:00P	08/27/96.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.76.B5B	1	Move to Stiff Fit Up Stat. B80	09/02/96.02:00P	09/02/96.03:00P	
1.2.2.76.B5C	1	Set-up & Purge B80	09/02/96.03:00P	09/02/96.04:00P	
1.2.2.76.B5D	2	Fit Stiffeners B80	09/02/96.04:00P	09/03/96.09:00A	
1.2.2.76.B5E	4	Weld Stiffeners B80	09/03/96.09:00A	09/03/96.02:00P	
1.2.2.76.B5F	1	Move to Exp.Bellows Stat. B80	09/04/96.10:00A	09/04/96.11:00A	
1.2.2.76.B5G	3	Fit,Purge,Weld Exp. Bellows B80	09/04/96.11:00A	09/04/96.03:00P	
1.2.2.76.B5H	1	Inspect, Install End Caps B80	09/04/96.03:00P	09/04/96.04:00P	
1.2.2.76.B5J	1	Move to Test Area B80	09/06/96.09:00A	09/06/96.10:00A	
1.2.2.76.B5K	1	Pre-Clean & Black Light B80	09/06/96.10:00A	09/06/96.11:00A	
1.2.2.76.B5L	30	Leak Test B80	09/06/96.11:00A	09/07/96.05:00P	
1.2.2.76.B5O	1	Move to Post Test Storage B80	09/09/96.08:00A	09/09/96.09:00A	
1.2.2.76.B5P	1	Clean, Dry & End Cap B80	09/09/96.09:00A	09/09/96.10:00A	
1.2.2.76.B5R	1	Transport to Erection B80	09/10/96.10:00A	09/10/96.11:00A	
1.2.2.76.B5S	1	Set & Align B80	09/10/96.11:00A	09/10/96.12:00P	
1.2.2.76.B5T	1	Set Clean Room, Purge & Fit B80	09/10/96.01:00P	09/10/96.02:00P	
1.2.2.76.B5U	2	Weld Joint B80	09/10/96.02:00P	09/10/96.04:00P	
1.2.2.76.B5V	2	Leak Test Joint B80	09/10/96.04:00P	09/11/96.09:00A	
1.2.2.76.B5W	2	Install Tube Supports B80	09/10/96.04:00P	09/11/96.09:00A	
1.2.2.76.B5X	2	Remove Equip'mt, Clean & Cap B80	09/11/96.09:00A	09/11/96.11:00A	
1.2.2.81	99	Cans 81-85	09/09/96.04:00P	09/26/96.10:00A	
1.2.2.81.1A	1	Unload,Rec/Insp Tube 81	09/10/96.08:00A	09/10/96.09:00A	
1.2.2.81.1B	1	Move to Stiff Fit Up Stat. 81	09/10/96.09:00A	09/10/96.10:00A	
1.2.2.81.1C	1	Set-up & Purge 81	09/10/96.10:00A	09/10/96.11:00A	
1.2.2.81.1D	2	Fit Stiffeners 81	09/10/96.11:00A	09/10/96.02:00P	
1.2.2.81.1E	4	Weld Stiffeners 81	09/10/96.02:00P	09/11/96.09:00A	
1.2.2.81.1F	1	Inspect, Install End Caps 81	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.81.1H	1	Move to Test Area 81	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.81.1I	1	Pre-Clean & Black Light 81	09/11/96.11:00A	09/11/96.12:00P	
1.2.2.81.1J	30	Leak Test 81	09/11/96.12:00P	09/12/96.06:00P	
1.2.2.81.1M	1	Move to Post Test Storage 81	09/13/96.08:00A	09/13/96.09:00A	
1.2.2.81.1N	1	Clean, Dry & End Cap 81	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.81.1P	1	Transport to Erection 81	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.81.1Q	1	Set & Align 81	09/16/96.10:00A	09/16/96.11:00A	
1.2.2.81.1R	1	Set Clean Room, Purge & Fit 81	09/16/96.11:00A	09/16/96.12:00P	
1.2.2.81.1S	2	Weld Joint 81	09/16/96.01:00P	09/16/96.03:00P	
1.2.2.81.1T	2	Leak Test Joint 81	09/16/96.03:00P	09/16/96.05:00P	
1.2.2.81.1U	2	Install Tube Supports 81	09/16/96.03:00P	09/16/96.05:00P	
1.2.2.81.1V	2	Remove Equip'mt, Clean & Cap 81	09/17/96.08:00A	09/17/96.10:00A	
1.2.2.81.2A	1	Unload,Rec. & Inspect 82	09/10/96.09:00A	09/10/96.10:00A	
1.2.2.81.2B	1	Move to Stiff Fit Up Stat. 82	09/11/96.11:00A	09/11/96.12:00P	
1.2.2.81.2C	1	Set-up & Purge 82	09/11/96.01:00P	09/11/96.02:00P	
1.2.2.81.2D	2	Fit Stiffeners 82	09/11/96.02:00P	09/11/96.04:00P	
1.2.2.81.2E	4	Weld Stiffeners 82	09/11/96.04:00P	09/12/96.11:00A	
1.2.2.81.2F	1	Inspect, Install End Caps 82	09/12/96.11:00A	09/12/96.12:00P	
1.2.2.81.2H	1	Move to Test Area 82	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.81.2I	1	Pre-Clean & Black Light 82	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.81.2J	30	Leak Test 82	09/13/96.11:00A	09/14/96.05:00P	
1.2.2.81.2M	1	Move to Post Test Storage 82	09/16/96.08:00A	09/16/96.09:00A	
1.2.2.81.2N	1	Clean, Dry & End Cap 82	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.81.2P	1	Transport to Erection 82	09/17/96.04:00P	09/17/96.05:00P	
1.2.2.81.2Q	1	Set & Align 82	09/18/96.08:00A	09/18/96.09:00A	
1.2.2.81.2R	1	Set Clean Room, Purge & Fit 82	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.81.2S	2	Weld Joint 82	09/18/96.10:00A	09/18/96.12:00P	
1.2.2.81.2T	2	Leak Test Joint 82	09/18/96.01:00P	09/18/96.03:00P	
1.2.2.81.2U	2	Install Tube Supports 82	09/18/96.01:00P	09/18/96.03:00P	
1.2.2.81.2V	2	Remove Equip'mt, Clean & Cap 82	09/18/96.03:00P	09/18/96.05:00P	
1.2.2.81.3A	1	Unload,Rec/Insp Tube 83	09/10/96.10:00A	09/10/96.11:00A	
1.2.2.81.3B	1	Move to Stiff Fit Up Stat. 83	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.81.3C	1	Set-up & Purge 83	09/13/96.11:00A	09/13/96.12:00P	
1.2.2.81.3D	2	Fit Stiffeners 83	09/13/96.01:00P	09/13/96.03:00P	
1.2.2.81.3E	4	Weld Stiffeners 83	09/13/96.03:00P	09/16/96.10:00A	
1.2.2.81.3F	1	Inspect, Install End Caps 83	09/16/96.10:00A	09/16/96.11:00A	
1.2.2.81.3H	1	Move to Test Area 83	09/16/96.11:00A	09/16/96.12:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.81.3I	1	Pre-Clean & Black Light 83	09/16/96.01:00P	09/16/96.02:00P	
1.2.2.81.3J	30	Leak Test 83	09/16/96.02:00P	09/17/96.08:00P	
1.2.2.81.3M	1	Move to Post Test Storage 83	09/18/96.08:00A	09/18/96.09:00A	
1.2.2.81.3N	1	Clean, Dry & End Cap 83	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.81.3P	1	Transport to Erection 83	09/19/96.02:00P	09/19/96.03:00P	
1.2.2.81.3Q	1	Set & Align 83	09/19/96.03:00P	09/19/96.04:00P	
1.2.2.81.3R	1	Set Clean Room, Purge & Fit 83	09/19/96.04:00P	09/19/96.05:00P	
1.2.2.81.3S	2	Weld Joint 83	09/20/96.08:00A	09/20/96.10:00A	
1.2.2.81.3T	2	Leak Test Joint 83	09/20/96.10:00A	09/20/96.12:00P	
1.2.2.81.3U	2	Install Tube Supports 83	09/20/96.10:00A	09/20/96.12:00P	
1.2.2.81.3V	2	Remove Equip'mt, Clean & Cap 83	09/20/96.01:00P	09/20/96.03:00P	
1.2.2.81.4A	1	Unload,Rec/Insp Tube 84	09/10/96.11:00A	09/10/96.12:00P	
1.2.2.81.4B	1	Move to Stiff Fit Up Stat. 84	09/16/96.01:00P	09/16/96.02:00P	
1.2.2.81.4C	1	Set-up & Purge 84	09/16/96.02:00P	09/16/96.03:00P	
1.2.2.81.4D	2	Fit Stiffeners 84	09/16/96.03:00P	09/16/96.05:00P	
1.2.2.81.4E	4	Weld Stiffeners 84	09/17/96.08:00A	09/17/96.12:00P	
1.2.2.81.4F	1	Inspect, Install End Caps 84	09/17/96.01:00P	09/17/96.02:00P	
1.2.2.81.4H	1	Move to Test Area 84	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.81.4I	1	Pre-Clean & Black Light 84	09/18/96.10:00A	09/18/96.11:00A	
1.2.2.81.4J	30	Leak Test 84	09/18/96.11:00A	09/19/96.05:00P	
1.2.2.81.4M	1	Move to Post Test Storage 84	09/20/96.08:00A	09/20/96.09:00A	
1.2.2.81.4N	1	Clean, Dry & End Cap 84	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.81.4P	1	Transport to Erection 84	09/23/96.11:00A	09/23/96.12:00P	
1.2.2.81.4Q	1	Set & Align 84	09/23/96.01:00P	09/23/96.02:00P	
1.2.2.81.4R	1	Set Clean Room, Purge & Fit 84	09/23/96.02:00P	09/23/96.03:00P	
1.2.2.81.4S	2	Weld Joint 84	09/23/96.03:00P	09/23/96.05:00P	
1.2.2.81.4T	2	Leak Test Joint 84	09/24/96.08:00A	09/24/96.10:00A	
1.2.2.81.4U	2	Install Tube Supports 84	09/24/96.08:00A	09/24/96.10:00A	
1.2.2.81.4V	2	Remove Equip'mt, Clean & Cap 84	09/24/96.10:00A	09/24/96.12:00P	
1.2.2.81.5A	1	Unload,Rec/Insp Tube 85	09/10/96.01:00P	09/10/96.02:00P	
1.2.2.81.5B	1	Move to Stiff Fit Up Stat. 85	09/18/96.10:00A	09/18/96.11:00A	
1.2.2.81.5C	1	Set-up & Purge 85	09/18/96.11:00A	09/18/96.12:00P	
1.2.2.81.5D	1	F/W Pump Port Reinf. 85	09/18/96.01:00P	09/18/96.02:00P	
1.2.2.81.5E	2	Fit Stiffeners 85	09/18/96.02:00P	09/18/96.04:00P	
1.2.2.81.5F	4	Weld Stiffeners 85	09/18/96.04:00P	09/19/96.11:00A	
1.2.2.81.5G	1	Move to P.Port Stat. 85	09/19/96.11:00A	09/19/96.12:00P	
1.2.2.81.5H	1	Setup & Bore 10" Inlet 85	09/19/96.01:00P	09/19/96.02:00P	
1.2.2.81.5I	2	Purge/F/W Pump Port 85	09/19/96.02:00P	09/19/96.04:00P	
1.2.2.81.5J	1	Inspect, Install End Caps 85	09/19/96.04:00P	09/19/96.05:00P	
1.2.2.81.5L	1	Move to Test Area 85	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.81.5M	1	Pre-Clean & Black Light 85	09/20/96.10:00A	09/20/96.11:00A	
1.2.2.81.5N	30	Leak Test 85	09/20/96.11:00A	09/21/96.05:00P	
1.2.2.81.5Q	1	Move to Post Test Storage 85	09/23/96.08:00A	09/23/96.09:00A	
1.2.2.81.5R	1	Clean, Dry & End Cap 85	09/23/96.09:00A	09/23/96.10:00A	
1.2.2.81.5T	1	Transport to Erection 85	09/25/96.09:00A	09/25/96.10:00A	
1.2.2.81.5U	1	Set & Align 85	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.81.5V	1	Set Clean Room, Purge & Fit 85	09/25/96.11:00A	09/25/96.12:00P	
1.2.2.81.5W	2	Weld Joint 85	09/25/96.01:00P	09/25/96.03:00P	
1.2.2.81.5X	2	Leak Test Joint 85	09/25/96.03:00P	09/25/96.05:00P	
1.2.2.81.5Y	2	Install Tube Supports 85	09/25/96.03:00P	09/25/96.05:00P	
1.2.2.81.5Z	2	Remove Equip'mt, Clean & Cap 85	09/26/96.08:00A	09/26/96.10:00A	
1.2.2.81.B1A	1	Unload,Rec/Insp Tube B81	09/10/96.08:00A	09/10/96.09:00A	
1.2.2.81.B1B	1	Move to Stiff Fit Up Stat. B81	09/10/96.09:00A	09/10/96.10:00A	
1.2.2.81.B1C	1	Set-up & Purge B81	09/10/96.10:00A	09/10/96.11:00A	
1.2.2.81.B1D	2	Fit Stiffeners B81	09/10/96.11:00A	09/10/96.02:00P	
1.2.2.81.B1E	4	Weld Stiffeners B81	09/10/96.02:00P	09/11/96.09:00A	
1.2.2.81.B1F	1	Move to Exp.Bellows Stat. B81	09/11/96.09:00A	09/11/96.10:00A	
1.2.2.81.B1G	3	Fit,Purge,Weld Exp. Bellows B81	09/11/96.10:00A	09/11/96.02:00P	
1.2.2.81.B1H	1	Inspect, Install End Caps B81	09/11/96.02:00P	09/11/96.03:00P	
1.2.2.81.B1J	1	Move to Test Area B81	09/11/96.03:00P	09/11/96.04:00P	
1.2.2.81.B1K	1	Pre-Clean & Black Light B81	09/11/96.04:00P	09/11/96.05:00P	
1.2.2.81.B1L	30	Leak Test B81	09/11/96.05:00P	09/12/96.11:00P	
1.2.2.81.B1O	1	Move to Post Test Storage B81	09/13/96.08:00A	09/13/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.81.B1P	1	Clean, Dry & End Cap B81	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.81.B1R	1	Transport to Erection B81	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.81.B1S	1	Set & Align B81	09/13/96.11:00A	09/13/96.12:00P	
1.2.2.81.B1T	1	Set Clean Room, Purge & Fit B1	09/13/96.01:00P	09/13/96.02:00P	
1.2.2.81.B1U	2	Weld Joint B81	09/13/96.02:00P	09/13/96.04:00P	
1.2.2.81.B1V	2	Leak Test Joint B81	09/13/96.04:00P	09/16/96.09:00A	
1.2.2.81.B1W	2	Install Tube Supports B81	09/13/96.04:00P	09/16/96.09:00A	
1.2.2.81.B1X	2	Remove Equip'mt, Clean & Cap B81	09/16/96.09:00A	09/16/96.11:00A	
1.2.2.81.B2A	1	Unload,Rec/Insp Tube B82	09/10/96.09:00A	09/10/96.10:00A	
1.2.2.81.B2B	1	Move to Stiff Fit Up Stat. B82	09/11/96.10:00A	09/11/96.11:00A	
1.2.2.81.B2C	1	Set-up & Purge B82	09/11/96.11:00A	09/11/96.12:00P	
1.2.2.81.B2D	2	Fit Stiffeners B82	09/11/96.01:00P	09/11/96.03:00P	
1.2.2.81.B2E	4	Weld Stiffeners B82	09/11/96.03:00P	09/12/96.10:00A	
1.2.2.81.B2F	1	Move to Exp.Bellows Stat. B82	09/12/96.10:00A	09/12/96.11:00A	
1.2.2.81.B2G	3	Fit,Purge,Weld Exp. Bellows B82	09/12/96.11:00A	09/12/96.03:00P	
1.2.2.81.B2H	1	Inspect, Install End Caps B82	09/12/96.03:00P	09/12/96.04:00P	
1.2.2.81.B2J	1	Move to Test Area B82	09/13/96.09:00A	09/13/96.10:00A	
1.2.2.81.B2K	1	Pre-Clean & Black Light B82	09/13/96.10:00A	09/13/96.11:00A	
1.2.2.81.B2L	30	Leak Test B82	09/13/96.11:00A	09/14/96.05:00P	
1.2.2.81.B2O	1	Move to Post Test Storage B82	09/16/96.08:00A	09/16/96.09:00A	
1.2.2.81.B2P	1	Clean, Dry & End Cap B82	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.81.B2R	1	Transport to Erection B82	09/17/96.08:00A	09/17/96.09:00A	
1.2.2.81.B2S	1	Set & Align B82	09/17/96.09:00A	09/17/96.10:00A	
1.2.2.81.B2T	1	Set Clean Room, Purge & Fit B82	09/17/96.10:00A	09/17/96.11:00A	
1.2.2.81.B2U	2	Weld Joint B82	09/17/96.11:00A	09/17/96.02:00P	
1.2.2.81.B2V	2	Leak Test Joint B82	09/17/96.02:00P	09/17/96.04:00P	
1.2.2.81.B2W	2	Install Tube SupportsB82	09/17/96.02:00P	09/17/96.04:00P	
1.2.2.81.B2X	2	Remove Equip'mt, Clean & Cap B82	09/17/96.04:00P	09/18/96.09:00A	
1.2.2.81.B3A	1	Unload,Rec/Insp Tube B83	09/10/96.10:00A	09/10/96.11:00A	
1.2.2.81.B3B	1	Move to Stiff Fit Up Stat. B83	09/12/96.11:00A	09/12/96.12:00P	
1.2.2.81.B3C	1	Set-up & Purge B83	09/12/96.01:00P	09/12/96.02:00P	
1.2.2.81.B3D	2	Fit Stiffeners B83	09/12/96.02:00P	09/12/96.04:00P	
1.2.2.81.B3E	4	Weld Stiffeners B83	09/12/96.04:00P	09/13/96.11:00A	
1.2.2.81.B3F	1	Move to Exp.Bellows Stat. B83	09/13/96.11:00A	09/13/96.12:00P	
1.2.2.81.B3G	3	Fit,Purge,Weld Exp. Bellows B83	09/13/96.01:00P	09/13/96.04:00P	
1.2.2.81.B3H	1	Inspect, Install End Caps B83	09/13/96.04:00P	09/13/96.05:00P	
1.2.2.81.B3J	1	Move to Test Area B83	09/16/96.09:00A	09/16/96.10:00A	
1.2.2.81.B3K	1	Pre-Clean & Black Light B83	09/16/96.10:00A	09/16/96.11:00A	
1.2.2.81.B3L	30	Leak Test B83	09/16/96.11:00A	09/17/96.05:00P	
1.2.2.81.B3O	1	Move to Post Test Storage B83	09/18/96.08:00A	09/18/96.09:00A	
1.2.2.81.B3P	1	Clean, Dry & End Cap B83	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.81.B3R	1	Transport to Erection B883	09/18/96.03:00P	09/18/96.04:00P	
1.2.2.81.B3S	1	Set & Align B83	09/18/96.04:00P	09/18/96.05:00P	
1.2.2.81.B3T	1	Set Clean Room, Purge & Fit B83	09/19/96.08:00A	09/19/96.09:00A	
1.2.2.81.B3U	2	Weld Joint B83	09/19/96.09:00A	09/19/96.11:00A	
1.2.2.81.B3V	2	Leak Test Joint B83	09/19/96.11:00A	09/19/96.02:00P	
1.2.2.81.B3W	2	Install Tube Supports B83	09/19/96.11:00A	09/19/96.02:00P	
1.2.2.81.B3X	2	Remove Equip'mt, Clean & Cap B83	09/19/96.02:00P	09/19/96.04:00P	
1.2.2.81.B4A	1	Unload,Rec/Insp Tube B84	09/10/96.11:00A	09/10/96.12:00P	
1.2.2.81.B4B	1	Move to Stiff Fit Up Stat. B84	09/13/96.01:00P	09/13/96.02:00P	
1.2.2.81.B4C	1	Set-up & Purge B84	09/13/96.02:00P	09/13/96.03:00P	
1.2.2.81.B4D	2	Fit Stiffeners B84	09/13/96.03:00P	09/13/96.05:00P	
1.2.2.81.B4E	4	Weld Stiffeners B84	09/16/96.08:00A	09/16/96.12:00P	
1.2.2.81.B4F	1	Move to Exp.Bellows Stat. B84	09/16/96.01:00P	09/16/96.02:00P	
1.2.2.81.B4G	3	Fit,Purge,Weld Exp. Bellows B84	09/16/96.02:00P	09/16/96.05:00P	
1.2.2.81.B4H	1	Inspect, Install End Caps B84	09/17/96.08:00A	09/17/96.09:00A	
1.2.2.81.B4J	1	Move to Test Area B84	09/18/96.09:00A	09/18/96.10:00A	
1.2.2.81.B4K	1	Pre-Clean & Black Light B84	09/18/96.10:00A	09/18/96.11:00A	
1.2.2.81.B4L	30	Leak Test B84	09/18/96.11:00A	09/19/96.05:00P	
1.2.2.81.B4O	1	Move to Post Test Storage B84	09/20/96.08:00A	09/20/96.09:00A	
1.2.2.81.B4P	1	Clean, Dry & End Cap B84	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.81.B4R	1	Transport to Erection B84	09/20/96.01:00P	09/20/96.02:00P	
1.2.2.81.B4S	1	Set & Align B84	09/20/96.02:00P	09/20/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.81.B4T	1	Set Clean Room, Purge & Fit B84	09/20/96.03:00P	09/20/96.04:00P	
1.2.2.81.B4U	2	Weld Joint B84	09/20/96.04:00P	09/23/96.09:00A	
1.2.2.81.B4V	2	Leak Test Joint B84	09/23/96.09:00A	09/23/96.11:00A	
1.2.2.81.B4W	2	Install Tube Supports B84	09/23/96.09:00A	09/23/96.11:00A	
1.2.2.81.B4X	2	Remove Equip'mt, Clean & Cap B84	09/23/96.11:00A	09/23/96.02:00P	
1.2.2.81.B5A	1	Unload,Rec/Insp Tube B85	09/10/96.01:00P	09/10/96.02:00P	
1.2.2.81.B5B	1	Move to Stiff Fit Up Stat. B85	09/16/96.02:00P	09/16/96.03:00P	
1.2.2.81.B5C	1	Set-up & Purge B85	09/16/96.03:00P	09/16/96.04:00P	
1.2.2.81.B5D	2	Fit Stiffeners B85	09/16/96.04:00P	09/17/96.09:00A	
1.2.2.81.B5E	4	Weld Stiffeners B85	09/17/96.09:00A	09/17/96.02:00P	
1.2.2.81.B5F	1	Move to Exp.Bellows Stat. B85	09/18/96.10:00A	09/18/96.11:00A	
1.2.2.81.B5G	3	Fit,Purge,Weld Exp. Bellows B85	09/18/96.11:00A	09/18/96.03:00P	
1.2.2.81.B5H	1	Inspect, Install End Caps B85	09/18/96.03:00P	09/18/96.04:00P	
1.2.2.81.B5J	1	Move to Test Area B85	09/20/96.09:00A	09/20/96.10:00A	
1.2.2.81.B5K	1	Pre-Clean & Black Light B85	09/20/96.10:00A	09/20/96.11:00A	
1.2.2.81.B5L	30	Leak Test B85	09/20/96.11:00A	09/21/96.05:00P	
1.2.2.81.B5O	1	Move to Post Test Storage B85	09/23/96.08:00A	09/23/96.09:00A	
1.2.2.81.B5P	1	Clean, Dry & End Cap B85	09/23/96.09:00A	09/23/96.10:00A	
1.2.2.81.B5R	1	Transport to Erection B85	09/24/96.10:00A	09/24/96.11:00A	
1.2.2.81.B5S	1	Set & Align B85	09/24/96.11:00A	09/24/96.12:00P	
1.2.2.81.B5T	1	Set Clean Room, Purge & Fit B85	09/24/96.01:00P	09/24/96.02:00P	
1.2.2.81.B5U	2	Weld Joint B85	09/24/96.02:00P	09/24/96.04:00P	
1.2.2.81.B5V	2	Leak Test Joint B85	09/24/96.04:00P	09/25/96.09:00A	
1.2.2.81.B5W	2	Install Tube Supports B85	09/24/96.04:00P	09/25/96.09:00A	
1.2.2.81.B5X	2	Remove Equip'mt, Clean & Cap B85	09/25/96.09:00A	09/25/96.11:00A	
1.2.2.86	99	Cans 86-90	09/23/96.04:00P	10/10/96.10:00A	
1.2.2.86.1A	1	Unload,Rec/Insp Tube 86	09/24/96.08:00A	09/24/96.09:00A	
1.2.2.86.1B	1	Move to Stiff Fit Up Stat. 86	09/24/96.09:00A	09/24/96.10:00A	
1.2.2.86.1C	1	Set-up & Purge 86	09/24/96.10:00A	09/24/96.11:00A	
1.2.2.86.1D	2	Fit Stiffeners 86	09/24/96.11:00A	09/24/96.02:00P	
1.2.2.86.1E	4	Weld Stiffeners 86	09/24/96.02:00P	09/25/96.09:00A	
1.2.2.86.1F	1	Inspect, Install End Caps 86	09/25/96.09:00A	09/25/96.10:00A	
1.2.2.86.1H	1	Move to Test Area 86	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.86.1I	1	Pre-Clean & Black Light 86	09/25/96.11:00A	09/25/96.12:00P	
1.2.2.86.1J	30	Leak Test 86	09/25/96.12:00P	09/26/96.06:00P	
1.2.2.86.1M	1	Move to Post Test Storage 86	09/27/96.08:00A	09/27/96.09:00A	
1.2.2.86.1N	1	Clean, Dry & End Cap 86	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.86.1P	1	Transport to Erection 86	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.86.1Q	1	Set & Align 86	09/30/96.10:00A	09/30/96.11:00A	
1.2.2.86.1R	1	Set Clean Room, Purge & Fit 86	09/30/96.11:00A	09/30/96.12:00P	
1.2.2.86.1S	2	Weld Joint 86	09/30/96.01:00P	09/30/96.03:00P	
1.2.2.86.1T	2	Leak Test Joint 86	09/30/96.03:00P	09/30/96.05:00P	
1.2.2.86.1U	2	Install Tube Supports 86	09/30/96.03:00P	09/30/96.05:00P	
1.2.2.86.1V	2	Remove Equip'mt, Clean & Cap 86	10/01/96.08:00A	10/01/96.10:00A	
1.2.2.86.2A	1	Unload,Rec. & Inspct 87	09/24/96.09:00A	09/24/96.10:00A	
1.2.2.86.2B	1	Move to Stiff Fit Up Stat. 87	09/25/96.11:00A	09/25/96.12:00P	
1.2.2.86.2C	1	Set-up & Purge 87	09/25/96.01:00P	09/25/96.02:00P	
1.2.2.86.2D	2	Fit Stiffeners 87	09/25/96.02:00P	09/25/96.04:00P	
1.2.2.86.2E	4	Weld Stiffeners 87	09/25/96.04:00P	09/26/96.11:00A	
1.2.2.86.2F	1	Inspect, Install End Caps 87	09/26/96.11:00A	09/26/96.12:00P	
1.2.2.86.2H	1	Move to Test Area 87	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.86.2I	1	Pre-Clean & Black Light 87	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.86.2J	30	Leak Test 87	09/27/96.11:00A	09/28/96.05:00P	
1.2.2.86.2M	1	Move to Post Test Storage 87	09/30/96.08:00A	09/30/96.09:00A	
1.2.2.86.2N	1	Clean, Dry & End Cap 87	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.86.2P	1	Transport to Erection 87	10/01/96.04:00P	10/01/96.05:00P	
1.2.2.86.2Q	1	Set & Align 87	10/02/96.08:00A	10/02/96.09:00A	
1.2.2.86.2R	1	Set Clean Room, Purge & Fit 87	10/02/96.09:00A	10/02/96.10:00A	
1.2.2.86.2S	2	Weld Joint 87	10/02/96.10:00A	10/02/96.12:00P	
1.2.2.86.2T	2	Leak Test Joint 87	10/02/96.01:00P	10/02/96.03:00P	
1.2.2.86.2U	2	Install Tube Supports 87	10/02/96.01:00P	10/02/96.03:00P	
1.2.2.86.2V	2	Remove Equip'mt, Clean & Cap 87	10/02/96.03:00P	10/02/96.05:00P	
1.2.2.86.3A	1	Unload,Rec/Insp Tube 88	09/24/96.10:00A	09/24/96.11:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.86.3B	1	Move to Stiff Fit Up Stat. 88	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.86.3C	1	Set-up & Purge 88	09/27/96.11:00A	09/27/96.12:00P	
1.2.2.86.3D	2	Fit Stiffeners 88	09/27/96.01:00P	09/27/96.03:00P	
1.2.2.86.3E	4	Weld Stiffeners 88	09/27/96.03:00P	09/30/96.10:00A	
1.2.2.86.3F	1	Inspect, Install End Caps 88	09/30/96.10:00A	09/30/96.11:00A	
1.2.2.86.3H	1	Move to Test Area 88	09/30/96.11:00A	09/30/96.12:00P	
1.2.2.86.3I	1	Pre-Clean & Black Light 88	09/30/96.01:00P	09/30/96.02:00P	
1.2.2.86.3J	30	Leak Test 88	09/30/96.02:00P	10/01/96.08:00P	
1.2.2.86.3M	1	Move to Post Test Storage 88	10/02/96.08:00A	10/02/96.09:00A	
1.2.2.86.3N	1	Clean, Dry & End Cap 88	10/02/96.09:00A	10/02/96.10:00A	
1.2.2.86.3P	1	Transport to Erection 88	10/03/96.02:00P	10/03/96.03:00P	
1.2.2.86.3Q	1	Set & Align 88	10/03/96.03:00P	10/03/96.04:00P	
1.2.2.86.3R	1	Set Clean Room, Purge & Fit 88	10/03/96.04:00P	10/03/96.05:00P	
1.2.2.86.3S	2	Weld Joint 88	10/04/96.08:00A	10/04/96.10:00A	
1.2.2.86.3T	2	Leak Test Joint 88	10/04/96.10:00A	10/04/96.12:00P	
1.2.2.86.3U	2	Install Tube Supports 88	10/04/96.10:00A	10/04/96.12:00P	
1.2.2.86.3V	2	Remove Equip'mt, Clean & Cap 88	10/04/96.01:00P	10/04/96.03:00P	
1.2.2.86.4A	1	Unload,Rec/Insp Tube 89	09/24/96.11:00A	09/24/96.12:00P	
1.2.2.86.4B	1	Move to Stiff Fit Up Stat. 89	09/30/96.01:00P	09/30/96.02:00P	
1.2.2.86.4C	1	Set-up & Purge 89	09/30/96.02:00P	09/30/96.03:00P	
1.2.2.86.4D	2	Fit Stiffeners 89	09/30/96.03:00P	09/30/96.05:00P	
1.2.2.86.4E	4	Weld Stiffeners 89	10/01/96.08:00A	10/01/96.12:00P	
1.2.2.86.4F	1	Inspect, Install End Caps 89	10/01/96.01:00P	10/01/96.02:00P	
1.2.2.86.4H	1	Move to Test Area 89	10/02/96.09:00A	10/02/96.10:00A	
1.2.2.86.4I	1	Pre-Clean & Black Light 89	10/02/96.10:00A	10/02/96.11:00A	
1.2.2.86.4J	30	Leak Test 89	10/02/96.11:00A	10/03/96.05:00P	
1.2.2.86.4M	1	Move to Post Test Storage 89	10/04/96.08:00A	10/04/96.09:00A	
1.2.2.86.4N	1	Clean, Dry & End Cap 89	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.86.4P	1	Transport to Erection 89	10/07/96.11:00A	10/07/96.12:00P	
1.2.2.86.4Q	1	Set & Align 89	10/07/96.01:00P	10/07/96.02:00P	
1.2.2.86.4R	1	Set Clean Room, Purge & Fit 89	10/07/96.02:00P	10/07/96.03:00P	
1.2.2.86.4S	2	Weld Joint 89	10/07/96.03:00P	10/07/96.05:00P	
1.2.2.86.4T	2	Leak Test Joint 89	10/08/96.08:00A	10/08/96.10:00A	
1.2.2.86.4U	2	Install Tube Supports 89	10/08/96.08:00A	10/08/96.10:00A	
1.2.2.86.4V	2	Remove Equip'mt, Clean & Cap 89	10/08/96.10:00A	10/08/96.12:00P	
1.2.2.86.5A	1	Unload,Rec/Insp Tube 90	09/24/96.01:00P	09/24/96.02:00P	
1.2.2.86.5B	1	Move to Stiff Fit Up Stat. 90	10/02/96.10:00A	10/02/96.11:00A	
1.2.2.86.5C	1	Set-up & Purge 90	10/02/96.11:00A	10/02/96.12:00P	
1.2.2.86.5D	1	F/W Pump Port Reinf. 90	10/02/96.01:00P	10/02/96.02:00P	
1.2.2.86.5E	2	Fit Stiffeners 90	10/02/96.02:00P	10/02/96.04:00P	
1.2.2.86.5F	4	Weld Stiffeners 90	10/02/96.04:00P	10/03/96.11:00A	
1.2.2.86.5G	1	Move to P.Port Stat. 90	10/03/96.11:00A	10/03/96.12:00P	
1.2.2.86.5H	1	Setup & Bore 10" Inlet90	10/03/96.01:00P	10/03/96.02:00P	
1.2.2.86.5I	2	Purge/F/W Pump Port 90	10/03/96.02:00P	10/03/96.04:00P	
1.2.2.86.5J	1	Inspect, Install End Caps 90	10/03/96.04:00P	10/03/96.05:00P	
1.2.2.86.5L	1	Move to Test Area 90	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.86.5M	1	Pre-Clean & Black Light 90	10/04/96.10:00A	10/04/96.11:00A	
1.2.2.86.5N	30	Leak Test 90	10/04/96.11:00A	10/05/96.05:00P	
1.2.2.86.5Q	1	Move to Post Test Storage 90	10/07/96.08:00A	10/07/96.09:00A	
1.2.2.86.5R	1	Clean, Dry & End Cap90	10/07/96.09:00A	10/07/96.10:00A	
1.2.2.86.5T	1	Transport to Erection 90	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.86.5U	1	Set & Align 90	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.86.5V	1	Set Clean Room, Purge & Fit 90	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.86.5W	2	Weld Joint 90	10/09/96.01:00P	10/09/96.03:00P	
1.2.2.86.5X	2	Leak Test Joint 900	10/09/96.03:00P	10/09/96.05:00P	
1.2.2.86.5Y	2	Install Tube Supports 90	10/09/96.03:00P	10/09/96.05:00P	
1.2.2.86.5Z	2	Remove Equip'mt, Clean & Cap 90	10/10/96.08:00A	10/10/96.10:00A	
1.2.2.86.B1A	1	Unload,Rec/Insp Tube B86	09/24/96.08:00A	09/24/96.09:00A	
1.2.2.86.B1B	1	Move to Stiff Fit Up Stat. B86	09/24/96.09:00A	09/24/96.10:00A	
1.2.2.86.B1C	1	Set-up & Purge B86	09/24/96.10:00A	09/24/96.11:00A	
1.2.2.86.B1D	2	Fit Stiffeners B86	09/24/96.11:00A	09/24/96.02:00P	
1.2.2.86.B1E	4	Weld Stiffeners B86	09/24/96.02:00P	09/25/96.09:00A	
1.2.2.86.B1F	1	Move to Exp.Bellows Stat. B86	09/25/96.09:00A	09/25/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.86.B1G	3	Fit,Purge,Weld Exp. Bellows B86	09/25/96.10:00A	09/25/96.02:00P	
1.2.2.86.B1H	1	Inspect, Install End Caps B86	09/25/96.02:00P	09/25/96.03:00P	
1.2.2.86.B1J	1	Move to Test Area B86	09/25/96.03:00P	09/25/96.04:00P	
1.2.2.86.B1K	1	Pre-Clean & Black Light B86	09/25/96.04:00P	09/25/96.05:00P	
1.2.2.86.B1L	30	Leak Test B86	09/25/96.05:00P	09/26/96.11:00P	
1.2.2.86.B1O	1	Move to Post Test Storage B86	09/27/96.08:00A	09/27/96.09:00A	
1.2.2.86.B1P	1	Clean, Dry & End Cap B86	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.86.B1R	1	Transport to Erection B86	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.86.B1S	1	Set & Align B86	09/27/96.11:00A	09/27/96.12:00P	
1.2.2.86.B1T	1	Set Clean Room, Purge & Fit B86	09/27/96.01:00P	09/27/96.02:00P	
1.2.2.86.B1U	2	Weld Joint B86	09/27/96.02:00P	09/27/96.04:00P	
1.2.2.86.B1V	2	Leak Test Joint B86	09/27/96.04:00P	09/30/96.09:00A	
1.2.2.86.B1W	2	Install Tube Supports B86	09/27/96.04:00P	09/30/96.09:00A	
1.2.2.86.B1X	2	Remove Equip'mt, Clean & Cap B86	09/30/96.09:00A	09/30/96.11:00A	
1.2.2.86.B2A	1	Unload,Rec/Insp Tube B87	09/24/96.09:00A	09/24/96.10:00A	
1.2.2.86.B2B	1	Move to Stiff Fit Up Stat. B87	09/25/96.10:00A	09/25/96.11:00A	
1.2.2.86.B2C	1	Set-up & Purge B87	09/25/96.11:00A	09/25/96.12:00P	
1.2.2.86.B2D	2	Fit Stiffeners B87	09/25/96.01:00P	09/25/96.03:00P	
1.2.2.86.B2E	4	Weld Stiffeners B87	09/25/96.03:00P	09/26/96.10:00A	
1.2.2.86.B2F	1	Move to Exp.Bellows Stat. B87	09/26/96.10:00A	09/26/96.11:00A	
1.2.2.86.B2G	3	Fit,Purge,Weld Exp. Bellows B87	09/26/96.11:00A	09/26/96.03:00P	
1.2.2.86.B2H	1	Inspect, Install End Caps B87	09/26/96.03:00P	09/26/96.04:00P	
1.2.2.86.B2J	1	Move to Test Area B87	09/27/96.09:00A	09/27/96.10:00A	
1.2.2.86.B2K	1	Pre-Clean & Black Light B87	09/27/96.10:00A	09/27/96.11:00A	
1.2.2.86.B2L	30	Leak Test B87	09/27/96.11:00A	09/28/96.05:00P	
1.2.2.86.B2O	1	Move to Post Test Storage 87	09/30/96.08:00A	09/30/96.09:00A	
1.2.2.86.B2P	1	Clean, Dry & End Cap B87	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.86.B2R	1	Transport to Erection B87	10/01/96.08:00A	10/01/96.09:00A	
1.2.2.86.B2S	1	Set & Align B87	10/01/96.09:00A	10/01/96.10:00A	
1.2.2.86.B2T	1	Set Clean Room, Purge & Fit B87	10/01/96.10:00A	10/01/96.11:00A	
1.2.2.86.B2U	2	Weld Joint B87	10/01/96.11:00A	10/01/96.02:00P	
1.2.2.86.B2V	2	Leak Test Joint B87	10/01/96.02:00P	10/01/96.04:00P	
1.2.2.86.B2W	2	Install Tube SupportsB87	10/01/96.02:00P	10/01/96.04:00P	
1.2.2.86.B2X	2	Remove Equip'mt, Clean & Cap B87	10/01/96.04:00P	10/02/96.09:00A	
1.2.2.86.B3A	1	Unload,Rec/Insp Tube B88	09/24/96.10:00A	09/24/96.11:00A	
1.2.2.86.B3B	1	Move to Stiff Fit Up Stat. B88	09/26/96.11:00A	09/26/96.12:00P	
1.2.2.86.B3C	1	Set-up & Purge B88	09/26/96.01:00P	09/26/96.02:00P	
1.2.2.86.B3D	2	Fit Stiffeners B88	09/26/96.02:00P	09/26/96.04:00P	
1.2.2.86.B3E	4	Weld Stiffeners B88	09/26/96.04:00P	09/27/96.11:00A	
1.2.2.86.B3F	1	Move to Exp.Bellows Stat. B88	09/27/96.11:00A	09/27/96.12:00P	
1.2.2.86.B3G	3	Fit,Purge,Weld Exp. Bellows B88	09/27/96.01:00P	09/27/96.04:00P	
1.2.2.86.B3H	1	Inspect, Install End Caps B88	09/27/96.04:00P	09/27/96.05:00P	
1.2.2.86.B3J	1	Move to Test Area B88	09/30/96.09:00A	09/30/96.10:00A	
1.2.2.86.B3K	1	Pre-Clean & Black Light B88	09/30/96.10:00A	09/30/96.11:00A	
1.2.2.86.B3L	30	Leak Test B88	09/30/96.11:00A	10/01/96.05:00P	
1.2.2.86.B3O	1	Move to Post Test Storage B88	10/02/96.08:00A	10/02/96.09:00A	
1.2.2.86.B3P	1	Clean, Dry & End Cap B88	10/02/96.09:00A	10/02/96.10:00A	
1.2.2.86.B3R	1	Transport to Erection B88	10/02/96.03:00P	10/02/96.04:00P	
1.2.2.86.B3S	1	Set & Align B88	10/02/96.04:00P	10/02/96.05:00P	
1.2.2.86.B3T	1	Set Clean Room, Purge & Fit B88	10/03/96.08:00A	10/03/96.09:00A	
1.2.2.86.B3U	2	Weld Joint B88	10/03/96.09:00A	10/03/96.11:00A	
1.2.2.86.B3V	2	Leak Test Joint B88	10/03/96.11:00A	10/03/96.02:00P	
1.2.2.86.B3W	2	Install Tube Supports B88	10/03/96.11:00A	10/03/96.02:00P	
1.2.2.86.B3X	2	Remove Equip'mt, Clean & Cap B88	10/03/96.02:00P	10/03/96.04:00P	
1.2.2.86.B4A	1	Unload,Rec/Insp Tube B89	09/24/96.11:00A	09/24/96.12:00P	
1.2.2.86.B4B	1	Move to Stiff Fit Up Stat. B89	09/27/96.01:00P	09/27/96.02:00P	
1.2.2.86.B4C	1	Set-up & Purge B89	09/27/96.02:00P	09/27/96.03:00P	
1.2.2.86.B4D	2	Fit Stiffeners B89	09/27/96.03:00P	09/27/96.05:00P	
1.2.2.86.B4E	4	Weld Stiffeners B89	09/30/96.08:00A	09/30/96.12:00P	
1.2.2.86.B4F	1	Move to Exp.Bellows Stat. B89	09/30/96.01:00P	09/30/96.02:00P	
1.2.2.86.B4G	3	Fit,Purge,Weld Exp. Bellows B89	09/30/96.02:00P	09/30/96.05:00P	
1.2.2.86.B4H	1	Inspect, Install End Caps B89	10/01/96.08:00A	10/01/96.09:00A	
1.2.2.86.B4J	1	Move to Test Area B89	10/02/96.09:00A	10/02/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.86.B4K	1	Pre-Clean & Black Light B89	10/02/96.10:00A	10/02/96.11:00A	
1.2.2.86.B4L	30	Leak Test B89	10/02/96.11:00A	10/03/96.05:00P	
1.2.2.86.B4O	1	Move to Post Test Storage B89	10/04/96.08:00A	10/04/96.09:00A	
1.2.2.86.B4P	1	Clean, Dry & End Cap B89	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.86.B4R	1	Transport to Erection B89	10/04/96.01:00P	10/04/96.02:00P	
1.2.2.86.B4S	1	Set & Align B89	10/04/96.02:00P	10/04/96.03:00P	
1.2.2.86.B4T	1	Set Clean Room, Purge & Fit B89	10/04/96.03:00P	10/04/96.04:00P	
1.2.2.86.B4U	2	Weld Joint B89	10/04/96.04:00P	10/07/96.09:00A	
1.2.2.86.B4V	2	Leak Test Joint B89	10/07/96.09:00A	10/07/96.11:00A	
1.2.2.86.B4W	2	Install Tube Supports B89	10/07/96.09:00A	10/07/96.11:00A	
1.2.2.86.B4X	2	Remove Equip'mt, Clean & Cap B89	10/07/96.11:00A	10/07/96.02:00P	
1.2.2.86.B5A	1	Unload,Rec/Insp Tube B90	09/24/96.01:00P	09/24/96.02:00P	
1.2.2.86.B5B	1	Move to Stiff Fit Up Stat. B90	09/30/96.02:00P	09/30/96.03:00P	
1.2.2.86.B5C	1	Set-up & Purge B90	09/30/96.03:00P	09/30/96.04:00P	
1.2.2.86.B5D	2	Fit Stiffeners B90	09/30/96.04:00P	10/01/96.09:00A	
1.2.2.86.B5E	4	Weld Stiffeners B90	10/01/96.09:00A	10/01/96.02:00P	
1.2.2.86.B5F	1	Move to Exp.Bellows Stat. B90	10/02/96.10:00A	10/02/96.11:00A	
1.2.2.86.B5G	3	Fit,Purge,Weld Exp. Bellows B90	10/02/96.11:00A	10/02/96.03:00P	
1.2.2.86.B5H	1	Inspect, Install End Caps B90	10/02/96.03:00P	10/02/96.04:00P	
1.2.2.86.B5J	1	Move to Test Area B90	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.86.B5K	1	Pre-Clean & Black Light B90	10/04/96.10:00A	10/04/96.11:00A	
1.2.2.86.B5L	30	Leak Test B90	10/04/96.11:00A	10/05/96.05:00P	
1.2.2.86.B5O	1	Move to Post Test Storage B90	10/07/96.08:00A	10/07/96.09:00A	
1.2.2.86.B5P	1	Clean, Dry & End Cap B90	10/07/96.09:00A	10/07/96.10:00A	
1.2.2.86.B5R	1	Transport to Erection B90	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.86.B5S	1	Set & Align B90	10/08/96.11:00A	10/08/96.12:00P	
1.2.2.86.B5T	1	Set Clean Room, Purge & Fit B90	10/08/96.01:00P	10/08/96.02:00P	
1.2.2.86.B5U	2	Weld Joint B90	10/08/96.02:00P	10/08/96.04:00P	
1.2.2.86.B5V	2	Leak Test Joint 90	10/08/96.04:00P	10/09/96.09:00A	
1.2.2.86.B5W	2	Install Tube Supports B90	10/08/96.04:00P	10/09/96.09:00A	
1.2.2.86.B5X	2	Remove Equip'mt, Clean & Cap B90	10/09/96.09:00A	10/09/96.11:00A	
1.2.2.91	131	Cans 91-95	09/30/96.04:00P	10/23/96.10:00A	
1.2.2.91.1A	1	Unload,Rec/Insp Tube 91	10/01/96.08:00A	10/01/96.09:00A	
1.2.2.91.1B	1	Move to Stiff Fit Up Stat. 91	10/01/96.09:00A	10/01/96.10:00A	
1.2.2.91.1C	1	Set-up & Purge 91	10/01/96.10:00A	10/01/96.11:00A	
1.2.2.91.1D	2	Fit Stiffeners 91	10/01/96.11:00A	10/01/96.02:00P	
1.2.2.91.1E	4	Weld Stiffeners 91	10/01/96.02:00P	10/02/96.09:00A	
1.2.2.91.1F	1	Inspect, Install End Caps 91	10/02/96.09:00A	10/02/96.10:00A	
1.2.2.91.1H	1	Move to Test Area 91	10/02/96.10:00A	10/02/96.11:00A	
1.2.2.91.1I	1	Pre-Clean & Black Light 91	10/02/96.11:00A	10/02/96.12:00P	
1.2.2.91.1J	30	Leak Test 91	10/02/96.12:00P	10/03/96.06:00P	
1.2.2.91.1M	1	Move to Post Test Storage 91	10/04/96.08:00A	10/04/96.09:00A	
1.2.2.91.1N	1	Clean, Dry & End Cap 91	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.91.1P	1	Transport to Erection 91	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.91.1Q	1	Set & Align 91	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.91.1R	1	Set Clean Room, Purge & Fit 91	10/11/96.11:00A	10/11/96.12:00P	
1.2.2.91.1S	2	Weld Joint 9	10/11/96.01:00P	10/11/96.03:00P	
1.2.2.91.1T	2	Leak Test Joint 91	10/11/96.03:00P	10/11/96.05:00P	
1.2.2.91.1U	2	Install Tube Supports 91	10/11/96.03:00P	10/11/96.05:00P	
1.2.2.91.1V	2	Remove Equip'mt, Clean & Cap 91	10/14/96.08:00A	10/14/96.10:00A	
1.2.2.91.2A	1	Unload,Rec. & Insp 92	10/01/96.09:00A	10/01/96.10:00A	
1.2.2.91.2B	1	Move to Stiff Fit Up Stat. 92	10/02/96.11:00A	10/02/96.12:00P	
1.2.2.91.2C	1	Set-up & Purge 92	10/02/96.01:00P	10/02/96.02:00P	
1.2.2.91.2D	2	Fit Stiffeners 92	10/02/96.02:00P	10/02/96.04:00P	
1.2.2.91.2E	4	Weld Stiffeners 92	10/02/96.04:00P	10/03/96.11:00A	
1.2.2.91.2F	1	Inspect, Install End Caps 92	10/03/96.11:00A	10/03/96.12:00P	
1.2.2.91.2H	1	Move to Test Area 92	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.91.2I	1	Pre-Clean & Black Light 92	10/04/96.10:00A	10/04/96.11:00A	
1.2.2.91.2J	30	Leak Test 92	10/04/96.11:00A	10/05/96.05:00P	
1.2.2.91.2M	1	Move to Post Test Storage 92	10/07/96.08:00A	10/07/96.09:00A	
1.2.2.91.2N	1	Clean, Dry & End Cap 92	10/07/96.09:00A	10/07/96.10:00A	
1.2.2.91.2P	1	Transport to Erection 92	10/14/96.04:00P	10/14/96.05:00P	
1.2.2.91.2Q	1	Set & Align 92	10/15/96.08:00A	10/15/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.91.2R	1	Set Clean Room, Purge & Fit 92	10/15/96.09:00A	10/15/96.10:00A	
1.2.2.91.2S	2	Weld Joint 92	10/15/96.10:00A	10/15/96.12:00P	
1.2.2.91.2T	2	Leak Test Joint 92	10/15/96.01:00P	10/15/96.03:00P	
1.2.2.91.2U	2	Install Tube Supports 92	10/15/96.01:00P	10/15/96.03:00P	
1.2.2.91.2V	2	Remove Equip'mt, Clean & Cap 92	10/15/96.03:00P	10/15/96.05:00P	
1.2.2.91.3A	1	Unload,Rec/Insp Tube 93	10/01/96.10:00A	10/01/96.11:00A	
1.2.2.91.3B	1	Move to Stiff Fit Up Stat. 93	10/04/96.10:00A	10/04/96.11:00A	
1.2.2.91.3C	1	Set-up & Purge 93	10/04/96.11:00A	10/04/96.12:00P	
1.2.2.91.3D	2	Fit Stiffeners 93	10/04/96.01:00P	10/04/96.03:00P	
1.2.2.91.3E	4	Weld Stiffeners 93	10/04/96.03:00P	10/07/96.10:00A	
1.2.2.91.3F	1	Inspect, Install End Caps 93	10/07/96.10:00A	10/07/96.11:00A	
1.2.2.91.3H	1	Move to Test Area 93	10/07/96.11:00A	10/07/96.12:00P	
1.2.2.91.3I	1	Pre-Clean & Black Light 93	10/07/96.01:00P	10/07/96.02:00P	
1.2.2.91.3J	30	Leak Test 93	10/07/96.02:00P	10/08/96.08:00P	
1.2.2.91.3M	1	Move to Post Test Storage 93	10/09/96.08:00A	10/09/96.09:00A	
1.2.2.91.3N	1	Clean, Dry & End Cap 93	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.91.3P	1	Transport to Erection 93	10/16/96.02:00P	10/16/96.03:00P	
1.2.2.91.3Q	1	Set & Align 93	10/16/96.03:00P	10/16/96.04:00P	
1.2.2.91.3R	1	Set Clean Room, Purge & Fit 93	10/16/96.04:00P	10/16/96.05:00P	
1.2.2.91.3S	2	Weld Joint 93	10/17/96.08:00A	10/17/96.10:00A	
1.2.2.91.3T	2	Leak Test Joint 93	10/17/96.10:00A	10/17/96.12:00P	
1.2.2.91.3U	2	Install Tube Supports 93	10/17/96.10:00A	10/17/96.12:00P	
1.2.2.91.3V	2	Remove Equip'mt, Clean & Cap 93	10/17/96.01:00P	10/17/96.03:00P	
1.2.2.91.4A	1	Unload,Rec/Insp Tube 94	10/01/96.11:00A	10/01/96.12:00P	
1.2.2.91.4B	1	Move to Stiff Fit Up Stat. 94	10/07/96.01:00P	10/07/96.02:00P	
1.2.2.91.4C	1	Set-up & Purge 94	10/07/96.02:00P	10/07/96.03:00P	
1.2.2.91.4D	2	Fit Stiffeners 94	10/07/96.03:00P	10/07/96.05:00P	
1.2.2.91.4E	4	Weld Stiffeners 94	10/08/96.08:00A	10/08/96.12:00P	
1.2.2.91.4F	1	Inspect, Install End Caps 94	10/08/96.01:00P	10/08/96.02:00P	
1.2.2.91.4H	1	Move to Test Area 94	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.91.4I	1	Pre-Clean & Black Light 94	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.91.4J	30	Leak Test 94	10/09/96.11:00A	10/10/96.05:00P	
1.2.2.91.4M	1	Move to Post Test Storage 94	10/11/96.08:00A	10/11/96.09:00A	
1.2.2.91.4N	1	Clean, Dry & End Cap 94	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.91.4P	1	Transport to Erection 94	10/18/96.11:00A	10/18/96.12:00P	
1.2.2.91.4Q	1	Set & Align 94	10/18/96.01:00P	10/18/96.02:00P	
1.2.2.91.4R	1	Set Clean Room, Purge & Fit 94	10/18/96.02:00P	10/18/96.03:00P	
1.2.2.91.4S	2	Weld Joint 94	10/18/96.03:00P	10/18/96.05:00P	
1.2.2.91.4T	2	Leak Test Joint 94	10/21/96.08:00A	10/21/96.10:00A	
1.2.2.91.4U	2	Install Tube Supports 94	10/21/96.08:00A	10/21/96.10:00A	
1.2.2.91.4V	2	Remove Equip'mt, Clean & Cap 94	10/21/96.10:00A	10/21/96.12:00P	
1.2.2.91.5A	1	Unload,Rec/Insp Tube 95	10/01/96.01:00P	10/01/96.02:00P	
1.2.2.91.5B	1	Move to Stiff Fit Up Stat. 95	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.91.5C	1	Set-up & Purge 95	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.91.5D	1	F/W Pump Port Reinf. 95	10/09/96.01:00P	10/09/96.02:00P	
1.2.2.91.5E	2	Fit Stiffeners 95	10/09/96.02:00P	10/09/96.04:00P	
1.2.2.91.5F	4	Weld Stiffeners 95	10/09/96.04:00P	10/10/96.11:00A	
1.2.2.91.5G	1	Move to P.Port Stat. 95	10/10/96.11:00A	10/10/96.12:00P	
1.2.2.91.5H	1	Setup & Bore 10" Inlet 95	10/10/96.01:00P	10/10/96.02:00P	
1.2.2.91.5I	2	Purge/F/W Pump Port 5	10/10/96.02:00P	10/10/96.04:00P	
1.2.2.91.5J	1	Inspect, Install End Caps 5	10/10/96.04:00P	10/10/96.05:00P	
1.2.2.91.5L	1	Move to Test Area 95	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.91.5M	1	Pre-Clean & Black Light 95	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.91.5N	30	Leak Test 95	10/11/96.11:00A	10/12/96.05:00P	
1.2.2.91.5Q	1	Move to Post Test Storage 95	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.91.5R	1	Clean, Dry & End Cap 95	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.91.5T	1	Transport to Erection 95	10/22/96.09:00A	10/22/96.10:00A	
1.2.2.91.5U	1	Set & Align 9	10/22/96.10:00A	10/22/96.11:00A	
1.2.2.91.5V	1	Set Clean Room, Purge & Fit 95	10/22/96.11:00A	10/22/96.12:00P	
1.2.2.91.5W	2	Weld Joint 95	10/22/96.01:00P	10/22/96.03:00P	
1.2.2.91.5X	2	Leak Test Joint 95	10/22/96.03:00P	10/22/96.05:00P	
1.2.2.91.5Y	2	Install Tube Supports 95	10/22/96.03:00P	10/22/96.05:00P	
1.2.2.91.5Z	2	Remove Equip'mt, Clean & Cap 95	10/23/96.08:00A	10/23/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.91.B1A	1	Unload,Rec/Insp Tube B91	10/01/96.08:00A	10/01/96.09:00A	
1.2.2.91.B1B	1	Move to Stiff Fit Up Stat. B91	10/01/96.09:00A	10/01/96.10:00A	
1.2.2.91.B1C	1	Set-up & Purge B91	10/01/96.10:00A	10/01/96.11:00A	
1.2.2.91.B1D	2	Fit Stiffeners B91	10/01/96.11:00A	10/01/96.02:00P	
1.2.2.91.B1E	4	Weld Stiffeners B91	10/01/96.02:00P	10/02/96.09:00A	
1.2.2.91.B1F	1	Move to Exp.Bellows Stat. B91	10/02/96.09:00A	10/02/96.10:00A	
1.2.2.91.B1G	3	Fit,Purge,Weld Exp. Bellows B91	10/02/96.10:00A	10/02/96.02:00P	
1.2.2.91.B1H	1	Inspect, Install End Caps B91	10/02/96.02:00P	10/02/96.03:00P	
1.2.2.91.B1J	1	Move to Test Area B91	10/02/96.03:00P	10/02/96.04:00P	
1.2.2.91.B1K	1	Pre-Clean & Black Light B91	10/02/96.04:00P	10/02/96.05:00P	
1.2.2.91.B1L	30	Leak Test B91	10/02/96.05:00P	10/03/96.11:00P	
1.2.2.91.B1O	1	Move to Post Test Storage B91	10/04/96.08:00A	10/04/96.09:00A	
1.2.2.91.B1P	1	Clean, Dry & End Cap B91	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.91.B1R	1	Transport to Erection B91	10/10/96.10:00A	10/10/96.11:00A	
1.2.2.91.B1S	1	Set & Align B91	10/10/96.11:00A	10/10/96.12:00P	
1.2.2.91.B1T	1	Set Clean Room, Purge & Fit B91	10/10/96.01:00P	10/10/96.02:00P	
1.2.2.91.B1U	2	Weld Joint B91	10/10/96.02:00P	10/10/96.04:00P	
1.2.2.91.B1V	2	Leak Test Joint B91	10/10/96.04:00P	10/11/96.09:00A	
1.2.2.91.B1W	2	Install Tube Supports B91	10/10/96.04:00P	10/11/96.09:00A	
1.2.2.91.B1X	2	Remove Equip'mt, Clean & Cap B91	10/11/96.09:00A	10/11/96.11:00A	
1.2.2.91.B2A	1	Unload,Rec/Insp Tube B92	10/01/96.09:00A	10/01/96.10:00A	
1.2.2.91.B2B	1	Move to Stiff Fit Up Stat. B92	10/02/96.10:00A	10/02/96.11:00A	
1.2.2.91.B2C	1	Set-up & Purge B92	10/02/96.11:00A	10/02/96.12:00P	
1.2.2.91.B2D	2	Fit Stiffeners B92	10/02/96.01:00P	10/02/96.03:00P	
1.2.2.91.B2E	4	Weld Stiffeners B92	10/02/96.03:00P	10/03/96.10:00A	
1.2.2.91.B2F	1	Move to Exp.Bellows Stat. B92	10/03/96.10:00A	10/03/96.11:00A	
1.2.2.91.B2G	3	Fit,Purge,Weld Exp. Bellows B92	10/03/96.11:00A	10/03/96.03:00P	
1.2.2.91.B2H	1	Inspect, Install End Caps B92	10/03/96.03:00P	10/03/96.04:00P	
1.2.2.91.B2J	1	Move to Test Area B92	10/04/96.09:00A	10/04/96.10:00A	
1.2.2.91.B2K	1	Pre-Clean & Black Light B92	10/04/96.10:00A	10/04/96.11:00A	
1.2.2.91.B2L	30	Leak Test B92	10/04/96.11:00A	10/05/96.05:00P	
1.2.2.91.B2O	1	Move to Post Test Storage B92	10/07/96.08:00A	10/07/96.09:00A	
1.2.2.91.B2P	1	Clean, Dry & End Cap B92	10/07/96.09:00A	10/07/96.10:00A	
1.2.2.91.B2R	1	Transport to Erection B92	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.91.B2S	1	Set & Align B92	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.91.B2T	1	Set Clean Room, Purge & Fit B92	10/14/96.10:00A	10/14/96.11:00A	
1.2.2.91.B2U	2	Weld Joint B92	10/14/96.11:00A	10/14/96.02:00P	
1.2.2.91.B2V	2	Leak Test Joint B92	10/14/96.02:00P	10/14/96.04:00P	
1.2.2.91.B2W	2	Install Tube Supports B92	10/14/96.02:00P	10/14/96.04:00P	
1.2.2.91.B2X	2	Remove Equip'mt, Clean & Cap B92	10/14/96.04:00P	10/15/96.09:00A	
1.2.2.91.B3A	1	Unload,Rec/Insp Tube B93	10/01/96.10:00A	10/01/96.11:00A	
1.2.2.91.B3B	1	Move to Stiff Fit Up Stat. B93	10/03/96.11:00A	10/03/96.12:00P	
1.2.2.91.B3C	1	Set-up & Purge B9	10/03/96.01:00P	10/03/96.02:00P	
1.2.2.91.B3D	2	Fit Stiffeners B93	10/03/96.02:00P	10/03/96.04:00P	
1.2.2.91.B3E	4	Weld Stiffeners B9	10/03/96.04:00P	10/04/96.11:00A	
1.2.2.91.B3F	1	Move to Exp.Bellows Stat. B93	10/04/96.11:00A	10/04/96.12:00P	
1.2.2.91.B3G	3	Fit,Purge,Weld Exp. Bellows B93	10/04/96.01:00P	10/04/96.04:00P	
1.2.2.91.B3H	1	Inspect, Install End Caps B93	10/04/96.04:00P	10/04/96.05:00P	
1.2.2.91.B3J	1	Move to Test Area B93	10/07/96.09:00A	10/07/96.10:00A	
1.2.2.91.B3K	1	Pre-Clean & Black Light B93	10/07/96.10:00A	10/07/96.11:00A	
1.2.2.91.B3L	30	Leak Test B93	10/07/96.11:00A	10/08/96.05:00P	
1.2.2.91.B3O	1	Move to Post Test Storage B93	10/09/96.08:00A	10/09/96.09:00A	
1.2.2.91.B3P	1	Clean, Dry & End Cap B93	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.91.B3R	1	Transport to Erection B93	10/15/96.03:00P	10/15/96.04:00P	
1.2.2.91.B3S	1	Set & Align B93	10/15/96.04:00P	10/15/96.05:00P	
1.2.2.91.B3T	1	Set Clean Room, Purge & Fit B93	10/16/96.08:00A	10/16/96.09:00A	
1.2.2.91.B3U	2	Weld Joint B93	10/16/96.09:00A	10/16/96.11:00A	
1.2.2.91.B3V	2	Leak Test Joint B93	10/16/96.11:00A	10/16/96.02:00P	
1.2.2.91.B3W	2	Install Tube Supports B9	10/16/96.11:00A	10/16/96.02:00P	
1.2.2.91.B3X	2	Remove Equip'mt, Clean & Cap B93	10/16/96.02:00P	10/16/96.04:00P	
1.2.2.91.B4A	1	Unload,Rec/Insp Tube B94	10/01/96.11:00A	10/01/96.12:00P	
1.2.2.91.B4B	1	Move to Stiff Fit Up Stat. B94	10/04/96.01:00P	10/04/96.02:00P	
1.2.2.91.B4C	1	Set-up & Purge B94	10/04/96.02:00P	10/04/96.03:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.91.B4D	2	Fit Stiffeners B94	10/04/96.03:00P	10/04/96.05:00P	
1.2.2.91.B4E	4	Weld Stiffeners B94	10/07/96.08:00A	10/07/96.12:00P	
1.2.2.91.B4F	1	Move to Exp.Bellows Stat. B94	10/07/96.01:00P	10/07/96.02:00P	
1.2.2.91.B4G	3	Fit,Purge,Weld Exp. Bellows B94	10/07/96.02:00P	10/07/96.05:00P	
1.2.2.91.B4H	1	Inspect, Install End Caps B94	10/08/96.08:00A	10/08/96.09:00A	
1.2.2.91.B4J	1	Move to Test Area B94	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.91.B4K	1	Pre-Clean & Black Light B94	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.91.B4L	30	Leak Test B9	10/09/96.11:00A	10/10/96.05:00P	
1.2.2.91.B4O	1	Move to Post Test Storage B94	10/11/96.08:00A	10/11/96.09:00A	
1.2.2.91.B4P	1	Clean, Dry & End Cap B94	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.91.B4R	1	Transport to Erection B94	10/17/96.01:00P	10/17/96.02:00P	
1.2.2.91.B4S	1	Set & Align B94	10/17/96.02:00P	10/17/96.03:00P	
1.2.2.91.B4T	1	Set Clean Room, Purge & Fit B94	10/17/96.03:00P	10/17/96.04:00P	
1.2.2.91.B4U	2	Weld Joint B94	10/17/96.04:00P	10/18/96.09:00A	
1.2.2.91.B4V	2	Leak Test Joint B94	10/18/96.09:00A	10/18/96.11:00A	
1.2.2.91.B4W	2	Install Tube Supports B94	10/18/96.09:00A	10/18/96.11:00A	
1.2.2.91.B4X	2	Remove Equip'mt, Clean & Cap B94	10/18/96.11:00A	10/18/96.02:00P	
1.2.2.91.B5A	1	Unload,Rec/Insp Tube B95	10/01/96.01:00P	10/01/96.02:00P	
1.2.2.91.B5B	1	Move to Stiff Fit Up Stat. B95	10/07/96.02:00P	10/07/96.03:00P	
1.2.2.91.B5C	1	Set-up & Purge B95	10/07/96.03:00P	10/07/96.04:00P	
1.2.2.91.B5D	2	Fit Stiffeners B95	10/07/96.04:00P	10/08/96.09:00A	
1.2.2.91.B5E	4	Weld Stiffeners B95	10/08/96.09:00A	10/08/96.02:00P	
1.2.2.91.B5F	1	Move to Exp.Bellows Stat. B95	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.91.B5G	3	Fit,Purge,Weld Exp. Bellows B95	10/09/96.11:00A	10/09/96.03:00P	
1.2.2.91.B5H	1	Inspect, Install End Caps B95	10/09/96.03:00P	10/09/96.04:00P	
1.2.2.91.B5J	1	Move to Test Area B95	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.91.B5K	1	Pre-Clean & Black Light B95	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.91.B5L	30	Leak Test B95	10/11/96.11:00A	10/12/96.05:00P	
1.2.2.91.B5O	1	Move to Post Test Storage B95	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.91.B5P	1	Clean, Dry & End Cap B95	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.91.B5R	1	Transport to Erection B95	10/21/96.10:00A	10/21/96.11:00A	
1.2.2.91.B5S	1	Set & Align B95	10/21/96.11:00A	10/21/96.12:00P	
1.2.2.91.B5T	1	Set Clean Room, Purge & Fit B95	10/21/96.01:00P	10/21/96.02:00P	
1.2.2.91.B5U	2	Weld Joint B95	10/21/96.02:00P	10/21/96.04:00P	
1.2.2.91.B5V	2	Leak Test Joint B95	10/21/96.04:00P	10/22/96.09:00A	
1.2.2.91.B5W	2	Install Tube Supports B95	10/21/96.04:00P	10/22/96.09:00A	
1.2.2.91.B5X	2	Remove Equip'mt, Clean & Cap B95	10/22/96.09:00A	10/22/96.11:00A	
1.2.2.96	135	Cans 96-98	10/07/96.04:00P	10/30/96.03:00P	
1.2.2.96.1A	1	Unload,Rec/Insp Tube 96	10/08/96.08:00A	10/08/96.09:00A	
1.2.2.96.1B	1	Move to Stiff Fit Up Stat. 96	10/08/96.09:00A	10/08/96.10:00A	
1.2.2.96.1C	1	Set-up & Purge 96	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.1D	2	Fit Stiffeners 96	10/08/96.11:00A	10/08/96.02:00P	
1.2.2.96.1E	4	Weld Stiffeners 96	10/08/96.02:00P	10/09/96.09:00A	
1.2.2.96.1F	1	Inspect, Install End Caps 96	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.96.1H	1	Move to Test Area 96	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.96.1I	1	Pre-Clean & Black Light 96	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.96.1J	30	Leak Test 96	10/09/96.12:00P	10/10/96.06:00P	
1.2.2.96.1M	1	Move to Post Test Storage 96	10/11/96.08:00A	10/11/96.09:00A	
1.2.2.96.1N	1	Clean, Dry & End Cap 96	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.96.1P	1	Transport to Erection 96	10/24/96.09:00A	10/24/96.10:00A	
1.2.2.96.1Q	1	Set & Align 96	10/24/96.10:00A	10/24/96.11:00A	
1.2.2.96.1R	1	Set Clean Room, Purge & Fit 96	10/24/96.11:00A	10/24/96.12:00P	
1.2.2.96.1S	2	Weld Joint 96	10/24/96.01:00P	10/24/96.03:00P	
1.2.2.96.1T	2	Leak Test Joint 96	10/24/96.03:00P	10/24/96.05:00P	
1.2.2.96.1U	2	Install Tube Supports 96	10/24/96.03:00P	10/24/96.05:00P	
1.2.2.96.1V	2	Remove Equip'mt, Clean & Cap 96	10/25/96.08:00A	10/25/96.10:00A	
1.2.2.96.2A	1	Unload,Rec. & Insp 97	10/08/96.09:00A	10/08/96.10:00A	
1.2.2.96.2B	1	Move to Stiff Fit Up Stat. 97	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.96.2C	1	Set-up & Purge 97	10/09/96.01:00P	10/09/96.02:00P	
1.2.2.96.2D	2	Fit Stiffeners 97	10/09/96.02:00P	10/09/96.04:00P	
1.2.2.96.2E	4	Weld Stiffeners 97	10/09/96.04:00P	10/10/96.11:00A	
1.2.2.96.2F	1	Inspect, Install End Caps 97	10/10/96.11:00A	10/10/96.12:00P	
1.2.2.96.2H	1	Move to Test Area 97	10/11/96.09:00A	10/11/96.10:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.96.2I	1	Pre-Clean & Black Light 97	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.96.2J	30	Leak Test 97	10/11/96.11:00A	10/12/96.05:00P	
1.2.2.96.2M	1	Move to Post Test Storage 97	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.96.2N	1	Clean, Dry & End Cap 97	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.96.2P	1	Transport to Erection 97	10/25/96.04:00P	10/25/96.05:00P	
1.2.2.96.2Q	1	Set & Align 97	10/28/96.08:00A	10/28/96.09:00A	
1.2.2.96.2R	1	Set Clean Room, Purge & Fit 97	10/28/96.09:00A	10/28/96.10:00A	
1.2.2.96.2S	2	Weld Joint 97	10/28/96.10:00A	10/28/96.12:00P	
1.2.2.96.2T	2	Leak Test Joint 97	10/28/96.01:00P	10/28/96.03:00P	
1.2.2.96.2U	2	Install Tube Supports 97	10/28/96.01:00P	10/28/96.03:00P	
1.2.2.96.2V	2	Remove Equip'mt, Clean & Cap 97	10/28/96.03:00P	10/28/96.05:00P	
1.2.2.96.3A	1	Unload,Rec/Insp Tube 98	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.3B	1	Move to Stiff Fit Up Stat. 98	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.96.3C	1	Set-up & Purge 98	10/11/96.11:00A	10/11/96.12:00P	
1.2.2.96.3D	2	Fit Stiffeners 98	10/11/96.01:00P	10/11/96.03:00P	
1.2.2.96.3E	4	Weld Stiffeners 98	10/11/96.03:00P	10/14/96.10:00A	
1.2.2.96.3F	1	Inspect, Install End Caps 98	10/14/96.10:00A	10/14/96.11:00A	
1.2.2.96.3H	1	Move to Test Area 98	10/14/96.11:00A	10/14/96.12:00P	
1.2.2.96.3I	1	Pre-Clean & Black Light 98	10/14/96.01:00P	10/14/96.02:00P	
1.2.2.96.3J	30	Leak Test 98	10/14/96.02:00P	10/15/96.08:00P	
1.2.2.96.3M	1	Move to Post Test Storage 98	10/16/96.08:00A	10/16/96.09:00A	
1.2.2.96.3N	1	Clean, Dry & End Cap 98	10/16/96.09:00A	10/16/96.10:00A	
1.2.2.96.3P	1	Transport to Erection 98	10/29/96.02:00P	10/29/96.03:00P	
1.2.2.96.3Q	1	Set & Align 98	10/29/96.03:00P	10/29/96.04:00P	
1.2.2.96.3R	1	Set Clean Room, Purge & Fit 98	10/29/96.04:00P	10/29/96.05:00P	
1.2.2.96.3S	2	Weld Joint 98	10/30/96.08:00A	10/30/96.10:00A	
1.2.2.96.3T	2	Leak Test Joint 98	10/30/96.10:00A	10/30/96.12:00P	
1.2.2.96.3U	2	Install Tube Supports 98	10/30/96.10:00A	10/30/96.12:00P	
1.2.2.96.3V	2	Remove Equip'mt, Clean & Cap 98	10/30/96.01:00P	10/30/96.03:00P	
1.2.2.96.B1A	1	Unload,Rec/Insp Tube B96	10/08/96.08:00A	10/08/96.09:00A	
1.2.2.96.B1B	1	Move to Stiff Fit Up Stat. B96	10/08/96.09:00A	10/08/96.10:00A	
1.2.2.96.B1C	1	Set-up & Purge B96	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.B1D	2	Fit Stiffeners B96	10/08/96.11:00A	10/08/96.02:00P	
1.2.2.96.B1E	4	Weld Stiffeners B96	10/08/96.02:00P	10/09/96.09:00A	
1.2.2.96.B1F	1	Move to Exp.Bellows Stat. B96	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.96.B1G	3	Fit,Purge,Weld Exp. Bellows B96	10/09/96.10:00A	10/09/96.02:00P	
1.2.2.96.B1H	1	Inspect, Install End Caps B96	10/09/96.02:00P	10/09/96.03:00P	
1.2.2.96.B1J	1	Move to Test Area B96	10/09/96.03:00P	10/09/96.04:00P	
1.2.2.96.B1K	1	Pre-Clean & Black Light B96	10/09/96.04:00P	10/09/96.05:00P	
1.2.2.96.B1L	30	Leak Test B96	10/09/96.05:00P	10/10/96.11:00P	
1.2.2.96.B1O	1	Move to Post Test Storage B96	10/11/96.08:00A	10/11/96.09:00A	
1.2.2.96.B1P	1	Clean, Dry & End Cap B96	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.96.B1R	1	Transport to Erection B96	10/23/96.10:00A	10/23/96.11:00A	
1.2.2.96.B1S	1	Set & Align B96	10/23/96.11:00A	10/23/96.12:00P	
1.2.2.96.B1T	1	Set Clean Room, Purge & Fit B96	10/23/96.01:00P	10/23/96.02:00P	
1.2.2.96.B1U	2	Weld Joint B96	10/23/96.02:00P	10/23/96.04:00P	
1.2.2.96.B1V	2	Leak Test Joint B96	10/23/96.04:00P	10/24/96.09:00A	
1.2.2.96.B1W	2	Install Tube Supports B96	10/23/96.04:00P	10/24/96.09:00A	
1.2.2.96.B1X	2	Remove Equip'mt, Clean & Cap B96	10/24/96.09:00A	10/24/96.11:00A	
1.2.2.96.B2A	1	Unload,Rec/Insp Tube B97	10/08/96.09:00A	10/08/96.10:00A	
1.2.2.96.B2B	1	Move to Stiff Fit Up Stat. B97	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.96.B2C	1	Set-up & Purge B97	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.96.B2D	2	Fit Stiffeners B97	10/09/96.01:00P	10/09/96.03:00P	
1.2.2.96.B2E	4	Weld Stiffeners B97	10/09/96.03:00P	10/10/96.10:00A	
1.2.2.96.B2F	1	Move to Exp.Bellows Stat. B97	10/10/96.10:00A	10/10/96.11:00A	
1.2.2.96.B2G	3	Fit,Purge,Weld Exp. Bellows B97	10/10/96.11:00A	10/10/96.03:00P	
1.2.2.96.B2H	1	Inspect, Install End Caps B97	10/10/96.03:00P	10/10/96.04:00P	
1.2.2.96.B2J	1	Move to Test Area B97	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.96.B2K	1	Pre-Clean & Black Light B97	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.96.B2L	30	Leak Test B97	10/11/96.11:00A	10/12/96.05:00P	
1.2.2.96.B2O	1	Move to Post Test Storage B97	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.96.B2P	1	Clean, Dry & End Cap B97	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.96.B2R	1	Transport to Erection B97	10/25/96.08:00A	10/25/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.96.B2S	1	Set & Align B97	10/25/96.09:00A	10/25/96.10:00A	
1.2.2.96.B2T	1	Set Clean Room, Purge & Fit B97	10/25/96.10:00A	10/25/96.11:00A	
1.2.2.96.B2U	2	Weld Joint B97	10/25/96.11:00A	10/25/96.02:00P	
1.2.2.96.B2V	2	Leak Test Joint B97	10/25/96.02:00P	10/25/96.04:00P	
1.2.2.96.B2W	2	Install Tube Supports B97	10/25/96.02:00P	10/25/96.04:00P	
1.2.2.96.B2X	2	Remove Equip'mt, Clean & Cap B97	10/25/96.04:00P	10/28/96.09:00A	
1.2.2.96.B3A	1	Unload,Rec/Insp Tube B98	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.B3B	1	Move to Stiff Fit Up Stat. B98	10/10/96.11:00A	10/10/96.12:00P	
1.2.2.96.B3C	1	Set-up & Purge B98	10/10/96.01:00P	10/10/96.02:00P	
1.2.2.96.B3D	2	Fit Stiffeners B98	10/10/96.02:00P	10/10/96.04:00P	
1.2.2.96.B3E	4	Weld Stiffeners B98	10/10/96.04:00P	10/11/96.11:00A	
1.2.2.96.B3F	1	Move to Exp.Bellows Stat. B98	10/11/96.11:00A	10/11/96.12:00P	
1.2.2.96.B3G	3	Fit,Purge,Weld Exp. Bellows 98	10/11/96.01:00P	10/11/96.04:00P	
1.2.2.96.B3H	1	Inspect, Install End Caps B98	10/11/96.04:00P	10/11/96.05:00P	
1.2.2.96.B3J	1	Move to Test Area B98	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.96.B3K	1	Pre-Clean & Black Light B98	10/14/96.10:00A	10/14/96.11:00A	
1.2.2.96.B3L	30	Leak Test B98	10/14/96.11:00A	10/15/96.05:00P	
1.2.2.96.B3O	1	Move to Post Test Storage B98	10/16/96.08:00A	10/16/96.09:00A	
1.2.2.96.B3P	1	Clean, Dry & End Cap B98	10/16/96.09:00A	10/16/96.10:00A	
1.2.2.96.B3R	1	Transport to Erection B98	10/28/96.03:00P	10/28/96.04:00P	
1.2.2.96.B3S	1	Set & Align B98	10/28/96.04:00P	10/28/96.05:00P	
1.2.2.96.B3T	1	Set Clean Room, Purge & Fit B98	10/29/96.08:00A	10/29/96.09:00A	
1.2.2.96.B3U	2	Weld Joint B98	10/29/96.09:00A	10/29/96.11:00A	
1.2.2.96.B3V	2	Leak Test Joint B98	10/29/96.11:00A	10/29/96.02:00P	
1.2.2.96.B3W	2	Install Tube Supports B98	10/29/96.11:00A	10/29/96.02:00P	
1.2.2.96.B3X	2	Remove Equip'mt, Clean & Cap B98	10/29/96.02:00P	10/29/96.04:00P	
1.2.3	1256	Module Inspect & Test	06/27/96.02:00P	02/03/97.02:00P	
1.2.3.01	120	Final Align Leg 1 Mod.1	06/27/96.02:00P	07/18/96.02:00P	
1.2.3.02	120	Final Alignment Leg 1 Mod.2	07/18/96.02:00P	08/08/96.02:00P	
1.2.3.03	480	Leak Test Leg 1 Mod 1	07/18/96.02:00P	08/07/96.02:00P	
1.2.3.04	480	Leak Test Leg 1 Mod 2	08/08/96.02:00P	08/28/96.02:00P	
1.2.3.05	480	Bake Out Leg 1 Mod 1	08/07/96.02:00P	08/27/96.02:00P	
1.2.3.07	120	Final Alignment Leg 2 Mod.1	10/29/96.02:00P	11/19/96.02:00P	
1.2.3.08	120	Final Alignment Leg 2 Mod.2	11/19/96.02:00P	12/10/96.02:00P	
1.2.3.09	480	Leak Test Leg 2 Mod 1	11/19/96.02:00P	12/09/96.02:00P	
1.2.3.10	480	Leak Test Leg 2 Mod 2	12/10/96.02:00P	12/30/96.02:00P	
1.2.3.11	480	Bake Out Leg 2 Mod.1	12/09/96.02:00P	12/29/96.02:00P	
1.2.3.12	360	Final Leak Test Leg 2	01/19/97.02:00P	02/03/97.02:00P	
1.2.3.14	480	Bake Out Leg 1 Mod.2	08/28/96.02:00P	09/17/96.02:00P	
1.2.3.15	480	Bake Out Leg 2 Mod 2	12/30/96.02:00P	01/19/97.02:00P	
1.2.3.6	360	Final Leak Test Leg 1	09/17/96.02:00P	10/02/96.02:00P	
1.2.4	2081	Tube Cans	10/09/95.04:00P	10/07/96.05:00P	
1.2.4.1	400	Order Tube Material	10/10/95.08:00A	12/18/95.05:00P	
1.2.4.M000	40	Manufacture 4 Make Up Pieces	12/19/95.08:00A	12/25/95.05:00P	
1.2.4.M001	40	Manufacture Leg 1 Cans 1-5	12/26/95.08:00A	01/01/96.05:00P	
1.2.4.M006	40	Manufacture Leg 1 Cans 6-10	01/09/96.08:00A	01/15/96.05:00P	
1.2.4.M011	40	Manufacture Leg 1 Cans 11-15	01/23/96.08:00A	01/29/96.05:00P	
1.2.4.M016	40	Manufacture Leg 1 Cans 16-20	02/06/96.08:00A	02/12/96.05:00P	
1.2.4.M021	40	Manufacture Leg 1 Cans 21-25	02/20/96.08:00A	02/26/96.05:00P	
1.2.4.M026	40	Manufacture Leg 1 Cans 26-30	03/05/96.08:00A	03/11/96.05:00P	
1.2.4.M031	40	Manufacture Leg 1 Cans 31-35	03/19/96.08:00A	03/25/96.05:00P	
1.2.4.M036	40	Manufacture Leg 1 Cans 36-40	04/02/96.08:00A	04/08/96.05:00P	
1.2.4.M041	40	Manufacture Leg 1 Cans 41-45	04/16/96.08:00A	04/22/96.05:00P	
1.2.4.M046	40	Manufacture Leg 1 Cans 46-50	01/02/96.08:00A	01/08/96.05:00P	
1.2.4.M051	40	Manufacture Leg 1 Cans 51-55	01/16/96.08:00A	01/22/96.05:00P	
1.2.4.M056	40	Manufacture Leg 1 Cans 56-60	01/30/96.08:00A	02/05/96.05:00P	
1.2.4.M061	40	Manufacture Leg 1 Cans 61-65	02/13/96.08:00A	02/19/96.05:00P	
1.2.4.M066	40	Manufacture Leg 1 Cans 66-70	02/27/96.08:00A	03/04/96.05:00P	
1.2.4.M071	40	Manufacture Leg 1 Cans 71-75	03/12/96.08:00A	03/18/96.05:00P	
1.2.4.M076	40	Manufacture Leg 1 Cans 76-80	03/26/96.08:00A	04/01/96.05:00P	
1.2.4.M081	40	Manufacture Leg 1 Cans 81-85	04/09/96.08:00A	04/15/96.05:00P	
1.2.4.M086	40	Manufacture Leg 1 Cans 86-90	04/23/96.08:00A	04/29/96.05:00P	
1.2.4.M091	40	Manufacture Leg 1 Cans 91-95	04/30/96.08:00A	05/06/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.4.M096	40	Manufacture Leg 1 Cans 96-98	05/07/96.08:00A	05/13/96.05:00P	
1.2.4.M101	40	Manufacture Leg 2 Cans 1-5	05/14/96.08:00A	05/20/96.05:00P	
1.2.4.M106	40	Manufacture Leg 2 Cans 6-10	05/28/96.08:00A	06/03/96.05:00P	
1.2.4.M111	40	Manufacture Leg 2 Cans 11-15	06/11/96.08:00A	06/17/96.05:00P	
1.2.4.M116	40	Manufacture Leg 2 Cans 16-20	06/25/96.08:00A	07/01/96.05:00P	
1.2.4.M121	40	Manufacture Leg 2 Cans 21-25	07/09/96.08:00A	07/15/96.05:00P	
1.2.4.M126	40	Manufacture Leg 2 Cans 26-30	07/23/96.08:00A	07/29/96.05:00P	
1.2.4.M131	40	Manufacture Leg 2 Cans 31-35	08/06/96.08:00A	08/12/96.05:00P	
1.2.4.M136	40	Manufacture Leg 2 Cans 36-40	08/20/96.08:00A	08/26/96.05:00P	
1.2.4.M141	40	Manufacture Leg 2 Cans 41-45	09/03/96.08:00A	09/09/96.05:00P	
1.2.4.M146	40	Manufacture Leg 2 Cans 46-50	05/21/96.08:00A	05/27/96.05:00P	
1.2.4.M151	40	Manufacture Leg 2 Cans 51-55	06/04/96.08:00A	06/10/96.05:00P	
1.2.4.M156	40	Manufacture Leg 2 Cans 56-60	06/18/96.08:00A	06/24/96.05:00P	
1.2.4.M161	40	Manufacture Leg 2 Cans 61-65	07/02/96.08:00A	07/08/96.05:00P	
1.2.4.M166	40	Manufacture Leg 2 Cans 66-70	07/16/96.08:00A	07/22/96.05:00P	
1.2.4.M171	40	Manufacture Leg 2 Cans 71-75	07/30/96.08:00A	08/05/96.05:00P	
1.2.4.M176	40	Manufacture Leg 2 Cans 76-80	08/13/96.08:00A	08/19/96.05:00P	
1.2.4.M181	40	Manufacture Leg 2 Cans 81-85	08/27/96.08:00A	09/02/96.05:00P	
1.2.4.M186	40	Manufacture Leg 2 Cans 86-90	09/10/96.08:00A	09/16/96.05:00P	
1.2.4.M191	40	Manufacture Leg 2 Cans 91-95	09/17/96.08:00A	09/23/96.05:00P	
1.2.4.M196	40	Manufacture Leg 2 Cans 96-98	09/24/96.08:00A	09/30/96.05:00P	
1.2.4.T000	40	Transport 4 Make Up Pieces to Site	12/26/95.08:00A	01/01/96.05:00P	
1.2.4.T001	40	Transport to Site Leg 1 Cans 01-05	01/02/96.08:00A	01/08/96.05:00P	
1.2.4.T006	40	Transport to Site Leg 1 Cans 6-10	01/16/96.08:00A	01/22/96.05:00P	
1.2.4.T011	40	Transport to Site Leg 1 Cans 11-15	01/30/96.08:00A	02/05/96.05:00P	
1.2.4.T016	40	Transport to Site Leg 1 Cans 16-20	02/13/96.08:00A	02/19/96.05:00P	
1.2.4.T021	40	Transport to Site Leg 1 Cans 21-25	02/27/96.08:00A	03/04/96.05:00P	
1.2.4.T026	40	Transport to Site Leg 1 Cans 26-30	03/12/96.08:00A	03/18/96.05:00P	
1.2.4.T031	40	Transport to Site Leg 1 Cans 31-35	03/26/96.08:00A	04/01/96.05:00P	
1.2.4.T036	40	Transport to Site Leg 1 Cans 36-40	04/09/96.08:00A	04/15/96.05:00P	
1.2.4.T041	40	Transport to Site Leg 1 Cans 41-45	04/23/96.08:00A	04/29/96.05:00P	
1.2.4.T046	40	Transport to Site Leg 1 Cans 46-50	01/09/96.08:00A	01/15/96.05:00P	
1.2.4.T051	40	Transport to Site Leg 1 Cans 51-55	01/23/96.08:00A	01/29/96.05:00P	
1.2.4.T056	40	Transport to Site Leg 1 Cans 56-60	02/06/96.08:00A	02/12/96.05:00P	
1.2.4.T061	40	Transport to Site Leg 1 Cans 61-65	02/20/96.08:00A	02/26/96.05:00P	
1.2.4.T066	40	Transport to Site Leg 1 Cans 66-70	03/05/96.08:00A	03/11/96.05:00P	
1.2.4.T071	40	Transport to Site Leg 1 Cans 71-75	03/19/96.08:00A	03/25/96.05:00P	
1.2.4.T076	40	Transport to Site Leg 1 Cans 76-80	04/02/96.08:00A	04/08/96.05:00P	
1.2.4.T081	40	Transport to Site Leg 1 Cans 81-85	04/16/96.08:00A	04/22/96.05:00P	
1.2.4.T086	40	Transport to Site Leg 1 Cans 86-90	04/30/96.08:00A	05/06/96.05:00P	
1.2.4.T091	40	Transport to Site Leg 1 Cans 91-95	05/07/96.08:00A	05/13/96.05:00P	
1.2.4.T096	40	Transport to Site Leg 1 Cans 96-98	05/14/96.08:00A	05/20/96.05:00P	
1.2.4.T101	40	Transport to Site Leg 2 Cans 01-05	05/21/96.08:00A	05/27/96.05:00P	
1.2.4.T106	40	Transport to Site Leg 2 Cans 06-10	06/04/96.08:00A	06/10/96.05:00P	
1.2.4.T111	40	Transport to Site Leg 2 Cans 11-15	06/18/96.08:00A	06/24/96.05:00P	
1.2.4.T116	40	Transport to Site Leg 2 Cans 16-20	07/02/96.08:00A	07/08/96.05:00P	
1.2.4.T121	40	Transport to Site Leg 2 Cans 21-25	07/16/96.08:00A	07/22/96.05:00P	
1.2.4.T126	40	Transport to Site Leg 2 Cans 26-30	07/30/96.08:00A	08/05/96.05:00P	
1.2.4.T131	40	Transport to Site Leg 2 Cans 31-35	08/13/96.08:00A	08/19/96.05:00P	
1.2.4.T136	40	Transport to Site Leg 2 Cans 36-40	08/27/96.08:00A	09/02/96.05:00P	
1.2.4.T141	40	Transport to Site Leg 2 Cans 41-45	09/10/96.08:00A	09/16/96.05:00P	
1.2.4.T146	40	Transport to Site Leg 2 Cans 46-50	05/28/96.08:00A	06/03/96.05:00P	
1.2.4.T151	40	Transport to Site Leg 2 Cans 51-55	06/11/96.08:00A	06/17/96.05:00P	
1.2.4.T156	40	Transport to Site Leg 2 Cans 56-60	06/25/96.08:00A	07/01/96.05:00P	
1.2.4.T161	40	Transport to Site Leg 2 Cans 61-65	07/09/96.08:00A	07/15/96.05:00P	
1.2.4.T166	40	Transport to Site Leg 2 Cans 66-70	07/23/96.08:00A	07/29/96.05:00P	
1.2.4.T171	40	Transport to Site Leg 2 Cans 71-75	08/06/96.08:00A	08/12/96.05:00P	
1.2.4.T176	40	Transport to Site Leg 2 Cans 76-80	08/20/96.08:00A	08/26/96.05:00P	
1.2.4.T181	40	Transport to Site Leg 2 Cans 81-85	09/03/96.08:00A	09/09/96.05:00P	
1.2.4.T186	40	Transport to Site Leg 2 Cans 86-90	09/17/96.08:00A	09/23/96.05:00P	
1.2.4.T191	40	Transport to Site Leg 2 Cans 91-95	09/24/96.08:00A	09/30/96.05:00P	
1.2.4.T196	40	Transport to Site Leg 2 Cans 91-96	10/01/96.08:00A	10/07/96.05:00P	
5	2805	General	10/02/95.08:00A	02/03/97.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.96.2I	1	Pre-Clean & Black Light 97	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.96.2J	30	Leak Test 97	10/11/96.11:00A	10/12/96.05:00P	
1.2.2.96.2M	1	Move to Post Test Storage 97	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.96.2N	1	Clean, Dry & End Cap 97	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.96.2P	1	Transport to Erection 97	10/25/96.04:00P	10/25/96.05:00P	
1.2.2.96.2Q	1	Set & Align 97	10/28/96.08:00A	10/28/96.09:00A	
1.2.2.96.2R	1	Set Clean Room, Purge & Fit 97	10/28/96.09:00A	10/28/96.10:00A	
1.2.2.96.2S	2	Weld Joint 97	10/28/96.10:00A	10/28/96.12:00P	
1.2.2.96.2T	2	Leak Test Joint 97	10/28/96.01:00P	10/28/96.03:00P	
1.2.2.96.2U	2	Install Tube Supports 97	10/28/96.01:00P	10/28/96.03:00P	
1.2.2.96.2V	2	Remove Equip'mt, Clean & Cap 97	10/28/96.03:00P	10/28/96.05:00P	
1.2.2.96.3A	1	Unload,Rec/Insp Tube 98	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.3B	1	Move to Stiff Fit Up Stat. 98	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.96.3C	1	Set-up & Purge 98	10/11/96.11:00A	10/11/96.12:00P	
1.2.2.96.3D	2	Fit Stiffeners 98	10/11/96.01:00P	10/11/96.03:00P	
1.2.2.96.3E	4	Weld Stiffeners 98	10/11/96.03:00P	10/14/96.10:00A	
1.2.2.96.3F	1	Inspect, Install End Caps 98	10/14/96.10:00A	10/14/96.11:00A	
1.2.2.96.3H	1	Move to Test Area 98	10/14/96.11:00A	10/14/96.12:00P	
1.2.2.96.3I	1	Pre-Clean & Black Light 98	10/14/96.01:00P	10/14/96.02:00P	
1.2.2.96.3J	30	Leak Test 98	10/14/96.02:00P	10/15/96.08:00P	
1.2.2.96.3M	1	Move to Post Test Storage 98	10/16/96.08:00A	10/16/96.09:00A	
1.2.2.96.3N	1	Clean, Dry & End Cap 98	10/16/96.09:00A	10/16/96.10:00A	
1.2.2.96.3P	1	Transport to Erection 98	10/29/96.02:00P	10/29/96.03:00P	
1.2.2.96.3Q	1	Set & Align 98	10/29/96.03:00P	10/29/96.04:00P	
1.2.2.96.3R	1	Set Clean Room, Purge & Fit 98	10/29/96.04:00P	10/29/96.05:00P	
1.2.2.96.3S	2	Weld Joint 98	10/30/96.08:00A	10/30/96.10:00A	
1.2.2.96.3T	2	Leak Test Joint 98	10/30/96.10:00A	10/30/96.12:00P	
1.2.2.96.3U	2	Install Tube Supports 98	10/30/96.10:00A	10/30/96.12:00P	
1.2.2.96.3V	2	Remove Equip'mt, Clean & Cap 98	10/30/96.01:00P	10/30/96.03:00P	
1.2.2.96.B1A	1	Unload,Rec/Insp Tube B96	10/08/96.08:00A	10/08/96.09:00A	
1.2.2.96.B1B	1	Move to Stiff Fit Up Stat. B96	10/08/96.09:00A	10/08/96.10:00A	
1.2.2.96.B1C	1	Set-up & Purge B96	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.B1D	2	Fit Stiffeners B96	10/08/96.11:00A	10/08/96.02:00P	
1.2.2.96.B1E	4	Weld Stiffeners B96	10/08/96.02:00P	10/09/96.09:00A	
1.2.2.96.B1F	1	Move to Exp.Bellows Stat. B96	10/09/96.09:00A	10/09/96.10:00A	
1.2.2.96.B1G	3	Fit,Purge,Weld Exp. Bellows B96	10/09/96.10:00A	10/09/96.02:00P	
1.2.2.96.B1H	1	Inspect, Install End Caps B96	10/09/96.02:00P	10/09/96.03:00P	
1.2.2.96.B1J	1	Move to Test Area B96	10/09/96.03:00P	10/09/96.04:00P	
1.2.2.96.B1K	1	Pre-Clean & Black Light B96	10/09/96.04:00P	10/09/96.05:00P	
1.2.2.96.B1L	30	Leak Test B96	10/09/96.05:00P	10/10/96.11:00P	
1.2.2.96.B1O	1	Move to Post Test Storage B96	10/11/96.08:00A	10/11/96.09:00A	
1.2.2.96.B1P	1	Clean, Dry & End Cap B96	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.96.B1R	1	Transport to Erection B96	10/23/96.10:00A	10/23/96.11:00A	
1.2.2.96.B1S	1	Set & Align B96	10/23/96.11:00A	10/23/96.12:00P	
1.2.2.96.B1T	1	Set Clean Room, Purge & Fit B96	10/23/96.01:00P	10/23/96.02:00P	
1.2.2.96.B1U	2	Weld Joint B96	10/23/96.02:00P	10/23/96.04:00P	
1.2.2.96.B1V	2	Leak Test Joint B96	10/23/96.04:00P	10/24/96.09:00A	
1.2.2.96.B1W	2	Install Tube Supports B96	10/23/96.04:00P	10/24/96.09:00A	
1.2.2.96.B1X	2	Remove Equip'mt, Clean & Cap B96	10/24/96.09:00A	10/24/96.11:00A	
1.2.2.96.B2A	1	Unload,Rec/Insp Tube B97	10/08/96.09:00A	10/08/96.10:00A	
1.2.2.96.B2B	1	Move to Stiff Fit Up Stat. B97	10/09/96.10:00A	10/09/96.11:00A	
1.2.2.96.B2C	1	Set-up & Purge B97	10/09/96.11:00A	10/09/96.12:00P	
1.2.2.96.B2D	2	Fit Stiffeners B97	10/09/96.01:00P	10/09/96.03:00P	
1.2.2.96.B2E	4	Weld Stiffeners B97	10/09/96.03:00P	10/10/96.10:00A	
1.2.2.96.B2F	1	Move to Exp.Bellows Stat. B97	10/10/96.10:00A	10/10/96.11:00A	
1.2.2.96.B2G	3	Fit,Purge,Weld Exp. Bellows B97	10/10/96.11:00A	10/10/96.03:00P	
1.2.2.96.B2H	1	Inspect, Install End Caps B97	10/10/96.03:00P	10/10/96.04:00P	
1.2.2.96.B2J	1	Move to Test Area B97	10/11/96.09:00A	10/11/96.10:00A	
1.2.2.96.B2K	1	Pre-Clean & Black Light B97	10/11/96.10:00A	10/11/96.11:00A	
1.2.2.96.B2L	30	Leak Test B97	10/11/96.11:00A	10/12/96.05:00P	
1.2.2.96.B2O	1	Move to Post Test Storage B97	10/14/96.08:00A	10/14/96.09:00A	
1.2.2.96.B2P	1	Clean, Dry & End Cap B97	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.96.B2R	1	Transport to Erection B97	10/25/96.08:00A	10/25/96.09:00A	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.2.96.B2S	1	Set & Align B97	10/25/96.09:00A	10/25/96.10:00A	
1.2.2.96.B2T	1	Set Clean Room, Purge & Fit B97	10/25/96.10:00A	10/25/96.11:00A	
1.2.2.96.B2U	2	Weld Joint B97	10/25/96.11:00A	10/25/96.02:00P	
1.2.2.96.B2V	2	Leak Test Joint B97	10/25/96.02:00P	10/25/96.04:00P	
1.2.2.96.B2W	2	Install Tube SupportsB97	10/25/96.02:00P	10/25/96.04:00P	
1.2.2.96.B2X	2	Remove Equip'mt, Clean & Cap B97	10/25/96.04:00P	10/28/96.09:00A	
1.2.2.96.B3A	1	Unload,Rec/Insp Tube B98	10/08/96.10:00A	10/08/96.11:00A	
1.2.2.96.B3B	1	Move to Stiff Fit Up Stat. B98	10/10/96.11:00A	10/10/96.12:00P	
1.2.2.96.B3C	1	Set-up & Purge B98	10/10/96.01:00P	10/10/96.02:00P	
1.2.2.96.B3D	2	Fit Stiffeners B98	10/10/96.02:00P	10/10/96.04:00P	
1.2.2.96.B3E	4	Weld Stiffeners B98	10/10/96.04:00P	10/11/96.11:00A	
1.2.2.96.B3F	1	Move to Exp.Bellows Stat. B98	10/11/96.11:00A	10/11/96.12:00P	
1.2.2.96.B3G	3	Fit,Purge,Weld Exp. Bellows 98	10/11/96.01:00P	10/11/96.04:00P	
1.2.2.96.B3H	1	Inspect, Install End Caps B98	10/11/96.04:00P	10/11/96.05:00P	
1.2.2.96.B3J	1	Move to Test Area B98	10/14/96.09:00A	10/14/96.10:00A	
1.2.2.96.B3K	1	Pre-Clean & Black Light B98	10/14/96.10:00A	10/14/96.11:00A	
1.2.2.96.B3L	30	Leak Test B98	10/14/96.11:00A	10/15/96.05:00P	
1.2.2.96.B3O	1	Move to Post Test Storage B98	10/16/96.08:00A	10/16/96.09:00A	
1.2.2.96.B3P	1	Clean, Dry & End Cap B98	10/16/96.09:00A	10/16/96.10:00A	
1.2.2.96.B3R	1	Transport to Erection B98	10/28/96.03:00P	10/28/96.04:00P	
1.2.2.96.B3S	1	Set & Align B98	10/28/96.04:00P	10/28/96.05:00P	
1.2.2.96.B3T	1	Set Clean Room, Purge & Fit B98	10/29/96.08:00A	10/29/96.09:00A	
1.2.2.96.B3U	2	Weld Joint B98	10/29/96.09:00A	10/29/96.11:00A	
1.2.2.96.B3V	2	Leak Test Joint B98	10/29/96.11:00A	10/29/96.02:00P	
1.2.2.96.B3W	2	Install Tube Supports B98	10/29/96.11:00A	10/29/96.02:00P	
1.2.2.96.B3X	2	Remove Equip'mt, Clean & Cap B98	10/29/96.02:00P	10/29/96.04:00P	
1.2.3	1256	Module Inspect & Test	06/27/96.02:00P	02/03/97.02:00P	
1.2.3.01	120	Final Align Leg 1 Mod.1	06/27/96.02:00P	07/18/96.02:00P	
1.2.3.02	120	Final Alignment Leg 1 Mod.2	07/18/96.02:00P	08/08/96.02:00P	
1.2.3.03	480	Leak Test Leg 1 Mod 1	07/18/96.02:00P	08/07/96.02:00P	
1.2.3.04	480	Leak Test Leg 1 Mod 2	08/08/96.02:00P	08/28/96.02:00P	
1.2.3.05	480	Bake Out Leg 1 Mod 1	08/07/96.02:00P	08/27/96.02:00P	
1.2.3.07	120	Final Alignment Leg 2 Mod.1	10/29/96.02:00P	11/19/96.02:00P	
1.2.3.08	120	Final Alignment Leg 2 Mod.2	11/19/96.02:00P	12/10/96.02:00P	
1.2.3.09	480	Leak Test Leg 2 Mod 1	11/19/96.02:00P	12/09/96.02:00P	
1.2.3.10	480	Leak Test Leg 2 Mod 2	12/10/96.02:00P	12/30/96.02:00P	
1.2.3.11	480	Bake Out Leg 2 Mod.1	12/09/96.02:00P	12/29/96.02:00P	
1.2.3.12	360	Final Leak Test Leg 2	01/19/97.02:00P	02/03/97.02:00P	
1.2.3.14	480	Bake Out Leg 1 Mod.2	08/28/96.02:00P	09/17/96.02:00P	
1.2.3.15	480	Bake Out Leg 2 Mod 2	12/30/96.02:00P	01/19/97.02:00P	
1.2.3.6	360	Final Leak Test Leg 1	09/17/96.02:00P	10/02/96.02:00P	
1.2.4	2081	Tube Cans	10/09/95.04:00P	10/07/96.05:00P	
1.2.4.1	400	Order Tube Material	10/10/95.08:00A	12/18/95.05:00P	
1.2.4.M000	40	Manufacture 4 Make Up Pieces	12/19/95.08:00A	12/25/95.05:00P	
1.2.4.M001	40	Manufacture Leg 1 Cans 1-5	12/26/95.08:00A	01/01/96.05:00P	
1.2.4.M006	40	Manufacture Leg 1 Cans 6-10	01/09/96.08:00A	01/15/96.05:00P	
1.2.4.M011	40	Manufacture Leg 1 Cans 11-15	01/23/96.08:00A	01/29/96.05:00P	
1.2.4.M016	40	Manufacture Leg 1 Cans 16-20	02/06/96.08:00A	02/12/96.05:00P	
1.2.4.M021	40	Manufacture Leg 1 Cans 21-25	02/20/96.08:00A	02/26/96.05:00P	
1.2.4.M026	40	Manufacture Leg 1 Cans 26-30	03/05/96.08:00A	03/11/96.05:00P	
1.2.4.M031	40	Manufacture Leg 1 Cans 31-35	03/19/96.08:00A	03/25/96.05:00P	
1.2.4.M036	40	Manufacture Leg 1 Cans 36-40	04/02/96.08:00A	04/08/96.05:00P	
1.2.4.M041	40	Manufacture Leg 1 Cans 41-45	04/16/96.08:00A	04/22/96.05:00P	
1.2.4.M046	40	Manufacture Leg 1 Cans 46-50	01/02/96.08:00A	01/08/96.05:00P	
1.2.4.M051	40	Manufacture Leg 1 Cans 51-55	01/16/96.08:00A	01/22/96.05:00P	
1.2.4.M056	40	Manufacture Leg 1 Cans 56-60	01/30/96.08:00A	02/05/96.05:00P	
1.2.4.M061	40	Manufacture Leg 1 Cans 61-65	02/13/96.08:00A	02/19/96.05:00P	
1.2.4.M066	40	Manufacture Leg 1 Cans 66-70	02/27/96.08:00A	03/04/96.05:00P	
1.2.4.M071	40	Manufacture Leg 1 Cans 71-75	03/12/96.08:00A	03/18/96.05:00P	
1.2.4.M076	40	Manufacture Leg 1 Cans 76-80	03/26/96.08:00A	04/01/96.05:00P	
1.2.4.M081	40	Manufacture Leg 1 Cans 81-85	04/09/96.08:00A	04/15/96.05:00P	
1.2.4.M086	40	Manufacture Leg 1 Cans 86-90	04/23/96.08:00A	04/29/96.05:00P	
1.2.4.M091	40	Manufacture Leg 1 Cans 91-95	04/30/96.08:00A	05/06/96.05:00P	

REPORT: ACTPICK

LIGO BEAM TUBE MODULE CONSTRUCTION

REPORT DATE:30MAR94

PROJECT:LIGOB

TIME NOW:01OCT.12:00A

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.4.M096	40	Manufacture Leg 1 Cans 96-98	05/07/96.08:00A	05/13/96.05:00P	
1.2.4.M101	40	Manufacture Leg 2 Cans 1-5	05/14/96.08:00A	05/20/96.05:00P	
1.2.4.M106	40	Manufacture Leg 2 Cans 6-10	05/28/96.08:00A	06/03/96.05:00P	
1.2.4.M111	40	Manufacture Leg 2 Cans 11-15	06/11/96.08:00A	06/17/96.05:00P	
1.2.4.M116	40	Manufacture Leg 2 Cans 16-20	06/25/96.08:00A	07/01/96.05:00P	
1.2.4.M121	40	Manufacture Leg 2 Cans 21-25	07/09/96.08:00A	07/15/96.05:00P	
1.2.4.M126	40	Manufacture Leg 2 Cans 26-30	07/23/96.08:00A	07/29/96.05:00P	
1.2.4.M131	40	Manufacture Leg 2 Cans 31-35	08/06/96.08:00A	08/12/96.05:00P	
1.2.4.M136	40	Manufacture Leg 2 Cans 36-40	08/20/96.08:00A	08/26/96.05:00P	
1.2.4.M141	40	Manufacture Leg 2 Cans 41-45	09/03/96.08:00A	09/09/96.05:00P	
1.2.4.M146	40	Manufacture Leg 2 Cans 46-50	05/21/96.08:00A	05/27/96.05:00P	
1.2.4.M151	40	Manufacture Leg 2 Cans 51-55	06/04/96.08:00A	06/10/96.05:00P	
1.2.4.M156	40	Manufacture Leg 2 Cans 56-60	06/18/96.08:00A	06/24/96.05:00P	
1.2.4.M161	40	Manufacture Leg 2 Cans 61-65	07/02/96.08:00A	07/08/96.05:00P	
1.2.4.M166	40	Manufacture Leg 2 Cans 66-70	07/16/96.08:00A	07/22/96.05:00P	
1.2.4.M171	40	Manufacture Leg 2 Cans 71-75	07/30/96.08:00A	08/05/96.05:00P	
1.2.4.M176	40	Manufacture Leg 2 Cans 76-80	08/13/96.08:00A	08/19/96.05:00P	
1.2.4.M181	40	Manufacture Leg 2 Cans 81-85	08/27/96.08:00A	09/02/96.05:00P	
1.2.4.M186	40	Manufacture Leg 2 Cans 86-90	09/10/96.08:00A	09/16/96.05:00P	
1.2.4.M191	40	Manufacture Leg 2 Cans 91-95	09/17/96.08:00A	09/23/96.05:00P	
1.2.4.M196	40	Manufacture Leg 2 Cans 96-98	09/24/96.08:00A	09/30/96.05:00P	
1.2.4.T000	40	Transport 4 Make Up Pieces to Site	12/26/95.08:00A	01/01/96.05:00P	
1.2.4.T001	40	Transport to Site Leg 1 Cans 01-05	01/02/96.08:00A	01/08/96.05:00P	
1.2.4.T006	40	Transport to Site Leg 1 Cans 6-10	01/16/96.08:00A	01/22/96.05:00P	
1.2.4.T011	40	Transport to Site Leg 1 Cans 11-15	01/30/96.08:00A	02/05/96.05:00P	
1.2.4.T016	40	Transport to Site Leg 1 Cans 16-20	02/13/96.08:00A	02/19/96.05:00P	
1.2.4.T021	40	Transport to Site Leg 1 Cans 21-25	02/27/96.08:00A	03/04/96.05:00P	
1.2.4.T026	40	Transport to Site Leg 1 Cans 26-30	03/12/96.08:00A	03/18/96.05:00P	
1.2.4.T031	40	Transport to Site Leg 1 Cans 31-35	03/26/96.08:00A	04/01/96.05:00P	
1.2.4.T036	40	Transport to Site Leg 1 Cans 36-40	04/09/96.08:00A	04/15/96.05:00P	
1.2.4.T041	40	Transport to Site Leg 1 Cans 41-45	04/23/96.08:00A	04/29/96.05:00P	
1.2.4.T046	40	Transport to Site Leg 1 Cans 46-50	01/09/96.08:00A	01/15/96.05:00P	
1.2.4.T051	40	Transport to Site Leg 1 Cans 51-55	01/23/96.08:00A	01/29/96.05:00P	
1.2.4.T056	40	Transport to Site Leg 1 Cans 56-60	02/06/96.08:00A	02/12/96.05:00P	
1.2.4.T061	40	Transport to Site Leg 1 Cans 61-65	02/20/96.08:00A	02/26/96.05:00P	
1.2.4.T066	40	Transport to Site Leg 1 Cans 66-70	03/05/96.08:00A	03/11/96.05:00P	
1.2.4.T071	40	Transport to Site Leg 1 Cans 71-75	03/19/96.08:00A	03/25/96.05:00P	
1.2.4.T076	40	Transport to Site Leg 1 Cans 76-80	04/02/96.08:00A	04/08/96.05:00P	
1.2.4.T081	40	Transport to Site Leg 1 Cans 81-85	04/16/96.08:00A	04/22/96.05:00P	
1.2.4.T086	40	Transport to Site Leg 1 Cans 86-90	04/30/96.08:00A	05/06/96.05:00P	
1.2.4.T091	40	Transport to Site Leg 1 Cans 91-95	05/07/96.08:00A	05/13/96.05:00P	
1.2.4.T096	40	Transport to Site Leg 1 Cans 96-98	05/14/96.08:00A	05/20/96.05:00P	
1.2.4.T101	40	Transport to Site Leg 2 Cans 01-05	05/21/96.08:00A	05/27/96.05:00P	
1.2.4.T106	40	Transport to Site Leg 2 Cans 06-10	06/04/96.08:00A	06/10/96.05:00P	
1.2.4.T111	40	Transport to Site Leg 2 Cans 11-15	06/18/96.08:00A	06/24/96.05:00P	
1.2.4.T116	40	Transport to Site Leg 2 Cans 16-20	07/02/96.08:00A	07/08/96.05:00P	
1.2.4.T121	40	Transport to Site Leg 2 Cans 21-25	07/16/96.08:00A	07/22/96.05:00P	
1.2.4.T126	40	Transport to Site Leg 2 Cans 26-30	07/30/96.08:00A	08/05/96.05:00P	
1.2.4.T131	40	Transport to Site Leg 2 Cans 31-35	08/13/96.08:00A	08/19/96.05:00P	
1.2.4.T136	40	Transport to Site Leg 2 Cans 36-40	08/27/96.08:00A	09/02/96.05:00P	
1.2.4.T141	40	Transport to Site Leg 2 Cans 41-45	09/10/96.08:00A	09/16/96.05:00P	
1.2.4.T146	40	Transport to Site Leg 2 Cans 46-50	05/28/96.08:00A	06/03/96.05:00P	
1.2.4.T151	40	Transport to Site Leg 2 Cans 51-55	06/11/96.08:00A	06/17/96.05:00P	
1.2.4.T156	40	Transport to Site Leg 2 Cans 56-60	06/25/96.08:00A	07/01/96.05:00P	
1.2.4.T161	40	Transport to Site Leg 2 Cans 61-65	07/09/96.08:00A	07/15/96.05:00P	
1.2.4.T166	40	Transport to Site Leg 2 Cans 66-70	07/23/96.08:00A	07/29/96.05:00P	
1.2.4.T171	40	Transport to Site Leg 2 Cans 71-75	08/06/96.08:00A	08/12/96.05:00P	
1.2.4.T176	40	Transport to Site Leg 2 Cans 76-80	08/20/96.08:00A	08/26/96.05:00P	
1.2.4.T181	40	Transport to Site Leg 2 Cans 81-85	09/03/96.08:00A	09/09/96.05:00P	
1.2.4.T186	40	Transport to Site Leg 2 Cans 86-90	09/17/96.08:00A	09/23/96.05:00P	
1.2.4.T191	40	Transport to Site Leg 2 Cans 91-95	09/24/96.08:00A	09/30/96.05:00P	
1.2.4.T196	40	Transport to Site Leg 2 Cans 91-96	10/01/96.08:00A	10/07/96.05:00P	
5	2805	General	10/02/95.08:00A	02/03/97.02:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.5.1	8	CBI Notice to Proceed	10/02/95.08:00A	10/02/95.05:00P	
1.2.5.2	0	Project Management	10/02/95.08:00A	09/29/95.05:00P	
1.2.5.3	40	Award Tube Manufacture	10/03/95.08:00A	10/09/95.05:00P	
1.2.5.4	40	Award Expansion Bellows Manufg.	10/03/95.08:00A	10/09/95.05:00P	
1.2.5.5	40	Award Pump Port Manufacture	10/03/95.08:00A	10/09/95.05:00P	
1.2.5.6	40	Award Stiffeners Manufacture	10/03/95.08:00A	10/09/95.05:00P	
1.2.5.7	160	Project Team Mobilize	10/03/95.08:00A	10/30/95.05:00P	
1.2.5.8	40	Award Support Manufacture	10/03/95.08:00A	10/09/95.05:00P	
1.2.5.9	0	Handford Site Complete	02/03/97.02:00P	02/03/97.02:00P	
1.2.6	801	Mobilization	10/02/95.04:00P	02/19/96.05:00P	
1.2.6.01	0	Rec Site ER Dwgs.	10/03/95.08:00A	10/02/95.05:00P	
1.2.6.02	120	RFQ ER Bldg.	10/03/95.08:00A	10/23/95.05:00P	
1.2.6.03	80	Eval.& Award Site Bldg.	10/24/95.08:00A	11/06/95.05:00P	
1.2.6.04	320	Del & Fab. Bldg.	11/07/95.08:00A	01/01/96.05:00P	
1.2.6.05	240	Erect ER Bldgs.	01/09/96.08:00A	02/19/96.05:00P	
1.2.6.06	80	Eval.& Award Site Civil	10/24/95.08:00A	11/06/95.05:00P	
1.2.6.07	120	Mobilize Civil Sub.	11/07/95.08:00A	11/27/95.05:00P	
1.2.6.08	240	Perform Site Civil	11/28/95.08:00A	01/08/96.05:00P	
1.2.6.10	40	Set-Up Clean Equip.	11/30/95.08:00A	12/06/95.05:00P	
1.2.6.11	96	Ship Clean Equip	11/14/95.08:00A	11/29/95.05:00P	
1.2.6.12	240	Procure/Fab Clean Eq.	10/03/95.08:00A	11/13/95.05:00P	
1.2.6.13	200	Procure/Fab Test Hoods	10/10/95.08:00A	11/13/95.05:00P	
1.2.6.14	80	Set-Up Test Equip.	01/09/96.08:00A	01/22/96.05:00P	
1.2.6.15	40	Ship Test Equip	01/02/96.08:00A	01/08/96.05:00P	
1.2.6.16	480	Manufacturing/Deliver Vac.Pumps	10/10/95.08:00A	01/01/96.05:00P	
1.2.6.19	40	Bid & Order Vac Pumps	10/03/95.08:00A	10/09/95.05:00P	
1.2.6.20	160	Fab Vac Shack	10/03/95.08:00A	10/30/95.05:00P	
1.2.6.21	80	Set-Up Vac Shack	01/09/96.08:00A	01/22/96.05:00P	
1.2.6.22	80	Ship Vac Shack	12/26/95.08:00A	01/08/96.05:00P	
1.2.6.24	40	Comm.Clean Room	12/19/95.08:00A	12/25/95.05:00P	
1.2.6.25	80	Ship Clean Room	12/05/95.08:00A	12/18/95.05:00P	
1.2.6.26	320	Fab Clean Room	10/10/95.08:00A	12/04/95.05:00P	
1.2.6.28	40	RFQ/Award Clean Room	10/03/95.08:00A	10/09/95.05:00P	
1.2.6.29	400	Procure/Fab Equip	10/03/95.08:00A	12/11/95.05:00P	
1.2.6.30	120	Set-Up Fab Equip.	01/15/96.09:00A	02/05/96.09:00A	
1.2.6.31	80	Ship Fab Equip	12/12/95.08:00A	12/25/95.05:00P	
1.2.6.32	480	Procure Vac Shack Eq.	10/03/95.08:00A	12/25/95.05:00P	
1.2.6.33	160	Fab Weld Shack	11/07/95.08:00A	12/04/95.05:00P	
1.2.6.34	40	Proc. & Specs. Weld Shack	10/03/95.08:00A	10/09/95.05:00P	
1.2.6.35	160	Procure Weld Shack Eq.	10/10/95.08:00A	11/06/95.05:00P	
1.2.6.36	40	Set-Up Weld Shack	12/19/95.08:00A	12/25/95.05:00P	
1.2.6.37	80	Ship Weld Shack	12/05/95.08:00A	12/18/95.05:00P	
1.2.6.9	120	RFQ Site Civil	10/03/95.08:00A	10/23/95.05:00P	
1.2.7	1640	Expansion Bellows	10/02/95.08:00A	07/12/96.05:00P	
1.2.7.001	400	Mill Order Material & Bake Out	10/10/95.08:00A	12/18/95.05:00P	
1.2.7.002	60	Manuf. Bellows	12/19/95.08:00A	12/28/95.12:00P	
1.2.7.M001	40	Manuf. 1-5	10/02/95.08:00A	10/06/95.05:00P	
1.2.7.M006	40	Manuf. 6-10	10/09/95.08:00A	10/13/95.05:00P	
1.2.7.M011	40	Manuf. 11-15	10/16/95.08:00A	10/20/95.05:00P	
1.2.7.M016	40	Manuf. 16-20	10/23/95.08:00A	10/27/95.05:00P	
1.2.7.M021	40	Manuf. 21-25	10/30/95.08:00A	11/03/95.05:00P	
1.2.7.M026	40	Manuf. 26-30	11/06/95.08:00A	11/10/95.05:00P	
1.2.7.M031	40	Manuf. 31-35	11/13/95.08:00A	11/17/95.05:00P	
1.2.7.M036	40	Manuf. 36-40	11/20/95.08:00A	11/24/95.05:00P	
1.2.7.M041	40	Manuf. 41-45	11/27/95.08:00A	12/01/95.05:00P	
1.2.7.M046	40	Manuf. 46-50	12/04/95.08:00A	12/08/95.05:00P	
1.2.7.M051	40	Manuf. 51-55	12/11/95.08:00A	12/15/95.05:00P	
1.2.7.M056	40	Manuf. 56-60	12/18/95.08:00A	12/22/95.05:00P	
1.2.7.M061	40	Manuf. 61-65	12/25/95.08:00A	12/29/95.05:00P	
1.2.7.M066	40	Manuf. 66-70	01/01/96.08:00A	01/05/96.05:00P	
1.2.7.M071	40	Manuf. 71-75	01/08/96.08:00A	01/12/96.05:00P	
1.2.7.M076	40	Manuf. 76-80	01/15/96.08:00A	01/19/96.05:00P	
1.2.7.M081	40	Manuf. 81-85	01/22/96.08:00A	01/26/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.7.M086	40	Manuf. 86-90	01/29/96.08:00A	02/02/96.05:00P	
1.2.7.M091	40	Manuf. 91-90	02/05/96.08:00A	02/09/96.05:00P	
1.2.7.M096	40	Manuf. 96-100	02/12/96.08:00A	02/16/96.05:00P	
1.2.7.M101	40	Manuf. 1-5	02/19/96.08:00A	02/23/96.05:00P	
1.2.7.M106	40	Manuf. 6-10	02/26/96.08:00A	03/01/96.05:00P	
1.2.7.M111	40	Manuf. 11-15	03/04/96.08:00A	03/08/96.05:00P	
1.2.7.M116	40	Manuf. 16-20	03/11/96.08:00A	03/15/96.05:00P	
1.2.7.M121	40	Manuf. 21-25	03/18/96.08:00A	03/22/96.05:00P	
1.2.7.M126	40	Manuf. 26-30	03/25/96.08:00A	03/29/96.05:00P	
1.2.7.M131	40	Manuf. 31-35	04/01/96.08:00A	04/05/96.05:00P	
1.2.7.M136	40	Manuf. 36-40	04/08/96.08:00A	04/12/96.05:00P	
1.2.7.M141	40	Manuf. 41-45	04/15/96.08:00A	04/19/96.05:00P	
1.2.7.M146	40	Manuf. 46-50	04/22/96.08:00A	04/26/96.05:00P	
1.2.7.M151	40	Manuf. 51-55	04/29/96.08:00A	05/03/96.05:00P	
1.2.7.M156	40	Manuf. 56-60	05/06/96.08:00A	05/10/96.05:00P	
1.2.7.M161	40	Manuf. 61-65	05/13/96.08:00A	05/17/96.05:00P	
1.2.7.M166	40	Manuf. 66-70	05/20/96.08:00A	05/24/96.05:00P	
1.2.7.M171	40	Manuf. 71-75	05/27/96.08:00A	05/31/96.05:00P	
1.2.7.M176	40	Manuf. 76-80	06/03/96.08:00A	06/07/96.05:00P	
1.2.7.M181	40	Manuf. 81-85	06/10/96.08:00A	06/14/96.05:00P	
1.2.7.M186	40	Manuf. 86-90	06/17/96.08:00A	06/21/96.05:00P	
1.2.7.M191	40	Manuf. 91-95	06/24/96.08:00A	06/28/96.05:00P	
1.2.7.M196	40	Manuf. 96-100	07/01/96.08:00A	07/05/96.05:00P	
1.2.7.T001	40	Ship to Site 1-5	10/09/95.08:00A	10/13/95.05:00P	
1.2.7.T006	40	Ship to Site 6-10	10/16/95.08:00A	10/20/95.05:00P	
1.2.7.T011	40	Ship to Site 11-15	10/23/95.08:00A	10/27/95.05:00P	
1.2.7.T016	40	Ship to Site 16-20	10/30/95.08:00A	11/03/95.05:00P	
1.2.7.T021	40	Ship to Site 21-25	11/06/95.08:00A	11/10/95.05:00P	
1.2.7.T026	40	Ship to Site 26-30	11/13/95.08:00A	11/17/95.05:00P	
1.2.7.T031	40	Ship to Site 31-35	11/20/95.08:00A	11/24/95.05:00P	
1.2.7.T036	40	Ship to Site 36-40	11/27/95.08:00A	12/01/95.05:00P	
1.2.7.T041	40	Ship to Site 41-45	12/04/95.08:00A	12/08/95.05:00P	
1.2.7.T046	40	Ship to Site 46-50	12/11/95.08:00A	12/15/95.05:00P	
1.2.7.T051	40	Ship to Site 51-55	12/18/95.08:00A	12/22/95.05:00P	
1.2.7.T056	40	Ship to Site 56-60	12/25/95.08:00A	12/29/95.05:00P	
1.2.7.T061	40	Ship to Site 61-65	01/01/96.08:00A	01/05/96.05:00P	
1.2.7.T066	40	Ship to Site 66-70	01/08/96.08:00A	01/12/96.05:00P	
1.2.7.T071	40	Ship to Site 71-75	01/15/96.08:00A	01/19/96.05:00P	
1.2.7.T076	40	Ship to Site 76-80	01/22/96.08:00A	01/26/96.05:00P	
1.2.7.T081	40	Ship to Site 81-85	01/29/96.08:00A	02/02/96.05:00P	
1.2.7.T086	40	Ship to Site 86-90	02/05/96.08:00A	02/09/96.05:00P	
1.2.7.T091	40	Ship to Site 91-95	02/12/96.08:00A	02/16/96.05:00P	
1.2.7.T096	40	Ship to Site 96-100	02/19/96.08:00A	02/23/96.05:00P	
1.2.7.T101	40	Ship to Site 1-5	02/26/96.08:00A	03/01/96.05:00P	
1.2.7.T106	40	Ship to Site 6-10	03/04/96.08:00A	03/08/96.05:00P	
1.2.7.T111	40	Ship to Site 11-15	03/11/96.08:00A	03/15/96.05:00P	
1.2.7.T116	40	Ship to Site 16-20	03/18/96.08:00A	03/22/96.05:00P	
1.2.7.T121	40	Ship to Site 21-25	03/25/96.08:00A	03/29/96.05:00P	
1.2.7.T126	40	Ship to Site 26-30	04/01/96.08:00A	04/05/96.05:00P	
1.2.7.T131	40	Ship to Site 31-35	04/08/96.08:00A	04/12/96.05:00P	
1.2.7.T136	40	Ship to Site 36-40	04/15/96.08:00A	04/19/96.05:00P	
1.2.7.T141	40	Ship to Site 41-45	04/22/96.08:00A	04/26/96.05:00P	
1.2.7.T146	40	Ship to Site 46-50	04/29/96.08:00A	05/03/96.05:00P	
1.2.7.T151	40	Ship to Site 51-55	05/06/96.08:00A	05/10/96.05:00P	
1.2.7.T156	40	Ship to Site 56-60	05/13/96.08:00A	05/17/96.05:00P	
1.2.7.T161	40	Ship to Site 61-65	05/20/96.08:00A	05/24/96.05:00P	
1.2.7.T166	40	Ship to Site 66-70	05/27/96.08:00A	05/31/96.05:00P	
1.2.7.T171	40	Ship to Site 71-75	06/03/96.08:00A	06/07/96.05:00P	
1.2.7.T176	40	Ship to Site 76-80	06/10/96.08:00A	06/14/96.05:00P	
1.2.7.T181	40	Ship to Site 81-85	06/17/96.08:00A	06/21/96.05:00P	
1.2.7.T186	40	Ship to Site 86-90	06/24/96.08:00A	06/28/96.05:00P	
1.2.7.T191	40	Ship to Site 91-95	07/01/96.08:00A	07/05/96.05:00P	
1.2.7.T196	40	Ship to Site 96-100	07/08/96.08:00A	07/12/96.05:00P	

Activity ID	Duration	Description	Early Start	Early Finish	Comments
1.2.8	841	Pump Ports	10/09/95.04:00P	03/04/96.05:00P	
1.2.8.1	400	Mill Order Pump Port Material	10/10/95.08:00A	12/18/95.05:00P	
1.2.8.2	400	Manuf. Pump Ports	12/19/95.08:00A	02/26/96.05:00P	
1.2.8.3	40	Ship P. Ports to Site	02/27/96.08:00A	03/04/96.05:00P	
1.2.9	721	Stiffeners & Supports	10/09/95.04:00P	02/12/96.05:00P	
1.2.9.1	400	Mill Order Material	10/10/95.08:00A	12/18/95.05:00P	
1.2.9.2	280	Manuf. Stiffeners	12/19/95.08:00A	02/05/96.05:00P	
1.2.9.3	40	Ship to Site	02/06/96.08:00A	02/12/96.05:00P	
1.2.9.4	400	Mill Order Support Mat'l	10/10/95.08:00A	12/18/95.05:00P	
1.2.9.5	160	Manufacture Supports	12/19/95.08:00A	01/15/96.05:00P	
1.2.9.6	40	Ship Supports to Site	01/16/96.08:00A	01/22/96.05:00P	

**PROPOSAL
FOR THE
USE OF
DIFFERENTIAL
GLOBAL POSITIONING METHODS
FOR
THE LIGO PROJECT**

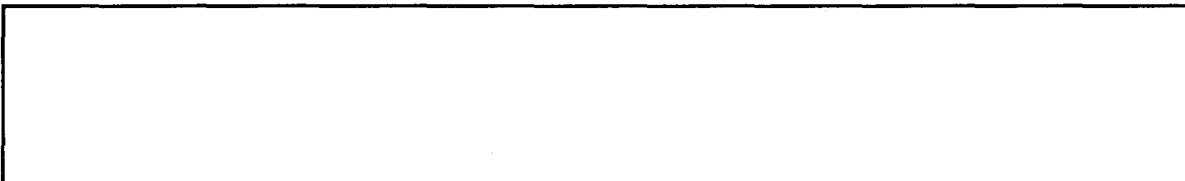
Summary-

CBI proposes the use of Global Positioning System(GPS) technology for construction and maintenance of the LIGO facilities. Specifically, the "Differential" method of GPS(DGPS) positioning will provide accuracies within the LIGO requirements. Commercially available equipment will be used for all aspects facility construction and maintenance including civil, structural and beam tube positioning activities. Data collection and manipulation will be performed with total station¹ software creating a three dimensional rectangular coordinate system for each site. These coordinates will be referenced to the GPS ellipsoidal grid. Grid coordinate identification provides millimeter accuracy when determining relationships between LIGO facilities.

Facility and equipment design will allow for maximum use of GPS technology in an effort to reduce error inherent with radio transmission and reception of GPS signals. Designs for monument placement, antenna elevations, reduced horizon aspect² of structures, etc. are requirements for DGPS use. This proposal provides solutions for meeting these requirements.

Outline-

This is a listing of planned methods for achieving the required LIGO accuracies while making maximum use of GPS technology. The following is presented in increasing detail from the first paragraph of

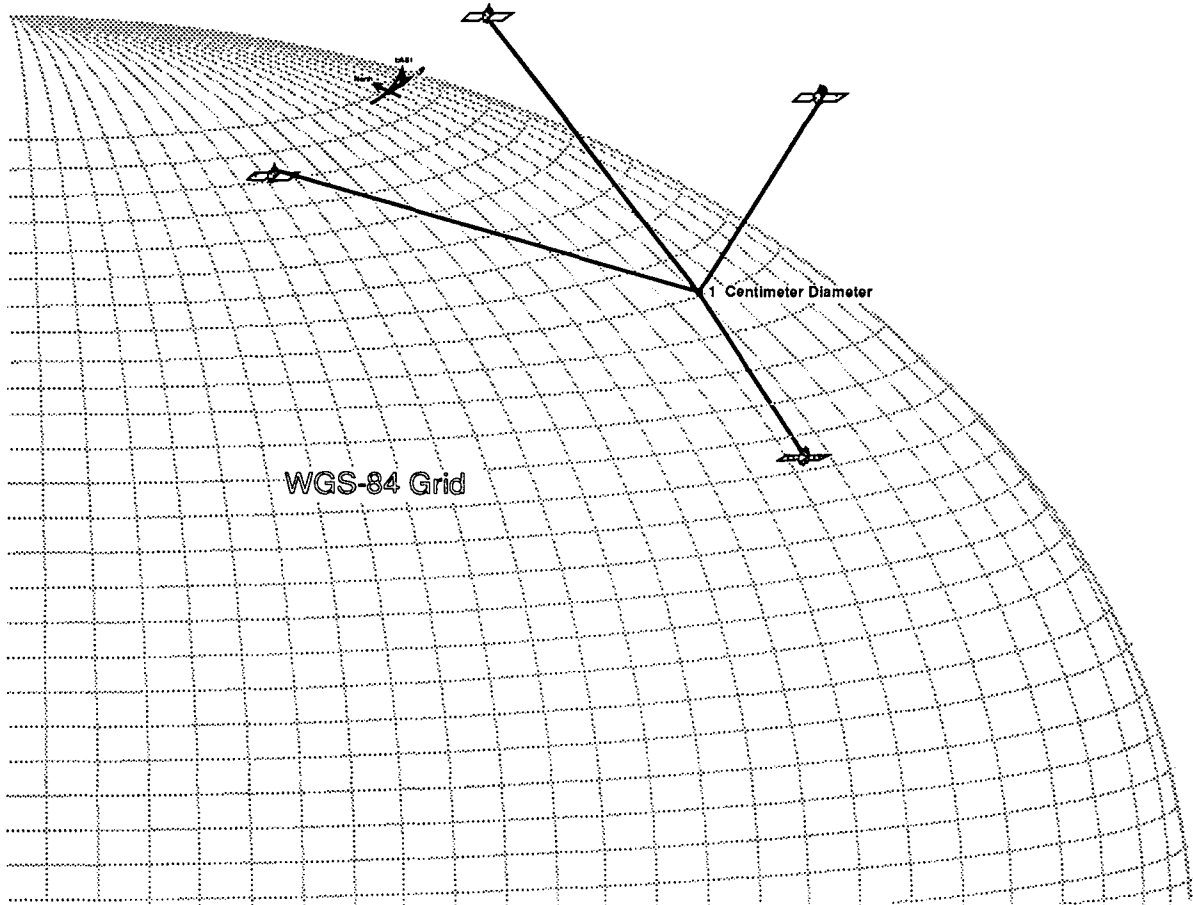


¹ Total Station is a method of data collection and processing providing coordinate systems and measured points in three dimensions. This software is available from the GPS equipment manufacturer..

² GPS antenna require a minimum of +15° horizon view for maximum satellite coverage.

PROPOSAL

For The Use Of Differential Global Positioning Methods
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each subject. Details presented in this proposal are conceptual in nature. Specific detail are included in Appendix A.

- 0.0 General GPS Information
- 1.0 Initial Site Survey and Listing of the GPS Scope of Work
- 2.0 Monument Design and Arrangement
- 3.0 DGPS Equipment Configurations
- 4.0 Beam Tube Alignment and Access Designs
- 5.0 Qualification of RTK Equipment

0.0 General GPS Information

The Global Positioning System(GPS) is a constellation of 24 satellites orbiting the earth. Each of these satellites is equipped with an atomic

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clock and has a precisely know orbit. Broadcasts from each satellite provide time and position information via radio waves. Commercially available GPS equipment will range from on-board ship computers to hand held receivers. This equipment can receive multiple satellite broadcasts and determine locations anywhere on earth within a few meters. Today, these systems are being used in many industries and through out the world. Parcel post companies can monitor their vehicles and locate which side of the street a truck is parked. Already, auto makers are developing monitoring systems that will pin-point a driver's position to a map reference. And in the near future, farmers will be able to plot out their fields and GPS controllers will drive their tractors to within centimeter accuracies.

Classical GPS-

The Global Positioning System "GPS" method uses four or more satellite broadcasts to determine position. A process similar to triangulation is used to locate a 'point of interest' position. The GPS equipment receives signals from the satellites and calculates position based on the known orbits and the distance from each satellite. This distance is determined by receiving a satellite signal that is coded with the time it left the satellite. The receiver divides this time by the speed of light and determines its distance from the point of interest. However, the speed of light is only constant in a vacuum and the distance the radio wave travels is filled with unknowns. Therefore, this form of autonomous³ GPS is restrained in its accuracies due to errors in satellite receptions. These errors consist of atmospheric conditions⁴, multipath errors (bouncing off obstacles like trees or buildings), and scrambling, known as "Selected Availability" error (the Department of Defence induces error to dilute accuracies for hostile forces). Luckily, the armed forces have allowed the commercial navigation industry to pursue another technique known as *Differential* GPS(DGPS).

³ Autonomous meaning a single receiver moving around the earth and within the collective error, monitoring its location.

⁴ Atmosphere is used to include the ionosphere and troposphere.

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Differential GPS Methods-

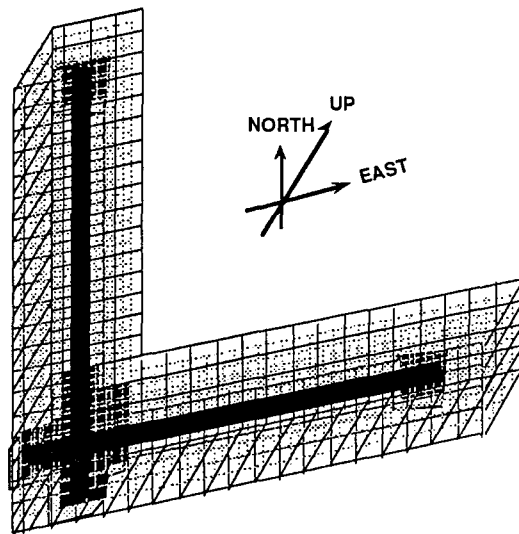
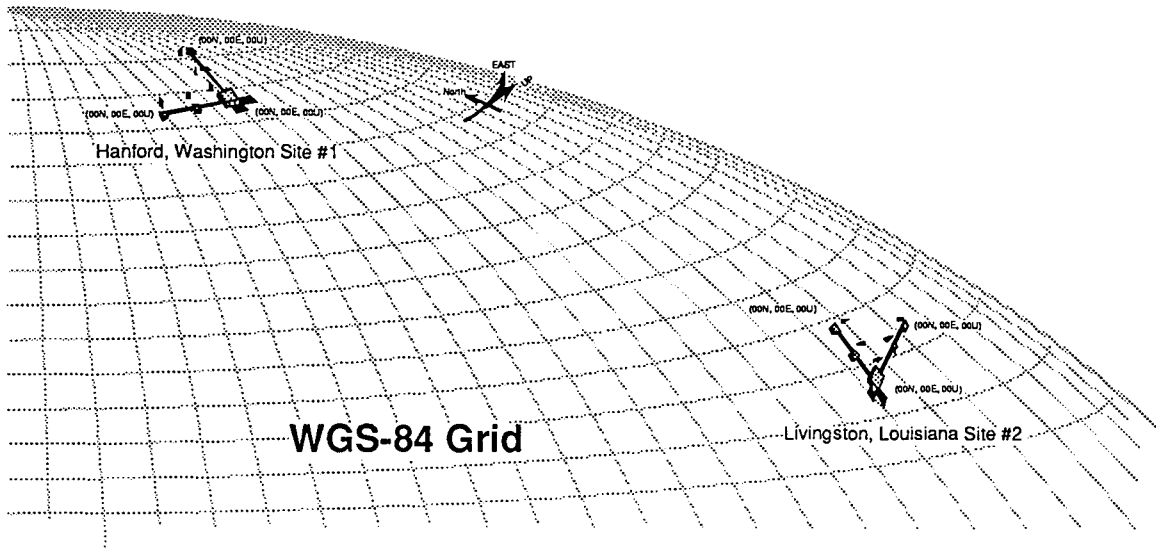
The few meters or even ten or twelve centimeters are not accurate enough for the proposed LIGO use. CBI proposes the use of the commercial method for DGPS for the LIGO project.

Differential GPS(DGPS) is a method of determining satellite transmission error with the result of increasing accuracies by magnitudes. This is accomplished by using two or more receivers that work together in a relatively small area of one-hundred kilometers or less. The satellites are high enough that the signals pass thru the same slice of atmosphere and therefore the errors are the same to each receiver. The first receiver is called the "Reference Receiver" and is located on a *known point*. The Reference Receiver monitors satellite signals in reverse. By knowing its position, and the satellite's position, the receiver calculates the distance and corrects for timing. These corrections are saved and processed later with the second receiver's data. These errors are constantly changing, so their corrections must be monitored continuously. The second receiver is known as the "Roving Receiver." As its name implies, it is moved over the area and positioned at points of interest. Data is collected from satellite transmissions and stored. Rover receiver data points are then post-processed with the reference receiver's correction data and millimeter accuracies are achieved within a few hours. This type of DGPS surveying is known as the "Static" method. This method of GPS, when used with "dual frequency" receivers achieves the greatest accuracies available in GPS technology. This Dual Frequency method will be used for determining monument locations, establishing the reference coordinate systems, and defining their locations to the WGS-84 ellipsoidal grid.

Real time data processing is required for GPS technology to become useful for construction and maintenance activities. This is possible when the reference receiver sends data over radio signals directly to the roving receivers. The roving receivers process corrections and achieve centimeter accuracies within 5 to 15 second time periods. This is known as the Real Time "Kinematic"(RTK) method and at this time, available from only one known manufacturer. The RTK trade off in accuracies do not compromise the LIGO requirements and its proposed use for daily construction and future maintenance will increase the efficiencies of layout and positioning activities at the LIGO facilities.

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For The Use Of Differential Global Positioning Methods
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**LIGO TYPICAL
COORDIANTE SYSTE!**

1.0 Initial Site Survey & GPS Scope of Work

GPS technology will be incorporated in all layout and surveying activities associated with the LIGO construction. The following is a general list of these planned activities.

Initial Site Survey-

Each site will receive a high accuracy DGPS "Static" survey that will determine monument positions within millimeter accuracies. This

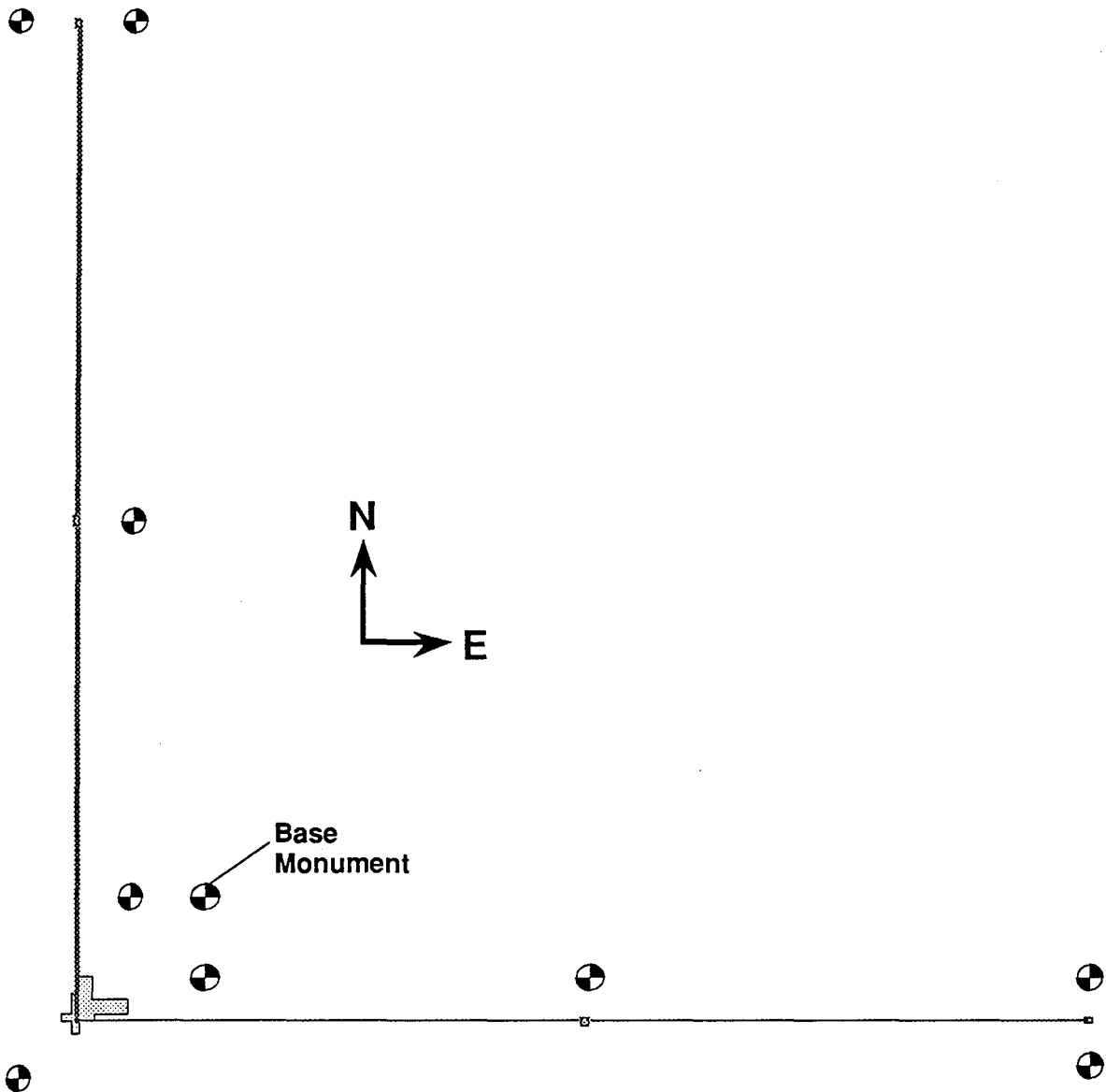
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survey will define a three dimensional rectangular coordinate system(North, East, Up). This coordinate system will be used for construction and maintenance activities at each LIGO facility. Periodic static surveys will be performed during the life of each facility to determine monument displacement and provide adjustments for the coordinate system.



The defined center of the coordinate system will be the point of intersection of the beam tubes at the corner station. Elevation will be set based on beam tube centerline at the four-way valve and references will be determined for each monument. An example of reference

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coordinates when based on a "theoretical" North/East site rotation is noted below:

Description	North	East	Up
Beam Tube Intersection	0.000m	0.000m	0.000m
Ref Monument "Base"	+50.000m	+50.000m	-1.000m
Ref Monument "A North"	+50.000m	+10.000m	-1.000m
Ref Monument "B North"	+2,000.000m	+10.000m	-1.000m
Ref Monument "C North"	+4,000.000m	+10.000m	-1.000m
Ref Monument "A East"	+10.000m	+50.000m	-1.000m
Ref Monument "B East"	+10.000m	+2,000.000m	-1.000m
Ref Monument "C East"	+10.000m	+4,000.000m	-1.000m
Ref Monument "S-W"	-25.000m	-25.000m	-1.000m
Ref Monument "N-W"	+4,000.000m	-10.000m	-1.000m
Ref Monument "S-E"	-10.000m	+4,000.000m	-1.000m

Each coordinate system will be referenced to the ellipsoidal grid known as the WGS-84⁵. This allows direct reference of one site coordinate system to another for determining beam tube relationships. The relationship to the WGS-84 will also reference legal monuments in the local area and provide established legal boundaries for the property.

A secondary monument system defining these boundaries will be set after the initial Static survey. These boundary monuments will meet local requirements for permanent markers and be installed using the RTK surveying method.

Listing of GPS Work Scope-

The GPS method of layout and alignment will be incorporated in job functions associated with construction activities including, but not limited to the following list. Real Time DGPS equipment and techniques will be the primary method of measurement unless otherwise noted.

- Initial Site Surveys for Construction
- Initial Layout and Installation of Monuments
- Layout and Monitoring of Civil Construction Activities
- Layout of Field and Shops Facilities
- Layout of Foundations and installation of form work
- Layout of Beam Tube Centerlines and Supports
- Alignment of Equipment, ie., Roads, Rail systems, etc.

⁵ Grid defined by the National Geodetic Survey and used for GPS reference.

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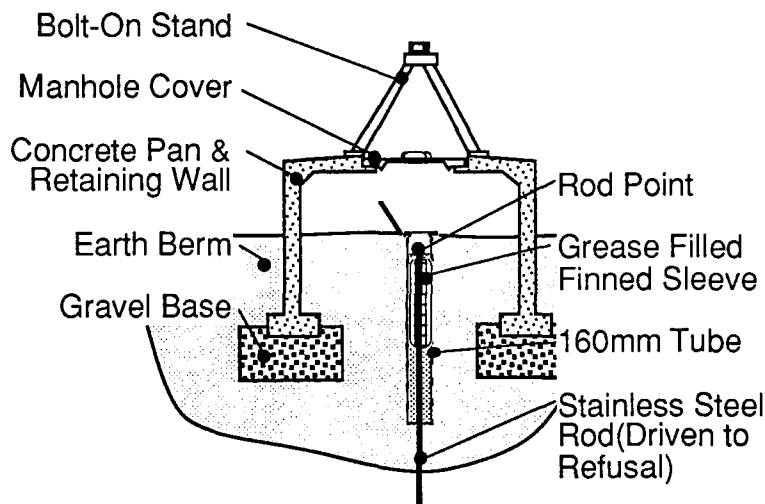
The LIGO Project

- Layout and Construction of Structures and buildings
- Initial and Final Road Work
- Initial and Final Alignment of Beam Tubes

These items are a general planned use for RTK-GPS systems. The use of these methods will increase efficiencies over traditional surveying techniques and provide superior accuracy.

2.0 Monument Design and Arrangement

CBI proposes a monument system that will meet the long term requirements of each LIGO facility. The success of Differential GPS depends solely on firm, fixed reference points for the location of the Reference Receiver. Permanent Reference GPS monuments will consist of ten(10) rod marker systems with a protective earthen berm and foundation installed around the marker for tripod and/or fixture positioning.



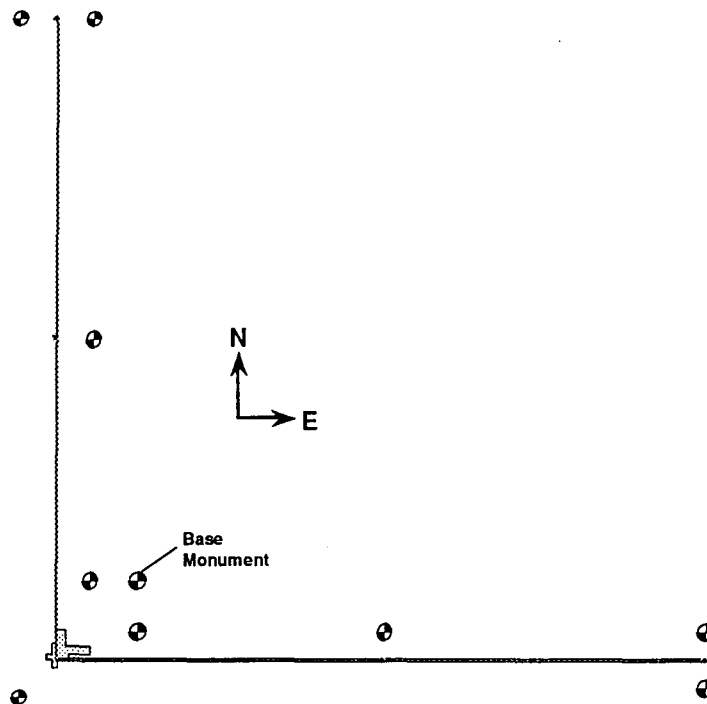
The rod marker system is provided by Berntsen International, Inc. of Madison, Wisconsin. These monuments are designed specifically for each LIGO application and will be subjected to testing during the DGPS qualification. Each monument location includes stainless steel rods with floating sleeves to compensate for frost heave and ground level shifts. Each sleeve includes a grease filled rod housing, finned sleeve and the rod point. This system is located in a 160 millimeter diameter, sand filled tube. Tests have been conducted by Geodetic Canada, the City of Winnipeg, Manitoba Canada and the National Geodetic Survey, Silver Springs, Maryland. These tests have concluded

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that the Berntsen Top Security Rod has sub-millimeter horizontal and vertical movement over test periods of five years and are measured to a 95% confidence level.

The monument foundation consists of a earthen berm, concrete pad and retaining wall. Drainage is provided away from the marker access area and a manhole and cover are provided for access to the marker system. An adjustable, ridged fixture will be bolted to the foundation pad for mounting the Reference Receiver with an all-weather cover attachment detail. The fixture will be removable and can be substitute with a standard surveying tripod when required.



Proposed monument arrangement requires positioning seven(7) monuments "within" the apex of the LIGO Beam Tube legs and three(3) monuments "outside" the apex. This arrangement allows for adequate radio reception between the Reference Receiver and the Roving Receivers with a minimum use of radio repeaters. The "Base Monument"(Reference Receiver Point) will be located beyond the LIGO *Phase C* expansion area at each facility. Expansion beyond the Corner Station Building will require movement of the reference Point. A static, dual frequency survey will be necessary to confirm any monument relocations or additions. Additional static, dual frequency geodetical surveys will be required in times of seismic or other ground disturbances and at periodic intervals during the facility life span.

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Based on the current monument reports, CBI suggests that a 5 year period be considered.

3.0 DGPS Equipment Configurations

Differential Global Positioning is an advancing technology that improves daily in what will soon be a five billion dollar industry. There appears to be three major suppliers of DGPS equipment suitable for Static Geodetical surveying equipment. These are Ashtech, Leica and Trimble Navigation. CBI proposes that the DGPS surveying contractor provide specifications on equipment to be used during the initial survey along with the proposed reporting format.

Static, Dual Frequency DGPS Equipment-

Initial Geodetical survey equipment will be comprised of dual frequency DGPS receivers and will utilize static techniques. This equipment will be supplied by the Surveying Contractor and approved by CALTECH prior to its use. Post-processing of data and error corrections will be required, and the Surveying Contractor will provide this equipment and service per a pre-approved format.

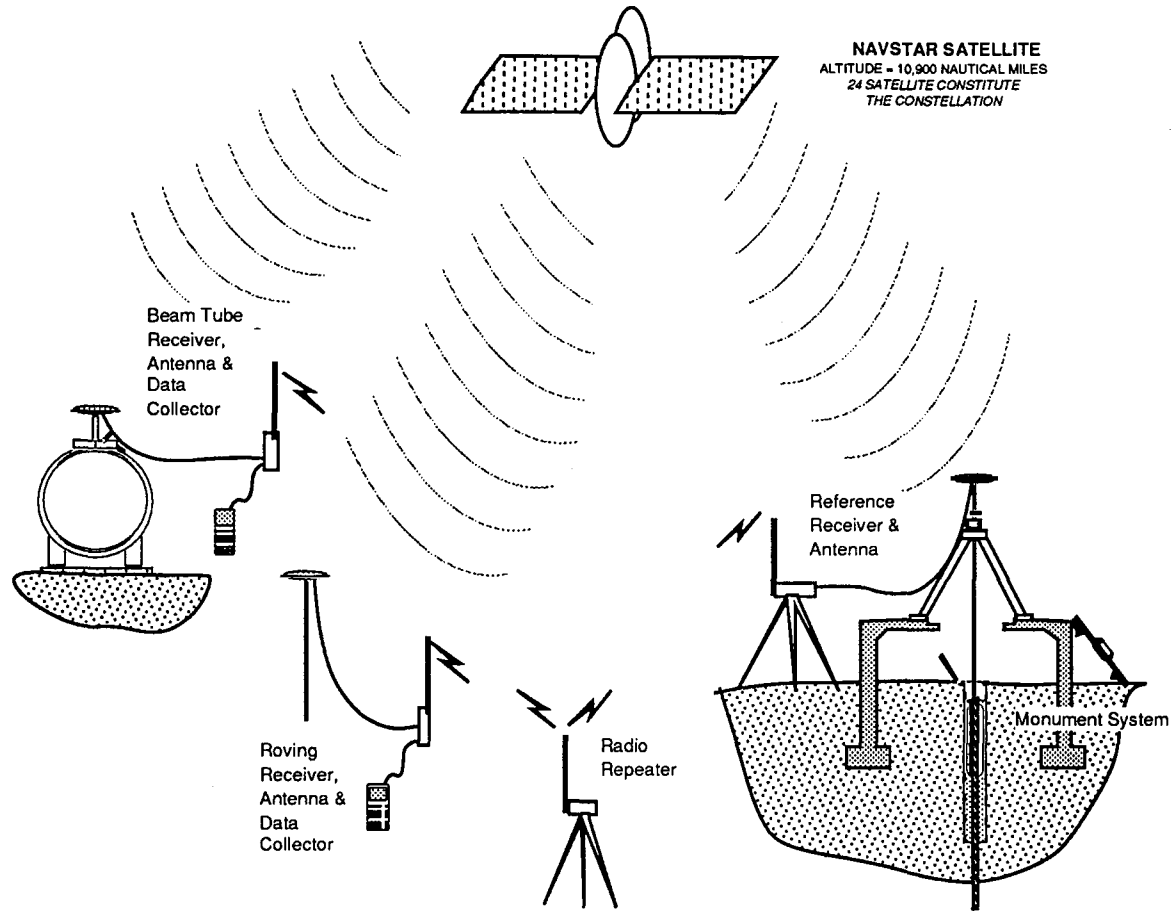
Real Time Kinematic DGPS Equipment-

CBI's proposed application of DGPS using real time kinematic methods requires a product with only one current manufacturer. This product is manufactured by Trimble Navigation of Sunnyvale, California, with product name: Site Surveyor II. This system has been demonstrated to perform within the required LIGO accuracies and provides useful programming features. The reason for the lack of current competitors seems to be the development of software within the data collector. The other major manufactures are developing similar systems, however introduction to the commercial market for these products is not yet scheduled.

CBI proposes to supply the Trimble Navigation Real Time Kinematic(RTK) Surveying equipment for the LIGO project. The RTK package will be pre-qualified by CBI and approved by CALTECH. This equipment will consist of receivers, antennas, radio repeaters, data collectors, computers, and computer software required to make full use of the GPS advantages.

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DGPS Equipment and Set-Up Configuration-

The basic package for DGPS surveys include the following equipment:

Qty	Description	Accessories
1	Reference Receiver	Stand or Mounting Bracket
1	Radio Antenna	Cabling as Required
1	Initializing Plate	Compass
1	Dome Antenna	Tripod & Optical Plummet
1+	Roving Receivers	Stands and/or Carriers
1	Radio Antenna	Cabling as Required
1	Dome Antenna	Cabling and Reference Pole
1	Roving Data Collector	Cabling to Receiver
Lot	Jigs and Fixtures for Adapting Dome Antenna	

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- 1+ Radio Repeaters Antenna and Stand
- 1 Software Package for Total Station and Mapping Programs
- 1 486 or Equal Computer with MS Windows® Software.
- 1 Printer, plotter, CD Rom and/or Disk Drive.

Civil, erection, and structural drawings shall include reference dimensions to the three-axis coordinates established during the initial static survey. These points will be located using the RTK feature of point locating so that layout and as-built conditions can be easily determined and documented.

CBI and Manufacturer trained technicians will use the equipment for civil and mechanical surveying and facility installations. Initial site layout and in-process excavation surveying will be performed by CBI. The RTK system will be able to determine construction progress in one-fourth the time of conventional optical surveying methods and provide immediate scaled drawings for accurate planning and payment schedule needs.

Structural/mechanical surveying needs will be provided by CBI using RTK equipment for layout, forming and as-built documentation. Beam tube installation and final alignment will be provided by CBI using the RTK equipment. Provisions for structures, valves, pumps, and similar obstructions that effect DGPS accuracies will be included in each area design.

4.0 Beam Tube Alignment and Access Design-

The positioning of beam tube supports is considered a "millwright" trade with the appropriate procedures for alignment including level, soft foot, and positioning. The application of the GPS technology to this type of discipline is a new concept at CBI and will be for any other contractor in this field. Because of the newness of this technology, CBI will remain conservative to a point of providing procedures for existing optical/laser alignment technology. These procedures are in place and will become a permanent part of the LIGO Operation and Maintenance Manual. Their need is not expected and the promise of GPS and its advancing technology will continue to decrease the possibility for their need.

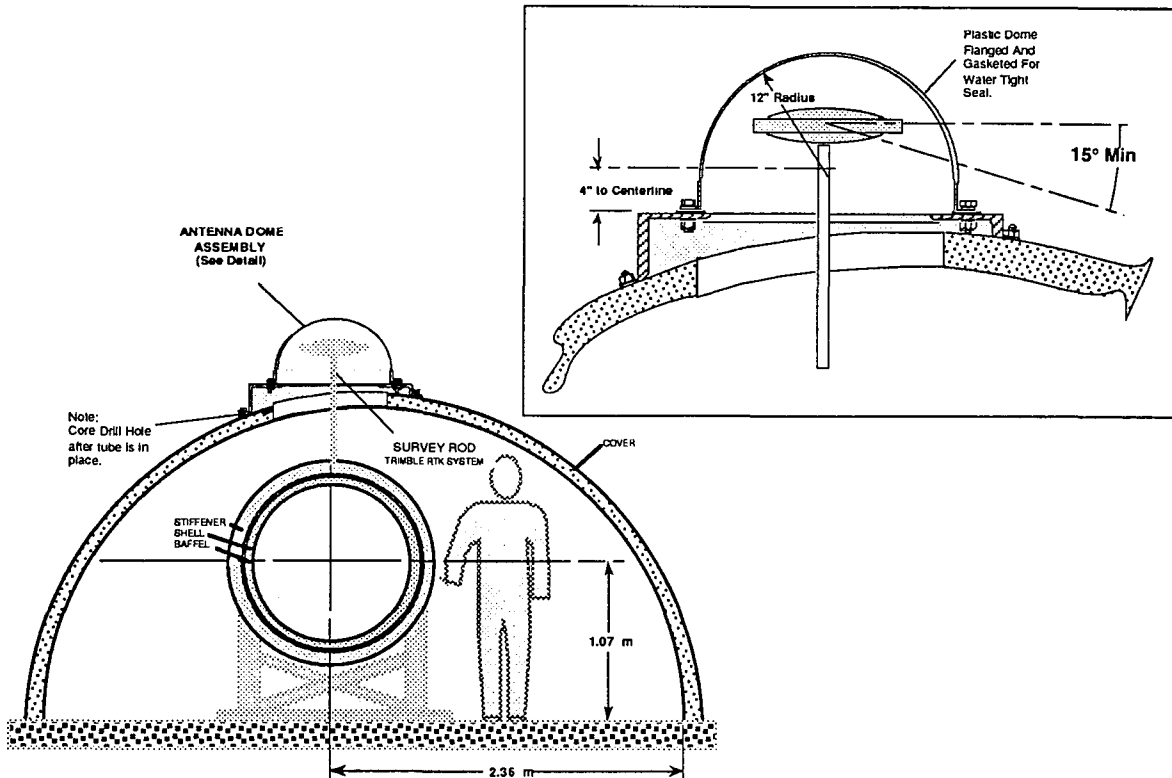
Special consideration is given to the center locating system at each beam tube support. Beam tube covers block GPS radio signals to the antenna, therefore a method of extending the antenna above the cover

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is required. CBI proposes a dome fixture. This dome will be fabricated from a plastic material that will not block radio waves and still provide a weather resistant cover for the lifetime of the facility. Acceptable materials for the dome are being studied and include cross-link polyethylene, co-extruded ABS® with a UV resistant coating, Lexan®, and acrylic. Each has good radio wave characteristics but polyethylene materials will best meet the 20 year facility life span requirements. The domes will be mounted to the concrete covers with fasteners and weather tight gaskets.

Beam Tube center reference points will be permanently marked on the support stiffener. This will be done with a centering fixture and verified by dimensions taken after each tube is welded into position. These as-built tube diameters will be keyed into the GPS software before alignment activities to plot DGPS data to the actual beam tube centerline. This allows for true aperture positioning in respect with tube best centers at the end connections. Axial views of the beam tube centerlines will identify high and low areas and generate a suggested alignment plan to position supports. This data will be valuable when

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ground or foundation shifts require centerline adjustments deviating from the original reference monument plan.

The antenna will be positioned to the beam tube support stiffener by means of a clamp-on fixture. This fixture centers to the permanent reference punch mark and has an adapter for the Rover RTK dome antenna. Also included is a level to verify rotation of the tube and can be used for re-adjustment.

Access to center points in buildings such as corner, mid and end stations are necessary for beam tube and equipment positioning after the buildings are erected. Two methods of accessing beam tube and related equipment are transfer points marked on steel plates embedded into the foundation beyond structures and overhead points accessed thru roof openings.

Transfer points consist of one piece steel plates mounted to a foundation reference and cast in place to be flush with the foundation pad. This plate will consist of a 10 centimeter width carbon steel bar of two centimeter thickness. The bars will be an average of ten meters and have a reference point in the form of a five-eighths by eleven course thread. This threaded hole will be measured after foundation installation and before building construction. The CBI technician will use a tripod with an optical plummet(tribrac). This tribrac centers and levels to the target and positions the RTK antenna for an accurate reading. Long shots will be adjusted for earth curvature automatically by using the data logging features

Access through the roof shall be required for beam tube and equipment in the corner stations. Roof openings will be curb type, weather tight doors that are lockable from either side. These openings shall be located above beam tube supports and must be accessible from the roof. The CBI technician will use a tripod with an optical plummet(tribrac). This tribrac centers and levels to the target and positions the RTK antenna for an accurate reading. Vertical shots will be adjusted for earth curvature automatically by using the data logging features provided with the RTK data logger.

5.0 Qualification of RTK Equipment

The current accuracies published by the manufacturer run on the edge of LIGO needs in respect to Real Time methods. CBI will qualify the RTK system and if the accuracies are found beyond the requirements, then a Static, post-processing method will be used.

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CBI has developed a procedure for qualification for the Site Surveyor II equipment. The reason for this activity is to determine repeatability and techniques in which an expected accuracy can be gained. The positioning of beam tubes in a three dimensional area is an application of "Millwright" techniques to the DGPS technology. A great deal of information regarding the actual usability of this equipment will allow for accurate estimates of manpower and equipment needed for the installation and maintenance of the LIGO Beam Tube Centerlines.

Trimble Navigation will provide equipment and technicians in order to develop this "new" application of GPS. CBI proposes to conduct this qualification by setting-up an accurate test course, testing the equipment through many different conditions and using the computer software to develop coordinate systems and defining adjustment points.

REPORT
ON
TRIMBLE NAVIGATION
Site Surveyor System
Using RTK-GPS Principle
(Real Time Kinematic - Global Positioning System)

Summary

A Trimble Navigation Seminar was attended by CBI Na-Con in an effort to determine the actual performance of a "Real Time Kinematic" system called the "Site Surveyor System." A *total* Global Positioning System(GPS) is being considered for the LIGO Project as an alternate to the current Cal Tech 250 Meter GPS monument set-up/optical alignment plan.

During a hands-on demonstration, the RTK-GPS equipment performed within the published accuracies of a two(2) centimeter range, in all axis. Actual deviation witnessed during a controlled lateral adjustment was less than five(5) millimeters.

The Trimble Navigation RTK-GPS Site Surveyor System meets the requirements of the current LIGO Beam Tube alignment tolerances. Further demonstration and testing is required to establish the system's maximum tolerance limits and achieve a comfort factor with regard to its repeatability.

Cost for the Site Surveyor System demonstrated during this seminar is estimated at \$ 55,000 dollars(\$US).

Event & Basic Information

The Seminar was conducted by Mr. Hugh Johnston of Trimble Navigation. Mr Johnston is a registered surveyor with 20+ years of surveying experience. His projects include the Alaskan pipelines, Gulf oil fields/platforms and has experience in mapping and geodetic plotting. The seminar duration was Monday and Tuesday(24 & 25-January-94) at the Trimble Offices located at the following address:

Trimble Navigation Limited
Monroe Business Center I
Building 3, Suite 600
610 Herndon Parkway
Herndon, Va 22070
(703)904-3010

Mr. Johnston detailed the Company's history as originally being a division of Hewlett-Packard developing GPS equipment. During the mid 70's, H-P determined the marketability of the GPS equipment to be minimal and employees of the division began their own company in 1978. The company's 1993 earnings exceeded \$150 million with over 50% of sales being overseas. The company can be found on NASDAQ as TRIMBLE, TRIMB or TRIMNAV. Corporate headquarters are located as noted below:

Trimble Navigation
645 North Mary Ave
Sunnyvale, CA 94088-3642
(800)827-8000

Classroom Information

The seminar involved 50% classroom work which included basic GPS(Global Positioning System) and DGPS(Differential GPS) theory, RTK(Real Time Kinematic) uses & accuracies, and equipment configuration.

Software for mapping and graphing data is included with the Site Surveyor Kit. This software runs on a IBM compatible 386 or better PC computer. Drawings can be plotted using a plotter or printer. The data can also be loaded into "Auto-Cad" for additional Graphical options.

If greater accuracy is required, the data from the RTK-GPS system can be post-processed to the millimeter level. This requires additional software not provided with the Site Surveyor System.

Based on the system's required programming and options, an estimated training period for an average "*computer literate user*" would be about three(3) days.

Field Instruction and Demonstration

The remainder of the seminar involved field exercises. A course was set-up using conventional optical surveying techniques. Two(2) points were set at 90° to the center point(total of three(3) points). Each point distance was measured using a steel tape and angle/elevation was measured using a K&E Transit.

The RTK-GPS was set-up using one base station receiver and two roving receivers with antenna rods and data collectors. Three radio repeaters were used based on the proximity of the office buildings.

The RTK-GPS demonstration began with instruction for initialization of the base station receivers. The rovers were individually initialized using a plate equipped with a compass for referencing direction. Each rover unit consisted of one receiver located in a back pack, one Data Collector attached to the receiver with coax cable and one antenna with a slip-on mount that could be mounted on a tripod or its own antenna pole. The antenna was also connected to the receiver via a coax cable.

Trimble's optical plummets were mounted on tripods and set-up, leveled and centered over two surveyed points. The first rover antenna was set in the slip-on holder and the point was verified and logged in. Data acquisition is performed with the Data Collector per the following routine:

- Select Menu Item and hit "OK."
- Input point description as desired.
- Wait for the readout to list the coordinate on the screen.
- When final coordinate is reviewed, hit "OK."
- Remove the antenna and continue to the next point

In total, the exercise took an average of 30 seconds per point to perform. The steps were repeated at the next point.

The third point was measured using the antenna pole. This technique was a little more time consuming due to the effort to plumb the antenna using a bulls-eye bubble mounted on the pole. The data collector has a helpful RMS(Root-Mean-Square) feature that determines the center of pole movement and allows for quick lock and point determination. Additional information regarding pole height is also entered when changed over from the tripod mount. All changes and point descriptions are entered via a menu driven program.

Signal quality for the RTK-GPS systems are tracked using "PDOP"(Position Dilution Of Precision). PDOP is a function of signal strength, number of satellites, atmospheric conditions, etc. that ultimately determine accuracy. The Data Collector gives consistent updates using a programmed quality setting and warns the user when the PDOP drops away from the set value. This happened during the demonstration due to a antenna being turned from vertical(dropped on the ground). The receiver did not loose signal but the PDOP warning flashed on the data collector screen. We stopped, plumbed the pole and it took less than 30 seconds to re-establish the signal back to the chosen PDOP.

Discussions Pertaining to LIGO Needs

After the formal seminar a discussion was held with Hugh Johnson(Trimble), Bill Moore of Bell Laser(a Trimble Consultant) and Steve Hand of CBI Na-Con. The following is a summary of the topics:

LIGO Site Reference Configuration-

Discussions regarding the best use of GPS on the LIGO site centered around the placement of reference monuments and fixturing of the antennas at each support. A sketch is attached showing the suggested monument configuration and placement(Page 8 of 8).

Qualification/Demonstration-

Trimble will attend and participate in CBI's qualification activity and provide the RTK-GPS without cost to CBI. CBI will provide a procedure for Mr. Johnston to review and comment. An estimated 5 working days will be dedicated to the GPS checkout.

Daily Operation Planning-

Planning can be performed using a computer program that up-dates and plots the current PDOP and satellite population by the hour. Mr. Johnston suggested performing data collection at night for the most accurate results. This is due to activity in the atmosphere during the day which is not present when away from the sun.

Special Conditions-

Areas of concern regarding site conditions were expressed by CBI and most were answered. Below is a listing of the each item:

- 1) The LIGO site in Livingston has 69KV power lines running across each tube arm.
Answer: The demonstration at the Trimble seminar was conducted under a 69KV power line. The powerline magnetic field affected the magnetic compass on the initialization plate but no problem was noted on the readings of the hand held

data collector. There should be no effect at the Livingston site under similar conditions.

- 2) Radio strength for repeaters and receivers will be hampered by the mid station buildings.

Answer: Radio signal strength is better than 10 kilometers based on line of sight positioning. The repeaters can be located in areas parallel to the beam tube and/or mid station buildings and serve the roving antenna with adequate signal strength.

- 3) Livingston Site has trees located within 115' of beam tube.

What is the horizon requirement of the GPS?

Answer: The satellite working area is a minimum of 15° above horizon. This is adjustable based on the PDOP requirement and the number of satellites available at the time of the data acquisition. The site will be surveyed to assure the required horizon.

- 4) What is the expected accuracy for the RTK-GPS system when used as a "Millwright" tool for the LIGO Beam Tube support positioning?

Answer: Trimble has not considered this application for the Site Surveyor System, however during this demonstration, a less than 5 millimeter deviation was impressive. Further testing should be planned using machine type equipment to accurately locate and stabilize antenna positions. Actual repeatability and accuracy will be determined at that time.

- 5) Trimble has a concern regarding multipath errors(errors that can be bounced or reflected) when readings are taken on the Beam Tube Covers.

Answer: The fixturing of the antenna support will be designed to extend the antenna high enough above the Beam Tube Cover to negate any multipath errors. Trimble will assist in this effort.

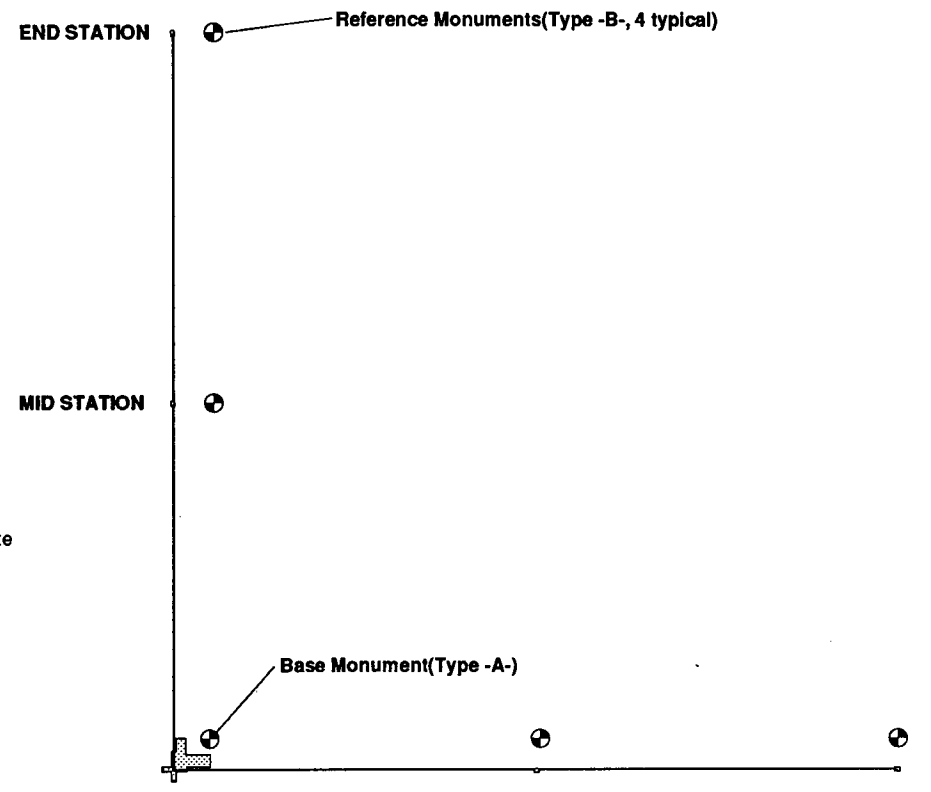
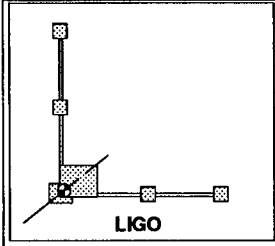
- 6) Mr. Mike McGuinness of Trimble's Houston office suggested a Geodetical Survey for both LIGO sites. This should be

performed by a dual frequency DGPS system. If CBI used the RTK-GPS Site surveyor for all site civil and construction work why would a dual frequency survey be necessary?

Answer: The Geodetical Survey would include both site reference monuments and local "Legal" monuments for positioning to the WGS-84 coordinate system(the system that is used by the GPS Satellites and the local "state/plane" system. The accuracy would also be millimeter level and allow for independent checks during the facility's life span.

- 7) What is the competition for Trimble for the same real time application and what other suppliers are in the marketplace?

Answer: CBI received a copy of the GPS trade magazine "GPS WORLD" in an effort to find other suppliers of Real Time GPS systems. At this time, no other supplier seems to have comparable equipment on the market.



- NOTES:**
- 1) Base Monument -A- contains a Initialization plate drilled with two(2) 5/8"-11unc holes spaced one wavelength (21cm). The hole centerline shall be rotated to a North-South direction(±10').
 - 2) Reference Monuments -B- contains a 15cm square mounting plate with a 5/8"-11unc threaded hole centered in the plate.
 - 3) Monuments to be fabricated with liquid filled centers for frost compensation.

Supplier's/Purchaser's No. _____	
CBI	
LIGO Alignment: LIGO GPS MONUMENT SET-UP	
Quantity No. _____	Contract No. _____
By SDH Date _____	Drawn _____
Checked _____	Plotted _____
Approved _____	_____

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Press Release

100-204
ATTN: STEVE HARVEY
703-731-9582



TrimbleNavigation

Media contact:
Roger DeL
Surveying & Mapping
Products Group
(408) 481-6915

**New GPS Total Station® Performs Everyday Total Station Tasks
With the Dramatic Productivity Gains of Real-Time GPS Surveying**

Sunnyvale, CA – March 7, 1994 – Trimble Navigation, Limited, (NASDAQ:TRMB) leads the commercial GPS marketplace through an ongoing commitment to research and development of GPS technology and applications. Trimble's leadership continues with the introduction of **GPS Total Stations**. This new family of GPS surveying products significantly expands the number of projects and sites in which surveyors can reap the large productivity benefits of real-time GPS surveying. Productivity increases of greater than 100% compared to conventional surveying are common with GPS Total Stations.

All Aspects of Surveying Gain Productivity

GPS Total Stations combine GPS surveying technology with mobile data communications. The result is a surveying system that overcomes the many logistical constraints of conventional surveying techniques for topographical, boundary, stake out (setting out), and local control surveying. There are numerous benefits. Using GPS Total Stations, surveyors:

- do not have to see or point at any targets
- can work freely around sites
- can work day or night in any weather
- can perform surveys with one person
- can run contour lines from vehicles
- can survey up to six miles (10 km) from one instrument set-up
- can relocate survey marks using a hand-held graphical display
- are assured that feature coding is done right at the survey point
- can work simultaneously as a team from just one instrument base station
- can easily perform independent point checks
- can achieve repeatable centimeter (cm) accuracy in the field – similar to GPS control accuracy – but without having to process GPS data on a PC

-- more --

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Post Office Box 3542 FAX: (408) 481-7781
Sunnyvale, CA 94086-3542

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TEL:415-481-7997

TRIMBLE TRAINING

The combined results of all of these benefits are fewer instrument set-ups, less time at each survey point, more productivity per crew member, faster job completion, and fewer re-surveys. These large increases in efficiency and productivity translate to higher profitability.

Gains Now Apply to Larger Number of Sites and Projects

Trimble pioneered real-time GPS surveying in 1993 with its Site Surveyor™ system, which was offered as an optional upgrade to Trimble 4000 Series survey receivers with post-processing capabilities. Those capabilities are now extended in the GPS Total Station, available in both single frequency configurations (recommended for open sites) and dual frequency configurations (recommended for varied sites).

Dual frequency configurations now incorporate a major logistical breakthrough which dramatically increases the kinds of sites and projects that can benefit from real-time GPS surveying. If enough GPS satellite signals become blocked by trees or structures at the site, a rover GPS receiver must be "re-initialized" in order to resume surveying. A dual frequency receiver will now do this re-initialization automatically, either by holding the rover's GPS antenna stationary for a minute, or optionally, while the unit is moving (on-the-fly, OTF). Depending on the site, this capability can represent a significant logistical advantage over single frequency systems which require that re-initialization be done at a known r previously surveyed point. Re-initialization while moving also enables dynamic cm-level positioning.

All GPS Total Stations incorporate an expanded set of specific, new surveying functions that are managed by the system's hand-held Survey Controller. These expanded capabilities include arc staking, line staking, slope staking, surface staking, intersections, and continuous surveying.

Affordable Real-time GPS Surveying Receivers

To make real-time GPS surveying more affordable, Trimble has introduced new receivers specifically designed for real-time surveying. The new Site Surveyor SE™ (single frequency) and Site Surveyor SSE™ (dual frequency) GPS receivers are equipped with Trimble's most powerful signal processing technology and real-time surveying capability as standard. Receivers can be upgraded to add post-processing capability for long baseline, higher accuracy geodetic and control surveying.

How Do GPS Total Stations Work?

GPS Total Stations consist of three functional elements: a survey-grade GPS receiver, radio/modem, and a hand-held Survey Controller. A "base station", consisting of a stationary GPS receiver and data

-- more --

radio/modem, broadcasts known-point, carrier phase data to a "rover" unit that actually performs the surveying tasks. The rover unit merges the broadcast data with incoming raw satellite signals to generate cm-level coordinates of the point in real-time, that is, as you occupy the point.

Availability

GPS Total Stations can be purchased either as turnkey products or as upgrades to existing 4000 Series receivers and will be available for shipment April 1994. For more information contact Geoff Jacobs, Product Marketing Manager, Trimble Navigation, Tel (408) 481-2865; FAX (408) 481-6074.

###

Trimble Navigation Ltd. is a world leader in the emerging world markets for commercial GPS. Trimble designs, manufactures and markets electronic instruments and systems for determining precise geographic location. These products are sold in a variety of markets including surveying and mapping, Geographic Information Systems (GIS), marine, aviation, vehicle tracking, military applications and differential GPS systems. Founded in 1978 and located in Sunnyvale, California, Trimble has been the leader in the commercial business of GPS since 1984.

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Trimble GPS Total Stations

Overview

A Trimble GPS Total Station incorporates three functional elements: a Trimble GPS receiver with real-time centimeter accuracy survey capability, a handheld Survey Controller, and a data radio/modem. Antennas accompany the GPS receiver and data radio. Additional accessories are available.

GPS Total Station capabilities are offered in a variety of convenient configurations to allow customers to select the product or products that meet their particular needs. Organizations acquiring GPS Total Stations for the first time can purchase turnkey solutions. The radio data/modem can, however, be sourced independently; therefore, for convenience, Trimble also offers GPS Total Stations without the data radio/modem.

Organizations that currently own 4000 Series Trimble receivers can upgrade to GPS Total Station functionality via system upgrades and additions. 4000 Series receivers with real-time surveying built-in (for example, Trimble Site Surveyor SE and Site Surveyor SSE) can also be upgraded to enable them to collect satellite data in the receiver for subsequent post-processing with GPSurvey software.

Key Features

- One-person GPS topographic, detail, stake out, and control surveying
- Lightweight and portable
- Operation via handheld Survey Controller
- Centimeter-accuracy (0.05 feet) in real-time
- Multiple rovers from one base instrument station
- Not restricted by line-of-sight
- Automatic initialization while stationary or (optional) while moving (dual frequency only)

General Specifications

Accuracy

Fine mode

Horizontal	$\pm(0.05 \text{ ft.} + 2 \text{ ppm} \times \text{baseline length})$ (1 cm + 2 ppm)	$\pm(0.05 \text{ ft.} + 2 \text{ ppm} \times \text{baseline length})$ (1 cm + 2 ppm)
Vertical	$\pm(0.07 \text{ ft.} - 2 \text{ ppm} \times \text{baseline length})$ (2 cm - 2 ppm)	$\pm(0.07 \text{ ft.} - 2 \text{ ppm} \times \text{baseline length})$ (2 cm - 2 ppm)
arse mode	$\pm 5.5 \text{ ft.} (1 \text{ m})$	$\pm 5.5 \text{ ft.} (1 \text{ m})$

Range

Baseline	6.2 miles (10 kilometers)	6.2 miles (10 kilometers)
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Occupation Time & Measurement Rate

Static occupation time	3 seconds, typical	3 seconds, typical
Measurement rate	Once per second	Once per second

Survey Controller Functions

Basic	Topographic Continuous measurement Stake out coordinates Stake out line Stake out arc Stake out surface (cut/fill) Stake out slope	Topographic Continuous measurement Stake out coordinates Stake out line Stake out arc Stake out surface (cut/fill) Stake out slope
Calculations	Intersections (bkg/bkg; bkg/dist; dist/dist) Inverse RPN calculator	Intersections (bkg/bkg; bkg/dist; dist/dist) Inverse RPN calculator
Reductions	Sea level, earth curvature, geoid separation, 3 & 7 parameter datum transformations	Sea level, earth curvature, geoid separation, 3 & 7 parameter datum transformations
Map projections	Plane Local Coordinates US State Plane UTM Transverse Mercator Mercator Lambert Conformal Malaysian RSO NAD83 Cassini Oblique Stereographic Latitude and Longitude	Plane Local Coordinates US State Plane UTM Transverse Mercator Mercator Lambert Conformal Malaysian RSO NAD83 Cassini Oblique Stereographic Latitude and Longitude

Data storage

Capacity	Up to 3,000 points Up to 40,000 points (optional)	Up to 3,000 points Up to 40,000 points (optional)
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Output formats

Type	Trimble Survey Controller Printed output (serial) Compatible with SDR20 and SDR33	Trimble Survey Controller Printed output (serial) Compatible with SDR20 and SDR33
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Initialization

Method	Two known points or RTK Initializer accessory	Automatic while stationary Automatic while moving (optional) Two known points or RTK Initializer accessory
Time required	<10 seconds (typical)	<1 minute (typical for automatic) <10 seconds (typical for two known points or RTK Initializer accessory)

Electrical

Power	12 V DC nominal Uses camcorder batteries (lead acid) 8 hours of operation on 4 batteries (nominal) <2 hours required for recharge (typical per battery)	12 V DC nominal Uses camcorder batteries (lead acid) 7 hours of operation on 4 batteries (nominal) <2 hours required for recharge (typical per battery)
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Physical

Weight	9.7 lbs. (4.4 kg)	11.9 lbs. (5.4 kg)
Dimensions		
GPS receiver	9.8 in. x 11 in. x 3.9 in. (25 cm x 28 cm x 10 cm)	9.8 in. x 11 in. x 3.9 in. (25 cm x 28 cm x 10 cm)
GPS antenna	5.9 in. diameter (15 cm)	6.3 in. x 6.3 in. x 3.5 in. (16 cm x 16 cm x 9 cm)
Survey Controller	8.3 in. x 3.5 in. x 2 in. (21 cm x 9 cm x 5 cm)	8.3 in. x 3.5 in. x 2 in. (21 cm x 9 cm x 5 cm)
TRIMTALK radio/modem	5.5 in. x 7.5 in. x 2.8 in. (14 cm x 19 cm x 7 cm)	5.5 in. x 7.5 in. x 2.8 in. (14 cm x 19 cm x 7 cm)
Survey Controller Display	8 lines by 20 characters Graphic, backlit LCD	8 lines by 20 characters Graphic, backlit LCD
Survey Controller Keypad	56 alphanumeric keys	56 alphanumeric keys

Environmental

Temperature		
GPS receiver	-4°F to +131°F (operating) (-20°C to +55°C) -22°F to 167°F (storage) (-30°C to +75°C)	-4°F to +131°F (operating) (-20°C to +55°C) -22°F to 167°F (storage) (-30°C to +75°C)
GPS antenna	-40°F to 149°F (operating) (-40°C to 65°C) -67°F to 167°F (storage) (-55°C to +75°C)	-40°F to 149°F (operating) (-40°C to 65°C) -67°F to 167°F (storage) (-55°C to +75°C)
Survey Controller	-4°F to 131°F (operating) (-20°C to 55°C) -4°F to 140°F (storage) (-20°C to +60°C) Up to 99% non-condensing	-4°F to 131°F (operating) (-20°C to 55°C) -4°F to 140°F (storage) (-20°C to +60°C) Up to 99% non-condensing
Humidity	Up to 99% non-condensing	Up to 99% non-condensing
Waterproof	Yes (Survey Controller meets Milspec 810D; GPS receiver: sealed, floats)	Yes (Survey Controller meets Milspec 810D; GPS receiver: sealed, floats)

Warranty

Length	12 months (hardware)	12 months (hardware)
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Notes

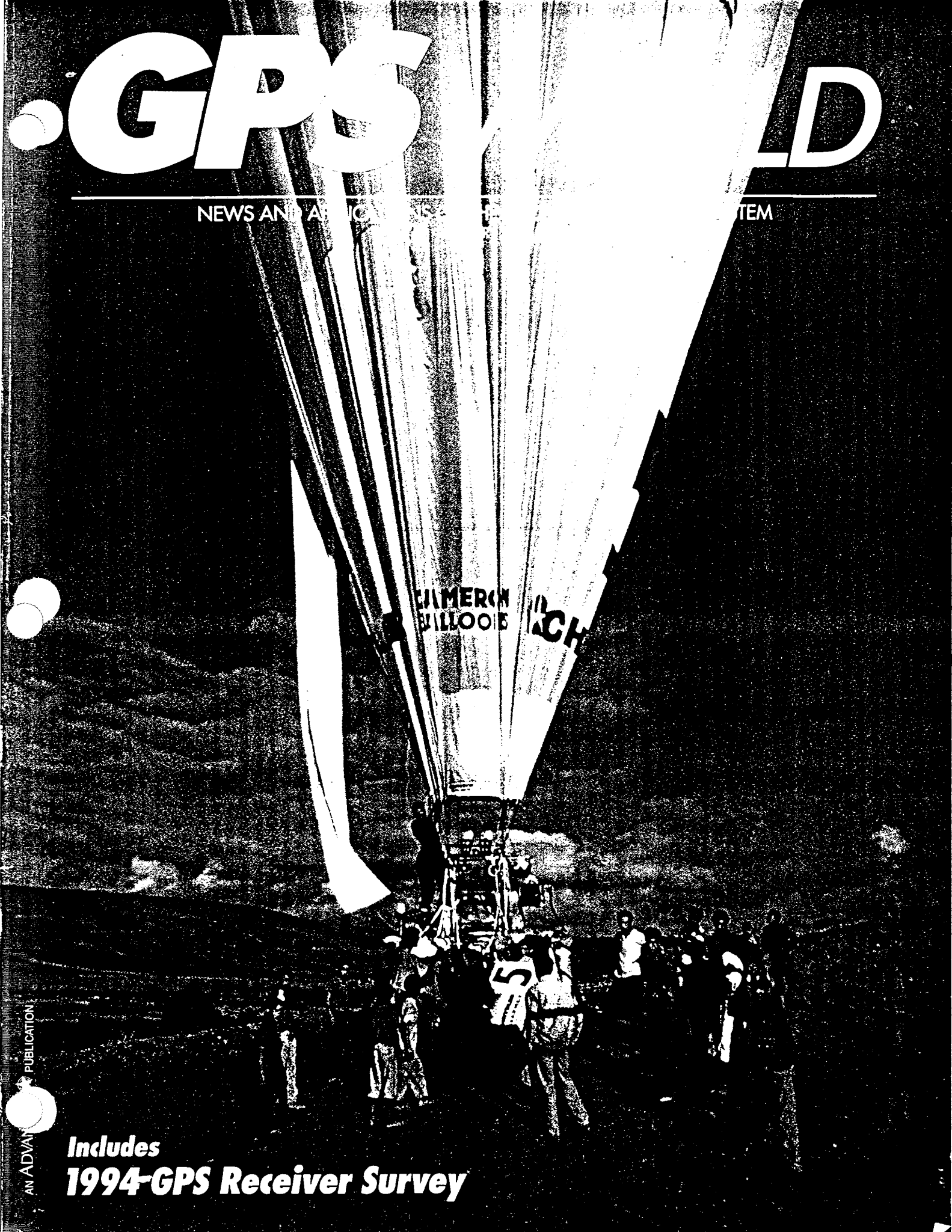
- General specifications apply to Trimble GPS Total Stations incorporating Trimble Maxwell-based technology GPS receivers with real-time surveying capability.
- Accuracy specifications cover both carrier phase (fine mode) and differential C/A code-based (coarse mode) measurement. Fine mode is for centimeter-level (0.05 feet) positioning; coarse mode is typically utilized for navigation or a prime or C/A code collection.
- GPS Total Station range can be affected by the range of the data link. The specified range corresponds to accuracy specifications and a suitable data link.
- Single- and dual-frequency GPS receivers incorporate both code and carrier-phase tracking. Receivers are available standard with 9 channels. Real-time surveying performance is not adversely affected by P-code encryption for either single- or dual-frequency receivers.
- Weight specifications include 4000 Series receiver, GPS antenna, Survey Controller, and one battery. Radio/modems are excluded, as these vary depending on the system selected.
- Accuracy specifications are based on favorable multipath and atmospheric conditions and proper antenna alignment.
- Dual-frequency initialization times are a function of the number of satellites visible, obstructions, baseline length, multipath and environmental effects.

Ordering Information

For specific ordering information on GPS Total Stations either as turnkey products or as upgrades to existing Trimble GPS systems, please contact your nearest Trimble sales office (see back cover) or dealer. Trimble has more than 200 survey dealer locations worldwide.

GPS WORLD

NEWS AND APPLICATIONS FOR THE GPS SYSTEM



AN ADVANCED PUBLICATION

**Includes
1994-GPS Receiver Survey**

IOC in '93

Over the years, the U.S. Department of Defense has taken more than a few hits — including quite a few from this magazine's readers, authors, and editors — for some of the agency's GPS policies. But critics of DoD's handling of its ownership and management of the Global Positioning System should declare a cease-fire, temporarily at least, and salute the substantial accomplishment that the U.S. military has consolidated with the declaration last month of the system's initial operational capability (IOC).

Transmittal of the letter from the secretary of defense to his counterpart at the Department of Transportation announcing IOC is more than a simple acknowledgement that 24 Block I and II satellites are in orbit and broadcasting healthy radio signals. It commits the Defense Department — by force of law — to sustaining a specified level of signal availability and quality on which users can rely under normal circumstances: the Standard Positioning Service. As DoD senior staff specialist (and *GPS World* editorial advisor) Jules McNeff has pointed out, IOC is more important to civil users than military ones. That's because the U.S. and allied military GPS user community already have a high level of confidence in access to the system through DoD's control of GPS and the availability of a separate and superior signal: the Precise Positioning Service. IOC, however, triggers provisions in the U.S. Federal Radionavigation Plan that ensure predictable access to GPS for civilians.

From concept development in the late 1960s, through program funding and establishment of a Joint Program Office in the early 1970s, from ground testing through initial satellite launch on February 22, 1978, to the four-year-hiatus following the Challenger space shuttle disaster, the U.S. Air Force and defense establishment stayed the GPS course. From the revived launch program and constellation design changes in 1989, through the detection and fix of a satellite glitch that slowed progress in 1991, to the proving grounds of Desert Storm and now the vindication of operational capability, DoD has kept the faith in a most unusual pact with the huge commercial and civil audience for one of its systems.

"Dual use" is a phrase that trips lightly off the tongue, but creating a critical, high-tech shared system that works for civilian as well as military constituencies is an awesome and arduous task in the real world. GPS has proved to be a trial by fire for all concerned and for DoD most of all.

So, before we return to selective availability, antispoofing, wide area differential, and international guarantees, we pause to congratulate — and celebrate — this formidable achievement by the U.S. Department of Defense.

Glen Gibbons

GPS WORLD

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The Winds of Change in Washington

Hale Montgomery

Washington Editor, *GPS World*

While GPS enters the new year in full flight as a U.S. certified operational system with 24 satellites, Washington tries its bureaucratic best to keep pace.

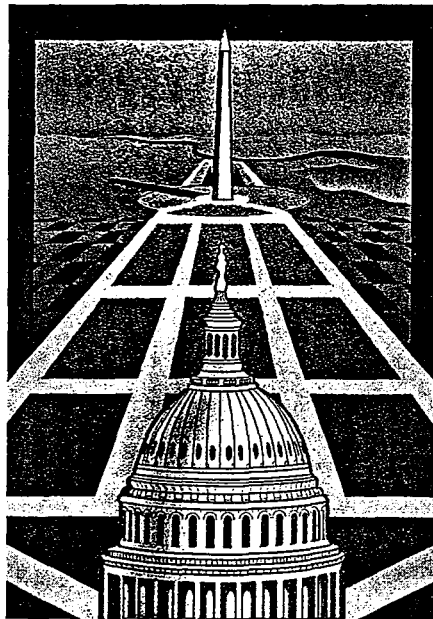
CHASING A STAR

Policy papers proliferate. It's an awakening by officialdom to the power and scope of a global U.S. resource. It reflects both the maturity of GPS as an operational system, and maybe an I-saw-it-first discovery process by some high decision-makers (although staffers at lower levels in most federal civil offices have been applying GPS for years). Withal, a number of government departments and agencies have either issued reports or are engaged in studies or reviews of GPS. Congress has either passed or is considering new legislation concerning control and use of GPS. The outcome of this heightened interest in GPS will have a profound effect on users of the system in the future.

Congressional. For example, in mid-November, Congress passed a \$265 billion defense authorization bill that included \$3 million (down from \$5 million) for an independent study by the Academies of Science and Public Administration into the management and funding of GPS. This embraces just about all of the current issues: greater civil control, fees and other funding schemes, the use of selective availability (SA), international participation, future system design, and more.

The language in that House/Senate compromise defense bill, approved by both chambers despite objection by the Department of Defense (DoD), was almost identical to that approved earlier by the Senate Armed Services Committee (see the October 1993 "Washington View" column in *GPS World*, p. 14). Results and recommendations of the study must be submitted to Congress by April 1, 1994.

In addition, Congress directed DoD in the same legislation to prepare a separate report, in coordination with the Central Intelligence Agency, of potential threats by terrorists or



hostile military forces to jam the system or exploit it for adversarial purposes. That report is due May 1.

Beyond this, GPS figures prominently in several new bills introduced recently:

■ A bill by Rep. W.J. (Billy) Tauzin (D-LA), chairman of the House Coast Guard and Navigation Subcommittee, requires the Department of Transportation (DoT) to report to Congress on the feasibility of establishing differential GPS (DGPS) stations on navigable inland waterways (read Mississippi, Ohio, and Missouri rivers). The GPS provision was part of a broader bill requiring all towing vessels to carry basic navigational tools, in reaction to the tragic accident last September when a towboat smashed into a railroad bridge near Mobile, Alabama, resulting in the derailment of an Amtrak passenger train with the loss of 47 lives. But if enacted, the GPS section would mean a huge expansion in the Coast Guard's current program of installing DGPS beacon sites serving U.S. coastal waters.

■ A \$2 billion authorization bill for the Federal Aviation Administration (FAA), introduced by Sen. Wendell Ford (D-KY), chairman of the Senate Aviation Subcommittee, emphasizes the need to implement GPS rapidly as the country's prime air traffic management technology.

Executive Branch. In the executive branch, some major studies have concluded; some are ongoing; all are indicative that this administration wants to exploit the benefits of GPS technology to a greater degree. The impetus behind the formation of the DoD/DoT task force last summer came largely from DoT

Secretary Frederico Peña, who in April talked his cabinet colleague, Defense Secretary Les Aspin, into reviewing the "enormous possibilities for civilian uses" of GPS.

Although the task force's recommendations have not been made public at the time this is being written, it is known that the report calls for establishment of a higher level office within DoT to handle GPS issues — an assistant secretary for radionavigation. Currently, the constituent agencies within DoT — the Coast Guard, FAA, and the Federal Highway Administration (FHWA) — operate separately within their authorities, with no single overall DoT authority. Much to the chagrin of DoD, negotiations now with DoT over civil use of GPS often are conducted by a single DoD command representative, facing a table full of DoT equals.

On other issues, the task force calls for an extensive eight-month study of DGPS aimed at eventually developing a national network of differential stations: one providing a common service under established standards and broadcasting data using standardized formats. Currently, a bizarre mix of federal differential reference sites exist, many independently operated by separate agencies. Federal offices routinely using GPS include the Army Corps of Engineers, National Oceanic and Atmospheric Administration, Census Bureau, Forestry Service, Environmental Protection Agency, FAA, Coast Guard, National Geodetic Survey, State-Treasury-Justice Departments, and others. A single standardized network, it is felt, could eliminate costly duplicative facilities.

Industry had input to the task force. Its comments focused on pleas to maintain stability of the system and to avoid radical policy changes that might disrupt markets; comments also dealt with the need for greater speed in implementing GPS into the transportation infrastructure. The GPS Industry Council, RTCA, Inc. (an aviation advisory group), and other nongovernment authorities submitted industry comments at the request of the task force. In response, the task force, in considering funding options for the system, did not recommend user fees (opposed by industry) but at the same time didn't rule out indirect fees from future consideration (for example, perhaps transit ticket taxes or fuel taxes). Federal system funding will remain about the same: the Pentagon carrying capital and operating costs in its budget, civil agencies paying for "augmentations" such as differential services, integrity monitoring, and other value-added services needed to meet special civil requirements. The task force did not change the policy on SA; it

remains in force for now.

Other studies are under way:

■ The Office of Science and Technology Policy (OSTP), a White House advisory group headed by President Clinton's Science Advisor, Dr. John H. Gibbons, is looking into ways to implement GPS into the national airspace. An extremely influential group, OSTP is one of the prime forces behind the administration's high-tech initiatives and government reform efforts. OSTP is reviewing the recommendations of the Airline Competitiveness Commission of last August that urged GPS as the foundation for changing the nation's air traffic control system "to a satellite-based navigation system by 1996 . . ."

■ The General Accounting Office (GAO), an investigative arm of Congress, is working on a report on how federal agencies could more efficiently share GPS equipment, field sites, and personnel, and what barriers exist to achieving that. The report, or critique, is due out in April.

CHANGES FORESHADOWED

Looking back in the fresh light of a dawning new year, it's clear that the forces of change

in the government were at work in 1993. It had almost a thematic rhythm. Recall:

As the new Clinton-Gore administration took office, its national technology policy enunciated a theology of converting defense technology to civil applications, creating new jobs, and improving the economy. GPS, almost a model dual-use (military/civil) technology, closely fit that policy . . . Then, in May and April, DoT Secretary Peña emphasized change in several speeches. In mid-April, referring specifically to GPS, Peña said at an IVHS conference, "We see it as a good opportunity to carry out one of the major themes of the president by applying military technology to civilian use and demonstrating U.S. leadership in this area" . . . Subsequently, in a Senate speech (May 30), Nebraska Democratic Sen. J. James Exon raised the issue of greater civil control of GPS and said, "I am very doubtful that the DoD should be the manager of GPS in the next century" . . .

In late May/early June, confirming Peña's enthusiasm, the joint DoD/DoT task force was formed . . . The Airline Competitiveness Commission in August anointed reforms

sought by the administration in the aviation industry, including its early call for GPS to form the backbone of civil air traffic management . . . In October, Congress approved legislation that mandates the independent, in-depth academic study of GPS validating Sen. Exon's earlier concerns . . . Commerce Secretary Ronald Brown chimed in with comments during ceremonies at Magellan Systems headquarters in California in November, calling the GPS industry "one in which the United States is the acknowledged world leader. By the end of this decade, as many as 100,000 Americans will be working in what will be a \$5 billion industry." (There's that jobs theme.) Now, if foresight matched hindsight, the outcome of these past events might tell us that in 1994 . . .

FEDERAL RADIONAVIGATION PLAN

Federal officials have been collecting input from users at public meetings to shape the content of its 1994 Federal Radionavigation Plan (FRP), the government's definitive policy guide on the operation of all federal

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radionavigation systems. Issued biannually, the 1994 version will be available in early 1995. Public meetings were held in Washington, D.C., and Columbus, Ohio, in November and in Seattle in December.

At a two-day meeting in Washington, D.C., the panel of federal officials noted that GPS will take over as the star federal navigation system, and other systems gradually will be phased out. The proposed schedule, tentative in nature, is outlined by the panelists:

■ **Loran-C:** A U.S. phase-out of overseas systems by the end of this year, but not systems in the United States. A ground-based system with an average accuracy of one-quarter mile. Loran-C is heavily used today in air, marine, and land applications; it has no altitude determination capability. The military will cease use by the end of this year, but other nations will take over operation of overseas stations, and civil U.S. use will continue for an unspecified time into the next century.

■ **Omega:** It is marked for extinction. Defense will make only limited use of it after this year. Omega is a Navy satellite-based system, used primarily in oceanic navigation. It has an accuracy of two to four miles. Civil

use is expected to phase out gradually.

■ **Transit:** Military need for the system ceases at year-end 1996. A satellite system, Transit is used by Navy submarines and ships; it will be replaced by GPS.

■ **VOR/DME:** This aviation system is expected to remain until 2000 or later. FAA operates more than 900 stations; it is the primary radionavigation system for commercial and general aviation aircraft. If it can be replaced by GPS, the phase-out will be gradual over the next five or more years.

At the two-day Washington meeting, both government and civil meteorological experts argued for a longer lifetime for Omega. The system, along with Loran-C, is heavily used for radiosondes, or weather balloons that measure temperature, humidity, and pressure in the atmosphere. They estimated 400,000 radiosondes are launched annually worldwide; the inexpensive disposable Omega and Loran transmitters aboard provide data on wind directions at various altitudes, a vital element in weather forecasting.

The Air Transport Association of America (ATA) urged that the FRP contain language to implement wide-area differential GPS and

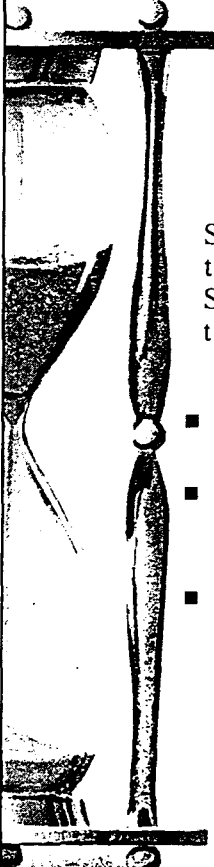
an integrity channel by 1995. Will Russell, ATA vice-president, reading the association's policy paper, declared that "U.S. air carriers have no plans to implement MLS [microwave landing systems] in their domestic aircraft and, unless there is no alternative, will not implement MLS in aircraft operated internationally." Russell also called for the military to eliminate SA, calling it "economically unsound."

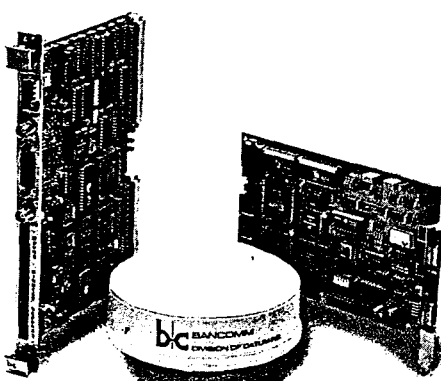
Among the panelists, Frank Mammano of FHWA forecast heavy use of GPS in future IVHS applications. One-fourth of all IVHS equipment sales will be for in-vehicle navigation equipment, accounting for \$4 billion a year in expenditures by year 2012, the branch chief in DoT's research division said. Not all of this will be GPS-based, but, he said, GPS will make up a large share of it. Coast Guard Comdr. Douglas Alsip said his service's purchase of dual DGPS reference stations for 60 coastal beacon sites will be "the largest civil procurement in GPS history." ■

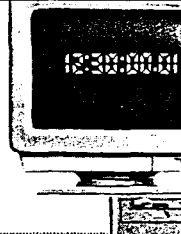
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Z -Tracking Results: Implications to Precision Civilian Applications

**S.A. Gourevitch, R.G. Lorenz and J.M. Nolan
Ashtech Inc.**



**1170 Kifer Road, Sunnyvale, California 94086
Telephone: 408/524-1400
Fax: 408/524-1500**

Z -Tracking Results: Implications to Precision Civilian Applications

S.A Gourevitch, R.G. Lorenz and J.M. Nolan
Ashtech Inc.

BIOGRAPHY

Sergei Gourevitch is a Senior Scientist and Manager of Software Development with Ashtech. Dr. Gourevitch was awarded a Ph.D. in experimental particle physics by Case Western Reserve University. After a term of post-doctoral research at Brandeis University, he joined the radio interferometry group at M.I.T. While at M.I.T. he was part of the group which demonstrated the feasibility of precise, carrier phase GPS geodesy and pioneered the technique. He made important contributions to all areas of GPS geodesy and navigation.

Robert Lorenz is a Senior Design Engineer and Product Manager, Z-12, with Ashtech. He holds a BS in Electrical Engineering and Computer Science.

John Nolan graduated from Curtin University of Technology, West Australia with a BS.Sc and M.Sc (surveying) in 1981 and 1990 respectively. From 1984 to 1991 he worked at Associated Surveys International an Australian survey company involved in all aspects of GPS. In 1991 he joined Ashtech Inc. where he now manages the company's post-processing group activities.

ABSTRACT

The Ashtech Z-12 is designed to provide full Dual Band performance, Pseudo-range and Carrier Phase Tracking on both the L1 and L2 Carrier Frequencies, both when Anti-Spoofing is enabled and when it is disabled.

The Z-12 features:

- New RF section. This section features 2-bit A to D conversion.
- New Digital Section. This section features a new ASIC with a patented advance in signal processing methods.
- New firmware algorithms.

With the Ashtech Z-12, the overwhelming majority of civilian users will not experience any performance loss when Anti-Spoofing is enabled.

The ASHTECH Z-12 ADVANTAGE (A/S on)

1. 13 dB better in SNR than "P-Codeless" or "Cross-Correlating" Receivers on L2 quantities.
2. Full wavelength L2 Carrier Phase Observable.
3. Full wavelength P-Code modulated Carrier phases and the P-Code pseudo-range on both bands, even under A/S conditions.
4. Systematic Pseudo Range errors are very low.

Why does the SNR Improvement matter ?

P-Codeless or Cross-Correlating pseudo ranges are either 4.5 times as noisy as the Z-12, for the same integration time, or they have to be integrated 20 times, or more, longer to get the same noise performance. The trouble with integrating longer is the length of time it takes for transients (such as are experienced on satellite acquisition or after a loss of signal) to die out. It takes many integration times for the transients to become negligible. The difference between waiting 15-30 seconds (say) for an Ashtech Receiver versus 5-15 minutes for a P-Codeless receiver, is critical for Rapid Static performance and for other applications.

Also, there will occasionally be such rapid changes in ionosphere that "P-Codeless" or "Cross-Correlating" will be unable to track. Ashtech will be able to track any conceivable ionospheric change.

HOW TO READ "SPEC" SHEETS

Correlation Times

All "Y-Buster" receivers use the C/A carrier phase loop to provide a guiding signal so that the other observables can be detected in loops that only have to track the difference between the prediction and the actual observables. These differences are mainly caused by a changing ionosphere and multipath interference variations.

It is often not clear what these internal, "guided loop" bandwidths are, and, of course, manufacturers whose internal loops have long time constants wish to hide these facts. For example, if the L2 carrier loop is guided and has a narrow bandwidth it might be difficult to see that fact by examining the L2 carrier observable alone. That is because the guiding C/A carrier loop has a wide bandwidth so that the L2 carrier also appears to have a wide bandwidth. If the guiding signal, or some other guided signal, is subtracted off, the narrow bandwidth character of the signal will be revealed. Figure 1 shows the phase auto correlation function for a Z-12. This reveals that there is an underlying correlation equivalent to a ten second integration time.

These facts are often not clear in a "spec" sheet. For example, we've seen "spec" sheets that imply that P-Codeless L2 carrier noise is only twice that for P-Code conditions for the same integration time.

Low Elevation Performance

"Y buster" SNRs fall off with decreasing signal strength as the square of the corresponding C/A quantities. That is, if the signal strength of a low satellite's C/A observable is 1/4 that of a high satellite's, the "Y-buster" signal strength will fall by a factor of 16. A "spec sheet" should state performance for several signal strengths and/or elevation angles.

Zero Baselines

While zero baseline results are extremely useful to manufacturers as diagnostic tools, and are of some use to users because they show up systematic errors; they are almost useless as performance predictors. This is because the usual zero-baseline measurement is made with a common pre-amp, the splitter being inserted after the preamp. As the pre-amp is the largest noise source, this zero-baseline measurement cancels most of the noise. We mention this because of published receiver comparisons which are based on zero-baseline measurements.

The following Figures graphically demonstrate the Z-12's performance:

FIRST: SOME FACTS

FACT 1. All "Y-Buster" Technologies guide or smooth their observables using the C/A Carrier Phase Observables. The critical performance criterion is "RMS in what integration time?". The critical questions for purchasers of GPS Equipment is "How do you measure it?"

L2 Pseudo-Range Double Difference
Auto-Correlation Function

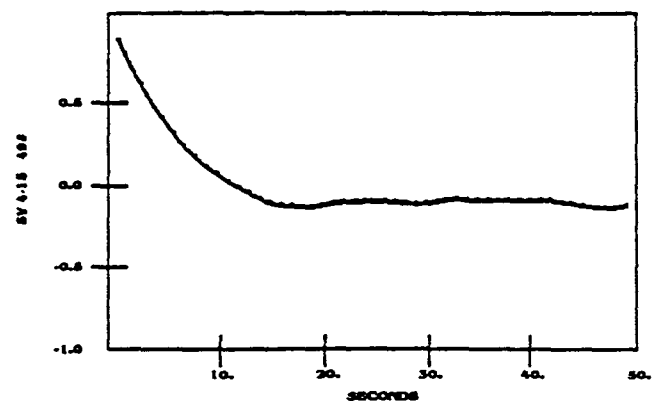


Figure 1.

FACT 2. All "Y-Buster" Technologies suffer an SNR degradation with elevation angle which goes as the square of the associated normal code tracking degradation. The critical question is "What's the Performance as a function of Elevation?"

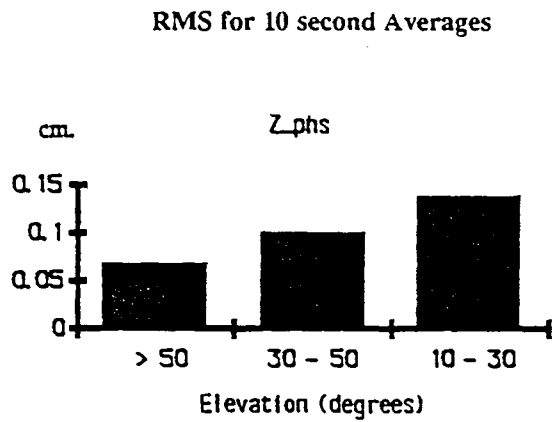


Figure 2.

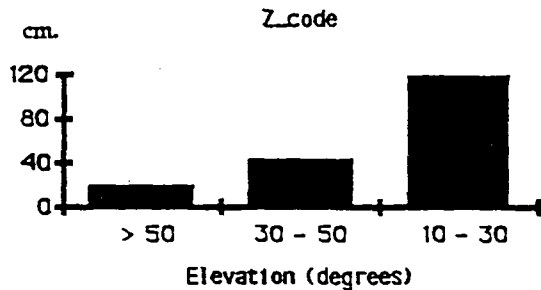


Figure 3.

Divide by 5.5 to get RMS for 5 Minutes

Z-12 Performance in Z-Tracking Mode

Based on Actual Measurement with Real Satellites.
Standard Ashtech Geodetic Antennae
(Exclusive of Multipath)

Carrier Phase (L1 AND L2) RMS	10 Second Averages	Equiv. 5 Minute Averages
All Elevations >10 Degrees	.14 cm	.025 cm
Pseudo-Range (L1 and L2) RMS	10 Second Averages	Equiv. 5 Minute Averages
All Elevations > 30 Degrees	20 cm	3.6 cm
10-30 Degrees	120 cm	22cm

The previous figures' performance numbers were based on a "before the LNA Splitter" Zero Baseline Test. (See reference 1)

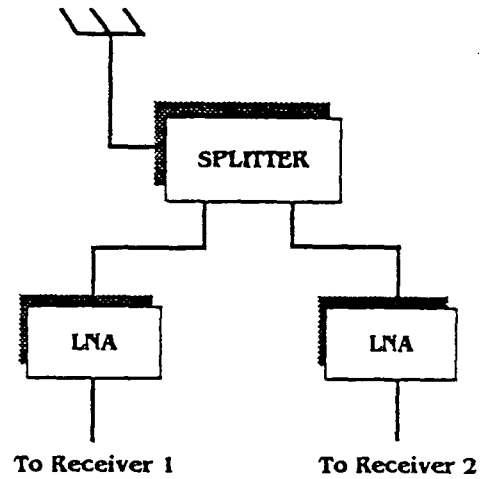


Figure 4.

The purpose of such a test is to derive performance figures which are on the one hand, free from multipath interference, but, on the other hand, bear some resemblance to actual field conditions. The reason that we want to try eliminate multipath is that multipath differs so much from one location to another and is also a function of antenna design.

In correcting the measured values to one receiver - one satellite, we were quite conservative. For example, we used a figure of 3 dB. SNR loss for the splitter where the actual measured loss was closer to 6 dB. (The splitter is "warmer" than the sky.)

The purpose of Figure 5 is to show that data collected in Z-Tracking Mode, when A/S is disabled, is representative of true A/S conditions. On this one particular day, A/S was enabled on one satellite. It was tracked in Z-Tracking Mode with SNR comparable to the other satellites. When the receiver was manually switched to P-Tracking Mode, lock was lost on that satellite while the SNRs of the other satellites rose. When the receiver was switched back to Z-Tracking, lock was regained. In Z-Mode, the SNR of the A/S satellite was consistent with the SNRs of the other satellites.

Figures 6 - 8 show that there is no offset between P-Tracking and Z-Tracking. These plots show a zero-baseline experiment where the receivers were started in Z-Tracking and manually switched to P-Mode. The Top chart shows the SNR increase (It's a log scale). The middle plot shows that while P-Mode has less noise (the plot is dominated by a low satellite) there is no loss of lock or bias shift when the switch is made. The bottom plot shows that the carrier phase observable is completely unaffected by the switch.

Figures 9 - 10 show a zero baseline where one receiver was in P-Mode, while the other was in Z-Tracking Mode. Again, there are no visible systematic errors. The average deviation from integer values of the carrier phase double difference is under .2 mm. The Average Double Difference Pseudo-range is about 1.8 cm. Again, all elevations are represented here.

Just before the 1993 ION conference started, A/S was turned on over a weekend. We just had time to process enough data to create Figure 11, Day 262. We present a carrier phase (L1 in this case, L2 was the same!) zero-baseline double difference. Notice the complete lack of measurable systematic errors!

Z-12 Performance with Anti-Spoofing On (246A)

L2 Signal to Noise for All Satellites

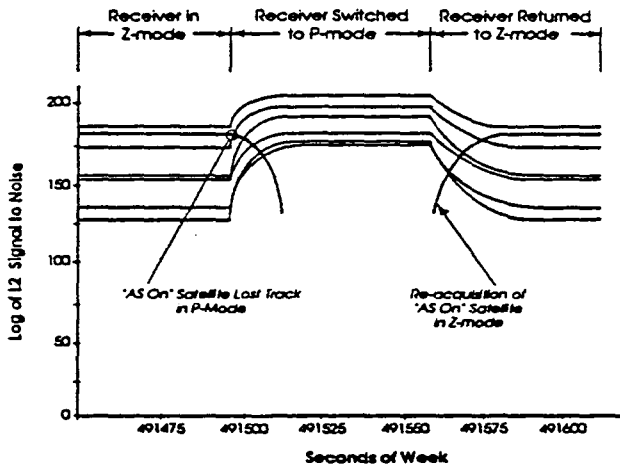


Figure 5.

- Receiver Manually Mode Switched
- One SV had A/S Turned On.
 - It Was Tracked in Z-Mode, lost in P-Mode and Re-acquired in Z-Mode
 - SNR Comparable to Non A/S Satellites Tracked in Z-Mode

Day 258 Zero Baseline

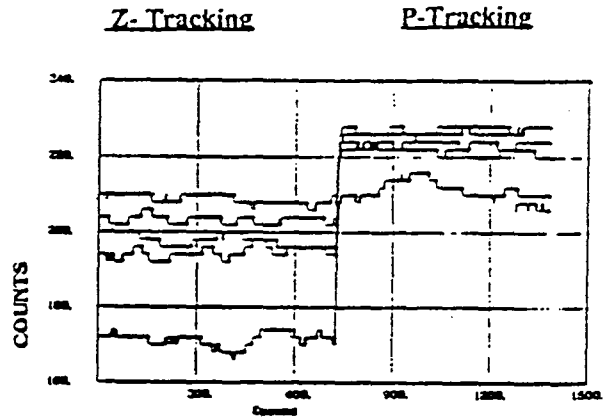


Figure 6.

P(Z) L1 Pseudo-Range Double Difference

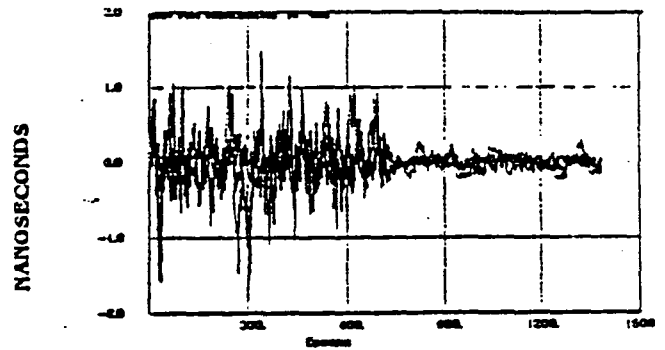


Figure 7.

P(Z) L1 Carrier Phase Double Difference

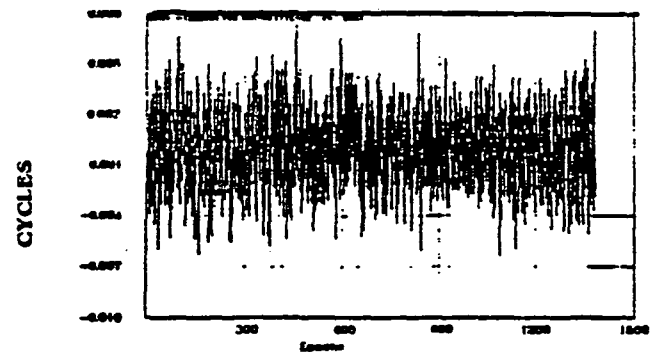


Figure 8.

Zero Baseline Double Differences

One Receiver in P-Tracking Mode
One Receiver in Z-Tracking Mode

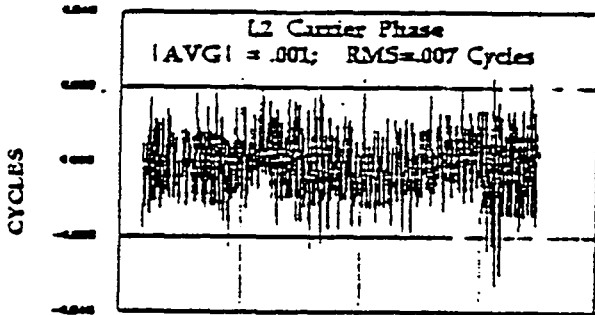


Figure 9.

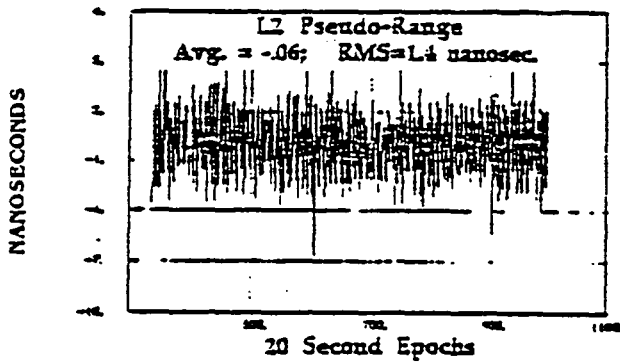


Figure 10.

Day 256 (A/S On) P1 Carrier Phase Double Differences

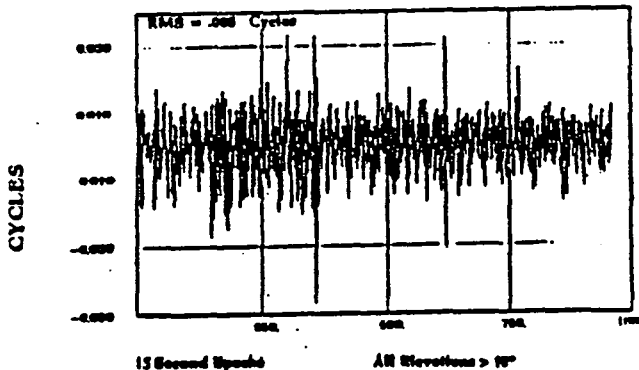


Figure 11.

Conclusions

With the Ashtech Z-12, the overwhelming majority of civilian users will not experience any performance loss when Anti-Spoofing is enabled.

Under A/S conditions, the Carrier Phase and Pseudo-Range Thermal Noise Errors, and Systematic Errors, are below the Multipath Errors caused by Present Day Antenna Technology.

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- Geodetic Processing Using Full Dual Band Observables
John Noian, Dr. Sergei Gourevitch and Jon Ladd,
Proceedings of ION-GPS-92 pgs. 1033-1041

**FOR FURTHER
INFORMATION CONTACT:**



**1170 Kifer Road, Sunnyvale, California 94086
Telephone: 408/524-1400
Fax: 408/524-1500**

-1993-

Very Precise Differential GPS - Development Status and Test Results

Xinhua Qin, Sergei Gourevitch, and Mark Kuhl

Ashtech, Inc.
1170 Kifer Road
Sunnyvale, CA 94086
(408) 524-1400

BIOGRAPHIES

Dr. Xinhua Qin is a Senior Software Engineer with Ashtech. Since January 1991, he has been working on GPS attitude determination and precise navigation systems. Before joining Ashtech, he received his Ph.D. degree in Aeronautics and Astronautics from Stanford University. During his Ph.D. research, Dr. Qin worked on an error analysis and data reduction simulation for the NASA/Stanford Relativity Gyroscope Experiment (NASA Gravity Probe-B).

Dr. Sergei Gourevitch was awarded a Ph.D. in experimental particle physics by Case Western Reserve University in 1972. After a term of post-doctoral research at Brandeis University, he joined the radio interferometry group at M.I.T. While at M.I.T., he was part of the group which demonstrated the feasibility of precise, carrier phase GPS geodesy and pioneered the technique. He made important contributions to all areas of GPS geodesy and navigation. Dr. Gourevitch joined Ashtech in February 1991 and is currently Senior Scientist and Manager of the Algorithmic Development Group.

Mr. Mark Kuhl is a graduate of Ohio University with an M.S. in Electrical Engineering. Throughout the last three years of his studies, he was employed by Avionics Engineering Center at Ohio University where he worked on GPS projects to augment flight navigation. In July 1990, Mr. Kuhl began employment with Ashtech and is responsible for developing receiver firmware for precise navigation and attitude determination.

ABSTRACT

VPDGPS is Ashtech's package for realizing the ultimate accuracy's that GPS relative navigation is

capable of achieving. It utilizes the full P-code observable set for real-time positioning at decimeter to centimeter levels of accuracy. It takes advantage of precise dual band P-code pseudorange and carrier phase observables and is capable of on-the-fly ambiguity resolution.

This PC-based system consists of two dual band P-code receivers, a 25-MHz 486 processing unit, and a reliable data link. One receiver set-up – the base receiver – is placed at a known point to broadcast the raw observables collected from the reference station. The other receiver set-up – the rover – along with the processing unit, will be tracked. The system set-up can be reversed; i.e., transmitting observables from the rover receiver and estimating the rover trajectory at a stationary base station.

The parameter estimation engine for VPDGPS is a Kalman filter. Depending on what observables are available and the processing options selected, the program can estimate real-time, three-dimensional position and velocity with accuracy's ranging from meter level (conventional DGPS) to sub-centimeter (UPDGPS).

The VPDGPS system will find use in applications ranging from real-time land surveying to aircraft auto-landing. This paper will discuss the system configuration, development strategies, and applications and present the preliminary test results.

INTRODUCTION

Over the last several years Differential GPS (DGPS) has come into its own. The substantial improvement in accuracy over standalone GPS has led to the extensive use of this technique in real-time airborne, marine and land navigation, and surveying applications.

DGPS is essentially a doubly differenced differential technique. Most current practice uses C/A pseudorange as the only observable and, due to the latency of the communication link, does not match time tags at both ends of the baseline; rather "corrections" are calculated and projected forward in time.

Ashtech is developing new products which will provide even better accuracy than current methods. There is almost a continuum of possible techniques which achieve increased accuracy at the expense of increased complexity. In an attempt to bring some order to this spectrum of techniques, we have come up with the following classification scheme:

DGPS	Differential GPS
PDGPS	Precise Differential GPS
VPDGPS	Very Precise Differential GPS
UPDGPS	Ultra Precise Differential GPS

Name	Description	RMS
DGPS	Current practice: C/A code Pseudorange	1-5 m.
PDGPS	P-code Pseudorange	0.1-1 m.
VPDGPS	Addition of dual band carrier phase	5-30 cm.
UPDGPS	Above with integer ambiguities resolved	< 2 cm.

As UPDGPS matures, it will completely replace what is now referred to as kinematic surveying.

Currently, VPDGPS and UPDGPS require that the processing, whether in real-time or in post-processing, be done in a processing computer outside the receivers. DGPS and PDGPS are currently available "in the box".

The VPDGPS package discussed in this paper is capable of providing all four categories of accuracy. However, we primarily focus, both in the discussion and in the test results, on the UPDGPS mode.

SYSTEM CONFIGURATION

The current real-time VPDGPS system is a PC-based system. The basic configuration consists of two receivers, a 25-MHz 486 PC and a reliable data link. Two receivers track the GPS signals and provide observables in both pseudorange the carrier phase. The measurement data are then transferred,

through direct RS-232 cable connections or other radio or telephone links, to the PC which serves as the processing unit. One receiver is placed at a known point to serve as the base reference station. The processing unit can be placed at either the base station or the rover station, depending on the application.

The current version of the processing software is initialized through the use of control files. The run-time program control parameters can be changed while the data processing is in progress. A graphics display is also available for way point navigation.

One of the major considerations in this system is the data transfer. As all data is processed in double difference mode, all the raw pseudorange and carrier phase measurements must be transferred to the processing unit with minimum delay. For a receiver with dual band P-code capability, a minimum of 200 bits must be transferred for each satellite at each update interval. With six satellites being tracked, the minimum amount of data to transfer is 1200 bits plus several hundred bits of overhead. A high-speed modem or data compression scheme can be used.

A simple data compression scheme has been employed to reduce the data link rate requirement. The raw data is first singly differenced by differencing with respect to the satellite which has the highest elevation. The singly differenced pseudorange and carrier phase observables are further differenced with respect to either the singly differenced PL1 pseudorange or PL2 pseudorange. This data compression scheme can reduce the data rate by 40%. This reduction allows the use of a standard 1200 BAUD modem at a once per second update rate.

DATA PROCESSING ALGORITHM

The VPDGPS system possesses three processing modes: a real-time mode, a real-time emulation mode, and a post-processing mode. In the real-time mode, the data is received via two RS-232 ports and distributed to the processing section of the program as the data arrives. When configured in the real-time emulation mode, the program obtains actual raw observable data from files which can be downloaded from the receivers or captured through the RS-232 ports when the program was run in the real-time mode. These data are then provided to another part of the program as if they had been

collected in real-time. In the post-processing mode, the raw data is processed without the simulated data transfer delay and also allows backward filtering and smoothing.

The parameter estimation engine for VPDGPS is a Kalman filter. It is a single baseline based relative position, velocity, and/or acceleration estimator. The measurements used for the Kalman filter are doubly differenced pseudorange, carrier phase, and/or Doppler observables:

$\rho_{C/A}$	C/A pseudorange
ρ_{P1}	PL1 pseudorange
ρ_{P2}	PL2 pseudorange
ϕ_{L1}	L1 carrier phase
ϕ_{L2}	L2 carrier phase
ω_{L1}	L1 Doppler
ω_{L2}	L2 Doppler

Depending on the type of DGPS processing selected, different subsets of the possible observations are used.

The parameters to be estimated by the Kalman filter are:

x	x component of the rover position.
v_x	x component of the rover velocity.
a_x	x component of the rover acceleration.
y	y component of the rover position.
v_y	y component of the rover velocity.
a_y	y component of the rover acceleration.
z	z component of the rover position.
v_z	z component of the rover velocity.
a_z	z component of the rover acceleration.
I_1	differential ionosphere 1.
I_2	differential ionosphere 2.
...	...
I_{n-1}	differential ionosphere n-1.
$N1_1$	L1 integer ambiguity 1.
$N1_2$	L1 integer ambiguity 2.
...	...
$N1_{n-1}$	L1 integer ambiguity n-1.
$N2_1$	L2/WL integer ambiguity 1.
$N2_2$	L2/WL integer ambiguity 2.
...	...
$N2_{n-1}$	L2/WL integer ambiguity n-1.

in which n is the number of satellites the program is currently processing. I_i is the differential ionosphere. $N1_i$ is the L1 double difference carrier phase integer ambiguity. $N2_i$ is the L2 or wide-lane

(WL) double difference carrier phase integer ambiguity. x, y, z can be expressed in either the Earth-Centered Earth-Fixed (ECEF) frame or a local geodetic frame.

Normally, the total number of states for the Kalman filter is $6+3*(n-1)$ if there are data from n satellites.

Most of the parameters are modeled as Gauss-Markov processes. Position is, of course, the integral of velocity while velocity is the integral of acceleration. The integer ambiguities are modeled as constants or as random walks with very small noise amplitude (the latter scheme improves numerical stability).

Depending on the rover dynamics and distance from the base station, the parameter set can be reduced. For static applications, eliminating the velocity and acceleration parameters not only reduces the number of parameters but also helps the ambiguity resolution. For a large ship, eliminating the acceleration parameters is possible. Also, the height can be modeled as a first-order Gauss-Markov process, i.e., no velocity parameter. For short baselines (< 10 km), the differential ionosphere can usually be removed from the parameter set.

DIFFERENTIAL IONOSPHERE MODELING

The double difference cancels most of the ionosphere. The residual part, called the differential ionosphere, is spatially correlated. For example, the differential ionosphere is usually proportional to receiver separation for distances up to hundreds of kilometers.

One program option is to ignore the differential ionosphere if the baseline length is less than 10 km.

When dual band observations are available, we can model the differential ionosphere. The current models concern themselves only with the time dependence of the differential ionosphere. Each double difference's ionosphere is modeled as a separate stochastic process. The models do not take advantage of the fact that the differential ionosphere is spatially correlated, except to determine the parameters for the model. The stochastic model parameters, the initial uncertainty and perturbation, are expressed as functions of the baseline length.

Several alternatives have been considered in modeling the time correlations of the differential ionosphere:

1. White noise model.
2. Gaussian-Markov process model.
3. Random walk model.

Cases 1 and 3 are, of course, the limits of case 2. The three models have been tested and results for cases 1 and 2 will be discussed in the Results section.

TROPOSPHERE DELAY MODELING

Differential troposphere becomes significant when the base and rover have more than a 100 meter height separation or more than a 20 km horizontal separation. The aircraft flight data, presented in the Results section, shows the solutions with and without the Goad and Goodman troposphere model [Leick 1990].

RESOLVING THE DOUBLE DIFFERENCE INTEGER AMBIGUITY (UPDGPS)

To fully take advantage of accurate carrier phase observables and perform centimeter level positioning, the initial double difference integer ambiguity must be resolved. In order to achieve an optimal estimation, the integer ambiguities are included in the parameter estimation set and treated as continuous variables.

Essentially, the average of the pseudorange observables determines the ambiguity parameters while the carrier phase observables determine vehicle motion. As the filter settles down, the formal errors (Kalman filter covariance matrix) become smaller. When the formal errors of the integer ambiguity parameters are smaller than pre-set values, integer ambiguity searches are launched. In the case of dual frequency observables, the wide-lane parameters are searched first. Once the wide-lane ambiguities have been determined, the L1 ambiguities are usually relatively easy to fix. If the L1 ambiguities can not be fixed after the wide-lane ambiguities are determined, the state estimation and covariance retain their values before fixing the wide-lane ambiguities and the program will try again at a later epoch.

SOLUTION QUALITY CONTROL

It is, of course, vital that the integer ambiguities are correctly fixed. A conservative criterion reduces the accuracy in some cases but guards against gross errors. A less conservative criterion results in a higher percentage of successful campaigns but a higher percentage of errors. The fact that a program which is right 85% of the time will win more "head-to-head" competitions than one which is correct 95% of the time is an unfortunate fact which tempts many manufacturers towards the less conservative approach.

One method we use is to pre-compute the post-fit residuals before the raw data observables are used for the Kalman measurement update. If there is any data which increases the residuals substantially, the data will be reweighted or eliminated. The "goodness" criterion is computed based on all the observations at the current epoch:

$$\chi^2 = (z - Hx)^T R^{-1} (z - Hx)$$

in which R is the weighting matrix, or the measurement noise covariance matrix, z is the measurement vector, H is the measurement matrix, and x is the state estimation vector. This χ^2 is a goodness-of-fit indicator. Once the Kalman update is performed, the post-fit residuals of the carrier phase measurements are also examined to ensure the correctness of the integer ambiguity resolution.

RESULTS

In this section, several test results will be presented. The baseline lengths ranged from less than 10 km to over 100 km. Due to the high data rate requirement and lack of a high-speed, high-power radio, all the real-time tests were limited to short distances. Long baseline results were post-processed. All the tests utilized the Ashtech P-12 receiver. Most of the plotted positions were computed with respect to the antenna phase center of the reference station except as specially noted.

SHORT BASELINE REAL-TIME RESULTS

During a test conducted in August 1992, a Tandy cellular phone and two Telebit *CellBlazer*TM modems were used as the data link with a 19,200 BAUD data rate. A portable 16-MHz 386 PC was used as the processing unit. The program established a

communication link through the cellular phone network. The data from the stationary reference site, which was 9 km away, were transmitted continuously through the cellular phone to the PC's serial port and processed by the PC. The rover receiver was directly connected to the PC's other serial port through a standard RS-232 cable. Due to the limited processing power of the 386 PC, the test was conducted with a 2 second measurement update rate. All the results shown in the following figures were collected in real-time.

The rover antenna was mounted on a tripod attached to a rack which was mounted on the roof of a van. This allowed the antenna/tripod assembly to be easily detached from the van and placed on ground monuments. Figure 1 shows the rover antenna trajectory. The plotted position was computed with respect to a control site (1111). Figure 2 shows the time history of the PDOP during the test, the frequent changes in the PDOP were due to the fact the processing power of the 16-MHz 386 PC is so limited that some satellites had to be manually eliminated from the data processing. Several spikes in the middle of the figure indicate that some satellites had cycle-slips due to their low elevation and/or changes in the visibility due to the movement of the van. Figure 3 shows the time history of the position estimation RMS values. As indicated, the RMS has a sharp transition after time tag 23.4. This indicates that the double difference integer ambiguities have been determined. The position estimation accuracy changes from around 1 meter to 0.01 meter. The speed of the van is shown in Figure 4.

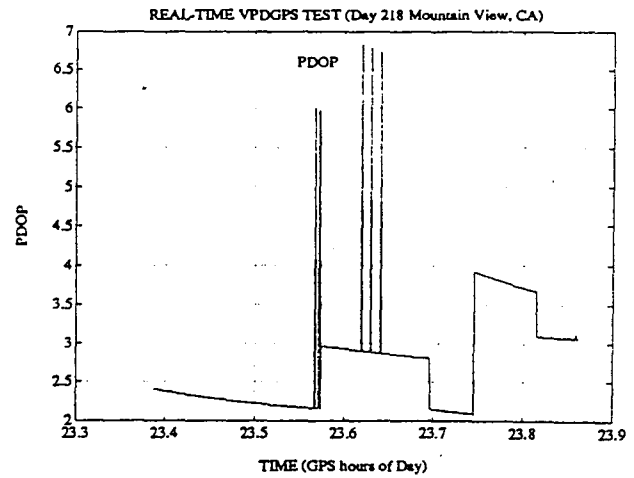


Figure 2. Day 218 Test: PDOP

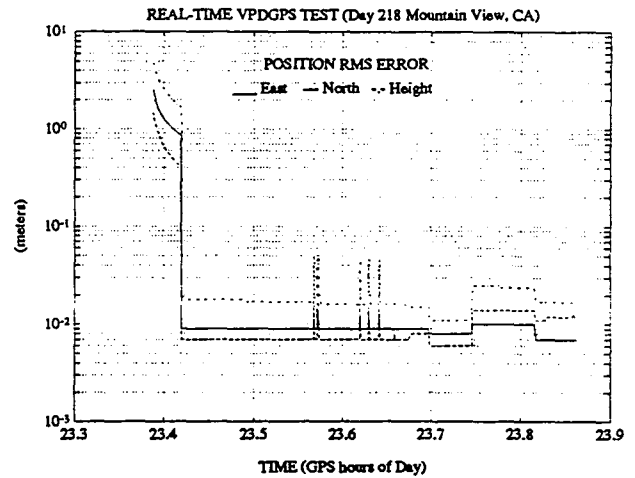


Figure 3. Day 218 Test: Position Estimation RMS

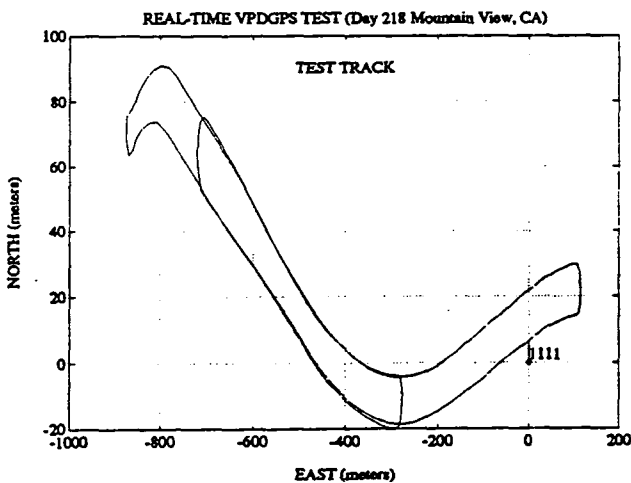


Figure 1. Day 218 Test: Van Trajectory

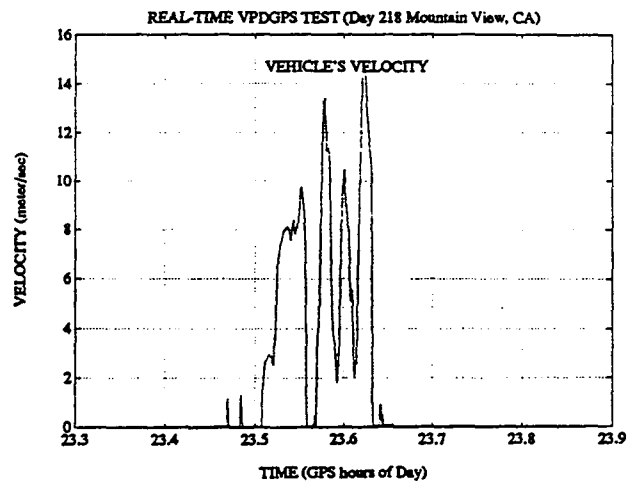


Figure 4. Day 218 Test: Van Velocity

Figure 5 shows the post-fit phase residuals. Note that the residuals have a jump right after the ambiguities are determined (after time tag 23.4). This is normal because after fixing ambiguities, the number of free parameters is reduced. On the average, the residuals after fixing the ambiguities are about 0.01 meters, which corresponds to 0.05 L1 cycles. This is a little higher than the receiver phase noise (~0.02 cycles). This is because neither the differential troposphere nor the differential ionosphere is modeled during the data processing. To validate that the integer ambiguities have been fixed to the correct values, Figure 6 shows the position error as compared to the GPS surveyed values when the antenna was placed on site 1111.

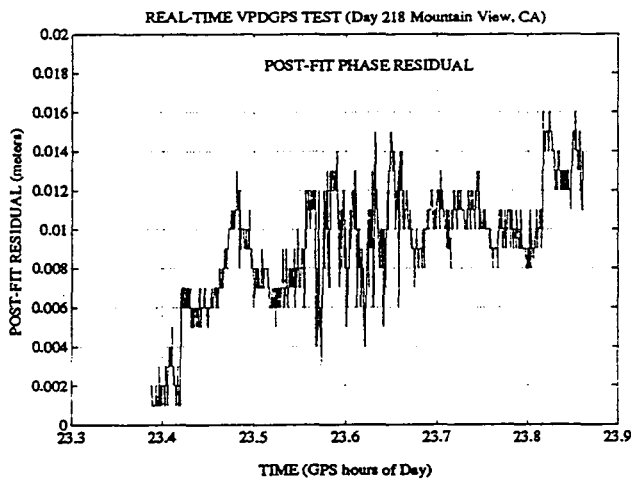


Figure 5. Day 218 Test: Post-fit Phase Residual

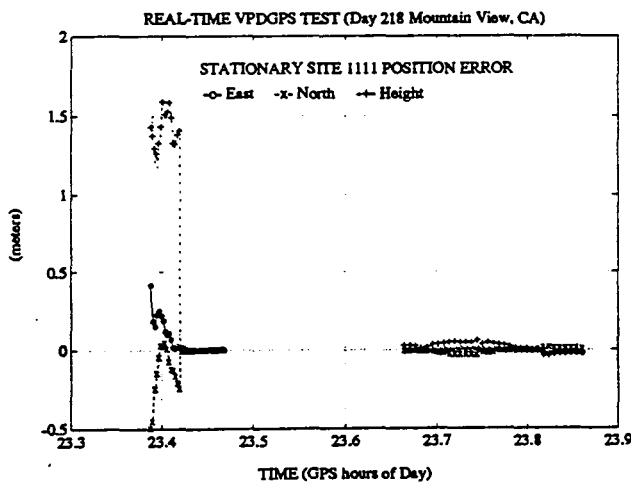


Figure 6: Day 218 Test: Stationary Site Position

AIRCRAFT FLIGHT TEST

This flight test was performed by the Avionics Engineering Center of Ohio University in April, 1992. The data was collected at a 0.5 second update rate and processed in a post-processing mode. During this test, the aircraft flew within 30 km from the base station at the airport.

Figure 7 shows the flight path during the test: the aircraft first took off and flew the large loop. It then touched the runway and flew another, smaller loop.

Figure 8 shows the post-fit phase residuals for several data processing cases:

Case	Trop Model	Ion Model
1	NT	NI
2	T	NI
3	T	WI
4	T	MI

where:

NT means no troposphere model.

T use the Goad and Goodman troposphere model.

NI means assume differential ionosphere is zero.

WI model the differential ionosphere as statistically independent at each epoch. The process noise of this white noise model was set at 1.5 ppm of the receiver separation.

MI model the differential ionosphere's temporal behavior as a Gauss-Markov process. The correlation time was set at 100 seconds; the process noise at 0.5 ppm of the receiver separation. The initial uncertainty of the ionosphere was set at 2.0 ppm of the receiver separation.

The effect of ignoring the troposphere is exacerbated by large height differences between the rover and base stations. The case 1 plot shows that the differential troposphere peak occurred when the aircraft flew about 1000 meters above the reference station. Most of this delay can be removed by the troposphere model as shown in case 2 of Figure 8.

In Figures 9 and 10, we show the position comparison of the above four cases. In these plots, the positions estimated from cases 1, 2 and 3 are compared to those from case 4. The reason for

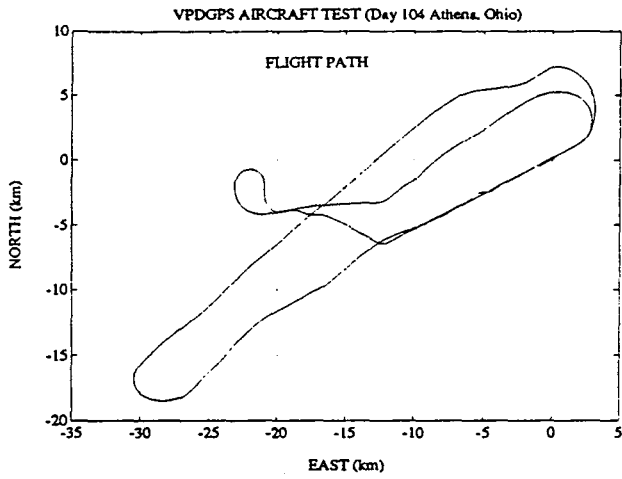


Figure 7. Aircraft Test: Flight Trajectory

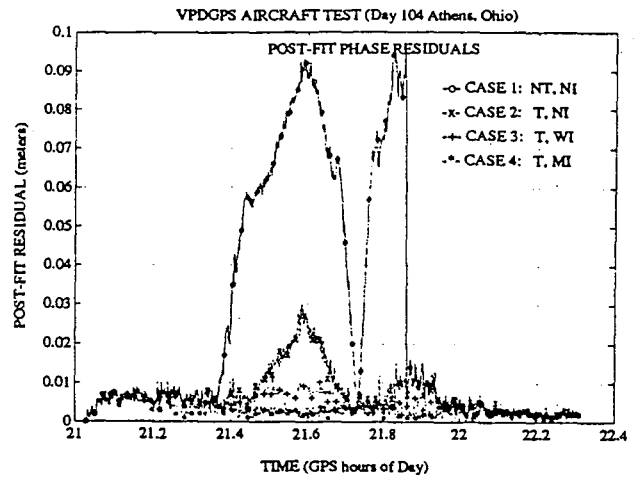


Figure 8. Aircraft Test: Post-fit Phase Residual

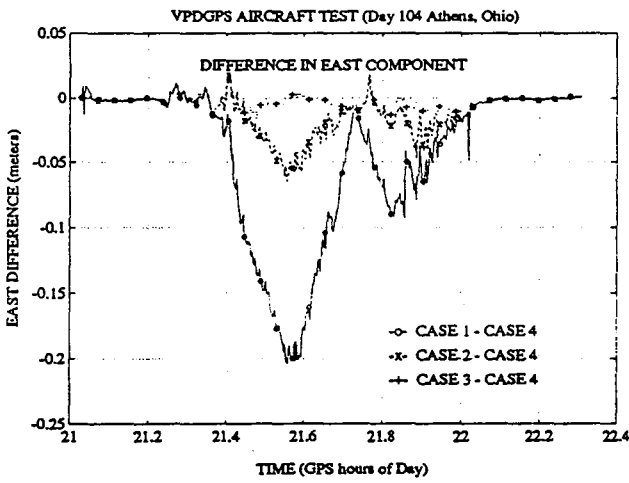


Figure 9. Aircraft Test: East Difference

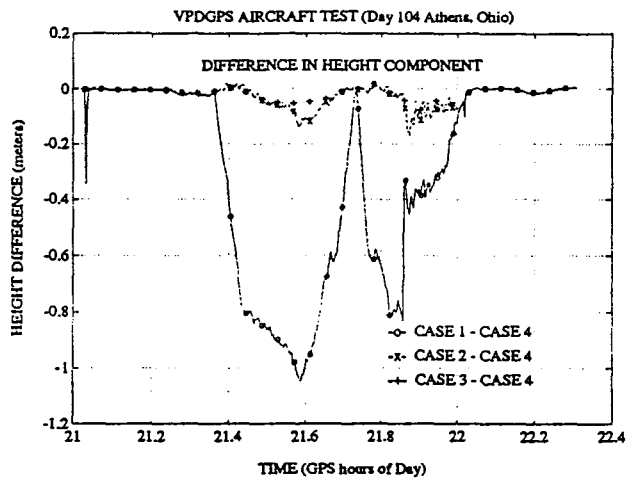


Figure 10. Aircraft Test: Height Difference

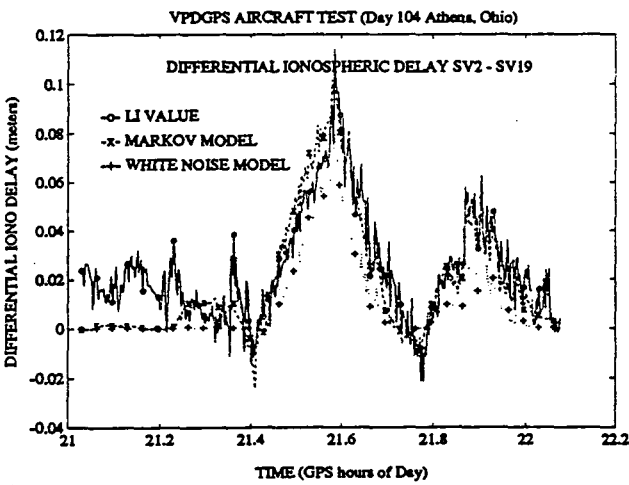


Figure 11. Aircraft Test: Ionosphere for SV2-SV19

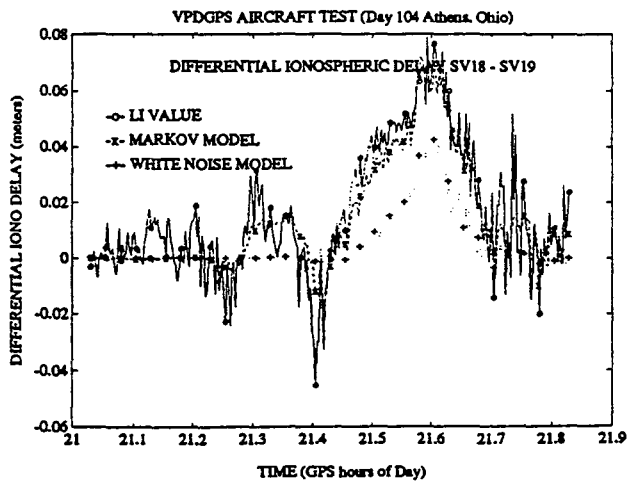


Figure 12. Aircraft Test: Ionosphere for SV18-SV19

choosing case 4 as the reference is due to the fact that case 4 has the minimum post-fit phase residual over the whole run (see Figure 8). Differences in the east and height components are plotted in Figure 9 and 10. As seen from the plots, unmodeled troposphere causes 0.1 to 0.2 meters of error in east component and up to 1 meter of error in the height component; unmodeled ionosphere causes a 5 cm error and a 15 cm error in the respective components. Note that the height difference is negative since unmodeled delays increase the effective signal path.

The differences between a white noise model and a Gauss-Markov process model for differential ionosphere are shown in Figures 8 through 12. Both models can remove the majority of the differential ionosphere. As seen from Figure 8, both models bring the post-fit phase residuals for a long baseline (> 10 km) to the same level as that for a short baseline (< 10 km). The resulting position estimation differences are less than 0.02 meters in the east component and less than 0.1 meters in the height component (Figures 9 and 10, case 3 - case 4). Figures 11 and 12 show the differential ionosphere from the linear geometry-free (*LI*) combination of carrier phases and their estimated values from two different models for the double differences between SV2, SV18 and SV19. The *LI* value is computed by the following formula:

$$LI = \frac{\lambda_2 (\phi_2 - N_2) - \lambda_1 (\phi_1 - N_1)}{(1 - f_1^2 / f_2^2)}$$

in which ϕ_1 , N_1 and ϕ_2 , N_2 are the double differenced carrier phase measurements and integer ambiguity parameters in L1 and L2 bands, respectively; λ_1 , f_1 and λ_2 , f_2 are the wavelength and frequency of L1 and L2 bands. This *LI* value represents the true differential ionosphere. From the plots, one can see that estimation of the differential ionosphere with a Gauss-Markov model follows the *LI* value better than that with a white noise model.

FIXING AMBIGUITIES ON-THE-FLY

To demonstrate the integer ambiguity searching scheme, the data was processed with a start epoch at which the aircraft was about 14 km away from the reference station and approaching the runway.

After about 2.5 minutes, while the aircraft was about 5 km away from the reference station, the correct set of integer ambiguities were determined. Figure 13 shows the aircraft trajectory during this process. The thick line is the position solution without fixing the integer ambiguities and the thin line is the position solution with the integer ambiguities being fixed. Figure 14 shows the positioning error compared to the whole run which processed the data from beginning to end.

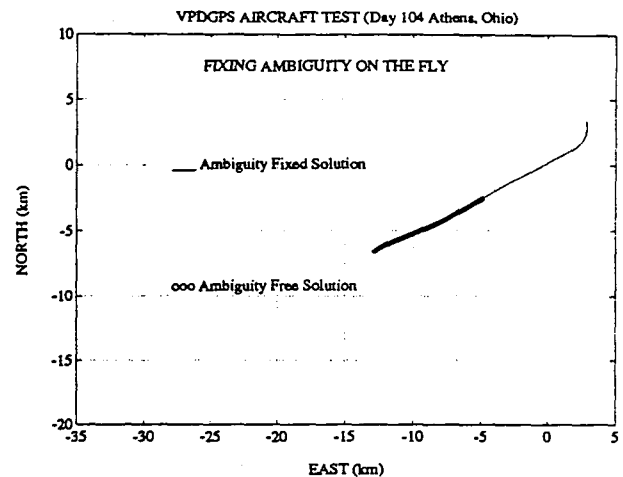


Figure 13. Aircraft Test: Fix Ambiguity On-the-Fly

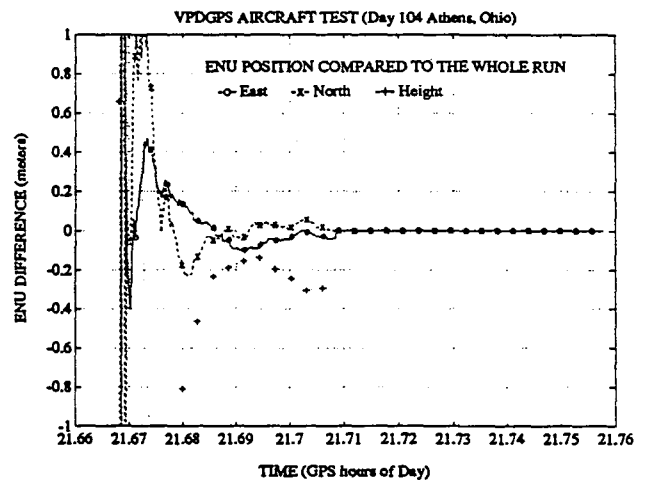


Figure 14. Aircraft Test: ENU Position Comparison

SHIP TEST

This test was done on board a ship in San Diego in June, 1992. There were 5 satellites visible during the test. Figure 15 shows the test track. Figure 16 shows the height above (below) the reference site. Most of

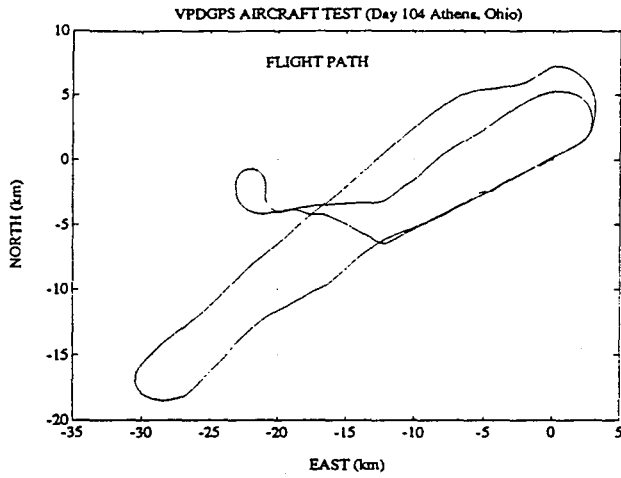


Figure 7. Aircraft Test: Flight Trajectory

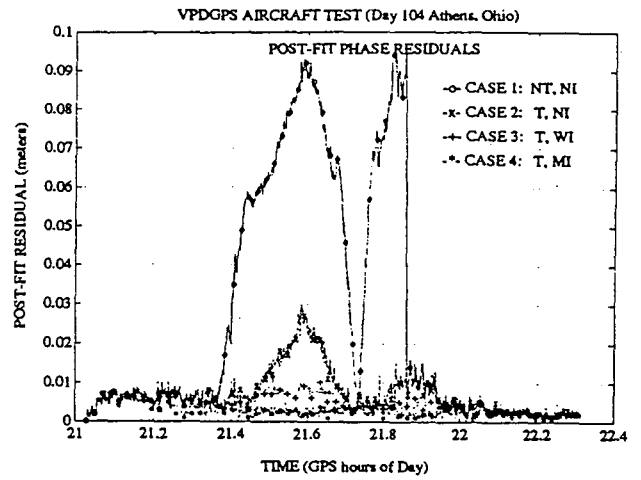


Figure 8. Aircraft Test: Post-fit Phase Residual

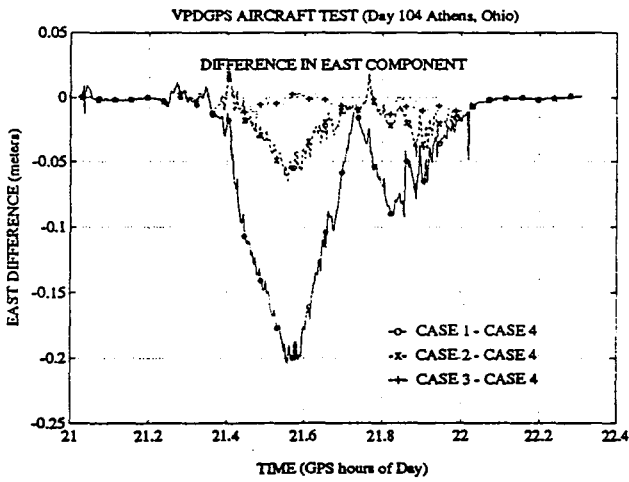


Figure 9. Aircraft Test: East Difference

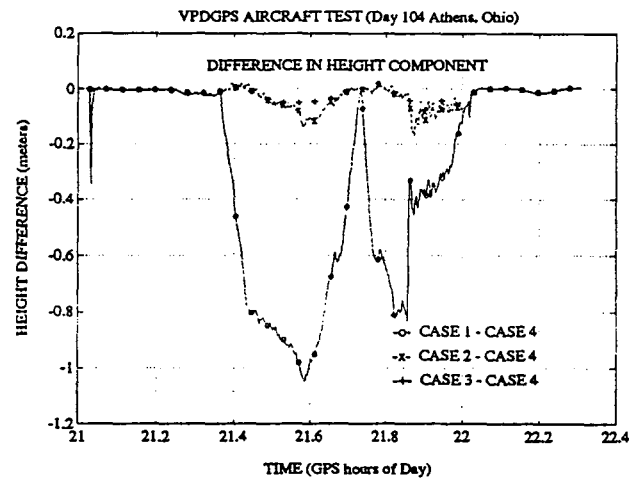


Figure 10. Aircraft Test: Height Difference

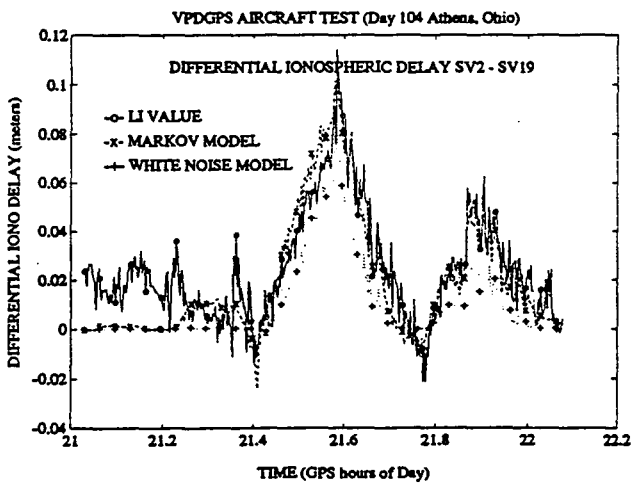


Figure 11. Aircraft Test: Ionosphere for SV2-SV19

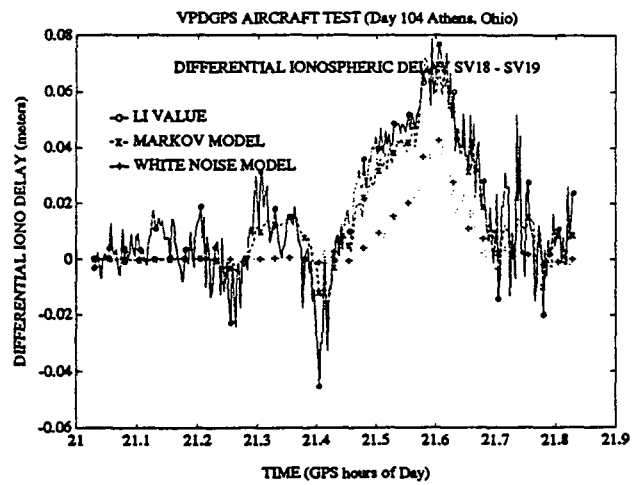


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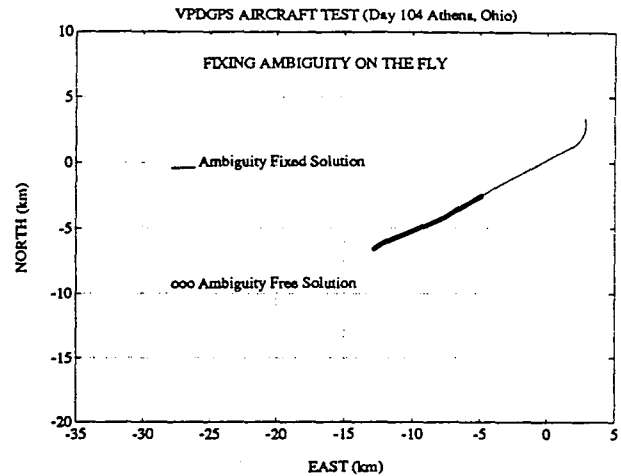


Figure 13. Aircraft Test: Fix Ambiguity On-the-Fly

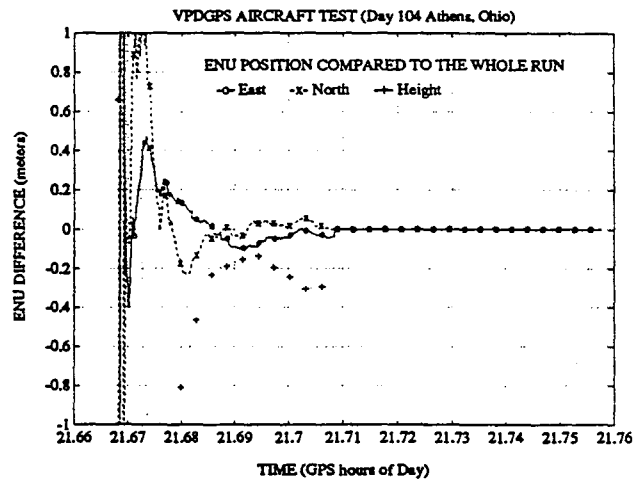


Figure 14. Aircraft Test: ENU Position Comparison

SHIP TEST

This test was done on board a ship in San Diego in June, 1992. There were 5 satellites visible during the test. Figure 15 shows the test track. Figure 16 shows the height above (below) the reference site. Most of

the results are ambiguity-fixed results, except for two short periods. One is at the beginning of the run; the other is between time tag 16.1 and 16.2. In the second period, after time tag 16.1, an unrecoverable cycle-slip occurred in the rover receiver and the integer ambiguities had to be redetermined. Since the program models the height as a random walk, the predicted (estimated) height during this period is essentially constant (see Figure 16). A few minutes later, the integer ambiguities had been redetermined and the ambiguity-fixed solutions were computed.

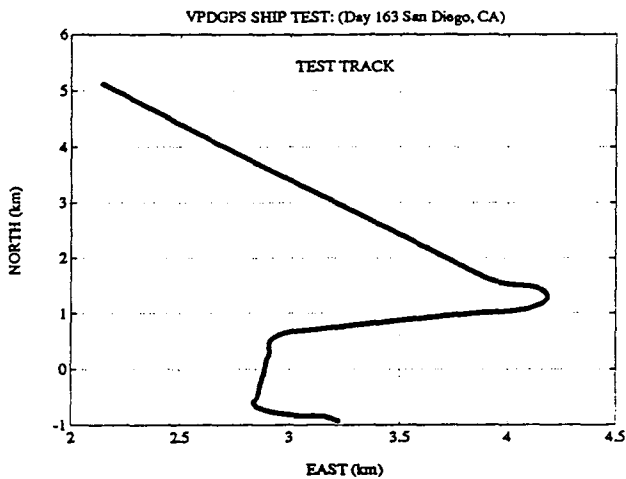


Figure 15. Ship Test: Ship Trajectory

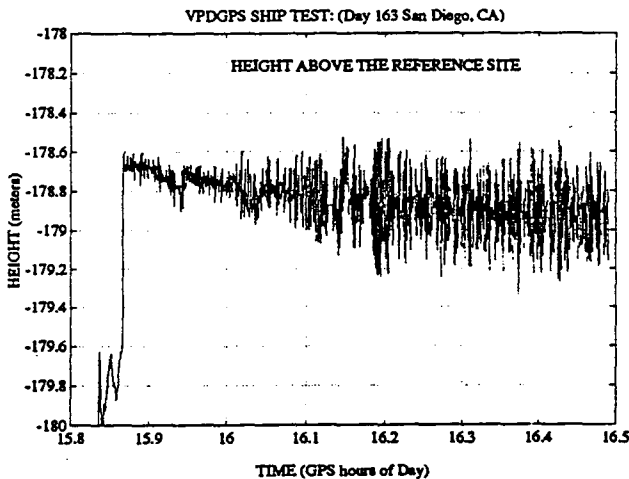


Figure 16. Ship Test: Height Relative to the BASE

LONG BASELINE VAN TEST

In March 1992, a test was conducted for a 160 km baseline. A reference station, TG3 was set up in Sunnyvale, CA. Another static site was selected near the rover to serve as a local base station, designated as RBS (Rover Base Station). By processing 2-3 hours worth of dual frequency data using the Ashtech GPPS software, the coordinates of RBS were known to a few centimeters relative to site TG3. The data from RBS and the rover were then processed by the Ashtech GPPS kinematic survey package with an antenna swap technique [Remondi 1988]. This relative position as computed from the kinematic survey was added to the coordinates of RBS to form the "ground truth". Figure 17 shows the test track of the rover with respect to the RBS.

The relative position from RBS to the rover was also processed by the VPDGPS package, the result agreeing with the kinematic survey results to within 1 centimeter [Gourevitch 1992].

The data from TG3 and the rover were processed by VPDGPS with a Gauss-Markov process model for the differential ionosphere and without fixing the integer ambiguities. Figure 18 shows the east, north, and height differences from the "ground truth" described above. Initially the results had relatively large errors. This is because the differential ionosphere had not been estimated to the corrected value. It took almost one hour for the solution to settle down and for the errors to reduce to 0.1-0.2 meters.

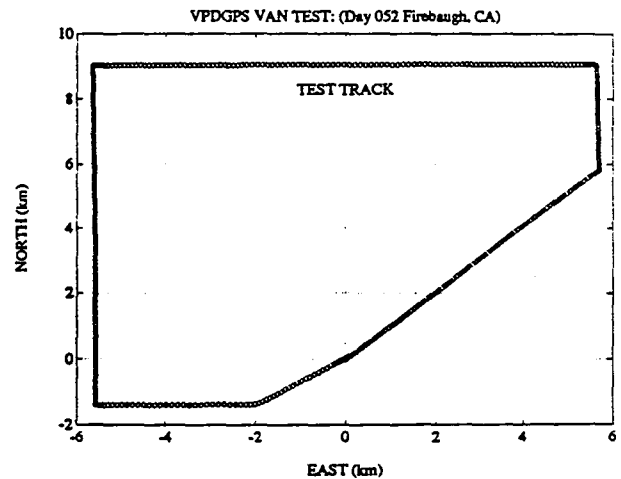


Figure 17. Long Baseline Test: Trajectory

**A Preliminary Report on the
Static and FastStatic Surveying Results obtained on the
Federal Geodetic Control Sub-committee (FGCS)
Test Network
using the
Trimble 4000SSE Geodetic System Surveyor and the
GPSurvey Software System**

October, 1992
Gaithersburg, Maryland,
U.S.A.

Prepared by:
Nicholas C. Talbot



TrimbleNavigation

1. Introduction

The Federal Geodetic Control Sub-committee (FGCS) has established a reliable framework of control stations that provide GPS system manufacturers with an opportunity to test and verify quoted accuracy specifications for their receiver hardware and software positioning systems.

Trimble Navigation has recently introduced two complementary survey products, the 4000SSE Geodetic Surveyor™ GPS receiver and the GPSurvey™ software system.

The 4000SSE Geodetic Surveyor receiver provides L1 and L2 signal tracking of up to nine GPS satellites using parallel channels. One of the distinct features of the Geodetic Surveyor unit is the way it overcomes P-code encryption. The 4000SSE tracks the P-code signal and full-cycle L1 and L2 carrier phase measurements when the P-code is available. When the P-code is encrypted, the Geodetic Surveyor system automatically switches from dual-frequency P-code tracking to precise C/A-code and cross-correlated Y-code operation, while maintaining full-cycle L1 and L2 carrier tracking.

The GPSurvey baseline reduction package utilizes the precise code and carrier phase measurements collected with the Geodetic Surveyor unit for FastStatic™ surveys and high-accuracy long baseline estimation. The GPSurvey software suite runs under the Microsoft Windows operating system.

The aim of the October 1992 FGCS campaign was to test the performance of the 4000SSE Geodetic Surveyor receiver in conjunction with the GPSurvey baseline reduction package. Traditional Static and FastStatic positioning techniques were the focus of the test.

2. Test Description

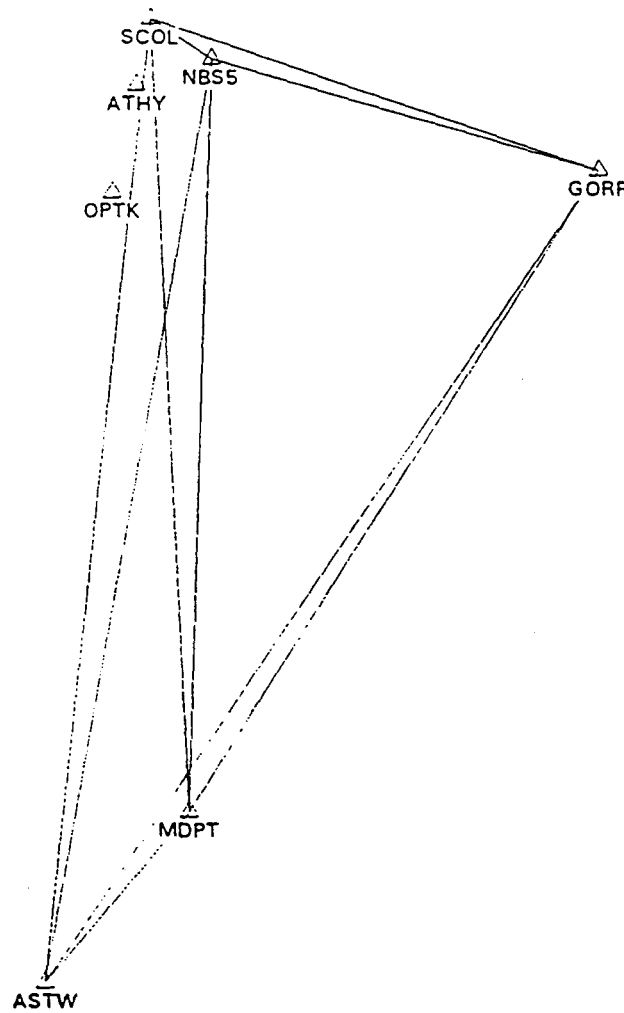
The FGCS test network is situated in Gaithersburg, Maryland, in the vicinity of Washington D.C. Twelve first-order geodetic control points were used for the investigation, with station separations varying from 0.2km to 104km (a network diagram is provided in Figure 1).

The FGCS test was conducted over four days: from Sunday, October 4, to Wednesday, October 7, 1992. Five Trimble 4000SSE Geodetic Surveyor systems were deployed during the test. Observations were divided into two sections: Static surveying, which was performed on Sunday, Monday, and Wednesday (see Table 1); and a FastStatic campaign, which was conducted on Tuesday.

The FastStatic survey was performed using two rovers and three reference sites. The rovers visited five permanent control sites on two separate occasions. The reference sites NBS5, SCOL, and OPTK were 0.5km, 7km and 17km, respectively, from the roving units. The spread of baseline lengths provided some breadth for the analysis of Trimble's FastStatic technique.

Session	Day	Local Time	NBS0	NBS1	NBS3	NBS5	ORM1	ATHY	SCOL	OPTK	GORF	ASTW	MDPT
278A	SUN	14:00 16:00	x	x	x	x	x						
278B	SUN	16:00 18:00	x	x	x	x	x						
279	MON	15:00 18:00				x		x	x	x	x		
281	WED	15:00 18:00				x			x		x	x	x

Table 1. Observing Schedule for the Static survey.



20000m

Figure 1. FGCS Test Network.

An afternoon observing window (2pm to 6pm local time) provided reasonable satellite geometry for the receiver test. Although there were brief periods of four satellite availability, most of the window had at least five satellites above 15 degrees (see Figure 2).

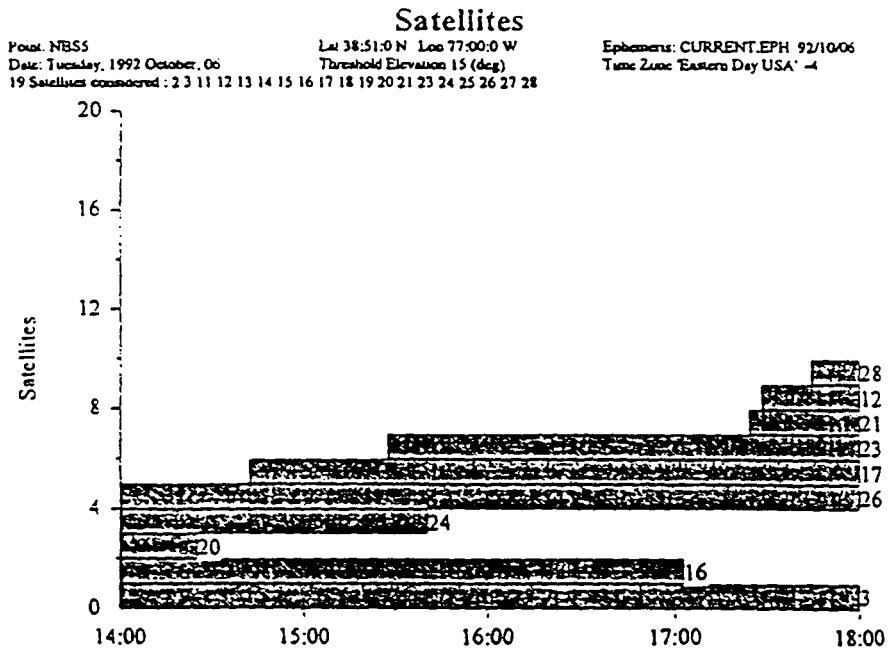
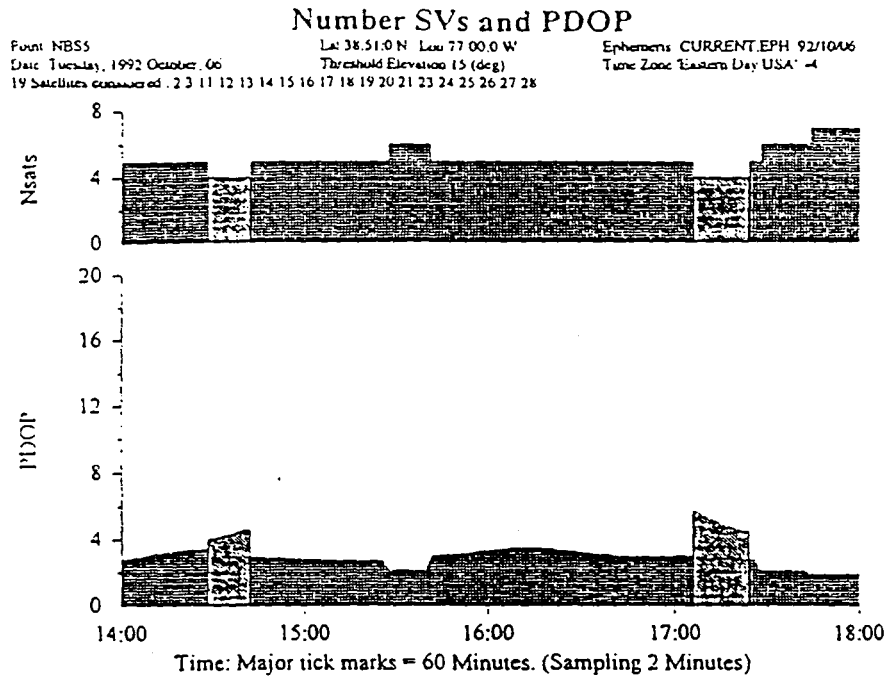


Figure 2. Satellite Availability during the FGCS Test.

3. Field observations

3.1. Static Survey

Short baselines were observed on Sunday (Day 278), using two 2-hour observation sessions. The P-code was encrypted on five Block II satellites (PRNs 16, 17, 20, 23 & 26) throughout the day. (Weekend Y-code [P-code encryption] testing has been commonplace over the last few months and is expected to continue until the Global Positioning System becomes fully operational, at which time all Block II satellites will be encrypted). All receivers automatically switched to C/A-code and cross-correlated Y-code tracking on the encrypted satellites. A mix of P-code, C/A-code and cross-correlated data was stored.

On Monday (Day 279), a single three hour session was used to observe medium-length baselines. These vectors varied in length from 7km to 42km. The same observation session was repeated on Wednesday (Day 281) for the long-baseline calibration.

3.2. FastStatic Survey

FastStatic survey occupations varied from several minutes, when seven satellites were in view, to approximately twenty minutes when only four satellites were available. The 4000SSE system provides the receiver operator with a *time-to-go* indicator that displays how long a site needs to be occupied. Rather conservative site occupation times were used to ensure that successful results would be obtained for the 17km baseline.

3.3. Summary of Field Observations

The field occupations followed the planned schedule exactly. All sessions were pre-planned and entered into the GPS units prior to arriving at the occupation points. Operators simply switched the equipment on and entered the predefined session.

4. Data Reduction

The GPSurvey software guides a user through:

- data download,
- baseline reduction,
- graphical viewing, and
- network adjustment,

using a logical, graphical interface.

To reduce the data, a user simply has to click on the *Auto Process* button to invoke the baseline processor. All statistical decisions are rigorously handled by the reduction software to ensure that the highest precision is obtained on FastStatic and Static baseline solutions.

One hundred thirty-five FastStatic and Static baselines were processed and adjusted within a day of leaving the field. This highlighted the ease of using the GPSurvey package in a production environment.

5. Data Analysis

5.1. Static Survey

All possible combinations of baselines were successfully processed within the GPSurvey package. Given that five receivers were operated simultaneously, ten baselines were generated for each common occupation.

Baseline closures were computed from a variety of Static and FastStatic solutions, spanning multiple sessions. The loop closures selected for appraisal were independently chosen by the FGCS officials.

The measurement quality of the 4000SSE Geodetic Surveyor units is immediately apparent from the closures (Table 2). The unadjusted baseline solutions close to less than $5\text{mm} \pm 0.5$ parts per million of the baseline length, in all examples. This is significantly better than the specified tolerance of the equipment and software. The broadcast satellite ephemerides were used to process all baselines.

The first closure included data from the mixed C/A-code, cross-correlated Y-code, and P-code observations collected on Sunday (Day 278). There is no appreciable degradation in the results when using data from encrypted satellites. Clearly, the 4000SSE system provides excellent insurance against P-code encryption.

From	To	Session			Slope Length (meters)	
NBS5	SCOL	279			6,948.92	
SCOL	NBS3	280			7,299.77	
NBS3	NBS5	278A			519.16	
		Total			14,767.9	
Closure [m]	+0.004 N	-0.002 E	+0.008 U	0.009 R	0.62 ppm	

From	To	Session			Slope Length (meters)	
NBS5	OPTK	279			17,132.9	
OPTK	SCOL	280			19,616.6	
SCOL	GORF	279			42,246.2	
GORF	NBS5	281			35,658.7	
		Total			114,654	
Closure [m]	0.000 N	-0.026 E	-0.028 U	0.038 R	0.33 ppm	

Table 2. Static Baseline Solution Closure Summaries.

From	To	Session			Slope Length (meters)	
NBS5	OPTK	280			17,132.9	
OPTK	ATHY	279			12,083.1	
ATHY	SCOL	279			7,534.7	
SCOL	GORF	279			42,246.2	
GORF	MDPT	281			80,017.2	
MDPT	NBS5	281			84,015.7	
		Total			243,030	
Closure [m]	+0.008 N	+0.001 E	+0.040 U	0.041 R	0.17 ppm	

(Table 2 Continued). Static Baseline Solution Closure Summaries.

5.2. FastStatic Survey

FastStatic surveying provides improved productivity over Static techniques by reducing site occupation time without significantly compromising solution quality.

The repeatability of the FastStatic surveying method was examined using the baselines derived from reference stations NBS5, OPTK and SCOL. A summary of the repeatability of the FastStatic baseline solutions is given in Table 3.

From	To	δN [mm]	δE [mm]	δU [mm]	Length [km]	Occupation Time [minutes]
NBS5	NBS3	+0.7	+1.9	-2.0	0.52	14
		+7.5	-6.5	+7.9		15
		-14.0	+3.3	-12.5		16
		+5.9	+1.3	+6.6		20
StdDev [mm]		8.5	3.8	8.1		
Spread [mm]		21.5	9.7	20.3		

From	To	δN [mm]	δE [mm]	δU [mm]	Length [km]	Occupation Time [minutes]
SCOL	NBS3	+4.6	+1.8	-1.5	7.3	20
		+1.9	-5.8	+14.3		15
		+4.0	-0.3	-3.1		14
		-10.4	+4.3	-9.7		16
StdDev [mm]		6.1	3.8	8.8		
Spread [mm]		14.9	10.2	24.1		

Table 3. Repeatability of the FastStatic baselines over varied baseline lengths.

From	To	δN [mm]	δE [mm]	δU [mm]	Length [km]	Occupation Time [minutes]
OPTK	NBS3	+13.1	-1.9	+1.8	17.5	15
		-19.3	+1.3	-10.9		16
		-2.5	-3.2	+7.2		14
		+8.7	+3.9	+1.8		20
StdDev	[mm]	12.5	2.8	6.7		
Spread	[mm]	32.3	7.1	18.1		

(Table 3 Continued). Repeatability of the FastStatic baselines over varied baseline lengths.

The repeatability figures shown in Table 3, represent the deviations from the mean of all baseline solutions between the respective reference site and NBS3. A more homogeneous solution would be obtained by studying residuals from a network adjustment of all Static and FastStatic results. In other words, the values shown in Table 3 are somewhat pessimistic.

Some fast static methods are limited by baseline length, because they rely on high correlation in the ionospheric error between the reference and roving sites. Results from OPTK, which was approximately 17km from NBS3, are only marginally worse than the repeatability figures obtained from SCOL and NBS5. Precise Dual-frequency code and carrier phase observations are optimally processed with the GPSurvey package to yield FastStatic results which are not restricted to short baselines.

6. Conclusion

The results of Federal Geodetic Control Sub-Committee October 1992 Test clearly demonstrates the quality of the Trimble 4000SSE system and the GPSurvey software.

FastStatic baseline repeatability was, on average, 0.01m for baseline lengths up to 17km in length. Static positioning results were confirmed to be better than $5\text{mm} \pm 0.5\text{ppm}$.

The GPSurvey system is easy to learn and use. The integrated environment guides an operator through every task in a survey project and provides on-line help to answer questions that might arise during processing.

The 4000SSE Geodetic Surveyor system provides a field-proven package with excellent measurement quality. The system exploits as much information as possible from the GPS signals to provide insurance against P-code encryption. The 4000SSE receiver can track and store dual-frequency code and full-cycle carrier phase measurements with P-code or with precise C/A-code and cross-correlated Y-code.

The 400SSE Geodetic Surveyor system, coupled with the GPSurvey software package, provides a versatile surveying system for the highest precision geodetic applications and rapid production survey operations.

Acknowledgments

Roy Anderson, National Geodetic Survey staff, and members of the Federal Geodetic Control Sub-Committee that participated in the field survey and provided support during test, are gratefully acknowledged.

UNAVCO Memo

TO: UNAVCO STEERING COMMITTEE
FROM: C. Rocken, C. Meertens
DATE: November, 8, 1992
RE: UNAVCO Receiver Tests
CC:

INTRODUCTION

Four GPS receivers capable of measuring p-code pseudoranges were tested at the UNAVCO facility. The purpose of these tests was to determine and document the relative performance of these receivers. Our tests were focussed on comparing the data types and the quality of these data. We also looked at power consumption and physical dimensions of the receivers. Our tests did not investigate or compare in any detail the firmware and capabilities of the receivers.

This report is quite long, but it is not required to read the entire document. Just this introduction and the "Receiver Test Description and Results" section need to be read. The remainder of the report contains figures and tables on which we base our test results.

The following tests were conducted:

Zero - Baseline tests: In these tests two receivers are connected to the same antenna and the same LNA (Low-noise amplifier). Data that are collected in this mode can be used to compute baseline solutions from double differences. These double differences cancel all common noise sources (such as orbit and propagation medium errors, antenna multipath and the noise generated by the LNA) and leave receiver measurement noise. The baseline, in this case, is exactly known since it is zero. Thus the observed baseline solutions can easily be compared against the truth. Post-fit residuals from computed zero-baseline solutions are used to compare receiver noise levels. For each zero-baseline we compare Phase L1, L2 and L3 (the ionospheric free linear combination will be called L3 in this report) noise levels and solutions, and we compare the Pseudorange L1 L2 and L3 noise level and solutions.

General Tracking Performance: These tests were carried out to compare how well the receivers track the GPS satellites. Here we compare the performance of the entire system including antenna, LNA and receivers. Thus each receiver is connected to its own antenna. The compared receivers are operated in this mode at the same time and we then look at the following: (a) Down to which elevation angle does the receiver track? (b) How many cycle slips occur during the compared time window? (c) What is L1 and L2 pseudorange multipath + receiver noise? The L1 pseudorange multipath + receiver noise is computed from the equation:

$$MP1_i = P1_i - 4.0915 \times L1_i + 3.0915 \times L2_i$$

where: MP1 is L1 pseudorange multipath + receiver noise at epoch "i" in meters,
 P1 is the L1 pseudorange (either C/A or P-code) measurement at epoch "i" in meters,
 L1: is the L1 carrier phase measurement at "i" in meters
 L2: is the L2 carrier phase measurement at "i" in meters.

L2 pseudorange multipath is computed similarly as:

$$MP2_i = P2_i - 5.0915 \times L1_i + 4.0915 \times L2_i$$

where: P2 is the L2 pseudorange (either P-code or Cross-correlated) at epoch "i" in meters.

MP1 and MP2 are a measure of the quality of the pseudoranges. While the pseudorange zero-baseline residuals, explained above, compare receiver noise levels only, MP1 and MP2 measure the performance of the entire system including antenna multipath, plus LNA and receiver noise. Values of MP1 and MP2 are especially important for those applications where accurate pseudoranges are required. Note that MP1 and MP2 are computed for one receiver and one antenna. Values of MP1 and MP2 are site and receiver-satellite geometry dependent. Therefore, if the performance of different receivers shall be compared based on these values one needs to ensure that the receivers are operating at the same time and in similar multipath environment.

Cycle slip counts: We identified carrier phase cycle slips by computing the gradient of ionospheric change of the L2 carrier according to the equation:

$$Dion_i = \frac{f_1^2}{f_1^2 - f_2^2} \times ((L2 - L1)_i - (L2 - L1)_{i-1})$$

Dion_i is the gradient of the ionospheric delay of the L2 carrier at epoch "i". It can be computed from the carrier phase measurements L1 and L2 at epochs "i" and "i-1" us-

ing the two carrier frequencies f_1 and f_2 . We compute $Dion$ in units of [meters/minute]. A cycle slip in this study is identified by a value of $Dion_i > 4$ m/minute. 4 meters/minute was chosen because the actual ionospheric gradient was never observed, during our tests, to change at such a high rate. Therefore, an apparent rate of change in "Dion" at more than 4 m/minute must be caused by a cycle slip between epochs, "i" and "i-1". This method of counting cycle slips is not complete, because small cycle slips may not be identified at low receiver sampling rates. However, our experience has shown that the number of cycle slips determined by this simple method is a good indicator of possible receiver-tracking problems.

Besides for the detection of cycle slips, "Dion" is a very valuable linear combination for comparing system phase noise, including antenna multipath, LNA and receiver noise. "Dion" measured with multiple receivers at the same time, the same location, and at the same sampling rate should be identical - with the exception of receiver and system noise. Thus, "Dion" can be used to compare system phase measurement noise levels.

Mixed-baseline tests: Data from the four receiver types that we tested were mixed in zero- and short-baselines. These mixed-baseline data sets were processed. Data mixing problems appear in the form of non-integer phase ambiguities. Because ground-truth was not known for our short-baselines we only inspected the ambiguities, to decide if data mixing causes serious problems. Mixing of different antennas was not a part of the tests described here.

Short-baseline tests: We ran short-baseline tests with three of the tested GPS receiver types. This test may be the most important test for the geodetic community as the baseline scatter is bottom line of the receiver performance. While short-baseline tests are important, they are also harder to conduct because the outcome of these tests depend to a larger extent on the data processing software and on the expertise of the data processor.

A/S tests: We collected data during several weekends when A/S was activated and compared performance of different receivers during A/S. We conducted the same tests under A/S as under normal non-A/S conditions. We consider these tests of the highest importance because of the possibility that A/S will be activated permanently in the near future. For the last several months it has been activated 2 days out of the week and A/S performance is already a most important aspect when selecting a GPS receiver.

Power Consumption: Physical dimensions, weight and receiver power consumption were measured and are listed in a table at the end of this report.

RECEIVER TEST DESCRIPTION AND RESULTS**Test Overview**

Our initial tests took place in during July and August, 1992. At that time, Ashtech LMXII, Trimble SSE, Leica SR299 and Osborne SNR-8000 receivers were available for testing. Trimble - Ashtech comparisons, conducted in July, 1992, were repeated in October, 1992, because we used old Ashtech firmware (firmware version 6I) during the first tests. In the second round of tests during October, 1992, we also added tests conducted during A/S.

The following table summarizes some basic facts about data types provided by the receivers as tested. The table does not reflect future upgrade plans by the manufacturers.

Table 1:

	ASHTECH LM-XII#	LEICA SR299	TRIMBLE 4000 SSE	OSBORNE SNR-8000
NUMBER OF SVs	12	9	9	8
L1 + L2 phase	YES	YES	YES	YES
L1 P-code	YES	NO	YES	YES
L2 P-code	YES	YES	YES	YES
A/S L1-C/A	YES	YES	YES	YES
Y2 -Y1	NO	NO ^a	YES	YES
A/S 24 cm L2	NO	NO	YES	YES

a. The Leica SR 299 also provides dual frequency pseudoranges under A/S, using a technique different from cross-correlation.

~~All tested receivers were dual frequency instruments, all~~ with the exception of the Leica could track L1 and L2 p-code data, all resume tracking of the C/A code when the p-code is encrypted with the y-code. Trimble SSE (TSSE) and Osborne SNR 8000 (also known as TurboRogues (TR)) provide cross - correlated Y2-Y1 pseudoranges, which, together with the C/A code measurements, provide dual frequency pseudoranges, even after implementation of A/S by the US DoD. The Leica SR299, using a technique different from cross-correlation, also provides dual frequency pseudoranges under A/S. All receivers measure full-wavelength L2 carrier phase data with the exception of the Ashtech LM-XII3 (LM) and Leica SR299 receivers, which in their current configuration, resume to squaring the L2 carrier when A/S is implemented.

HOW TO READ THIS REPORT

In order to make reading of this report easier all major results are summarized in brief form and we refer to the page, figure, or table that we base this information on. This format will allow the reader to quickly scan the provided information and look at the data in more detail if so desired.

All tested receivers are compared with the Trimble SSE receiver, mainly because this receiver was available to us during the entire first and second test periods.

OVERVIEW OF TESTS IN THIS REPORT:

- (1) Ashtech LMXII3 - Trimble SSE receiver comparison (October, 1992 tests):
 - (a) L1, L2, L3 Zero-baseline phase noise level and result comparison
 - (b) L1, L2, L3 Zero-baseline p-code noise level and result comparison
 - (c) General tracking comparison, cycle slips, MP1 and MP2 multipath etc.
 - (d) Effect of smoothing on Ashtech pseudorange data
 - (f) Comparison of Ashtech and TSSE C/A code noise levels
- (2) Trimble SSE - Osborne SNR-8000 (TR) comparison (July, 1992 Tests)
 - (a) L1, L2, L3 Zero-baseline phase noise level and result comparison
 - (b) L1, L2, L3 Zero-baseline p-code noise level and result comparison
 - (c) General tracking comparison, cycle slips, MP1 and MP2 multipath etc.
 - (d) "Normal" and Cross-Correlation tracking performance comparison
 - C/A versus P1 multipath comparison
 - C/A + (Y2-Y1) versus P2 multipath comparison
 - "Normal" and Cross-Correlation-general tracking parameters
 - Cross-Correlation effect on L3 phase noise
- (3) Trimble SSE - Leica comparison
- (4) Receiver mixing results - Zero-baseline results and ambiguities
- (5) Short - Baseline Repeatability Results
- (6) Data collected during A/S
- (7) Physical dimensions and power requirements
- (8) Examples of Receiver Problems
- (9) Test Summary

COMPARISON OF ASHTECH LMXII 3 AND TRIMBLE 4000 SSE RECEIVERS

The following section compares data collected with the Ashtech LMXII 3 GPS receiver to data collected with the Trimble 4000SSE receiver.

Initial tests were carried out at the UNAVCO facility with Ashtech receivers running with the firmware version "6T". After the tests had been completed and the results prepared for distribution, we were informed by Ashtech that the "6T" firmware was obsolete. We therefore repeated the tests with Ashtech receivers with the "6M" firmware in October, 1992. The original "6T" results are not included in this test report.

- 1a) Phase Zero-baseline results:** Figures 1a, 1b and 1c indicate that Ashtech receiver measurement noise is by a factor of 1.5 - 2 higher than Trimble SSE phase measurement noise. Table 2 shows that zero-baseline results are closer to zero for the Trimble than for the Ashtech in all frequencies. (Figures and Tables are on pages 2.1 - 2.2)
- 1b) P-code Zero-baseline results:** Figures 2a, 2b and 2c compare unsmoothed Trimble SSE to carrier phase smoothed Ashtech LMXII-3 double difference p-code residuals for the same session. Noise levels for L1, L2 and L3 are roughly equal. Note, however, that the Trimble data are uncorrelated and that the Ashtech data residuals show systematic effects, particularly evident in the L2 residuals. In addition, the Ashtech data have frequent spikes in the P-code data. Table 3 shows that the P-code zero-baseline results for the Trimble are a factor of 1.5 - 2 better than the Ashtech zero-baseline results. (Figures and Table are on pages 2.3 - 2.4)
- 1c) General Tracking Performance (without A/S):** Table 4a compares important general tracking parameters between two Trimble SSE and two Ashtech LMXII-3 receivers. Table 4 indicates that the Trimbles track more data during the identical time window - mostly because the TSSE tracks down to lower elevation angles. Even though more low elevation observations for the Trimble were included in the multipath computation of MP1 and MP2 in table 4a (and multipath effects are greater at lower elevation angles), the values for the TSSE are roughly comparable to the Ashtech multipath values. If observations taken at similar elevation angles are compared only, as is indicated in Table 4b, then the TSSE multipath values are on average clearly better than the Ashtech values.
- The better tracking performance of the TSSE receiver, as compared to the Ashtech is also demonstrated by the plots of MP1 in figures 3a, 3b and 3c. These figures show clearly that the Ashtech receiver tends to have problems tracking at low elevations (below 15 degrees), when the Trimble and Osborne SNR-8000 (TR) are still logging data. In figure 3a, for example, the Trimble and the TR both track a satellite that never rises more than 4.5 degrees above the horizon. (Figures and tables on pages 2.5 - 2.8)
- 1d) Effect of data smoothing on the Ashtech P-code data:** All results that we summarized above and that involved Ashtech pseudoranges, were based on carrier-smoothed pseudoranges. This smoothing is done by the Ashtech - provided RINEX translator and it is the mode in which, according to Ashtech, the data should be processed. Because

the Trimble SSE pseudoranges were not smoothed in these comparisons it is important to point out the effect of smoothing on Ashtech p-code pseudorange data. We obtained non-smoothed Ashtech pseudoranges by using the RINEX translator, provided by the University of Berne. Figure 4 shows that the smoothing reduces the noise level of the Ashtech non-smoothed pseudoranges at the cost of introducing systematics into the pseudorange data. These systematics can clearly be seen in the pseudorange post-fit residuals of figures 4a, 4b and 4c. These post fit residuals also show that Trimble SSE non-smoothed pseudoranges are lower in noise by more than a factor of ~ 2 than the non-smoothed Ashtech data. Table 5 shows that smoothing of the Ashtech data does not affect the zero-baseline results significantly. (Figures on pages 2.9-2.10)

- 1f) **Comparison of Ashtech and Trimble C/A code noise level:** Figure 21 shows a comparison of Ashtech and Trimble SSE C/A code measurements. Since both receivers are P-code receivers the C/A code pseudoranges will be used only when A/S is on. Thus the data shown in Figure 21 were collected during A/S. The data compare system noise plus site multipath. It can be seen that Trimble C/A code noise levels are clearly lower than Ashtech C/A code measurements. (Figure on page 5.4)

COMPARISON OF TRIMBLE SSE (TSSE) AND OSBORNE SNR-8000 (TR) RECEIVERS

These two receivers were compared in a similar fashion as the Trimble and Ashtech receivers. The initial zero-baseline tests were limited to about 35 minutes of data, sampled at 1 sec. intervals. This high-rate sampling was selected to ensure that the data from both receivers were averaged over the same time interval of approximately 1 second. For longer sampling intervals of 10 seconds, for example, TR data are averaged over 10 seconds whereas TSSE data are still averaged over 1 second. The short 35 minute tracking time was selected to keep the high-rate data files at manageable size.

The Osborne SNR-8000 uses up to 10 seconds of carrier phase data from the specified sampling interval, interpolated to the data epoch, and it uses the full data interval of pseudorange data, carrier smoothed to the data epoch. All tracking observables are statistically independent (uncorrelated).

- 2a) Phase Zero-baseline results: Figures 5a, 5b and 5c show that the phase noise level of the TSSE data appears a factor of ~ 1.5 higher than the Osborne SNR-8000 (TR).

These compared noise levels are receiver noise levels and not system noise levels because they are based on zero-baseline residuals. Table 6 shows that zero-baseline results from phase data are slightly closer to zero for the Osborne SNR-8000 (TR) data than for the Trimble SSE. Ambiguity-free zero-baseline computation shows that the Osborne SNR-8000 (TR) is significantly closer to zero than the Trimble SSE receiver. (Figures and Tables on pages 3.1-3.2)

2b) **P-code Zero-baseline results:** Figures 6a, 6b and 6c show that P-code (L1, L2, and L3) pseudorange noise level for the Trimble and Osborne SNR-8000 (TR) are very similar. Zero-baseline results from p-code data are summarized in Table 7 and show that baseline errors for the two receivers in this test are similar. Baseline errors for the Trimble for this short half-hour set are much smaller than for the TSSE zero-baseline that was compared with the Ashtech data. The reason for this may be that fewer low elevation observations were included in the TSSE - TR comparison. (Figures and Tables on pages 3.3-3.4)

2c) **General Tracking Performance (without A/S):** As can be seen from Table 8, the tracking characteristics of the TSSE receiver and the TR receiver are roughly similar. The TR receiver has an advantage of tracking to lower elevation angles, as can be seen from the average elevation angle in Table 8. Figures 3a, 3b and 3c also showed that the TR tracks to lower elevation angles than the TSSE and that MP1 of the TR is lower than for the TSSE - especially at low elevation angles. This advantage is most likely due to the choke ring antenna or the LNA because of the similarity between the p-code zero-baseline residuals. (Figures and Tables on pages 2.5-2.8 and 3.5)

2d) **Normal versus Cross-Correlation Tracking Performance:** Among the receivers that were tested, only the Trimble SSE and the Osborne SNR-8000 (TR) are capable of tracking full wavelength L2 carrier and Y1-Y2 code differences when A/S is implemented. Since A/S is currently often turned on during weekends and because it may be implemented permanently by 1993 this capability is of very high importance to UN-AVCO. During the July, 1992 tests we examined the cross-correlation performance by forcing the TSSE and TR receivers to operate in this mode. A/S performance can be tested by forcing the receivers to track in codeless mode - even when A/S is not on. These kinds of tests were conducted during the July 1992 tests. A second set of more important tests were conducted during October, 1992, during actual A/S periods. In the following we will summarize the July test results to compare the "codeless tracking" performance of the TSSE and the TR receivers.

First we compare data from two ZBL tests that were run at the same time. Two TSSE receivers were connected to the same Trimble 4000SST antenna. One of the TSSE receiver was operating in its "normal" mode collecting L1 and L2 P-code data. The other receiver was collecting C/A code range data on L1 and P2 minus P1 cross-correlated data instead of P2 pseudoranges. Two TR receivers were run the same way connected to a D+M choke-ring antenna. While one TR was operating in its "normal" p-code mode the other was operated in a cross-correlated mode.

The purpose of this test was to evaluate the increase of Pseudorange measurement noise after the implementation of A/S measures by the DoD. Note again that the results shown on the following pages are plots of MP1 and MP2 for single receivers and single satellites. The results reflect the sum of antenna multipath plus LNA plus receiver measurement noise. Comparison of receiver measurement noise for these two receivers was described in the previous sections - this section focuses on the relative increase in noise level for each of the receivers as it switches to cross-correlation mode

when P1, P2 tracking is replaced by C/A and C/A+"Y2-Y1" tracking.

Figures 7a, and 7b show that for both receivers MP1 increases if P-code and C/A code data are compared. Judging from these figures and from Table 9, the noise level increases by ~30% for MP1 for both receivers. Noise levels also increase for MP2 if we compare P2 versus C/A + (Y2-Y1) tracking. (Note that for the July tests the Y-code was not activated and the receivers cross-correlated P-code data). The noise level increase that can be seen in figure 7c and 7d and Table 9 appears quite large (> 50%). The reason for this large increase may be that some of the satellite traces are biased. These biases are probably due to cycle slips that were not detected in the MP2 linear combination. (Figures and Tables on pages 3.6-3.9)

Receiver phase-noise level increase due to cross-correlation tracking is indicated by the Zero-baseline residuals in figure 8. This figure shows the noise level for the L3 linear combination of the L1 and L2 phase data. The plot indicates that L3 phase noise levels for both receivers increase by a factor of ~ 1.5 - 2 in cross correlation mode (Figure on page 3.10).

COMPARISON OF TRIMBLE SSE (TSSE) AND LEICA SR 299 RECEIVERS

Because the Leica SR 299 does not provide L1 p-code data, and because it will resume to half-wavelength L2 carrier phase under A/S only limited tests were conducted with the Leica SR299 receiver.

One feature of the SR299 which, as far as we know, none of the other tested receivers have should be mentioned. This feature is called "time-recovery" and it ensures that measurement epochs are synchronized with GPS time to within 500 ns (less than 100 ns in the absence of S/A). This feature ensures that SR299 receivers remain synchronized even over long tracking periods - an essential requirement for high accuracy GPS, especially if S/A clock dithering levels were to be increased in the future. In comparison, the Trimble and Ashtech receivers remain synchronized to within 1 millisecond and the TR remains synchronized to within 10 milliseconds.

In the following we will compare MP1 and MP2 for the Leica SR299 and the Trimble SSE. As was explained before, this is a comparison of the sum of receiver and antenna multipath noise. A comparison of zero-baseline data was not possible because we did not have the necessary equipment to run the Leica receivers in a ZBL configuration.

3a) General Tracking Performance (without A/S): The data shown in Figure 9 and in Table 10 were computed for an elevation cutoff of 15 degrees. About two hours of data from an identical time window are shown. Both receivers were operated at a 15 second sampling rate. Note that for this test the TSSE receiver was operated with a D+M

choke ring antenna. This antenna appears to have slightly better multipath characteristics than Trimble's own SST antenna. Figure 9 compares Trimble SSE L1 P-code data with Leica SR299 C/A code data. For a comparison between Trimble SSE L1 P-code and Trimble C/A code data look, for example, at figure 7a in this report.

Table 10 compares the overall tracking performance and multipath noise levels for the two receivers. Note that the Table was compiled for an elevation cutoff of 15 degrees for both receivers and that the TSSE was connected to a D+M choke ring antenna.

Also note that this table compares Trimble SSE P-code with SR299 C/A code multipath levels. Overall it can be seen that the Trimble P-code noise level is clearly lower than the Leica C/A noise level. Based on figure 7a we can also conclude that TSSE C/A code MP1 is lower than Leica's C/A code data. Figure 9b also shows that TSSE MP2 is lower than MP2 for the SR 299. (Figure and Table on pages 3.11-3.12)

MIXED RECEIVER TESTS

Mixed-Receiver Zero-baseline results

In order to eliminate antenna effects and to examine receiver characteristics, zero-baselines (ZBL) were formed using a single antenna powered by one receiver but with RF signals transmitted to up to several receivers through a cable splitter and DC block. To evaluate the zero-baseline results we processed differenced phase data and examined the estimated ambiguities and baseline length. Ideally, the results of processing would show a zero length baseline and integer ambiguities (zero ambiguity fraction).

In our common receiver tests, described earlier in this report, the TSSE - TSSE, LM-LM, and TR-TR ZBL tests each resulted in a 0.00 cycle ambiguity fraction, indicating no significant problems. These results for the LM-LM with 6M firmware show a significant improvement over the results from our July, 1992, tests with 6I firmware. In the July test, the LM-LM ZBL ambiguity fractions were in a range of ± 0.03 cycles. This indicated a problem with combining LM data which was also apparent in the zero-baseline length results which showed up to 5.3 mm lengths in the L3 phase results. This has improved to 1.2 mm in the current LM-LM tests.

Mixing TSSE, LM, and TR receivers on zero-baselines degraded the fraction only slightly to ± 0.01 cycles in our current tests. The mixed TSSE - LM and TR - LM ZBL results from the July tests with version 6I were significantly worse yielding ambiguity fractions of ± 0.03 cycles which could be expected given the larger fractions found in the common LM-LM zero-baselines. With version 6M, we no longer see any significant differences between mixing receivers when we evaluate ambiguity fractions.

The zero-baseline length results are given in Table 11. The L1, L2 and L3 determined baselines for all combinations of receivers range from 0.5 to 3.0 mm with ambiguities unresolved. Resolving ambiguities typically has the effect of improving the results to where

most are near 1.0 mm. In the current tests, the worst results are 3.0 mm for the L3 with ambiguities resolved for the LM-XII3 mixed with the TSSe, but the results on the second day were less than 1.1 mm. Again, version 6M offers a significant improvement over our earlier 6I results for the LM-XII3 which gave mixed receiver L3 results of up to 15.6 mm (see LM results marked with an asterix in the table).

Overall, in the current tests there was a scatter of up to 3 mm between the results in the repeated measurements and no pair of mixed receivers combines significantly better than another. The results for mixed receiver zero-baselines are slightly larger (typically 1.0 mm) than obtained from common receiver zero-baselines which are typically less than 0.5 mm for all frequencies. (Table with results on page 4.1)

Mixed-Receiver Short-baseline results(<3 m)

We also processed data from a number of short (<3 meter) baselines, using a mix of receiver types. We again examined the fractional ambiguities for L1 or L2. Although baseline results may be affected by mixed antenna types due to variations in antenna phase center locations, the estimated ambiguity parameter should be an integer over these very short-baselines. We found that all tested short-baseline combinations of Trimble SSe, Turborogue, and Ashtech LM-XII3 receivers resulted in estimated ambiguities within ± 0.03 cycles of an integer. There are no significant differences in the mixing performance between any of these receivers and the small non-integer residual could have been caused by multipath effects.

We were not able to conduct zero-baseline receiver mixing tests with the Leica SR299 receiver. One short-baseline mixing test with the Leica showed that the mixed ambiguities were not clean. We were informed, however, that more extensive tests, conducted in Switzerland, showed no mixing problems. Because our tests were so brief and because zero-baseline tests were not possible, UNAVCO will try to conduct conclusive Leica mixing tests in the future.

Summary of Mixed-Receiver Tests

The results of mixing Trimble SSE, Turborogue, and Ashtech LM-XII3 receivers show only a slight increase in the non-integer ambiguity fraction (from 0.00 unmixed increasing to 0.01 cycles mixed) and typical zero-baseline lengths of 1.0 mm for L1, L2 and L3 processed results when ambiguities are resolved. Problems with Ashtech LM-XII3-Ashtech LM-XII3 zero-baseline observations and LM-XII3 mixed zero-baselines found with firmware version 6I appear to have been corrected in the current version 6M. The Leica receiver could not be combined in a zero-baseline test.

SHORT-BASELINE SCATTER AND REPEATABILITY

In order to test the scatter and repeatability of the measurements of each receiver system, a

set of simultaneous observations was made on short (<4 meter) baselines. The results therefore include the combined effects of receiver performance, antenna design and site multipath. For each pair of like antennas one antenna was set 40 cm higher than the other so that multipath effects would be different between them. The six antennas were at different locations on the roof and there were different distances between pairs of antennas so multipath conditions could be different for each common receiver/antenna pair. Clearly we cannot have all the antennas on the same baseline at the same time and this test compares results from observations made at the same time, rather than at the same location.

Phase Results

Phase data were processed for five 4.5 hour long sessions with the elevation cutoff at 15 degrees. All ambiguities were resolved. The baseline scatter is shown in figures 10-12 for each baseline component for L1, L2 and the L3 ionosphere free linear combination. The repeatabilities determined from the scatter are given in table 12. Figure 13 shows an example of the 13 double-difference phase residuals for one of the sessions.

The scatter of the L1 and L2 solutions is comparable for all receivers in the horizontal components with repeatabilities of better than 0.8 mm. The vertical component results show a wider spread. The TR shows the least vertical scatter and a vertical repeatability of better than 0.8 mm, the scatter of the TSSE is larger with a repeatability of 1.7 mm in the L2, and the LM-XII3 shows the largest scatter and a repeatability of 4.3 mm in the height component.

As a linear combination, the L3, ionosphere free, linear combination shows slightly larger scatter and horizontal repeatabilities of up to 0.6, 1.5, and 2.1 mm respectively for the TR, TSSE, and LM-XII3 receivers and height repeatabilities of 1.6, 3.8, and 5.0 mm. The smaller scatter and better repeatability of the TR is consistent with the smaller residuals as shown in figure 13. (Figures and Tables on pages 4.2-4.6)

P-Code Results

The repeatability and scatter of the p-code solutions for the short-baselines discussed previously are given in table 13 and figures 14-16. Although the phase processing of these same sessions had an elevation cutoff angle of 15 degrees, we were forced to process the LM-XII3 p-code data with an elevation cutoff of 25 degrees in order to obtain a reasonable solution. There were no problems processing the TSSE or TR p-code data at lower elevations, however, in order to be consistent, we processed the p-code results with a 25 degree elevation cutoff for all the receivers. An example of the L3 code double-difference residuals is given in figure 17. The TR has the lowest noise level in the residuals. TSSE is, on average lower than LM scatter. Note, that these results were computed with carrier-smoothed pseudoranges for the LM-XII3. Pseudoranges for the TR are also carrier smoothed over the sampling interval of 30 seconds (the measurements output by the receiver are uncorrelated, however). (Figures and Tables are on pages 4.7 - 4.11)

EFFECT OF A/S ON THE TESTED GPS RECEIVERS

As explained in the introduction of this report, only the TSSE and TR receivers provide true A/S capabilities such as full-wavelength L2 carrier phase data and dual frequency pseudoranges with A/S.

The Ashtech LMXII3 must be switched manually to code-less tracking mode in order to track Block 2 GPS satellites under A/S. Of the 3 Ashtech LMXII3 GPS receivers that we had on loan from the NRL in Boulder, for the October tests, only one was equipped with the codeless option. Therefore, it was not possible to compare zero-baseline results between the LMXII3 and the TSSE and TR under A/S.

We can compare, however, phase noise and pseudorange noise levels between two Ashtech receivers if the first receiver is operating in codeless and the second receiver is operating in P-code mode. In this comparison the second receiver will be able to track Block I satellites only, while the first receiver will track all satellites in codeless mode.

When switched manually to the codeless option, the Ashtech tracks C/A code pseudoranges only. It also resumes to squaring the L2 carrier, which results in ~12 cm ambiguities for the L2 phase data. Thus under A/S the Ashtech P-code receiver resumes to functioning like the C/A code receivers currently in the UNAVCO equipment pool.

The Trimble SSE and Osborne TR receivers are designed to switch automatically to cross-correlation mode when A/S is activated. When this happens these receivers track C/A code data plus the arrival-time difference between the Y2 and Y1 codes, obtained from cross-correlation. Thus C/A code and $C/A + (Y2 - Y1)$ provide dual frequency pseudoranges. In addition, full-wavelength L1 and L2 carrier phase data are obtained for all satellites. Block I satellites are tracked in P-code mode while Block II satellites are tracked in cross-correlation mode. When A/S is turned off, these receivers switch automatically back to p-code tracking.

Comparison of A/S Effect on Ashtech LMXII-3 and Trimble TSSE data

Since we had only one LMXII-3 receiver with the codeless tracking option we could not compute zero-baselines under A/S. Instead we looked at "Dion", a quantity that we explained in the introduction.

A/S effect on phase measurement noise: "Dion" is the gradient of the ionospheric delay of the L2 carrier at epoch "i". As explained before, it is computed from carrier phase data only and is therefore a measure of ionospheric change plus receiver phase measurement noise. "Dion", measured with multiple receivers at the same time, same sampling rate, and at the same location should be identical - with the exception of receiver and system noise. Thus, "Dion" can be used to compare system phase measurement noise levels in the absence of zero-baseline data.

Figure 18 shows that Ashtech phase noise increases by a factor of $\sim 1.5-2.0$ when the receiver is switched from P-code to codeless tracking. Figure 18 also shows that TSSE phase noise is lower than Ashtech's P-code phase noise by a factor of ~ 1.5 .

Figure 19 shows that TSSE phase noise is lower by a factor of ~ 2 when tracking a Block II satellite during A/S. (Figures on pages 5.1 - 5.2)

A/S effect on Ashtech and TSSE Pseudorange measurement noise: Figure 20 compares MP1 for the same time window, the same satellite and the same receivers as Figure 18. While the comparison in Figure 18 shows the differences in phase noise, the plot of MP1 in figure 20 compares what happens to L1 pseudorange measurement noise of an Ashtech receiver when A/S is turned on. The figure shows an increase in Ashtech pseudorange noise by a factor of more than 5 when the receiver switches from p-code to C/A code tracking. The TSSE data show MP1 computed from Trimble p-code data at the same time. The TSSE continues to track Block I satellites with P-code when A/S is turned on. The compared data were collected in a period during which A/S was activated, but the compared Block I satellite was not affected by A/S.

In figure 21 we compare Ashtech MP1 with TSSE MP1 and MP2. The figure shows clearly that TSSE C/A code as well as TSSE C/A + (Y2-Y1) are lower in noise than Ashtech C/A codes. The Ashtech does not provide an equivalent of P2 data under A/S. (Figures on pages 5.3-5.4)

Effect of A/S as it is switched on - Example from the Trimble TSSE receiver: As was mentioned above, the TSSE switches automatically from p-code tracking to cross-correlation mode for each satellite with A/S. When A/S is activated the receiver switches from P1 to C/A code on the L1 channel and from P2 to C/A + (Y2-Y1) on the L2 channel. On October 3rd, 1992 we started two TSSE receivers connected to the same antenna at 00:24 UTC - A/S was turned on at 01:00 UTC and both receivers switched to cross correlation. We can therefore show directly the effect A/S on the pseudorange and phase data in the following figures. Figure 22 shows the effect on MP1 and MP2 - no significant increase in noise level can be observed in this example. The same is true for the phase measurements, as shown in figure 23. (Figures on pages 5.5 and 5.6)

Phase Zero-Baseline Results - Comparison of TR and TSSE receivers with A/S: Figures 24a, 24b, and 24c show that the phase noise level of the TSSE receiver is higher when A/S is on than without A/S (compare with figures 5a, 5b and 5c). Especially L2 phase noise is higher by a factor of $\sim 1.5 - 2$. Noise levels for the TR also appear higher than without A/S. An increase in noise-level with time for the 24-hour data set can be seen for the TR. This increase may be due to S/A as the two TR receiver clocks became more misaligned over time, accumulating a relative offset of almost 7 msec by the end of the session. Table 14 shows that TSSE zero-baseline results are better than 1.5 mm for any linear combination, TR ZBL results are clearly smaller than 1 mm for L1, L2 and L3. (Figures and Table on pages 5.7 - 5.8)

Pseudorange Zero-Baseline Results - Comparison of TR and TSSE receivers under A/S: Figure 25a, 25b, and 25c show pseudorange post fit residuals under A/S. TR C/A-code residuals are clearly lower by more than a factor of 2 than TSSE C/A residuals. The difference is not as dramatic for the L2 and L3 residuals where the TR noise level is only slightly lower. Zero-baseline results from the TR are better by a factor of ~ 1.5-2 than TSSE zero-baseline solutions. (Figure and Table on page 5.9-5.10).

General Tracking Performance comparison for TSSE and TR receivers under A/S: Table 16 shows that the TR and TSSE receiver have different levels of MP1 and MP2 noise levels. TR noise levels are clearly lower during A/S. The TR also seems to suffer from fewer cycle slips than the TSSE. (Table on page 5.11)

PHYSICAL DIMENSIONS AND POWER REQUIREMENTS

The sizes and power consumption are summarized in Table 17. Power consumption was determined by monitoring the voltage and current requirement of each receiver. A fluke 45 digital multimeter was used. The tests were accomplished with a Hewlett-Packard 6439B DC Power Supply, converting 120VAC to a steady 13 VDC and amperage range of 100mA to 5A. All electronic tests and physical measurements were conducted and observed by UNAVCO Equipment Services Group engineers (Ed Manzanaras, Stephanie Perry, and Tony Stephens). The tests show that the Ashtech and TR require about twice as much power as the TSSE receiver. For further information and specifications refer to the individual manufactures documentation. (Tables pages 6.1-6.3)

PROBLEMS AND BUGS

All test results that are summarized in this report are based on what we consider "good data" for each receiver. This means we never used data from a problematic data set. Such problematic data sets were encountered from time to time. Each receiver (with the exception of the Leica for which we had only a very small amount of data) caused some problems from time to time. The most frequent problems were caused by the Ashtech data. Often we were not able to compute reasonable point position solutions until we eliminated data to rather high satellite elevation angles (> 25 degrees). For some data sets we were not able to obtain good point position solutions at all. Point position calculations, in the Bernese software, are important for clock - synchronization. The amount of time that we had to spend to clean Ashtech data for cycle slips was also much higher than the time we spent working with TSSE and TR data. This, however, may be partly due to the fact that we have less experience in working with Ashtech data. The following summarizes some of the more serious problems with the data that were encountered during our tests:

Pseudorange "Slips" for TSSE: Pseudorange data cannot have cycle slips, like carrier phase data. Still, we encountered such slips for the TSSE receiver as is shown in Figure 26. (Figure on page 7.1)

Half L1 carrier phase cycle slips for TR: Figure 27 shows examples of half L1 and L1 "mini" cycle slips. These slips can make data processing extremely time consuming. (Figure on page 7.2)

Problems with Ashtech receivers because of large amounts of carrier phase cycle slips:

On three days we collected data on the roof of the UNAVCO Lab to compute short-baselines between two Ashtech, two Trimble and two Osborne SNR 8000 receivers. On two of these days the data from the Ashtech receivers had, at times, serious problems. These problems were (a) Bad Pseudorange data that resulted in point positioning errors of many 10s of km. (b) Many hundreds of cycle slips. We do not know what caused these problems. The ionosphere did not seem to be particularly active (as indicated by the other receivers that performed normally), the satellites were high above the horizon, and the Ashtech receivers returned to functioning properly after a several hours. One of the two Ashtech receivers on the short test baseline was affected more severely than the other by the large number of cycle slips. The problematic areas are always clearly noticeable by frequent cycle slips - extended periods of time where the receiver slips at nearly every epoch. Figure 28 shows an example of such an occurrence in comparison with TSSE data collected at the same time. We use the previously defined quantity "DION" to illustrate the frequent cycle slips that occurred at certain times for both tested Ashtech receivers. (Figure on page 7.3)

Pseudorange Biases for TR receiver: In one case we saw evidence that the TR pseudoranges for some satellites were biased by ~12-15 meters relative to pseudoranges for other satellites. These biases could cause large problems if pseudoranges were to be used for cycle slip repair and ambiguity resolution...

TEST SUMMARY

The ultimate goal of these tests was to evaluate the next generation of dual-frequency p-code receivers in order to make recommendations to the UNAVCO user community.

With A/S off, all 4 receivers tested provide full-wavelength L2 phase observations, but only the Ashtech LMXII (LM), Trimble SSE (TSSE) and Osborne SNR-8000 (TR) receivers provide full p-code on both channels. In this mode, the TR and TSSE track to lower elevations and have lower phase noise and more precise zero-baselines than the LM. The TSSE phase noise is slightly higher than the TR and the p-code noise levels are comparable.

Only the Trimble SSE and Osborne SNR-8000 receivers are fully A/S capable. These receivers switch automatically from full P-code to Cross-correlation tracking modes for individual channels tracking Block II satellites when A/S is turned on. The receivers then provide C/A code and C/A+(Y2-Y1) pseudoranges and still provide full-wavelength L2 phase observations. These pseudoranges have higher noise levels than the P1 and P2 observables obtained

with A/S off and the phase residuals are also a factor of 1.5 to 2 noisier.

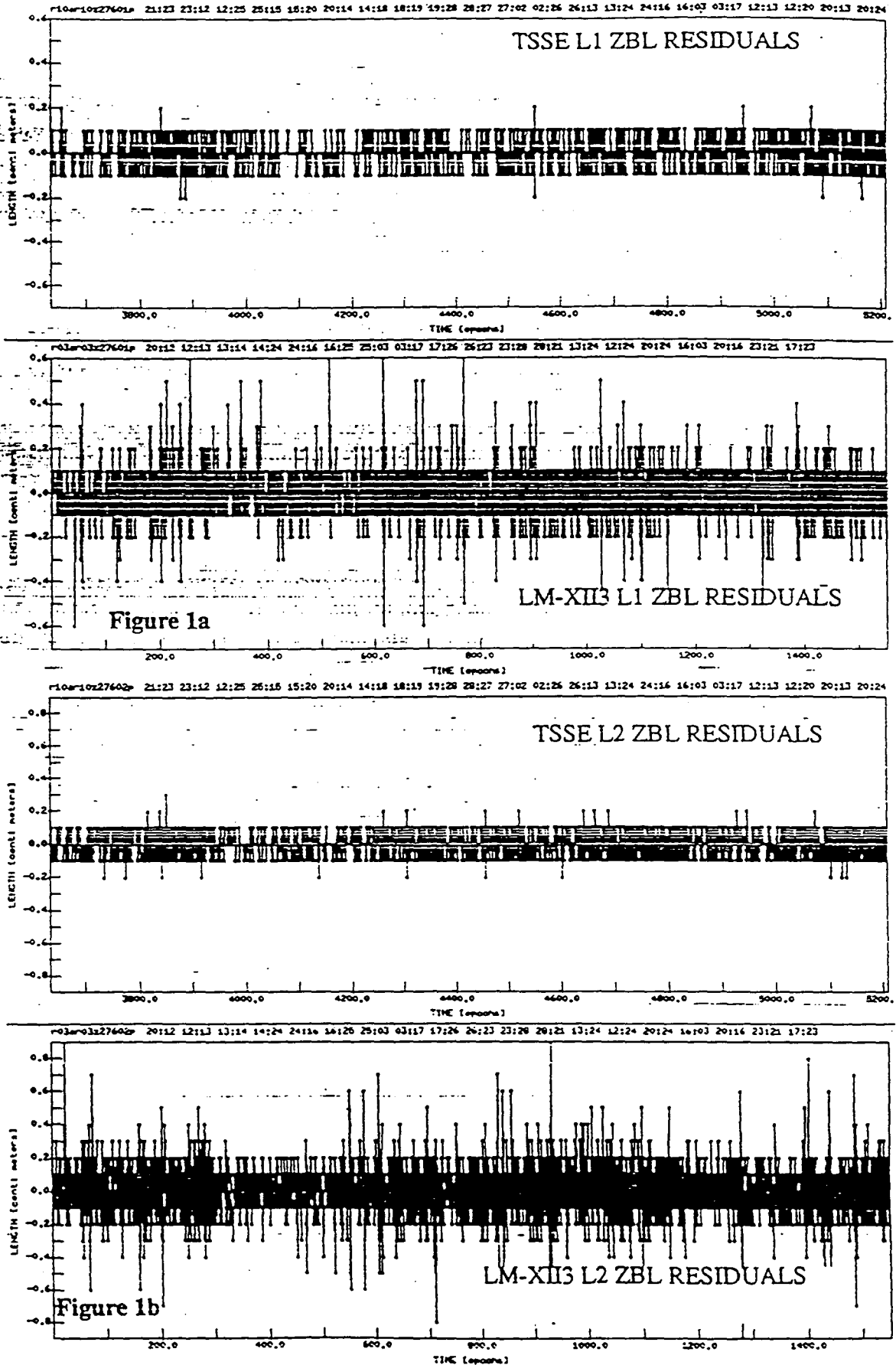
Overall, the TR has the lowest noise level of all the receivers, under all tracking modes. The TSSE, however, follows very closely in this aspect and is a product that is considerably more refined from an operational point of view. More importantly, however, the TSSE is lighter and takes only about half the power of the TR. Both receivers represent a significant improvement over the current Trimble 4000 SST receivers in the UNAVCO pool.

ACKNOWLEDGMENTS

This report would not have been possible without the willing cooperation of the GPS receiver manufacturers and engineers who provided these new receivers as well as technical support and personnel. Bruce Peetz (Trimble), Tom Meehan (JPL), Robert Snow (Osborne), and Tim Kerr (Leica) participated in the experiment in Boulder. John Ladd, Sergei Gourevitch and Ellis Veatch (Ashtech) provided technical support. Tom Kelecy from NOAA helped with arranging the loan of the NRL Ashtech receivers for the second part of the experiment. Yehuda Bock, Bob Schutz, Mike Bevis, Rick O'Connell and John Beavan made helpful suggestions to make this a more complete report.

Testing involved as many as 8 receivers at one time and several sessions a day with multiple configurations and combinations. The data collection required over 1 month of continuous measurements. Several 100 megabytes of data were collected. A "campaign" of this magnitude involved many of the personnel of the UNAVCO facility including James Stowell, who organized many of the experiments, Brennan O'Neill and Craig Roberts of the Field Engineering Group, Bruce Stephens, Ed Manzanares, Stephanie Perry and Tony Stephens of the Equipment Services Group, and Myron McCallum and Scott Watanabe of the Computer Support Group. John Braun, of UNAVCO's R+D group helped with data analysis, preparation of figures and data collection. Rob Kwitaal, from the University of Delft also helped much with the data collection during these experiments. Their enthusiastic support and long hours are greatly appreciated.

TRIMBLE SSE - ASHTECH LM-XI3 ZERO - BASELINE
PHASE NOISE COMPARISON



TRIMBLE- SSE - ASHTECH LM-XII3 ZERO-BASELINE
 PHASE NOISE COMPARISON

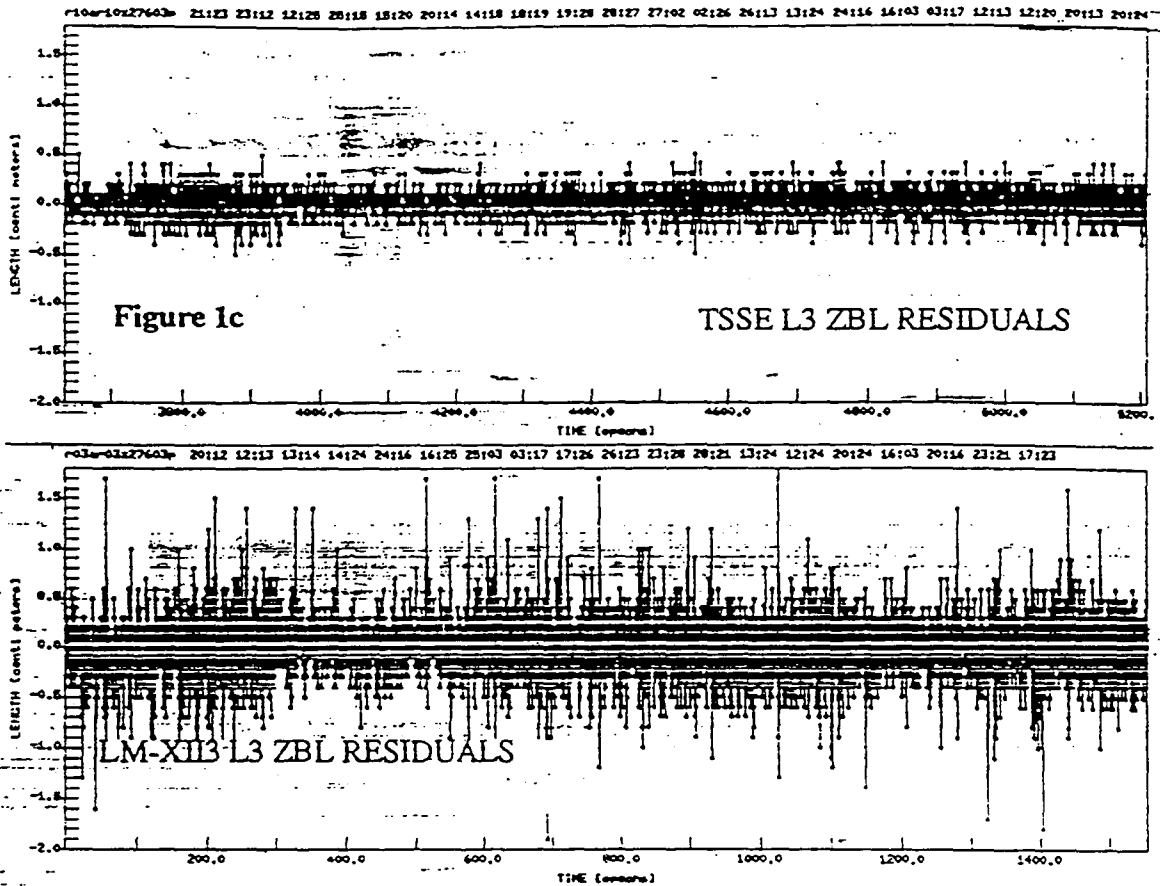


Figure 1a, 1b and 1c compare zero-baseline post-fit double difference residuals for the Trimble SSE and Ashtech LM-XII3 receivers. The Trimble and Ashtech zero-baseline data were collected at the same time. The difference in epoch numbers in the above plot reflects that the Ashtech receiver was started later than the Trimble because of a power failure. About 6 hours of data, sampled at 15 sec, are shown. The two Trimbles were connected to the same Trimble antenna, the two Ashtech receivers were connected to the same Ashtech antenna. Both antennas were located on the roof of the UNAVCO Lab in Boulder, CO. The data were collected Oct. 2nd, 1992. Figures 1a and 1b on the previous page compare L1 and L2 phase measurement noise respectively. Figure 1c, above compares noise levels of the ionospheric free linear combination.

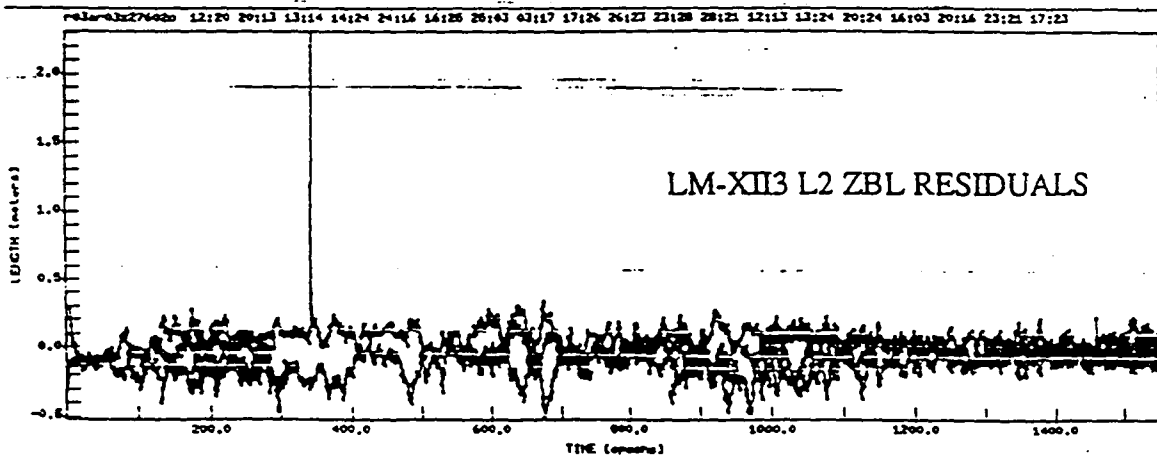
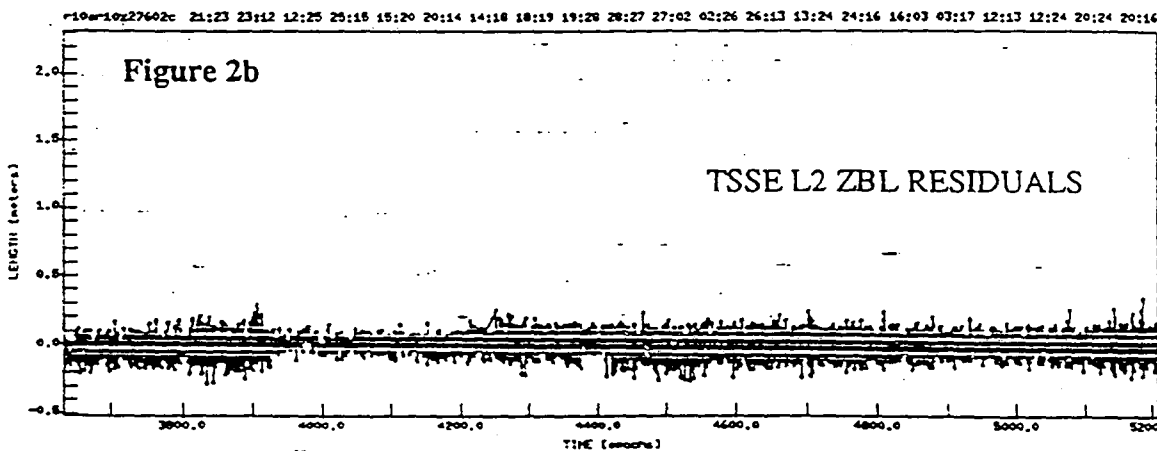
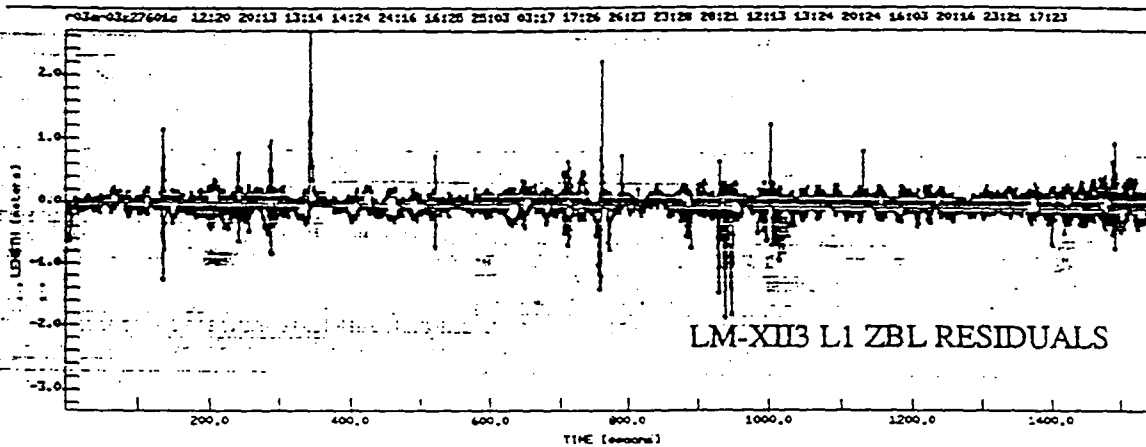
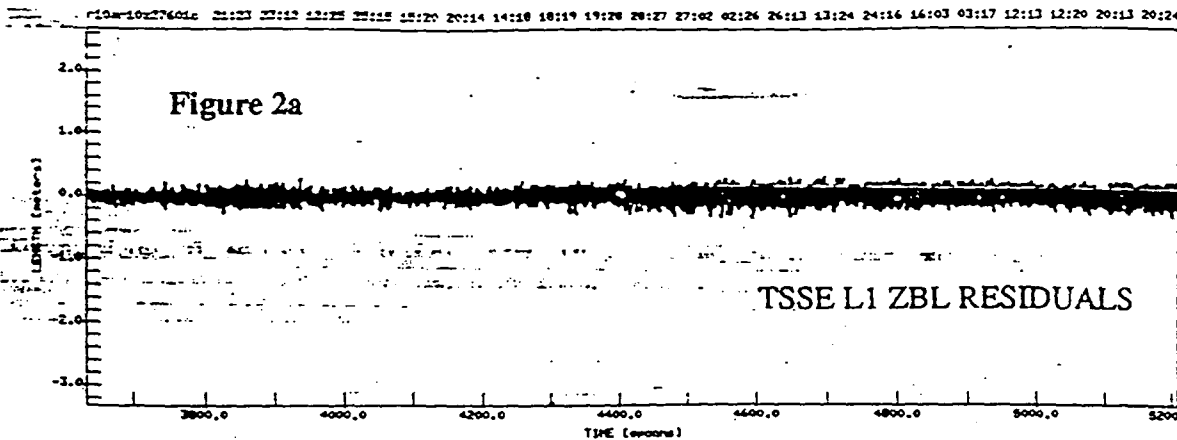
Table 2: Zero-Baseline Results

	TSSE LENGTH [mm]	LM-XII3 LENGTH [mm]
L1 - phase	0.0 (0.0)	0.0 (0.0)
L2 - phase	0.1 (0.1)	1.0 (1.0)
L3 - phase	0.0 ()	1.5 ()

Table 2 shows the zero-baseline lengths as computed with the Bernese software for the two compared receiver types. All the results that are shown in this table were computed from carrier phase data with all ambiguities resolved. The values in parentheses are baseline lengths with free ambiguities.

TRIMBLE -SSE - ASHTECH LM-XI3 ZERO - BASELINE

P-CODE NOISE COMPARISON



TRIMBLE SSE - ASHTECH LM-XII3 ZERO - BASELINE

E-CODE NOISE COMPARISON

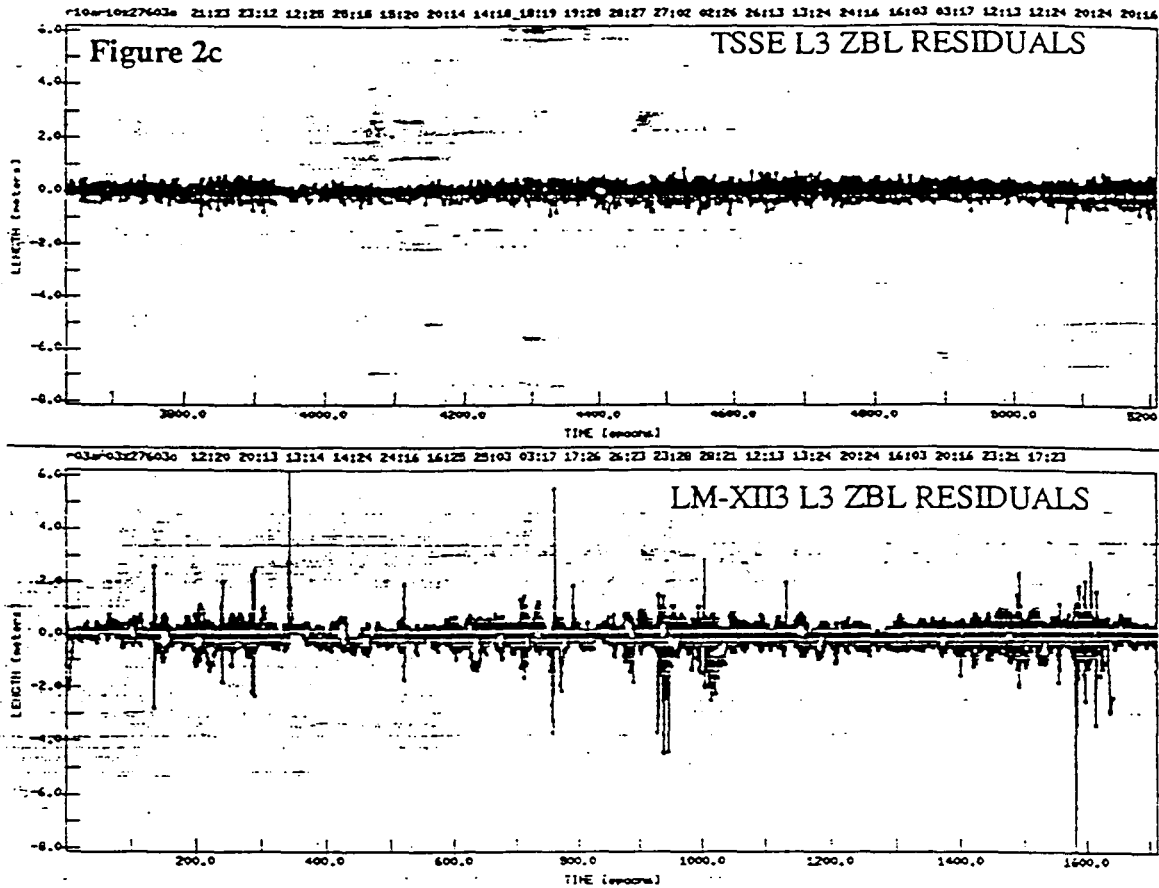


Figure 2a, 2b and 2c compare p-code zero-baseline post-fit double difference residuals for the Trimble SSE and Ashtech LM-XII3 receivers. The Trimble and Ashtech zero-baseline data were collected at the same time. The difference in epoch numbers in the above plot reflects that the Ashtech receiver was started later than the Trimble because of a power failure. About 6 hours of data, sampled at 15 sec are shown. The two Trimbles were connected to the same Trimble antenna, the two Ashtech receivers were connected to the same Ashtech antenna. Both antennas were located on the roof of the UNAVCO Lab in Boulder, CO. The data were collected Oct. 2nd, 1992. Figures 2a and 2b on the previous page compare L1 and L2 pcode measurement noise respectively. Figure 1c, above compares noise levels of the ionospheric free linear combination of the pcode data. Note that the Ashtech data are carrier smoothed and thus correlated, while the Trimble data are not smoothed and therefore not correlated!

Table 3: Zero-Baseline Results

	SSE LENGTH [mm]	LM-XII3 LENGTH [mm]
L1 - p-code	37.0	94.1
L2 - p-code	5.9	66.1
L3 - p-code	105.1	168.4

Table 3 shows the zero-baseline lengths as computed with the Bernese software for the two compared receiver types. All the results that are shown in this table were computed from pcode data

General Tracking Performance Comparison
Trimble SSE - Ashtech LM-XII3 (0 degrees cutoff)

Table 4a

	SSE (A)	SSE (B)	LM-XII3 (A)	LM-XII3 (B)
# of Obs. L1+L2+P1+P2	9,020	8,711	7,047	7,610
# of Cycle Slips < 20 deg.	16	17	17	27
# of Cycle Slips > 20 deg.	1	1	4	3
# Obs / Slip *	531	484	641	254
Average Elevation Angle	36.3	37.6	44.8	42.6
P1 Multipath[m]	0.49	0.47	0.75	0.48
P2 Multipath[m]	0.52	0.55	0.53	0.43
Comment			P-code was carrier- smoothed	P-code was carrier- smoothed
REC File	r10a2760.92o	r10z2760.92o	r03a2760.92o	r03z2760.92o

This table summarizes general tracking performance comparison between 2 TSSE and 2 Ashtech LM-XII3 receivers. The two Trimble receivers were operated from the same Trimble antenna, and the Ashtech receivers were operated off the same Ashtech antenna. Data from exactly the same time window are compared. The first row shows how many common observations of L1, L2 phase and P1 and P2 pseudoranges were taken during the ~6 hour time window. All 4 receivers were programmed to collect data down to zero degrees elevation. Rows 2 + 3 show the number of cycle slips below and above satellite elevations of 20 degrees. Row 4 shows the average number of observation/cycle slip (* Only cycle slips detected based on apparent "ionospheric jumps" were counted for computing the numbers in the # Obs / Slip column). Row 5 shows the average elevation angle of all common L1+L2+P1+P2 observations taken by the receivers. P1 (MP1) and P2 multipath (MP2) in rows 6 and 7 are computed from linear combinations between P1, L1 and L2 for MP1 and a linear combination of P2, L1 and L2 for MP2:

General Tracking Performance Comparison
Trimble SSE - Ashtech LM-XII3 (25 degrees cutoff)

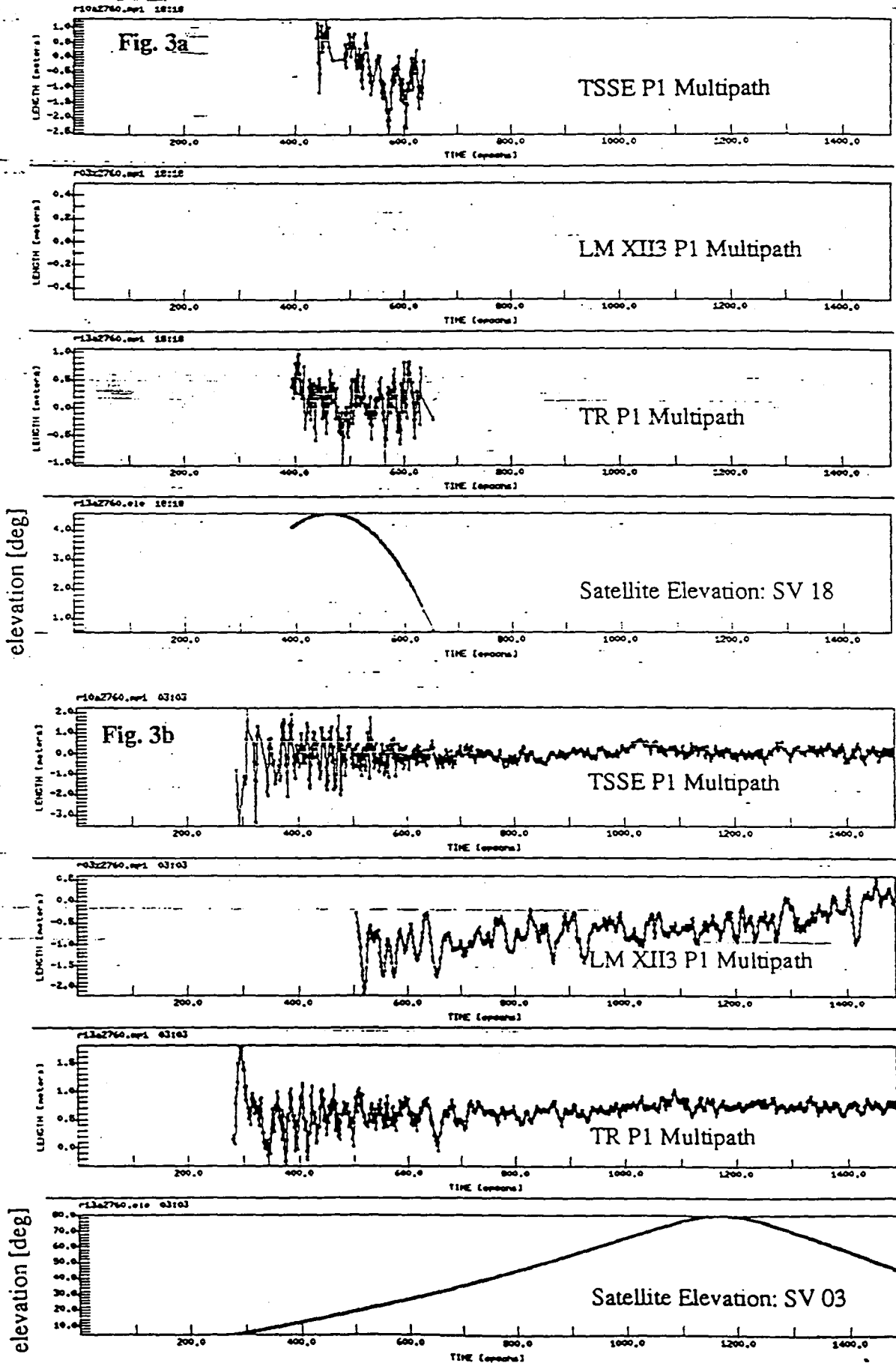
Table 4b

	SSE (A)	SSE (B)	LM-XII3 (A)	LM-XII3 (B)
# of Obs. L1+L2+P1+P2	6,010	5,790	5,995	6,021
# of Cycle Slips < 20 deg.	0	0	0	0
# of Cycle Slips > 20 deg.	1	1	1	2
# Obs / Slip *	6,010	5,790	5,995	3010.5
Average Elevation Angle	49.3	50.1	49.3	49.2
P1 Multipath[m]	0.31	0.29	0.55	0.41
P2 Multipath[m]	0.34	0.32	0.48	0.35
Comment	25 deg. cutoff	25 deg. cutoff	25 deg. cutoff P-code was car- rier- smoothed	25 deg. cutoff P-code was car- rier- smoothed
REC File	r10a2760.92o	r10z2760.92o	r03a2760.92o	r03z2760.92o

This table shows an analysis of the same data as table 4a. The main difference is that only observations above 25 deg satellite elevation angle were compared. Since the Trimble receiver tracks generally down to lower elevation angles, as indicated in the previous table 4a, the values in this table were computed to compare more similar data sets than in 4a.

TSSE, LMXII3, and TR Tracking + Multipath Comparison

MEMO



MEMO

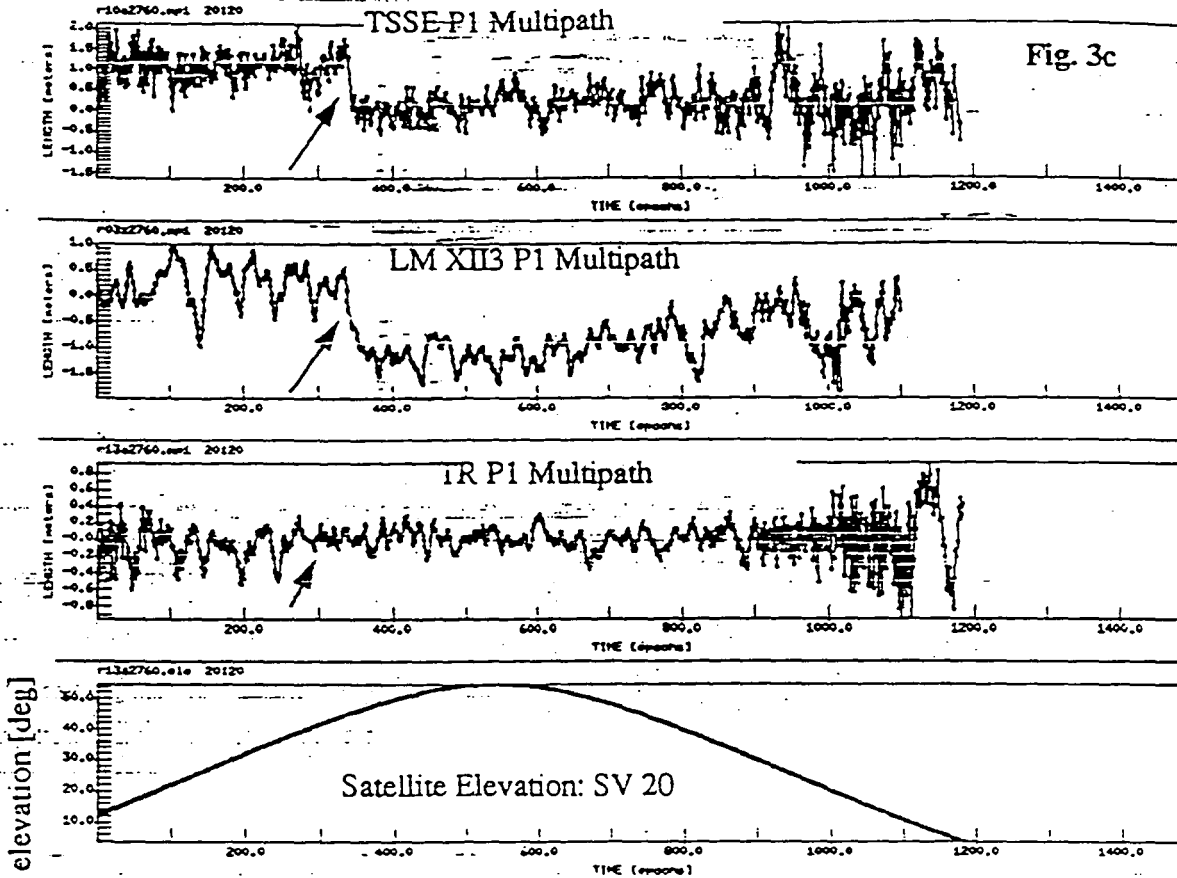
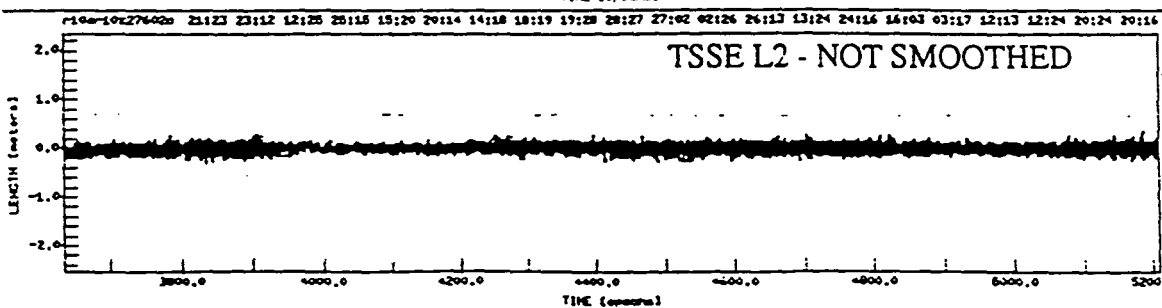
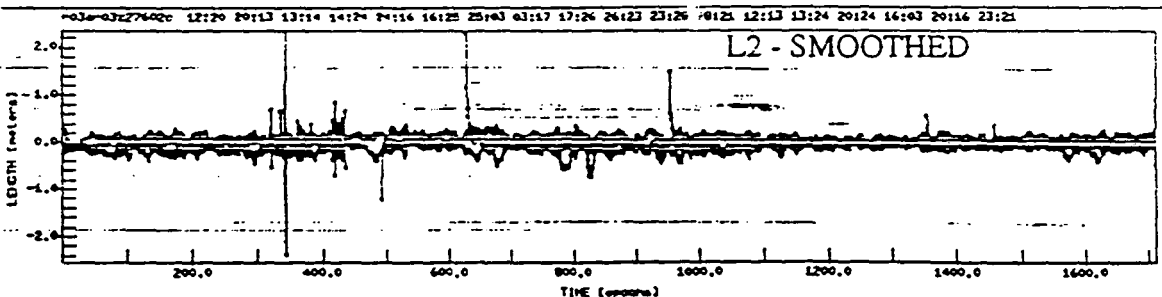
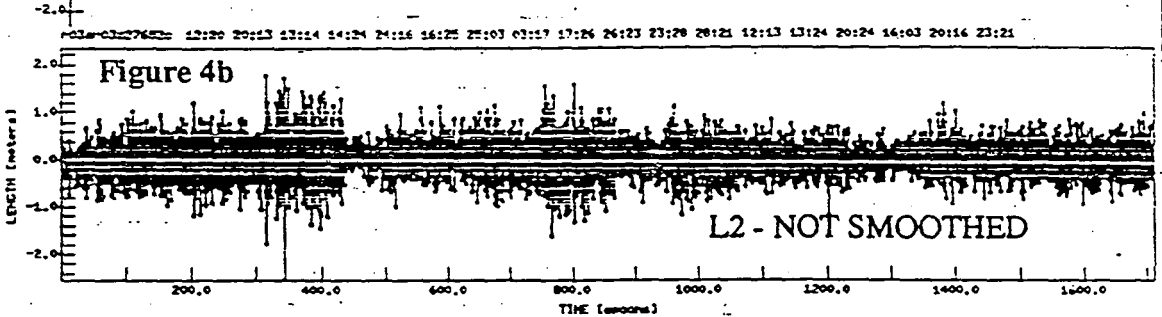
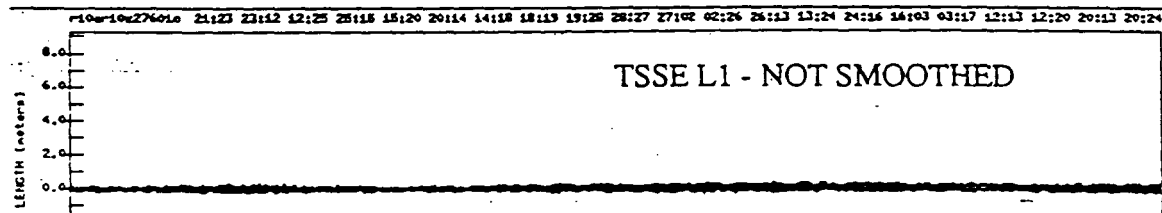
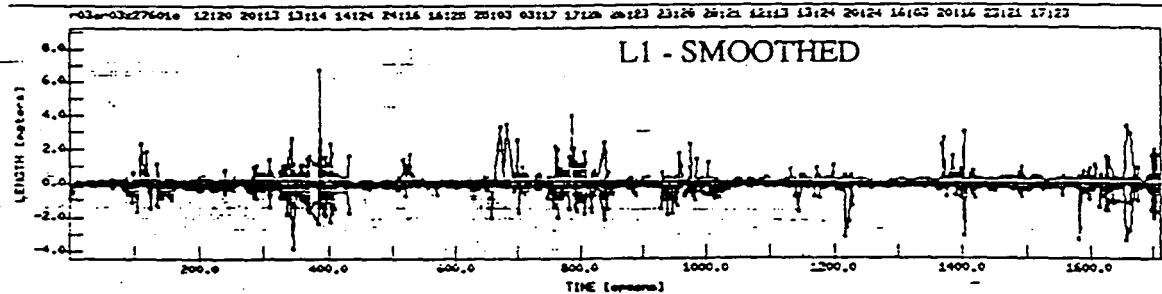
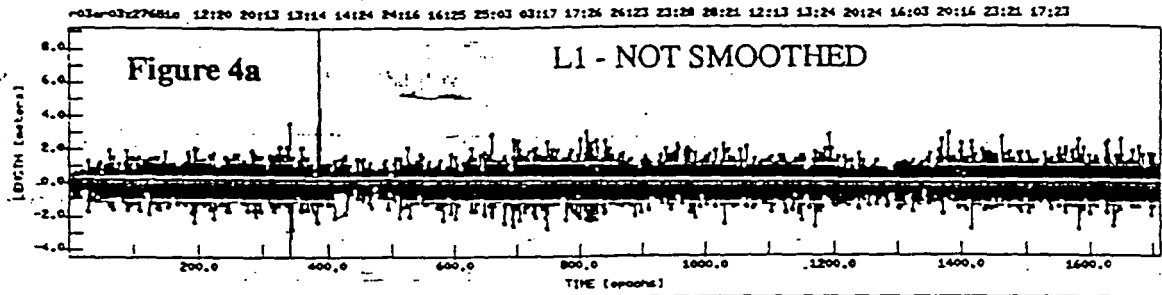


Fig. 3c

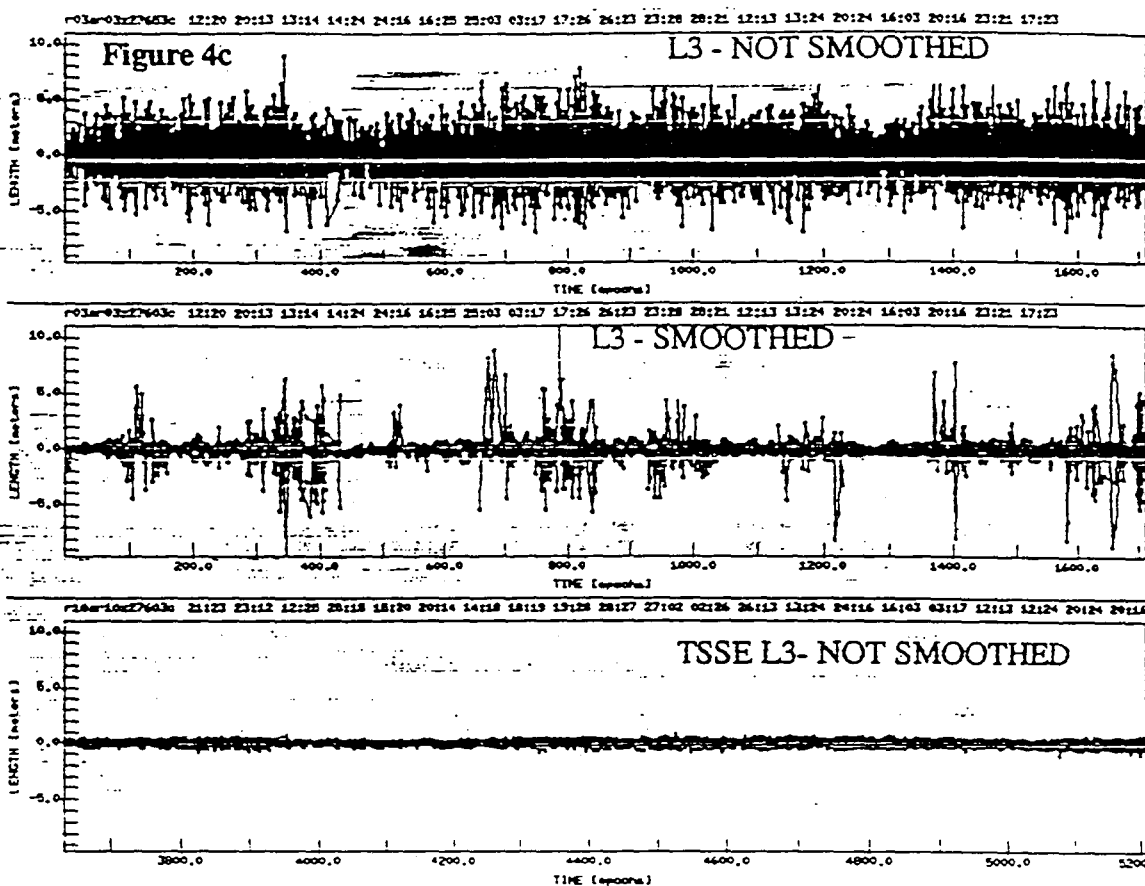
Figures 3a, 3b and 3c compare the L1 P-code multipath for data from 3 different satellites received with, from top to bottom, the TSSE, LMXII3 and TR p-code GPS receivers. The bottom panel for each of the three satellites displays the satellite elevation angles. The data were collected at the same time on Oct. 2nd. on the roof of the UNAVCO Lab. Each receiver was connected to its own antenna. Data for a time-window of 6 hours and a sampling rate of 15 seconds is shown. During this time window all receivers were programed to track satellites down to 0 degrees. Figures 3a 3b and 3c all show that the TR with the choke ring antenna tracks satellite down to the lowest elevation angles. The TSSE, while not tracking as low as the TR, tracks lower than the LMXII-3. Figure 3a shows an example where the satellite remains below 5 degrees and only the TSSE and TR lock on. Figure 3b shows that at times the TR and TSSE collect considerably more data than the LMXII3. Figure 3c, above shows an apparent incident of a step in the P1 multipath at epoch 310 for the TSSE and the LMXII3. This step is not present in the TR data. All three satellite lose data for ~5 epochs prior to the step. This step cannot be caused by the satellite and it's origin is not clear.

Note that the LMXII3 pseudorange data, used for the above plot, were carrier-phase smoothed.

EFFECT OF SMOOTHING ASHTECH PSEUDORANGE DATA ON ZBL
DOUBLE DIFFERENCE RESIDUALS



EFFECT OF SMOOTHING ASHTECH PSEUDORANGE DATA ON ZBL
DOUBLE DIFFERENCE RESIDUALS



Figures 4a, 4b and 4c compare Zero-baseline post-fit double-difference residuals for smoothed and un-smoothed Ashtech LM XII p-code pseudorange data with residuals from un-smoothed TSSE data. Figure 4a and 4b on the previous page compare L1 and L2 p-code measurement noise respectively. Figure 4c above compares noise levels of the ionospheric free linear combination of the p-code data.

Table 5 Zero-baseline Results

	LM -XII3 LENGTH [MM]	LM-XII3 SMOOTH LENGTH [MM]
L1-p-code	64.5	94.1
L2-p-code	51.6	66.1
L3-p-code	153.6	168.4

Table 5 shows the zero-baseline lengths as computed for the smoothed and unsmoothed Ashtech pseudorange data with the Bernese software. All the results that are shown were computed from P-code pseudorange data.

TRIMBLE SSE - OSBORNE SNR-8000 (TR) ZERO - BASELINE
PHASE NOISE COMPARISON

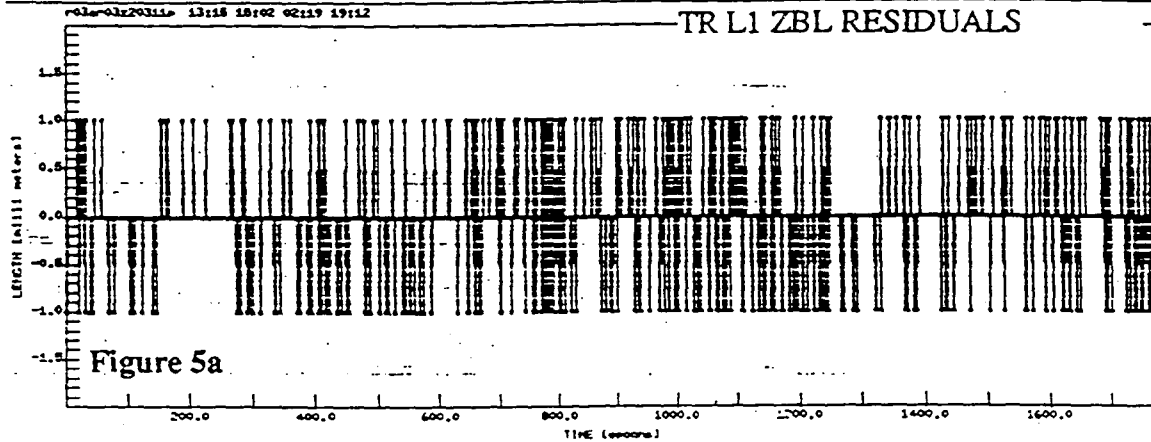
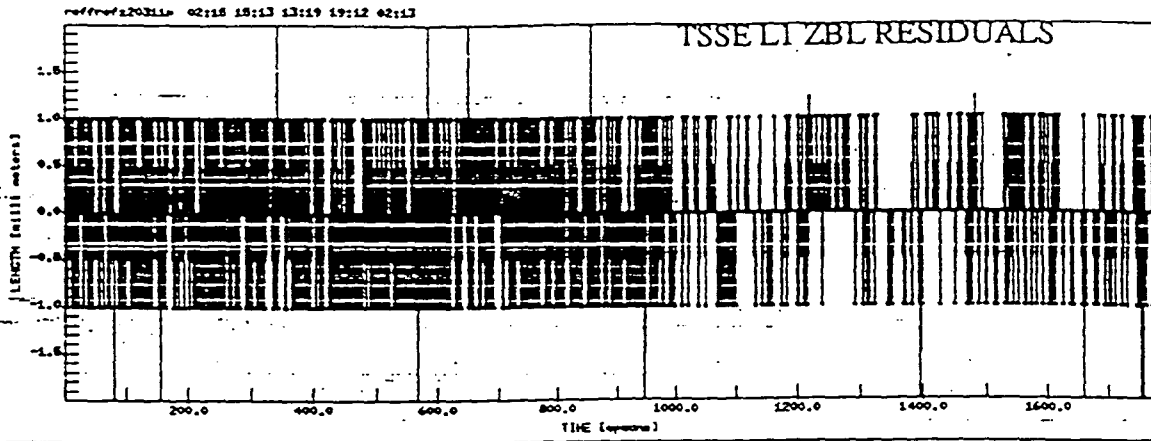


Figure 5a

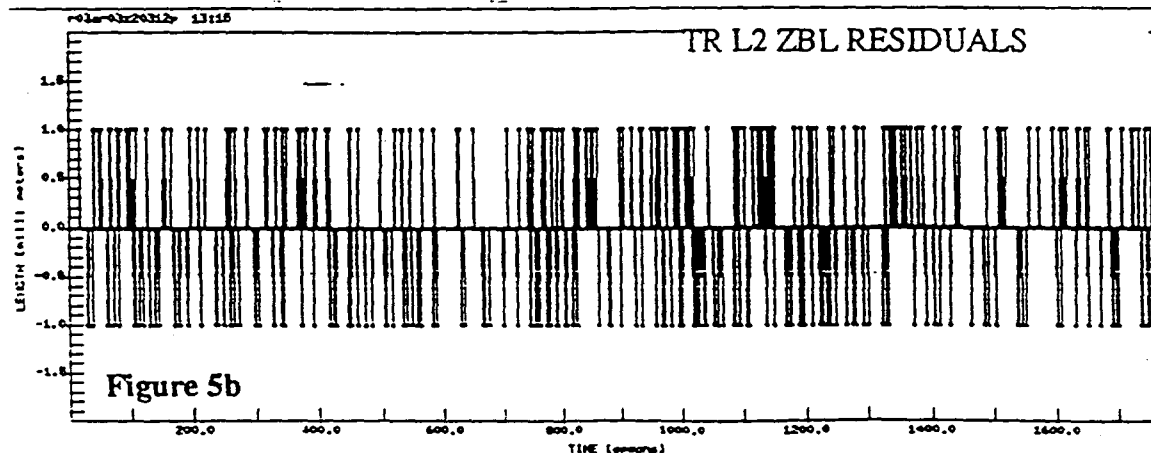
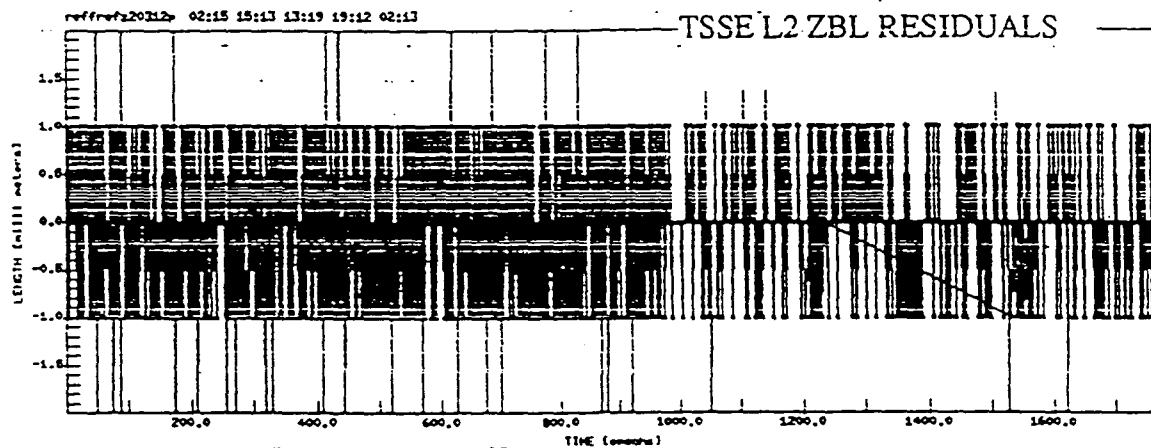


Figure 5b

TRIMBLE- SSE - OSBORNE SNR-8000 (TR) ZERO - BASELINE
 PHASE NOISE COMPARISON

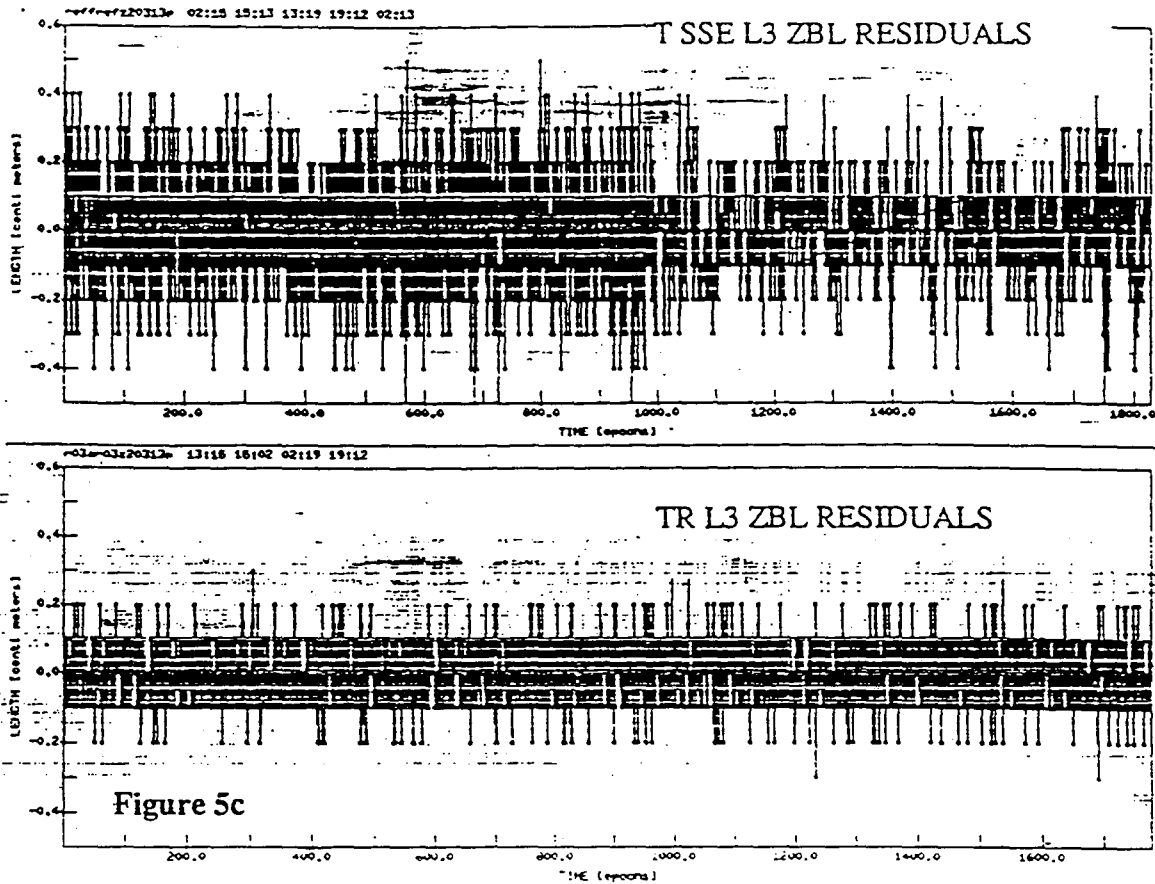


Figure 5c

Figure 5a, 5b and 5c compare Zero-baseline post-fit double-difference residuals for the Trimble SSE and the Osborne SNR-8000 (TR) receivers. The Trimble and Osborne SNR-8000 (TR) zero-baseline data were collected at the same time. About 35 minutes of data, sampled at 1-second, are shown. Two Trimbles were connected to the same Trimble antenna, two Osborne SNR-8000 (TR) receivers were connected to the same D + M choke ring antenna. Figure 1a and 1b on the previous page compare L1 and L2 phase measurement noise respectively. Figure 1c above compares noise levels of the ionospheric free linear combination.

Table 6 Zero-baseline Results

	SSE LENGTH [MM]	TR LENGTH [MM]
L1-phase	0.4 (2.7)	0.1 (3.7)
L2-phase	0.3 (4.1)	0.1 (2.1)
L3-phase	0.6 (13.2)	0.3 (6.6)

Table 6 shows the zero-baseline lengths as computed for the two compared receivers with the Bernese software. All the results that are shown were computed from carrier phase data with all ambiguities resolved. The values in parentheses show the zero-baseline lengths with free ambiguities.

TRIMBLE -SSE - OSBORNE SNR-8000 (TR) ZERO - BASELINE
P-CODE NOISE COMPARISON

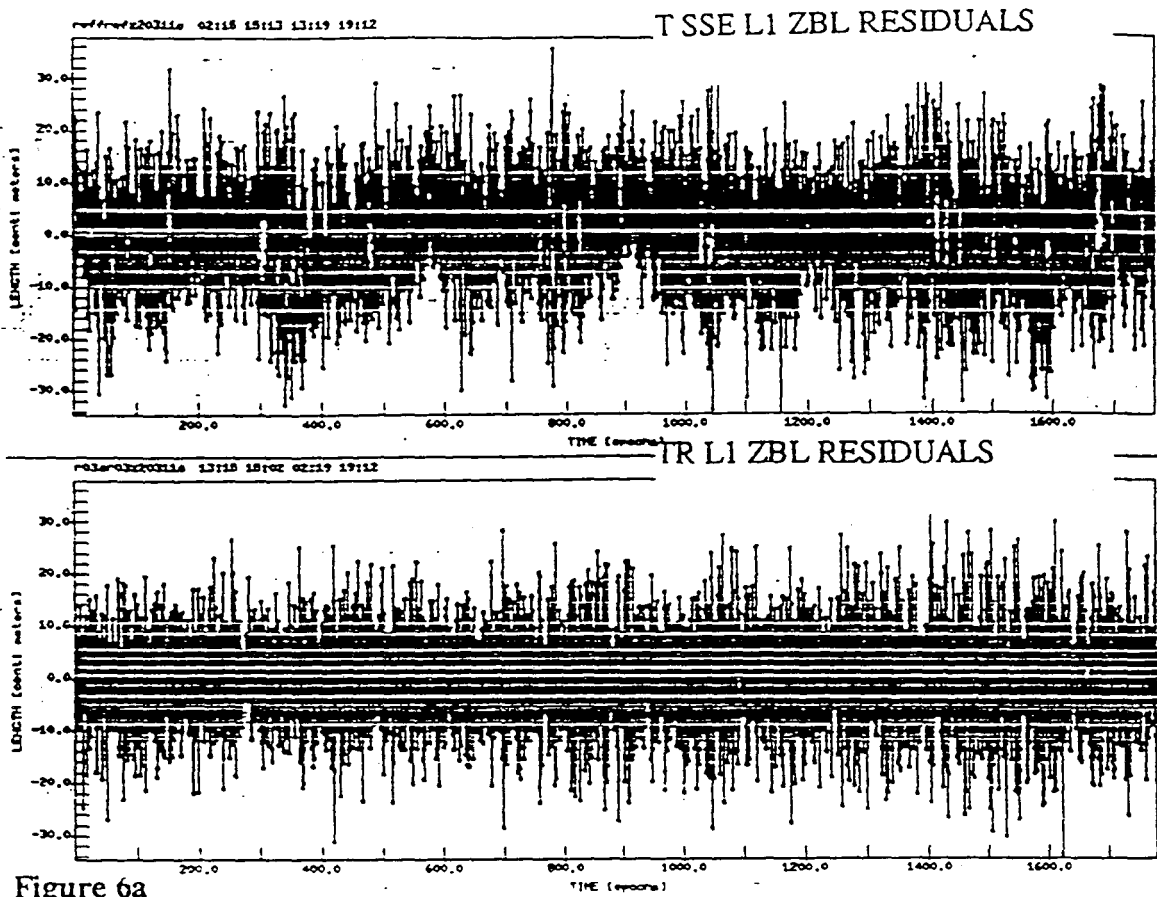


Figure 6a

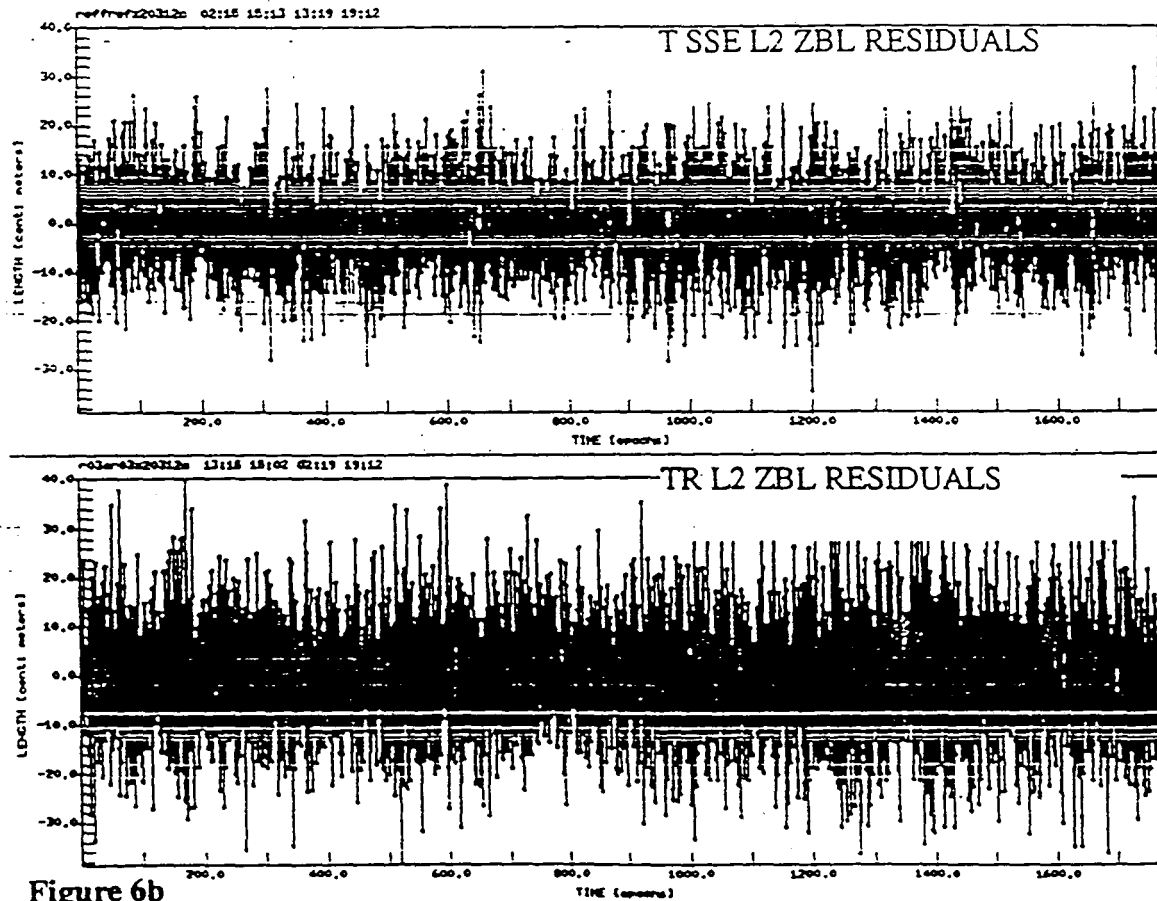


Figure 6b

TRIMBLE -SSE - OSBORNE SNR-8000 (TR) ZERO - BASELINE
P-CODE-NOISE COMPARISON

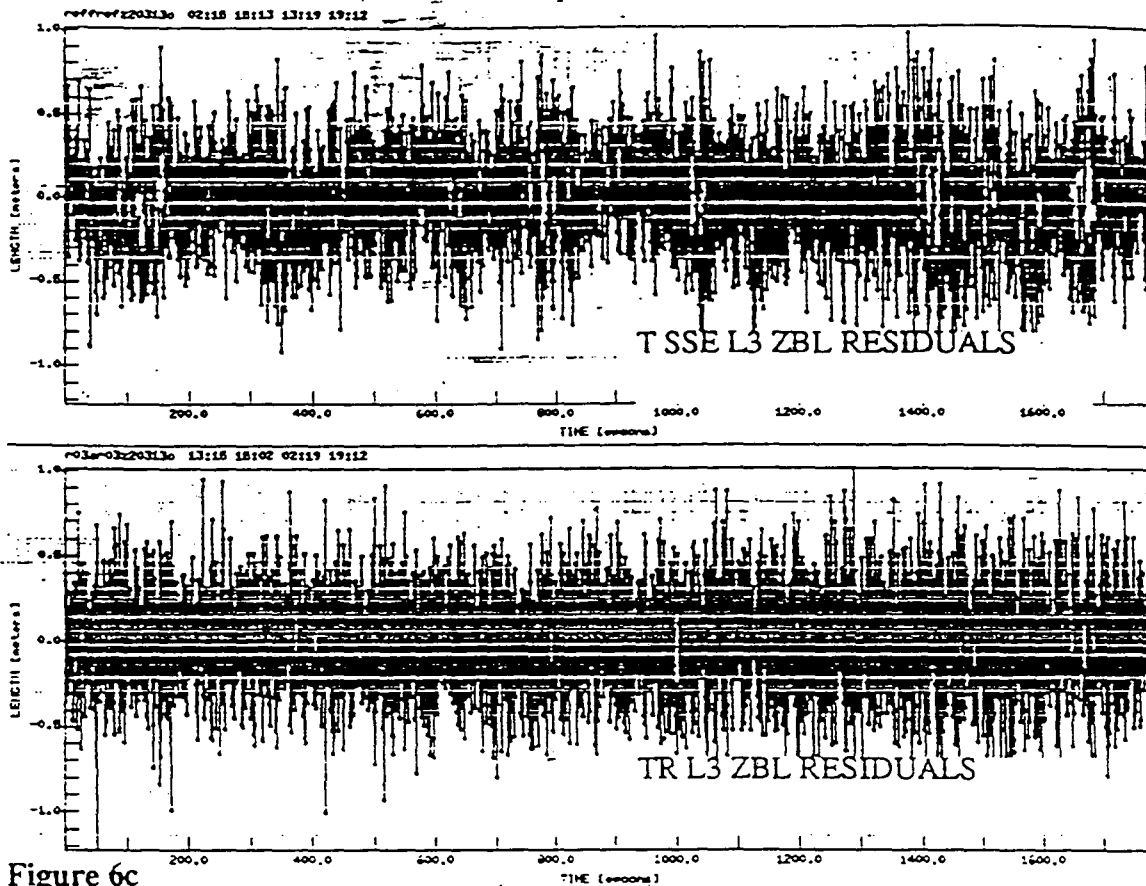


Figure 6c

Figure 6a, 6b and 6c compare Zero-baseline post-fit double-difference residuals for the Trimble SSE and the Osborne SNR-8000 (TR) receivers. The Trimble and Osborne SNR-8000 (TR) zero-baseline data were collected at the same time. About 35 minutes of data are shown. Two Trimbles were connected to the same Trimble antenna, two Osborne SNR-8000 (TR) receivers were connected to the same D + M choke ring antenna. Figure 6a and 6b on the previous page compare L1 and L2 p-code measurement noise respectively. Figure 6c above compares noise levels of the ionospheric free linear combination of the p-code data.

Table 7 Zero-baseline Results

	SSE LENGTH [MM]	TR LENGTH [MM]
L1-p-code	8.5	5.8
L2-p-code	21.1	25.6
L3-p-code	15.0	17.7

Table 7 shows the zero-baseline lengths as computed for the two compared receivers with the Bernese software. All the results that are shown were computed from P-code pseudorange data.

General Tracking Performance Comparison
Trimble SSE - Osborne SNR-8000 (TR)

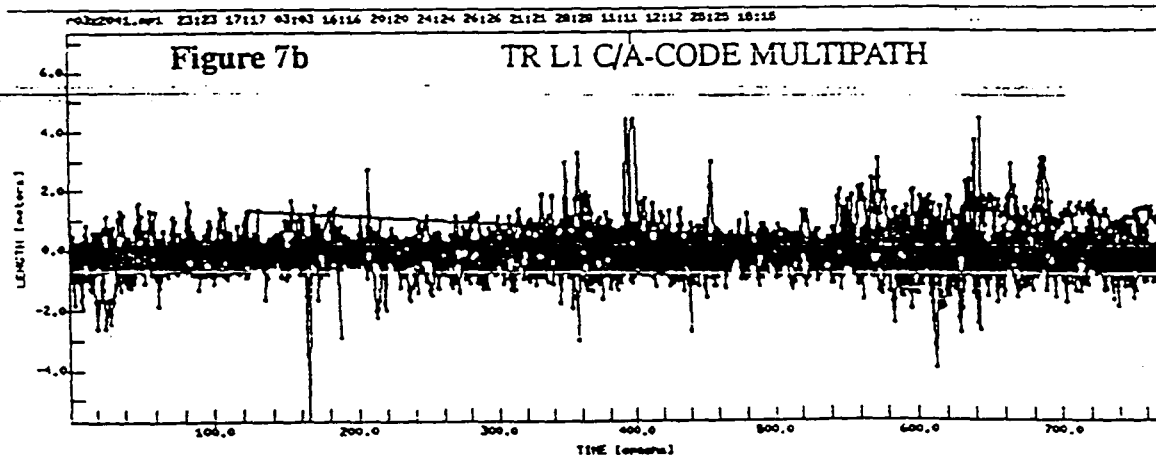
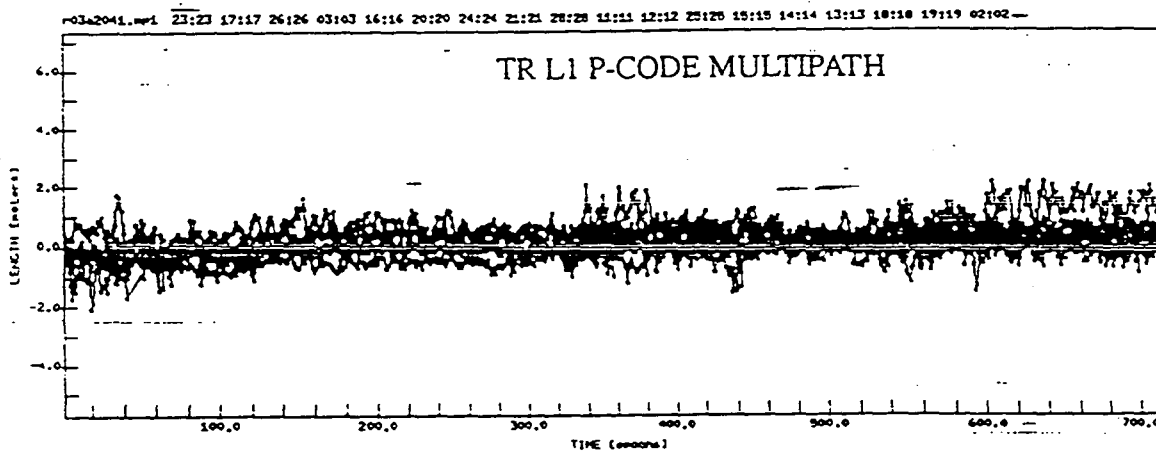
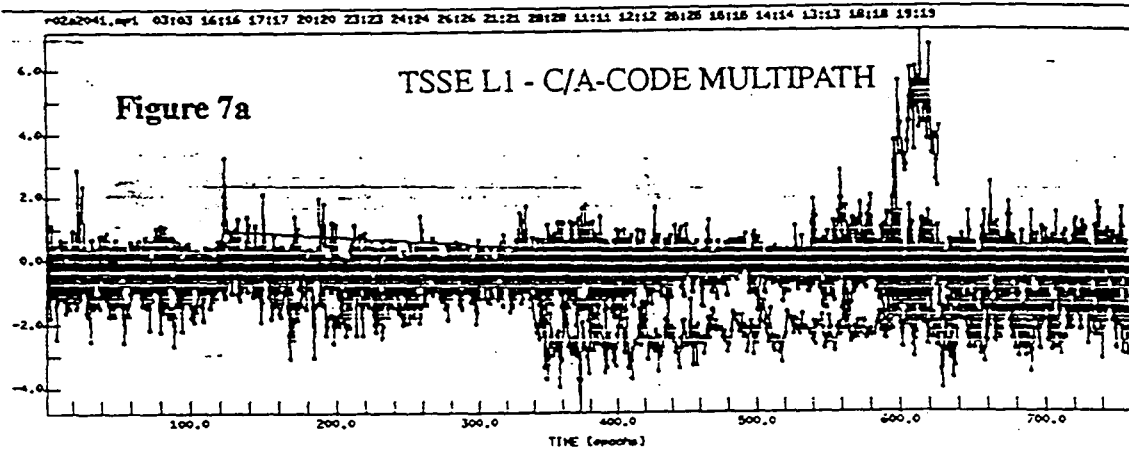
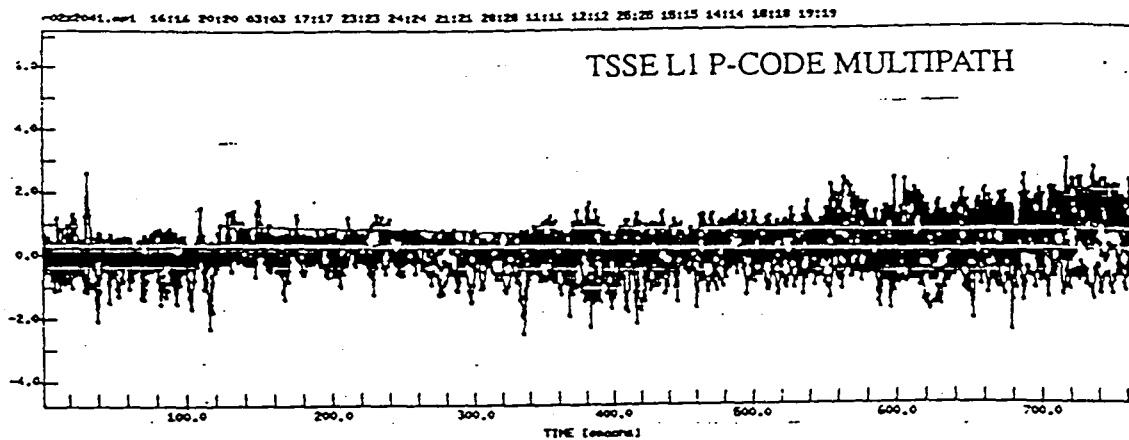
Table 8

	SSE (A)	SSE (B)	TR (A)	TR (B)
# of Obs. L1+L2+P1+P2	8,156	8,203	8,827	8,837
# of Cycle Slips > 20 deg.	0	0	0	0
# of Cycle Slips < 20 deg.	1	1	2	0
# Obs / Slip *	8,156	8,203	8,827	8,837
Average Elevation Angle	35.4	35.2	33.0	33.1
P1 Multipath[m]	0.31	0.31	0.32	0.32
P2 Multipath[m]	0.32	0.32	0.31	0.32
Comment				
REC #	1152 ("teff")	1128 ("tefz")	"r03a"	"r03z"

This table summarizes general tracking performance comparison between 2 TSSE and 2 Osborne SNR-8000 (TR) receivers. The two Trimble receivers were operated from the same Trimble antenna, and the Osborne SNR-8000 (TR) receivers were operated off the same D + M choke ring antenna. Data from exactly the same time window are compared. The first row shows the number of common observations of L1, L2 phase and pseudoranges that were logged during the ~35 minute time window. All 4 receivers were programmed to collect data down to zero degrees elevation. Rows 2 + 3 show the number of cycle slips below and above satellite elevations of 20 degrees. Row 4 shows the average number of observations/cycle slip (* Only cycle slips detected based on apparent "ionospheric jumps" were counted for computing the numbers in the # Obs / Slip column). Row 5 shows the average elevation angle of all common L1+L2+P1+P2 observation taken by the receivers. P1 (MP1) and P2 multipath (MP2) in rows 6 and 7 are computed from linear combinations between P1, L1 and L2 for MP1 and a linear combination of P2, L1 and L2 for MP2.

Figure 7a and 7b (following page) shows the comparison of the L1 P-code and C/A code multipath + receiver noise levels for the TSSE in the top (7a) and for the Osborne SNR-8000 (TR) in the bottom (7b) panels. The next page shows Figure 7c and 7d. The top two panels compare TSSE L2 pseudorange measurements noise plus multipath for p-code and C/A + "Y2-Y1" (7c). The bottom two panels show the same for the Osborne SNR-8000 (TR) receiver (7d). These data were collected while A/S was not on.

LI P-CODE VERSUS C/A CODE MULTIPATH COMPARISON FOR
TRIMBLE 4000 SST AND OSBORNE SNR-8000 (TR) RECEIVERS



L2 P-CODE VERSUS C/A + "Y2-Y1" CODE MULTIPATH COMPARISON FOR
 TRIMBLE 4000 SST AND OSBORNE SNR-8000 (TR) RECEIVERS

Figure 7c

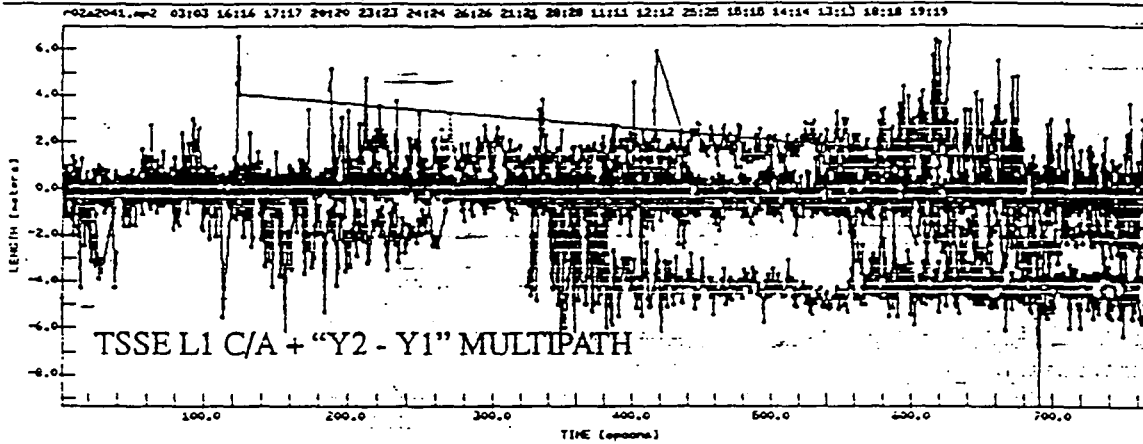
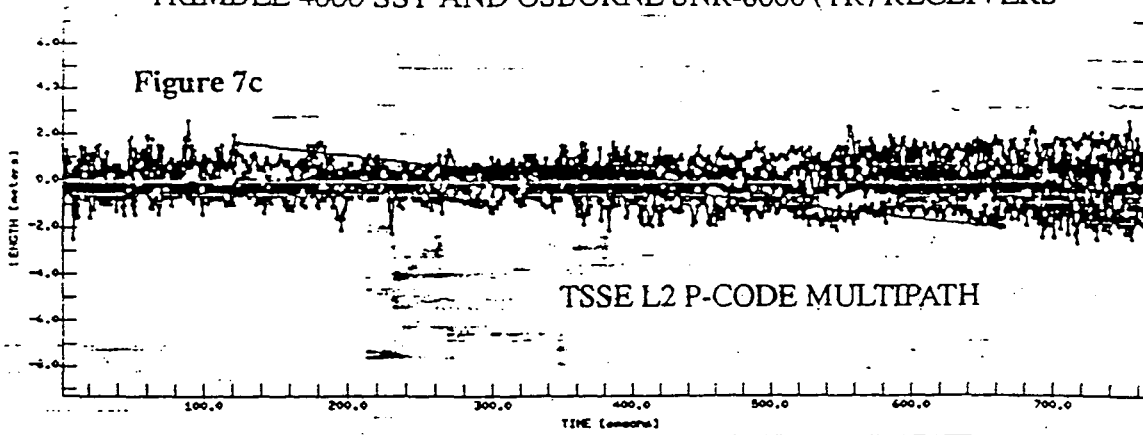
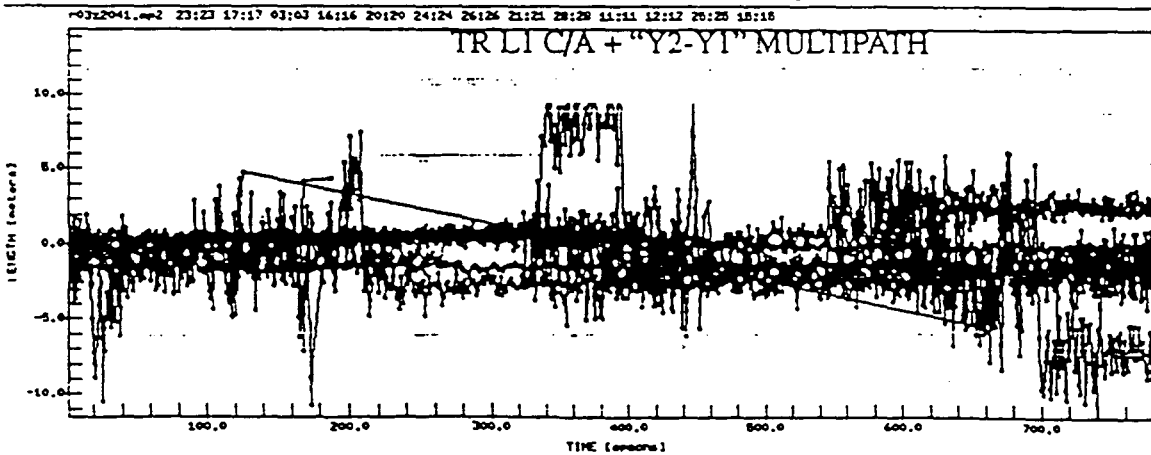
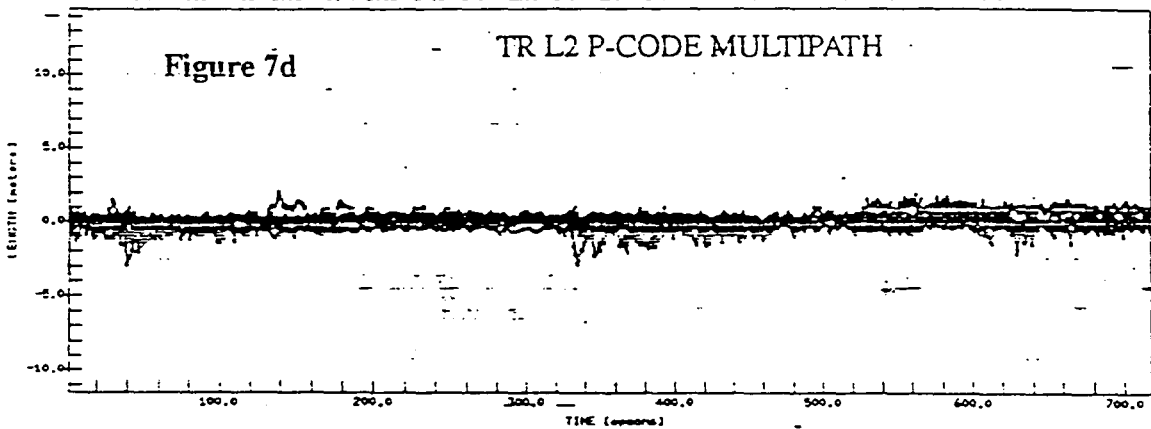


Figure 7d



Normal and Cross-Correlation Tracking Performance Comparison
Trimble SSE - Osborne SNR-8000 (TR)

Table 9

	SSE (A)	SSE (B) X-CORREL.	TR (A)	TR (B) X-CORREL.
# of Obs. L1+L2+P1+P2	4709	5087	4896	5347
# of Cycle Slips < 20 deg.	13	21	15	68
# of Cycle Slips > 20 deg.	4	2	21	2
# Obs / Slip *	294	339	4896	5347
Average Elevation Angle	37.3	37.6	36.8	36.5
P1 Multipath[m]	0.54	0.67	0.37	0.50
P2 Multipath[m]	0.51	0.87	0.37	1.30
Comment				Higher Multi- path probably due to low-ele- vation observa- tions.
REC #	1132 ("r02z")	1128 ("r02a")	"r03a"	"r03z"

This table compares the (a) the tracking performance of two TSSE receivers, running in ZBL mode connected to the same Trimble SST antenna. One of the TSSEs was operated in its "normal" mode (SSE-A) and the other one was operated in cross-correlation mode (SSE B). The same thing was done with two TR receivers that were operated during the same time in ZBL configuration, connected to the same D+M choke ring antenna. TR A was operated in "normal" mode and TR B was operated in X-correlation mode. Both receivers were operated at a 30-second sampling interval for about 6 hours. Note that none of the cycle slips of the TR receivers was detected based on "ionospheric jumps" - apparently all the cycle slips were related to data outages. It is not clear if these data outages were caused by receiver problems or by a bug in the RINEX translator that we used. The higher P2-multipath level of the TR in X-correlation mode may be due to the greater amount of low-elevation data provided by the TR receiver.

TRIMBLE-SSE AND OSBORNE SNR-8000 (TR) ZERO - BASELINE L3 PHASE RESIDUALS
 COMPARISONS BETWEEN RECEIVERS IN CROSS-CORRELATION MODE
 AND P-CODE TRACKING MODE

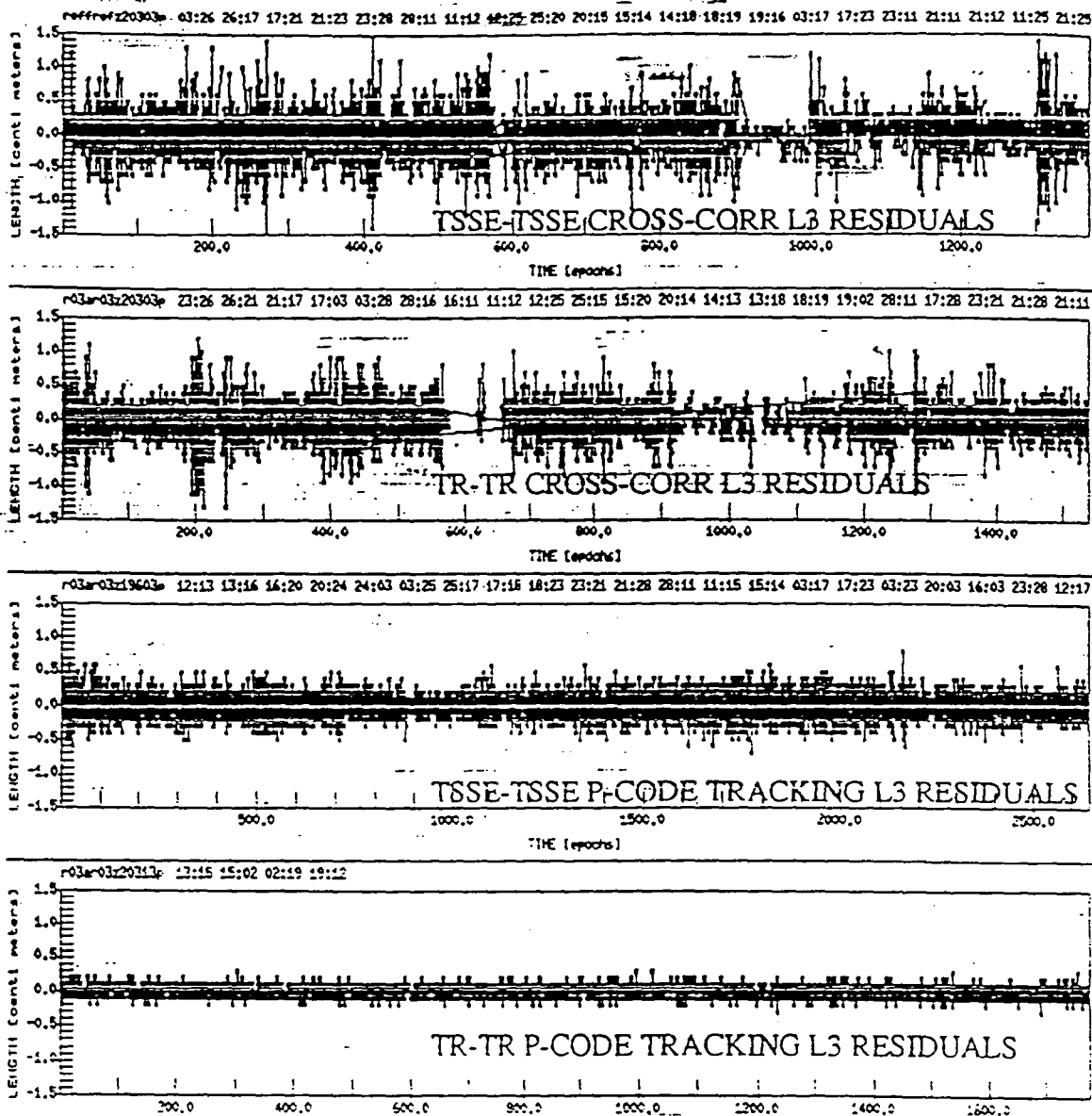
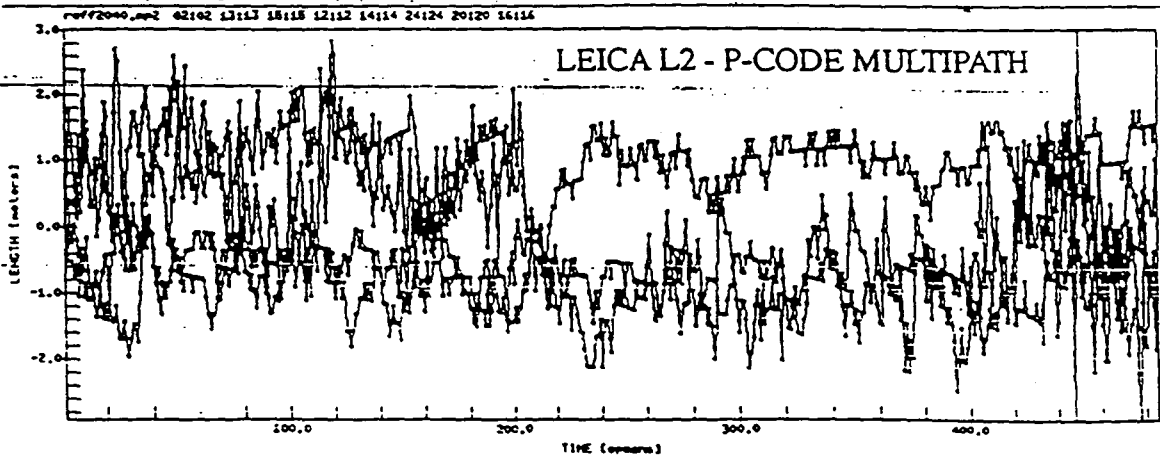
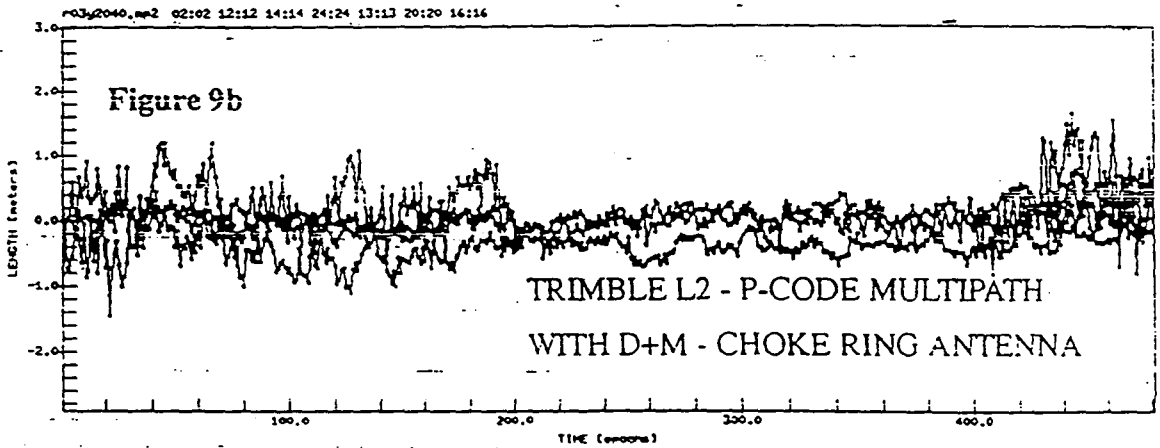
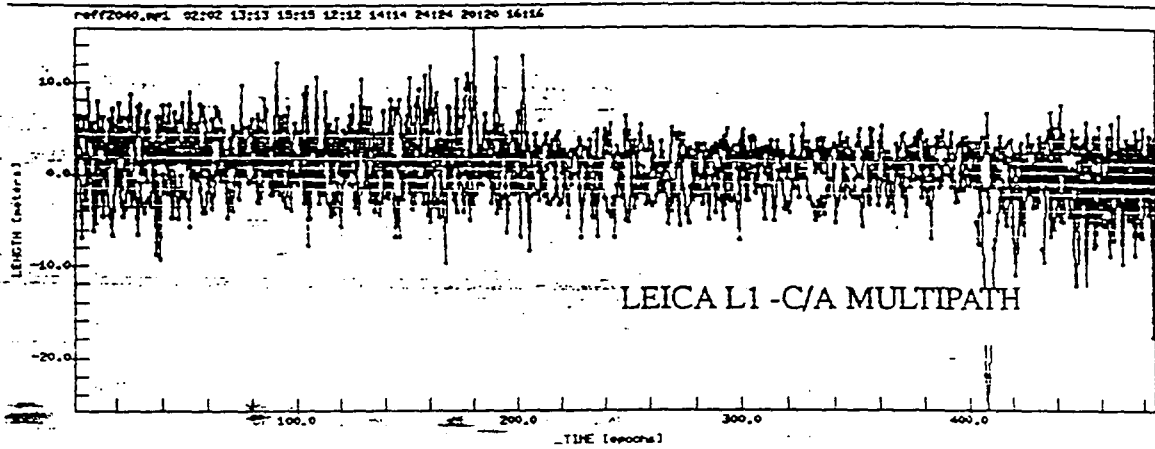
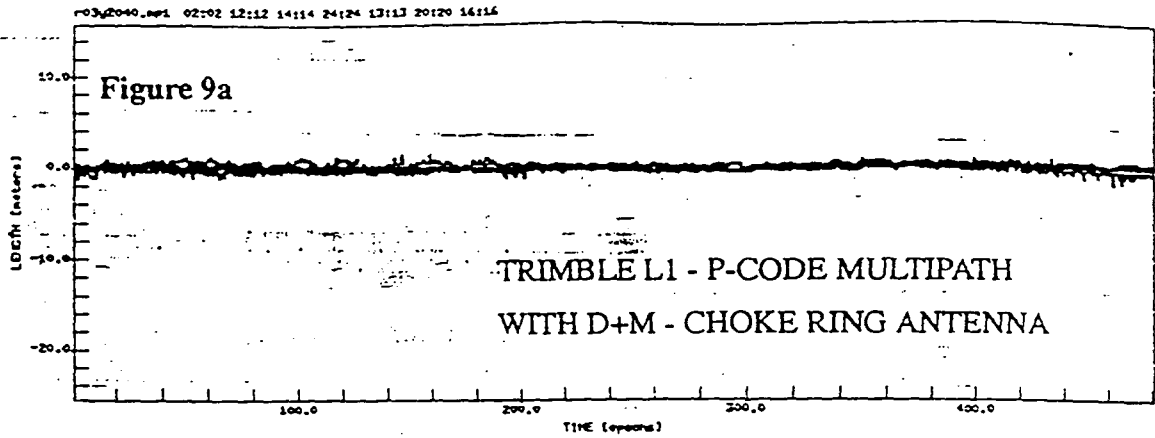


Figure 8a, and 8b: Comparisons of zero-baseline L3 ionosphere-free post-fit double-difference residuals of the Trimble SSE with Trimble SSE on a Trimble antenna with residuals of the Osborne SNR-8000 (TR) -Osborne SNR-8000 (TR) ZBL with the Dorne-Margolin antenna. Receivers were operated in cross-correlation mode (upper two panels) versus normal p-code tracking mode (lower two plots). Receivers operating in cross-correlation mode simulate tracking with A/S on. The bottom plot was 1 sec tracking, all others were 15 sec sampling rate.

TRIMBLE SSE - LEICA SR 299
PSEUDORANGE MULTIPATH + RECEIVER NOISE COMPARISON



General Tracking Performance Comparison

Trimble SSE - Leica SR 299

Table 10

	SSE	SR299
# of Obs. L1+L2+P1+P2	1737	1799
# of Cycle Slips < 20 deg.	0	0
# of Cycle Slips > 20 deg.	0	0
# Obs / Slip *	1737	1799
Average Elevation Angle	48.1	48.7
P1 Multipath[m]	.24	2.44 (C/A - CODE!)
P2 Multipath[m]	.25	0.55
Comment	15 deg cutoff NOTE THAT D+M CHOKE RING ANTENNA WAS USED	15 deg cutoff P1 is actually C/A code multipath.
REC #	1128 ("r03y")	100332 ("reff")

This table summarizes general tracking performance comparison between a T SSE and a Leica SR 299 receiver. The TSSE receiver was operated with a D+M choke ring antenna, while the SR299 receiver was operated with its own antenna. An elevation cutoff of 15 degrees was applied for computing the statistics presented in this table. Rows 2 + 3 show the number of cycle slips below and above satellite elevations of 20 degrees. Row 4 shows the average amount of observation/cycle slip (* Only cycle slips detected based on apparent "ionospheric jumps" were counted for computing the numbers in the # Obs / Slip column). Row 5 shows the average elevation angle of all common L1+L2+P1+P2 observations taken by the receivers. P1 (MP1) and P2 multipath (MP2) in rows 6 and 7 are computed from linear combinations between P1, L1 and L2 for MP1 and a linear combination of P2, L1 and L2 for MP2.

TABLE 11: Mixed Receiver Zero-baseline Results

REC. 1- REC. 2	LM-XII3- T-SSE	LM-XII3- TR	T-SSE -TR
ANTENNA	TR (LM)	TR (TSSE)	TR (TSSE)
	Length [mm]	Length [mm]	Length [mm]
L1-phase (amb unre- solved)	1.2 (0.3) 2.6*	1.3 (0.8) 2.5*	0.3 (0.3) 0.5*
L2-phase (amb unre- solved)	0.4 (0.7) 0.8*	0.6 (0.4) 2.8*	0.6 (1.6) 2.4*
L3-phase (amb unre- solved)	3.0 (1.9) 6.6*	2.4 (1.9) 1.8*	0.5 (2.0) 4.2*
L1-phase (amb resolved)	0.4 (0.4) 0.4*	0.4 (0.7) 0.6*	0.1 (0.1) 0.8*
L2-phase (amb resolved)	1.0 (1.3) 9.4*	0.4 (1.2) 5.0*	0.2 (1.1) 1.0*
L3-phase (amb resolved)	3.0 (1.1) 15.6*	2.4 (0.7) 7.5*	0.2 (1.3) 0.9*

Table 11. Results of zero-baseline mixed receiver tests. The first value in each box is the result for a triple zero-baseline with a Dorne-Margolin antenna powered by the LM-XII3 receiver with a splitter and DC block to the T-SSE and TR receivers. The second value in each box is the result from a second test mixing only two receivers with each antenna. Results are shown with ambiguities resolved and unresolved and data were processed with a 25 degree elevation cutoff. The third value in each box, marked with an * is the result from the July test. In that test the LM-XII3 had version 6I firmware, whereas the present test uses 6M. The TSSE and TR had the same version operating software in both tests. A/S was not on during these tests.

Table 12: Short-Baseline Phase Solution Repeatability

Frequency, amb. resol.	Component	reff- r03a (LM-XII3)	r11a- r10a (T-SSe)	r12a- r13a (TR)
	length >	3.3200 m	2.3396 m	1.5905 m
	1	1696 30 sec	1785 all 30	1876 all 30
	2	2117 30 sec	2308 sec	2508 sec
	3	3254 20 sec	2131	1812
	4	2672 20 sec	1788	1627
	5	2345 30 sec	2376	2035
L1	North	0.5 mm	0.6 mm	0.3 mm
	East	0.7	0.3	0.6
	Height	4.1	0.9	0.7
	Length	0.7	0.4	0.6
L2	North	0.5	0.2	0.4
	East	0.8	0.5	0.8
	Height	4.3	1.7	0.3
	Length	0.8	0.5	0.7
L3	North	1.8	1.2	0.3
	East	2.1	1.5	0.6
	Height	5.1	3.8	1.6
	Length	2.1	1.5	0.6

- Table of phase repeatability for five ~ 4.5 hour long sessions

BASELINE SCATTER

L1 phase 15 deg. cutoff

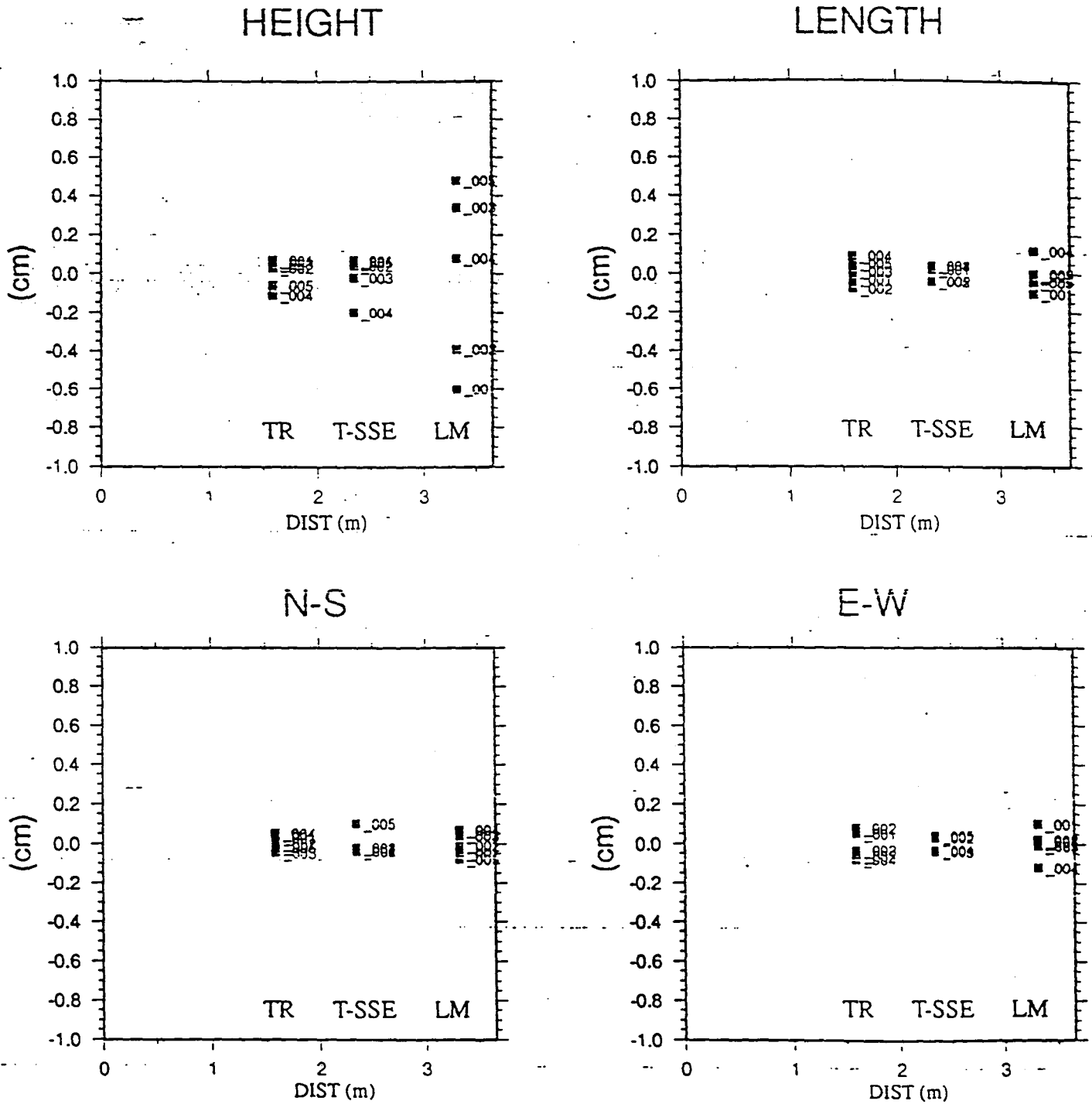


Figure 10. Scatter of L1 phase solutions for short, < 3.65 m, baselines. Results are for five 4.5 hour sessions. Each receiver operated off its own antenna. All ambiguities were resolved. The elevation cutoff was 15 degrees. Full scale for all plots is ± 1.0 cm.

BASELINE SCATTER

L2 phase 15 deg. cutoff

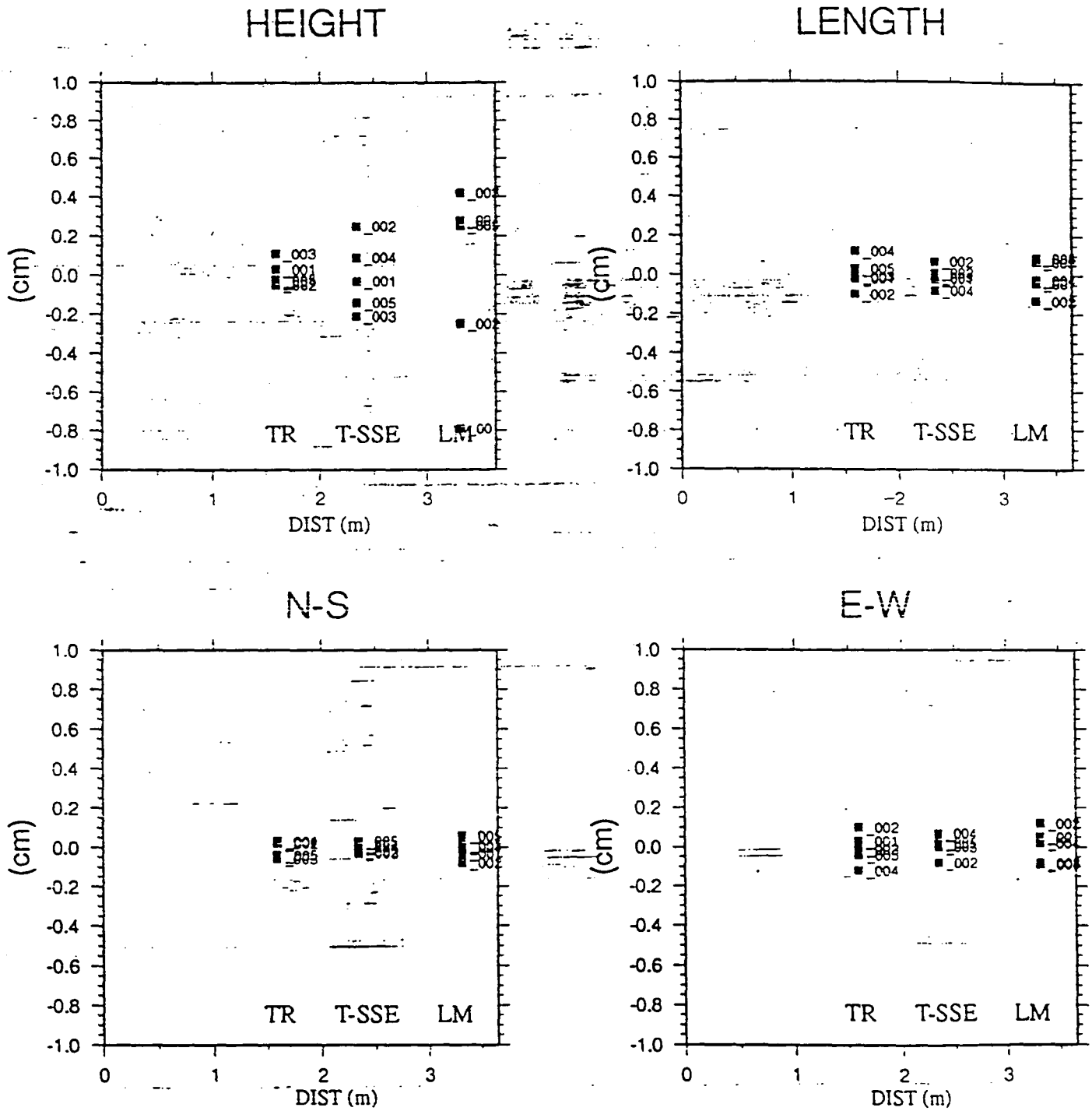


Figure 11. Scatter of L2 phase solutions.

BASELINE SCATTER

L3 phase 15 deg. cutoff

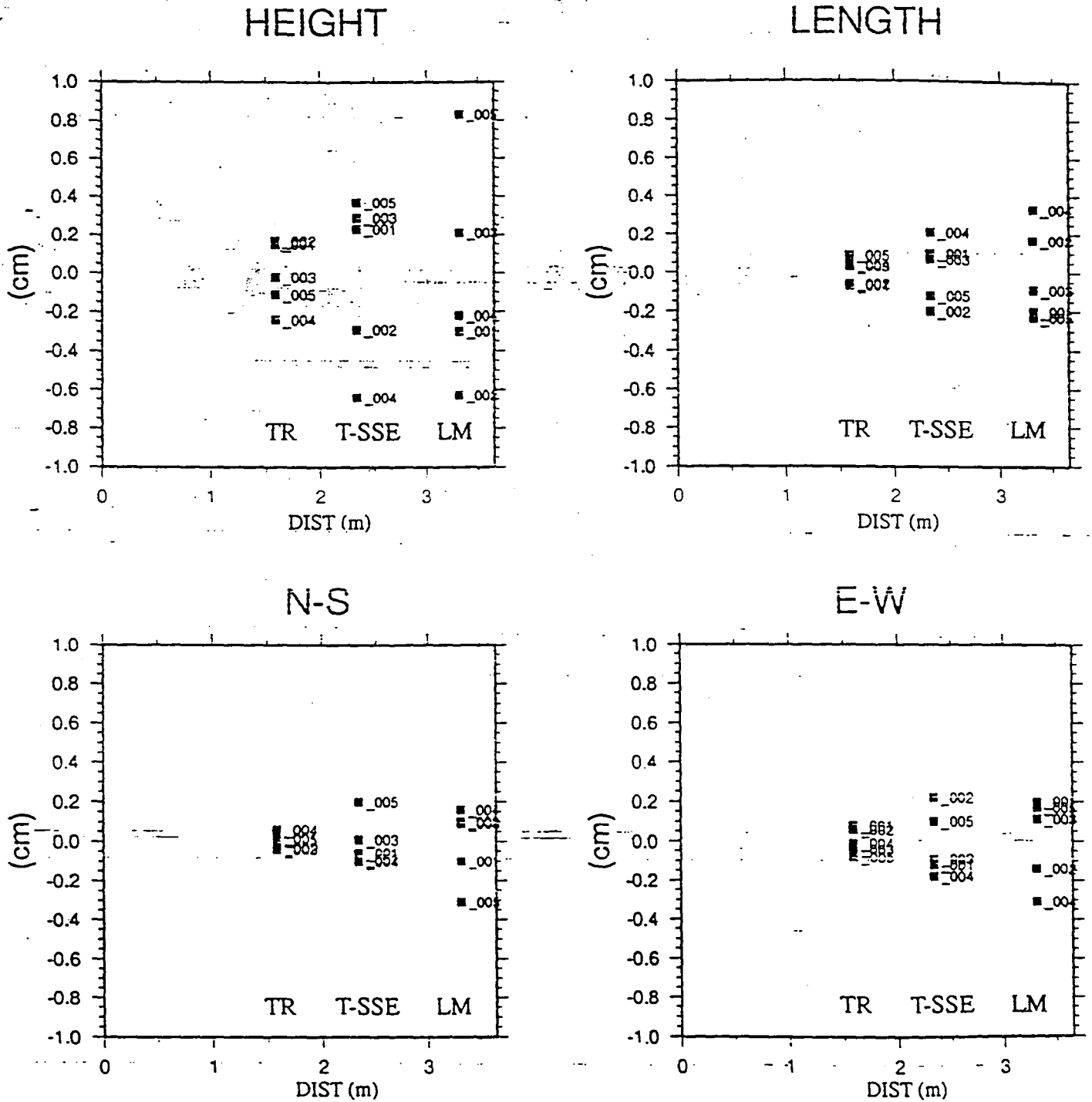


Figure 12. Scatter of L3 phase solutions.

SHORT-BASELINE COMMON RECEIVER/ANTENNA PHASE NOISE COMPARISONS

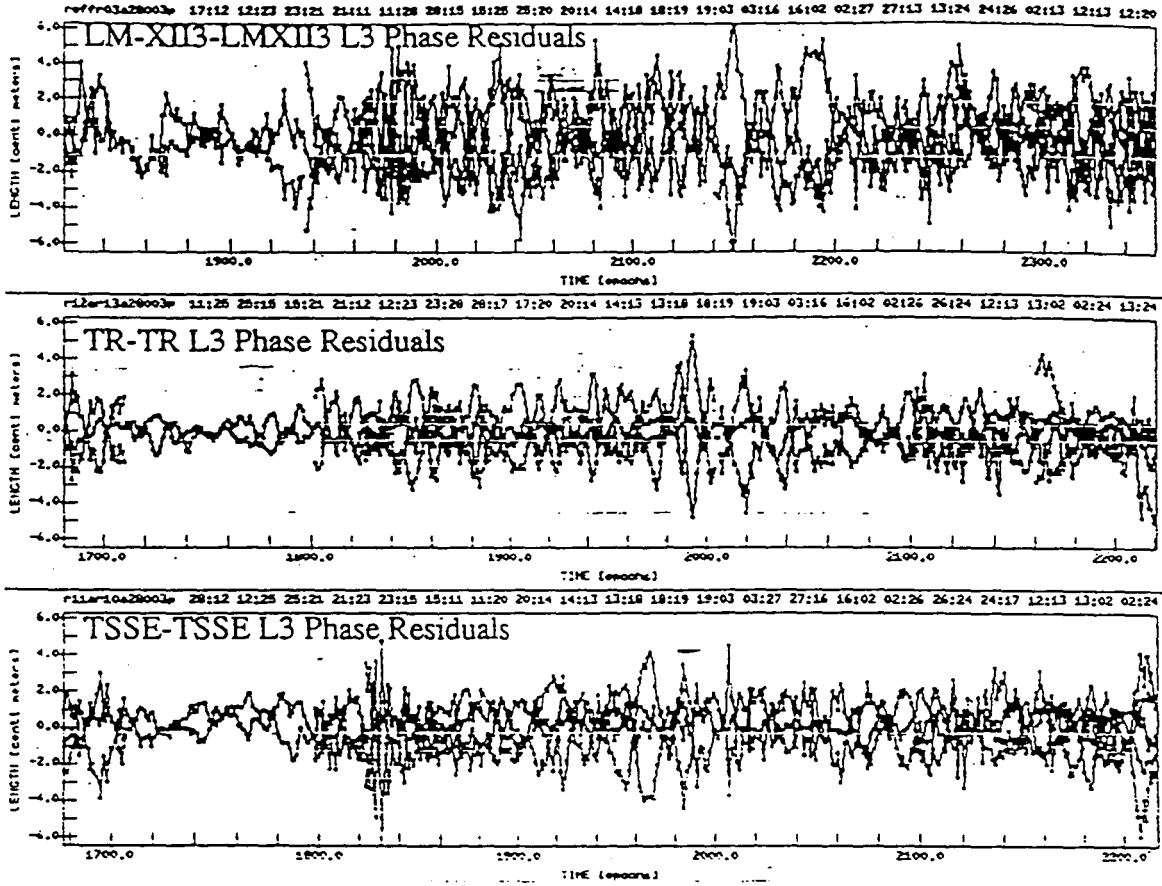


Figure 13. Example of L3 double-difference phase residuals for one 4.5 hour session of the short-baseline tests.

Table 13: Short-Baseline P-Code Solution Repeatability

Frequency, amb. resol.	Component	reff- r03a (LM-XII3)	r11a- r10a (T-SSe)	r12a- r13a (TR)
	length >	3.3200 m	2.3396 m	1.5905 m
	Session:	Obs. Used	Obs. Used	Obs. Used
	1	1251 30 sec	1317 all 30	1381 all 30
	2	1853 30 sec	1992 sec	2029 sec
	3	2543 20 sec	1608	1371
	4	1959 20 sec	1312	1169
	5	1558 30 sec	1818	1508
L1	North	46.1 mm	22.6 mm	14.2 mm
	East	42.0	52.7	6.1
	Height	14.6	39.7	39.9
	Length	43.9	49.7	8.6
L2	North	71.9	54.4	30.9
	East	65.2	60.9	29.3
	Height	79.2	52.5	16.1
	Length	74.4	59.3	33.9
L3	North	71.3	45.1	40.3
	East	212.2	112.9	13.2
	Height	304.7	72.0	82.7
	Length	243.5	110.3	23.2

Table of p-code repeatability for five 4.5 hour long sessions 25 degree elevation cutoff

BASELINE SCATTER

L1 p-code 25 deg. cutoff

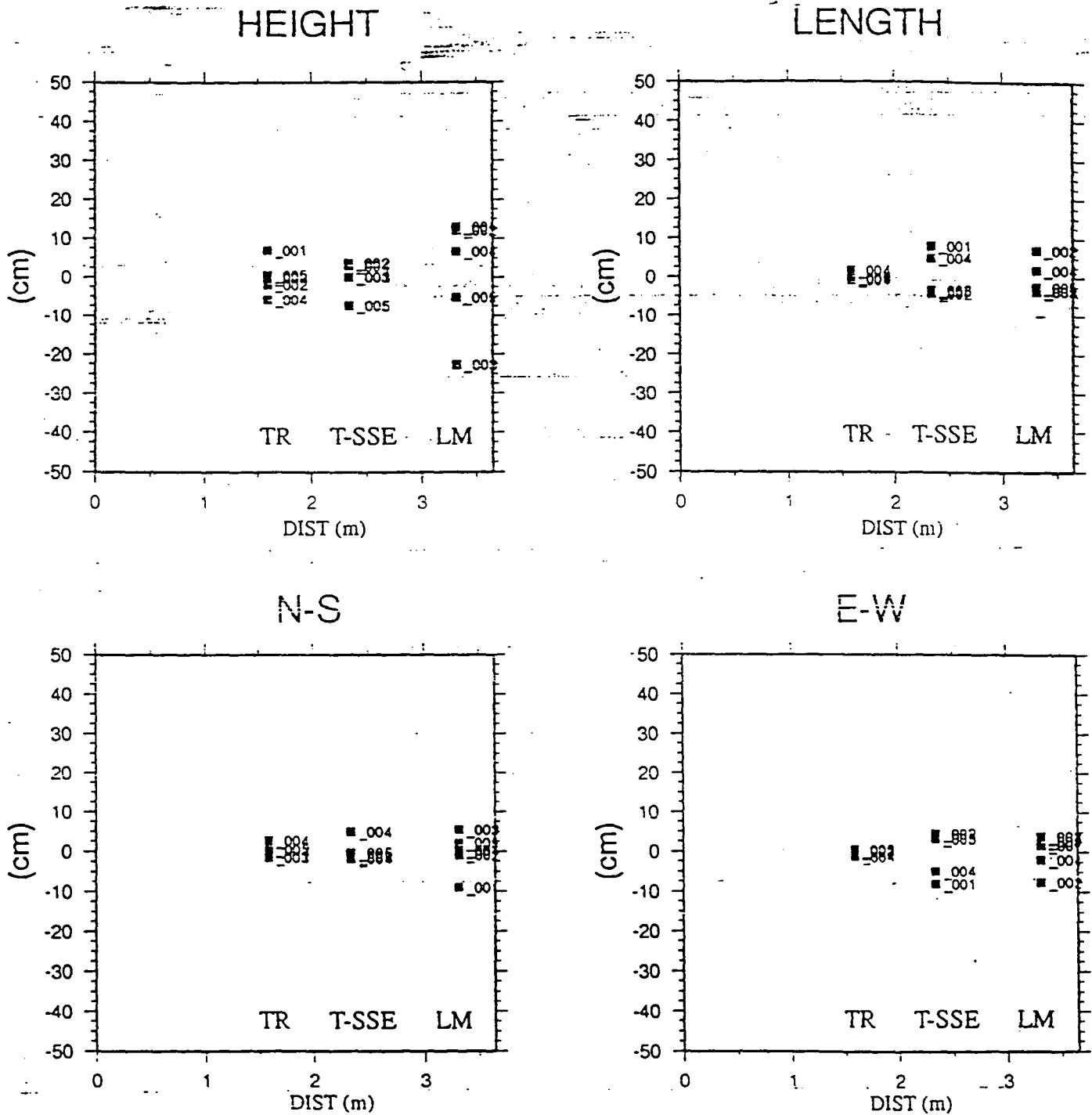


Figure 14. Scatter of L1 p-code solutions for short, < 3.65 m, baselines corresponding to the phase solutions given in figures 10-12. Results are for five 4.5 hour sessions. The elevation cutoff was 25 degrees. Full scale for all p-code scatter plots is ± 50 cm.

BASELINE SCATTER

L2 p-code 25 deg. cutoff

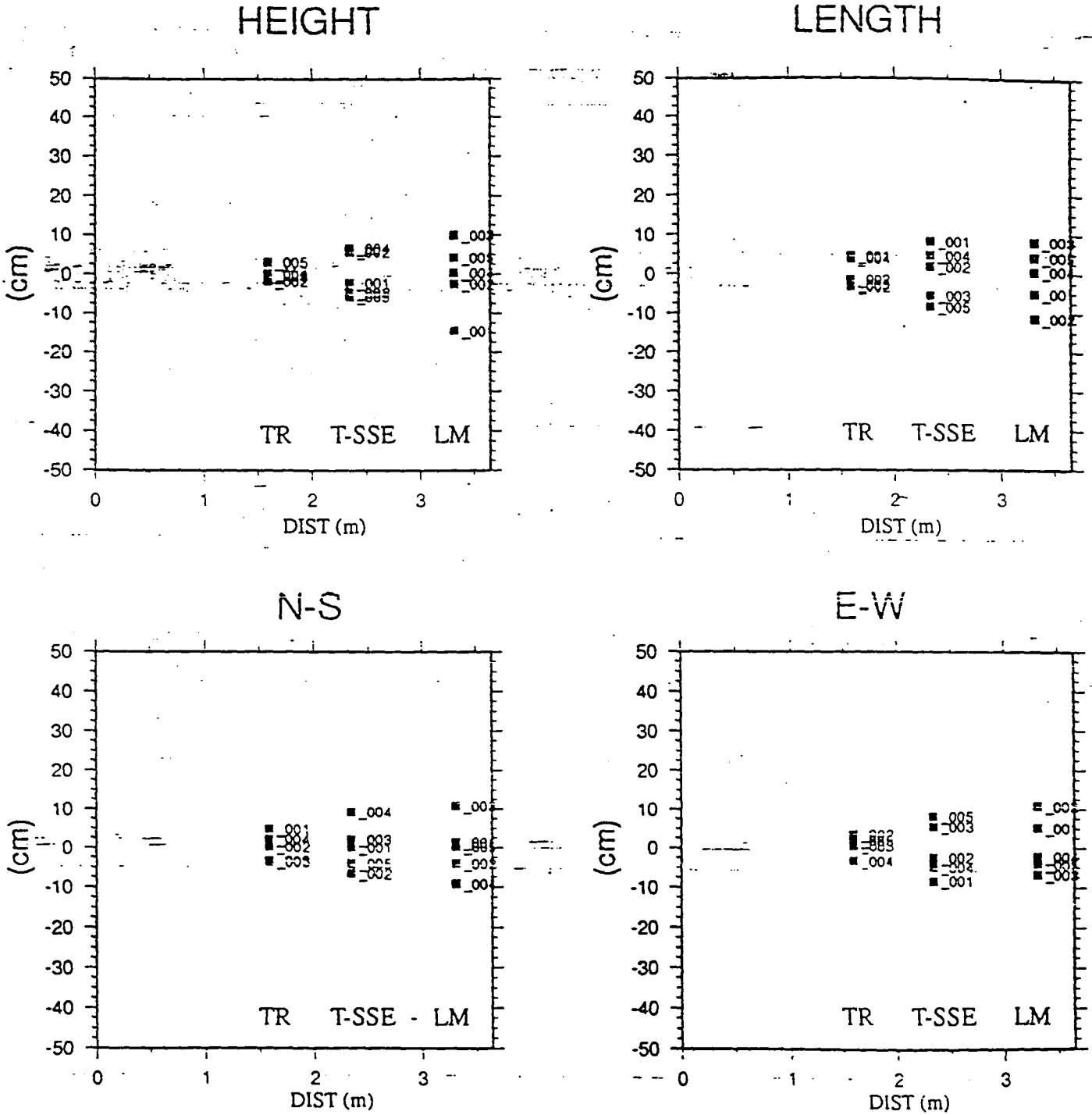


Figure 15. Scatter of L2 p-code solutions.

BASELINE SCATTER

L3 p-code 25 deg. cutoff

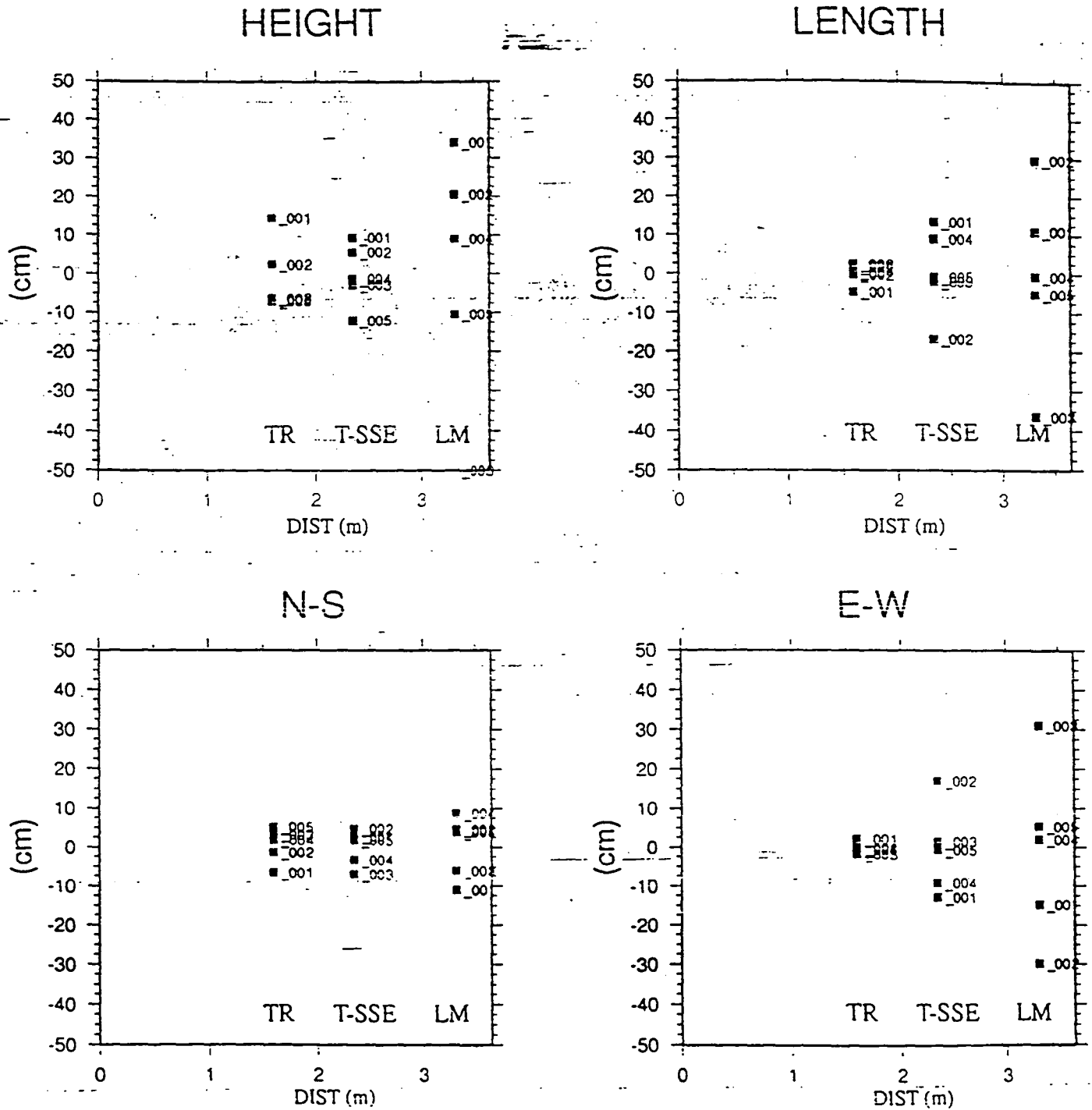


Figure 16. Scatter of L3 p-code solutions.

SHORT-BASELINE COMMON RECEIVER/ANTENNA P-CODE NOISE COMPARISONS

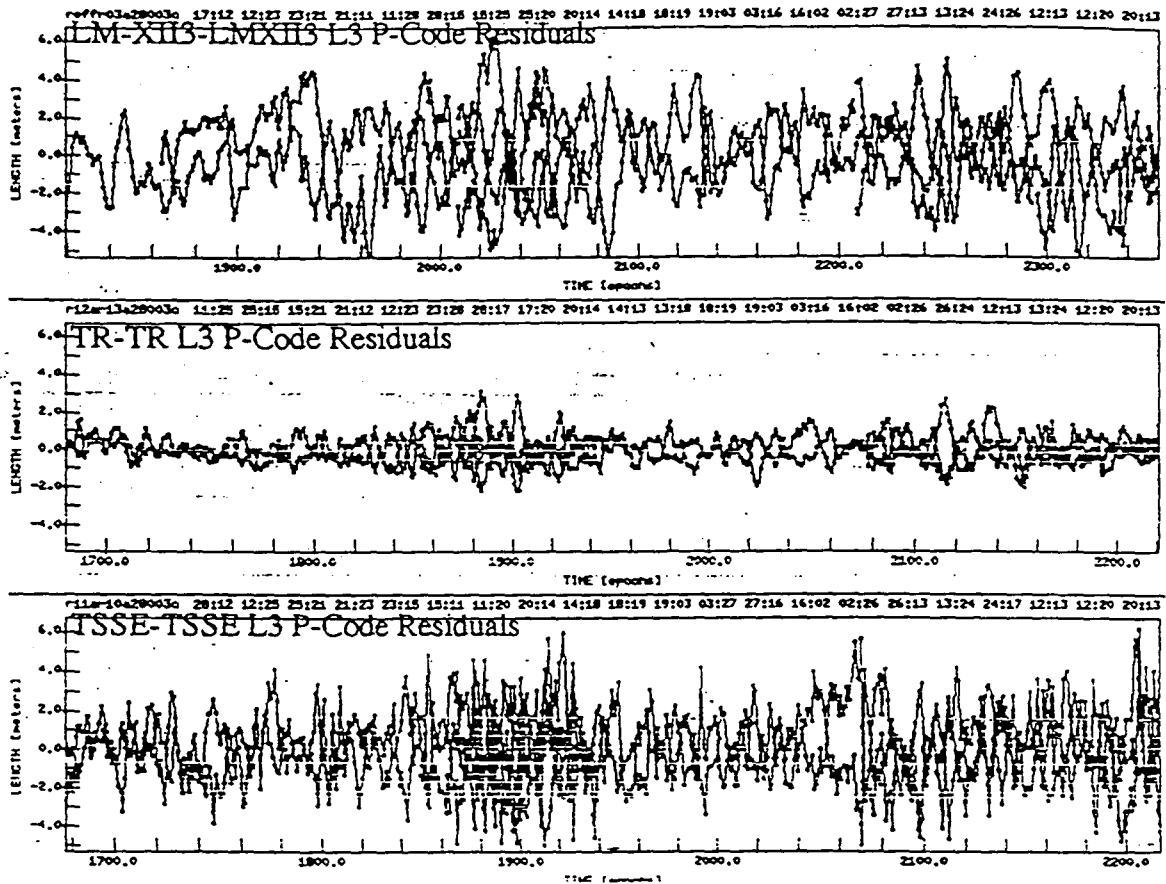


Figure 17. Example of L3 double-difference p-code residuals for one 4.5 hour session of the short-baseline tests.

EFFECT OF CODELESS TRACKING DURING A/S ON ASHTECH LMXII 3
PHASE NOISE DERIVED FROM DION

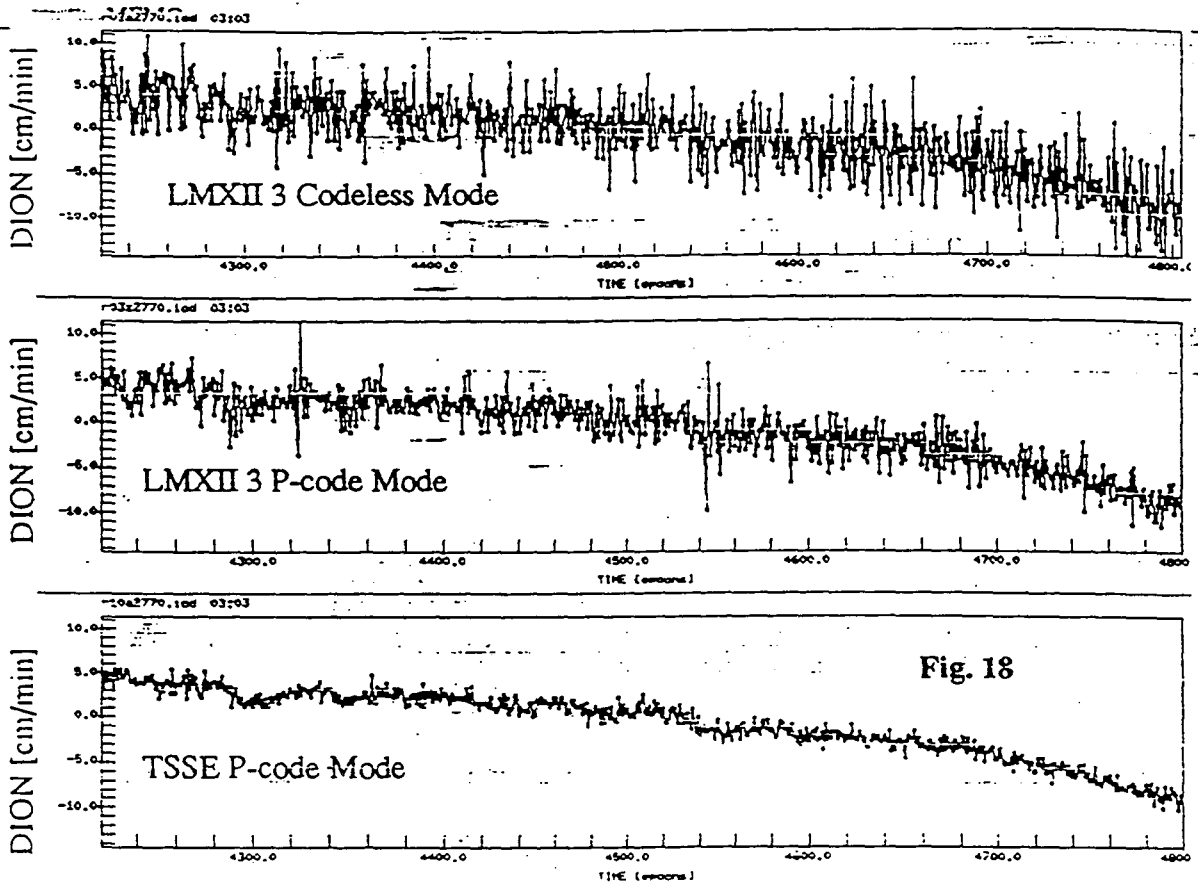


Figure 18 shows values of DION that were computed from data, collected while A/S was on. A data segment, collected with three different GPS receivers at the same time from the same Block I satellite is shown. The top panel shows data collected with an Ashtech P-code receiver that was forced to operate in codeless mode. (Note that if the Ashtech is switched to codeless mode all satellites, including Block I satellites, are tracked codeless) The second trace shows the same data collected in P-code mode from an Ashtech LMXII3 receiver that could not operate in codeless mode. The two Ashtech receivers were connected to the same antenna. The bottom trace shows Trimble data, collected at the same time off a separate antenna with a TSSE receiver. The TSSE had switched to cross-correlation but was tracking the Block I satellite in P-code mode. This figure shows: (a) Ashtech phase noise increases when the receiver is switched from P-code to codeless tracking, (b) TSSE phase noise is lower than Ashtech's p-code or codeless phase noise. Because the Ashtechs were operated off an Ashtech antenna and the Trimbles were operated off a Trimble antenna the difference in phase noise between these receivers may in part be due to antennas.

COMPARISON OF LMXII 3 CODELESS WITH TSSE CROSS-CORRELATED
DATA PHASE NOISE DURING A/S FOR BLOCK II SATELLITE
COMPARISON OF DION

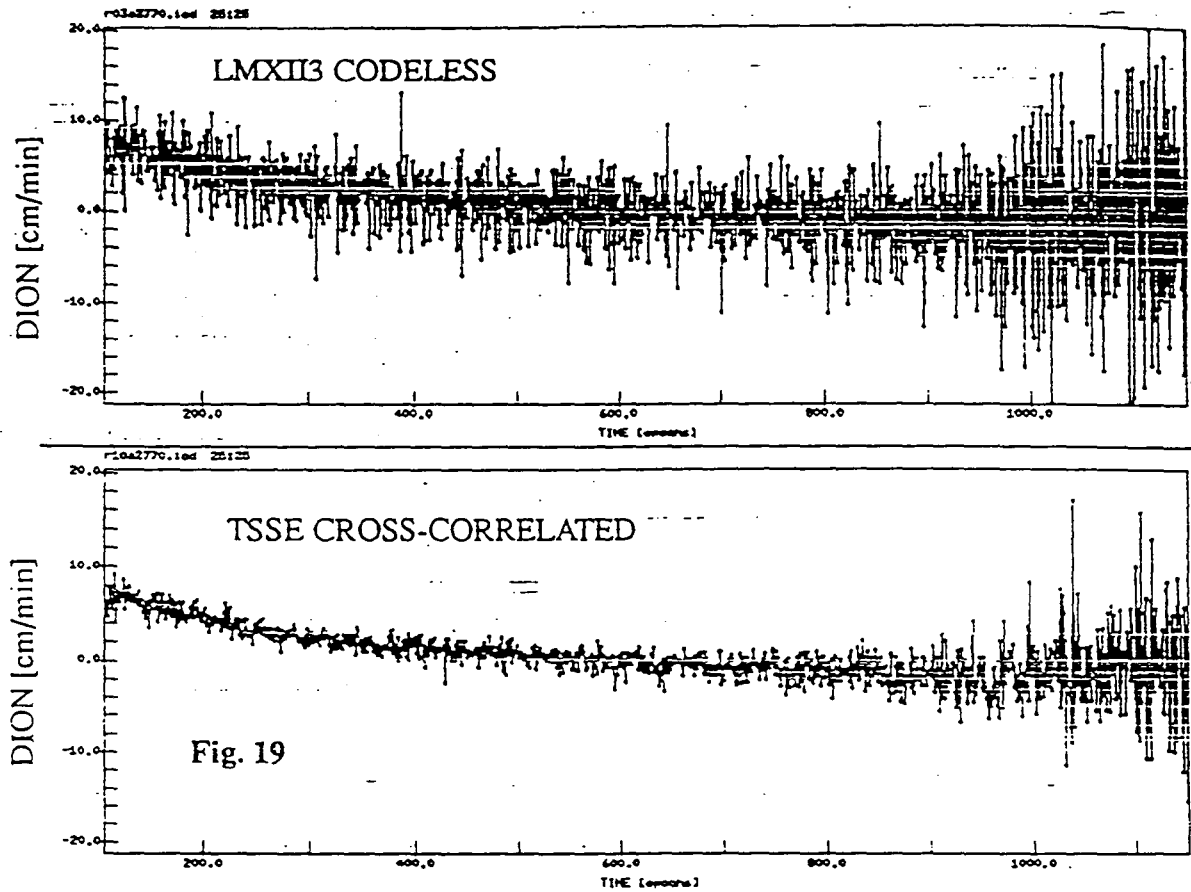


Figure 19 compares computed values of DION for the Ashtech LMXII 3 receiver (top panel) with data from the TSSE receiver (bottom panel). An identical time window for a "Block II" satellite (SV 25) is shown. The Ashtech had been switched to codeless tracking, the TSSE had switched automatically to cross-correlation mode.

EFFECT OF CODELESS TRACKING DURING A/S
ON ASHTECH PSEUDORANGE NOISE
COMPARISON OF MP1 FOR A "BLOCK 1" SATELLITE

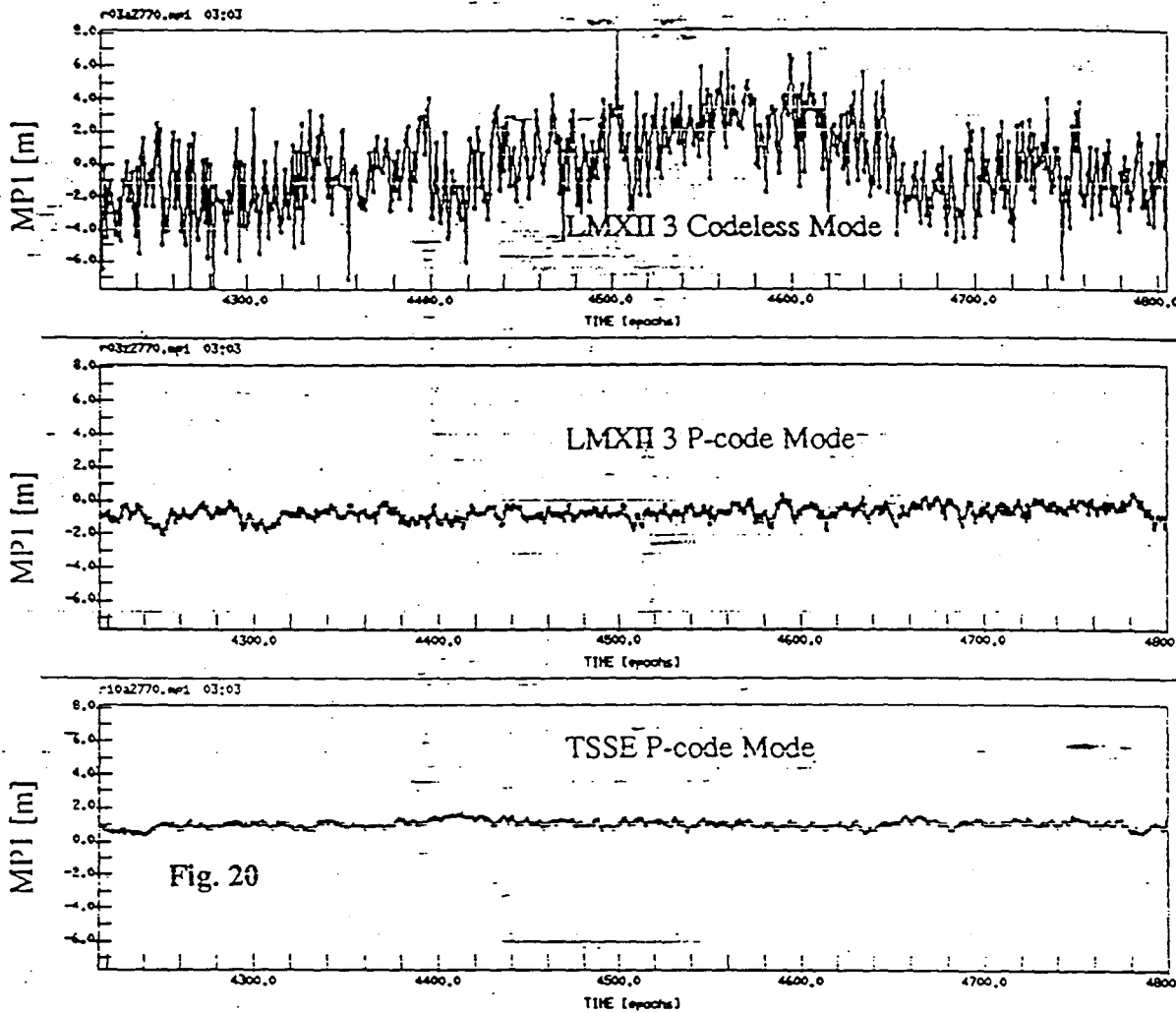


Figure 20 compares (top panel) Ashtech C/A code noise levels (as obtained with the LMXII3 in codeless mode when A/S is on) to (center panel) Ashtech P-code data collected at the same and for the same satellite. Both Ashtech receivers were connected to the same Ashtech antenna. The bottom panel shows, for comparison, Trimble P-code data collected during the same time from the same satellite, using a separate antenna.

COMPARISON OF LMXII 3 CODELESS WITH TSSE CROSS-CORRELATED
C/A PSEUDORANGE DATA NOISE DURING A/S FOR BLOCK II SATELLITE
COMPARISON OF MP1

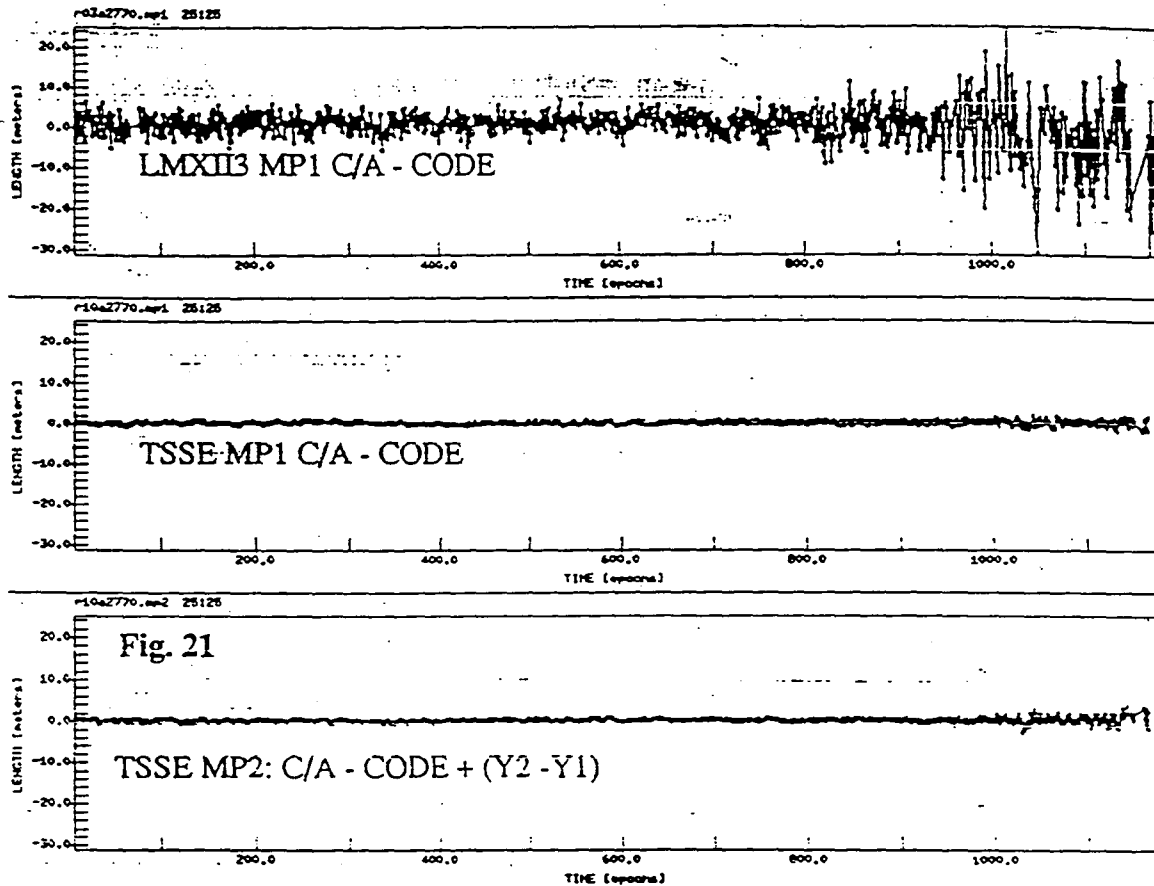


Figure 21 compares Ashtech LMXII-3 MP1 (top panel) to MP1 for the TSSE receiver (center panel). The bottom panel shows MP2 for the TSSE as computed using the sum of the C/A pseudoranges plus $(Y2 - Y1)$. All data shown above were collected from Block II satellite 25 while A/S was on. The Ashtech provides, under these circumstances, C/A only. The noise level of these C/A measurements is clearly higher than the TSSE C/A and/or the TSSE C/A + $(Y2 - Y1)$ noise. Trimble and Ashtech receivers were connected to their own antennas on the roof of the UNAVCO lab and multipath at the sites may be slightly different.

EFFECT OF A/S ON MP1 AND MP2 FOR THE TSSE RECEIVER.

Figure 22

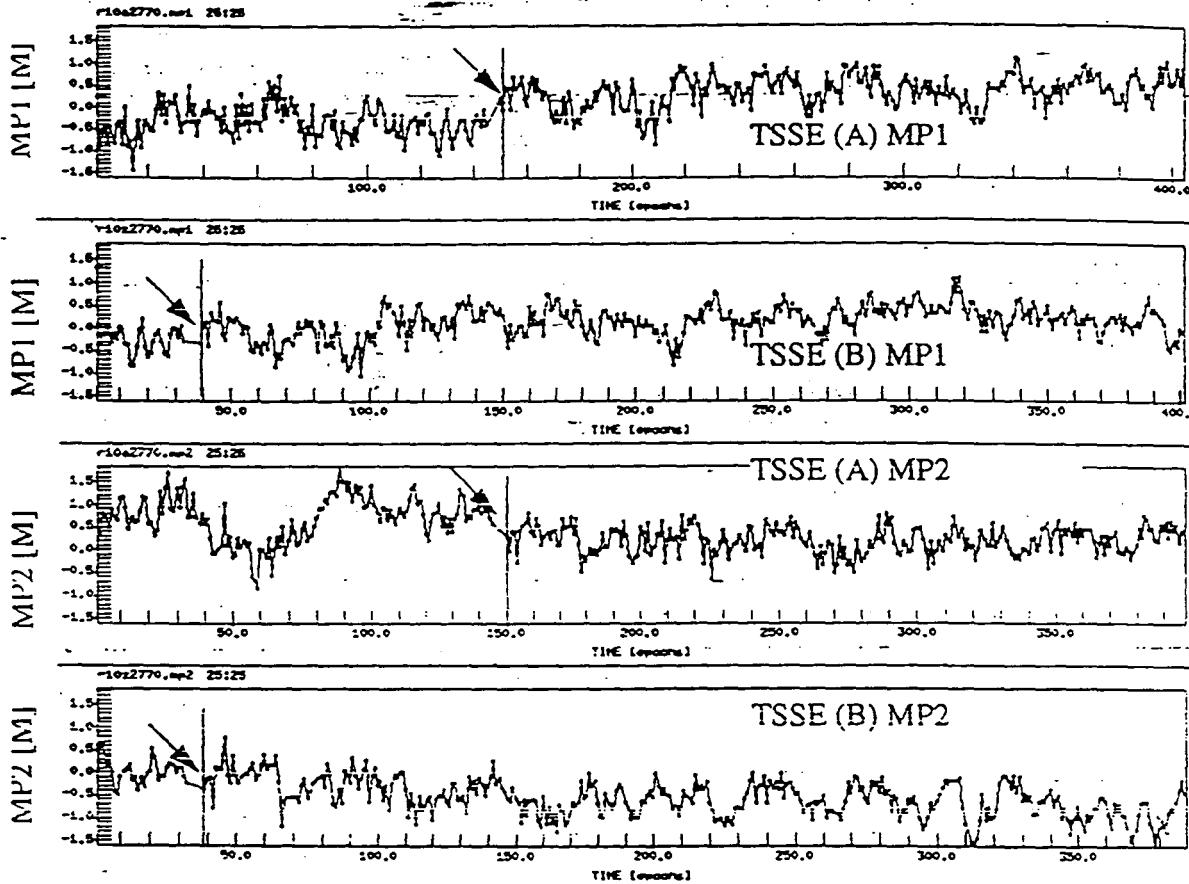


Figure 22: The above data show MP1 and MP2 for two TSSE receivers before and after A/S is implemented. The arrows indicate the epoch at which A/S is turned on. The error indicates the same point in time, but receiver TSSE (B) was turned on ~ 100 epochs after TSSE (A). Both receivers lost lock for ~ four 15-sec epochs on all Block II satellites. From the above data there is no apparent change in the MP1 or MP2 pseudorange noise level as A/S is turned on! We know that A/S was turned on at exactly the indicated epoch because another receiver without A/S capability lost all Block II satellites at this instance.

EFFECT OF A/S ON DION FOR THE TSSE RECEIVER

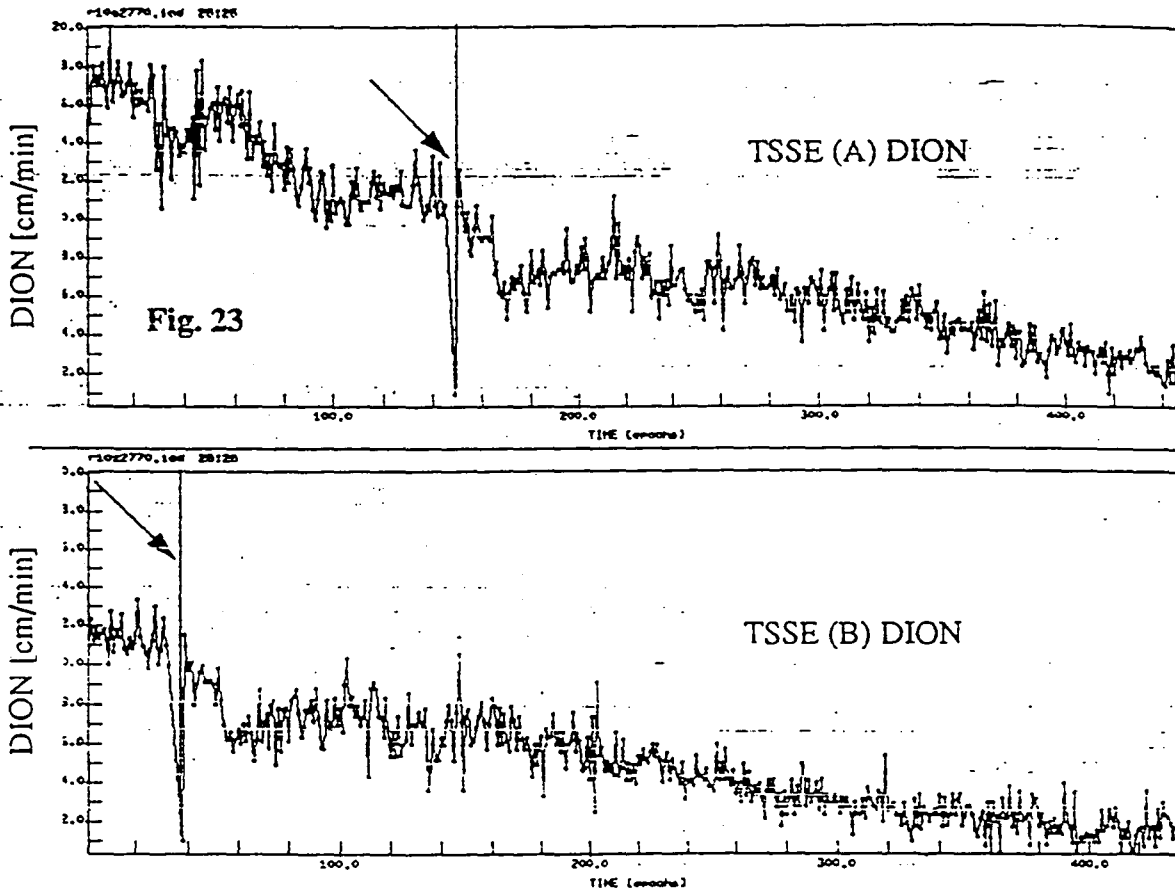
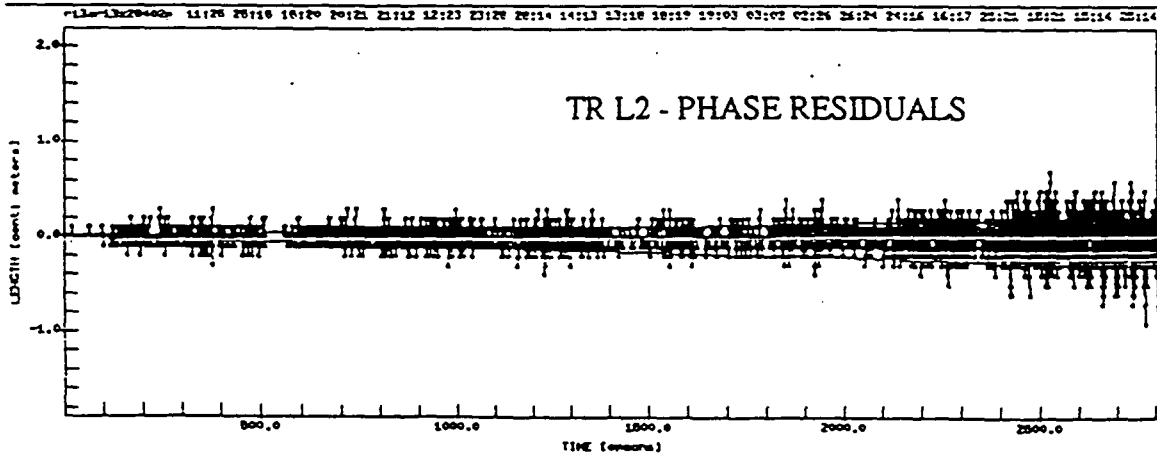
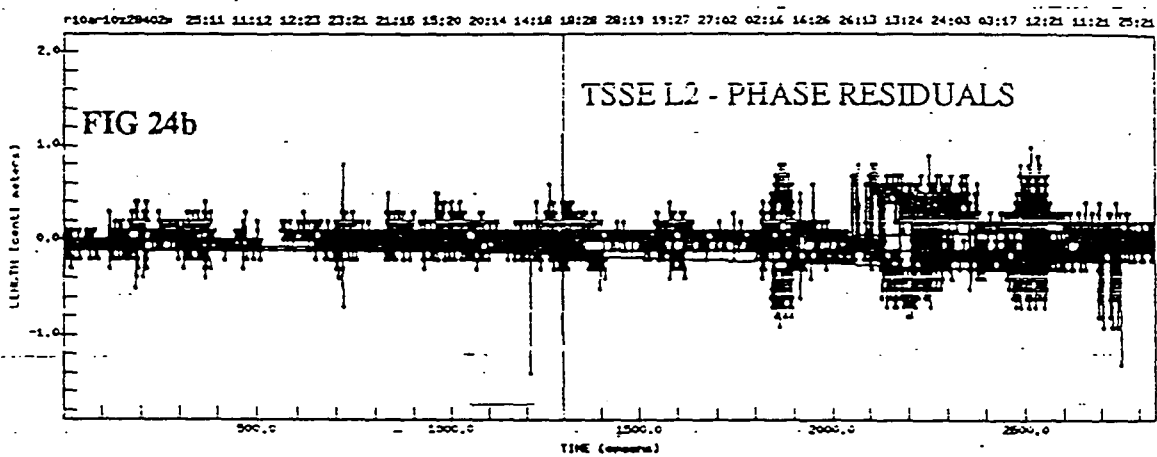
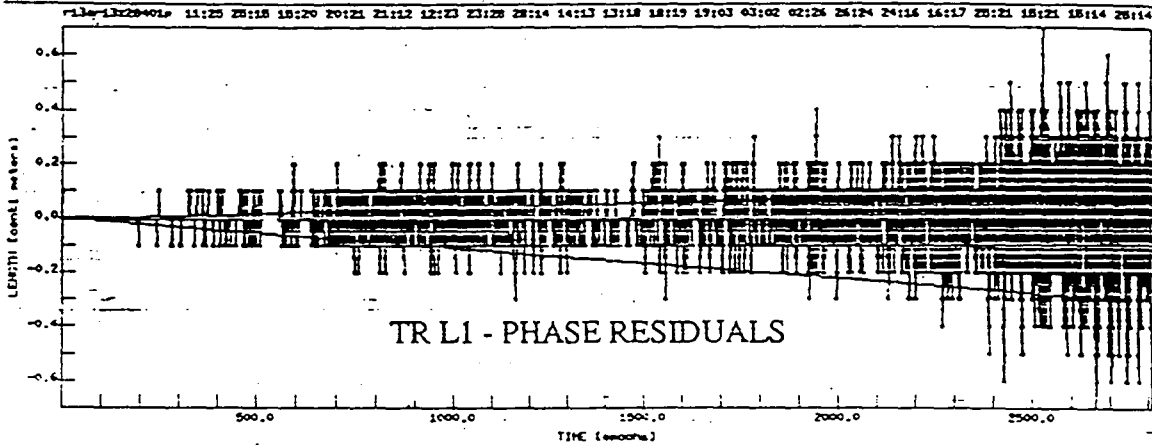
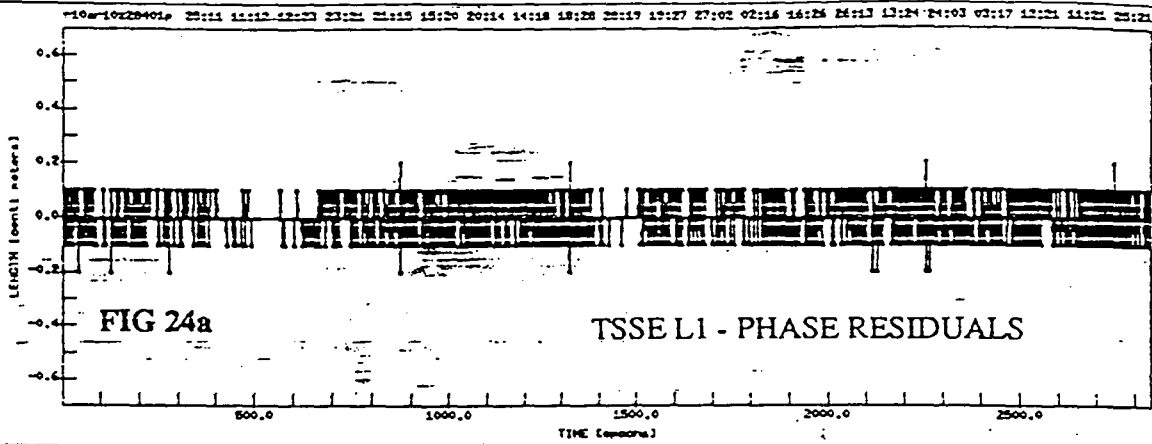


Figure 23 displays DION for satellite 25 before and after A/S is implemented. The data were collected during the same time interval with the same receivers as in the MP1 and MP2 data in the previous figure. The arrows indicate the point in time when A/S was turned on. The long period decrease in DION, common to both receivers, represents changes in the ionosphere. High frequency fluctuations are receiver plus antenna measurement noise.

COMPARISON OF TSSE - TR DOUBLE DIFFERENCE PHASE RESIDUALS ZBL DATA TAKEN DURING A/S



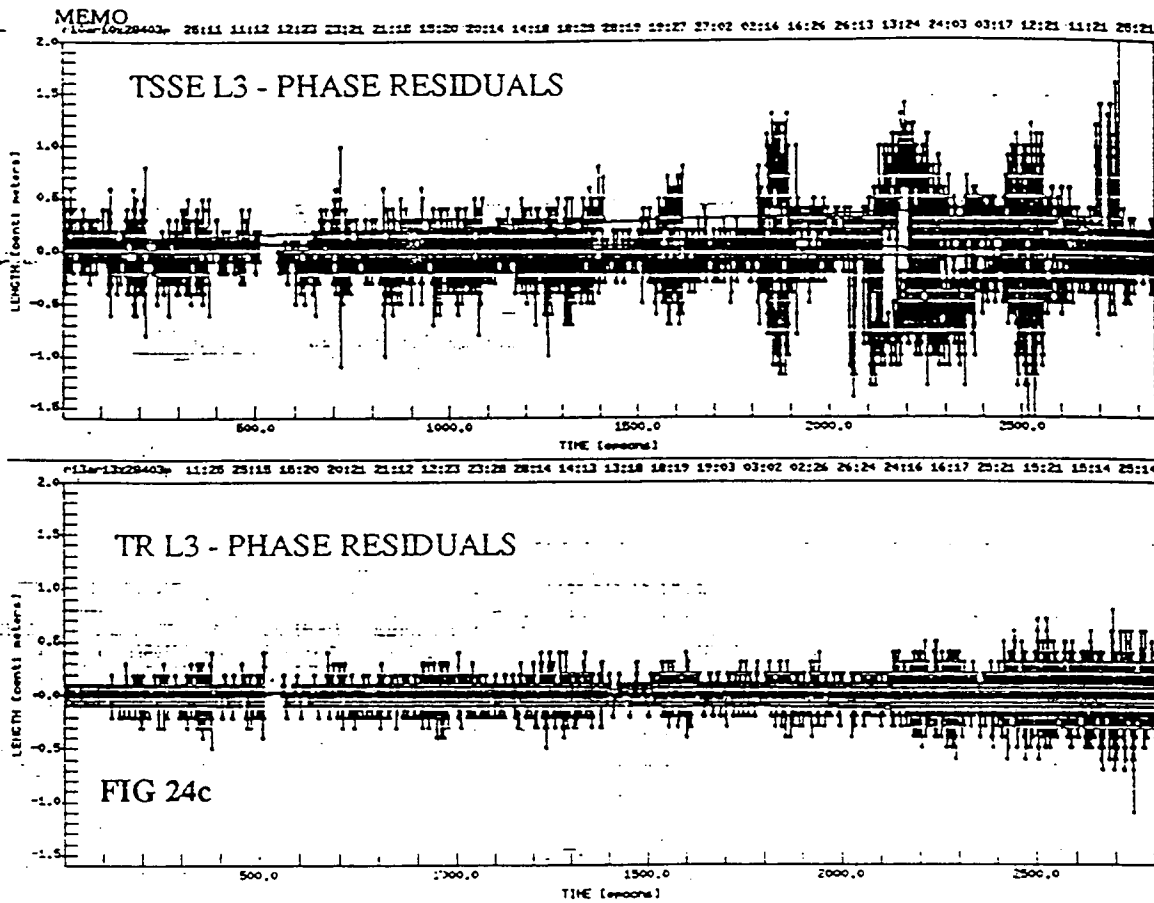


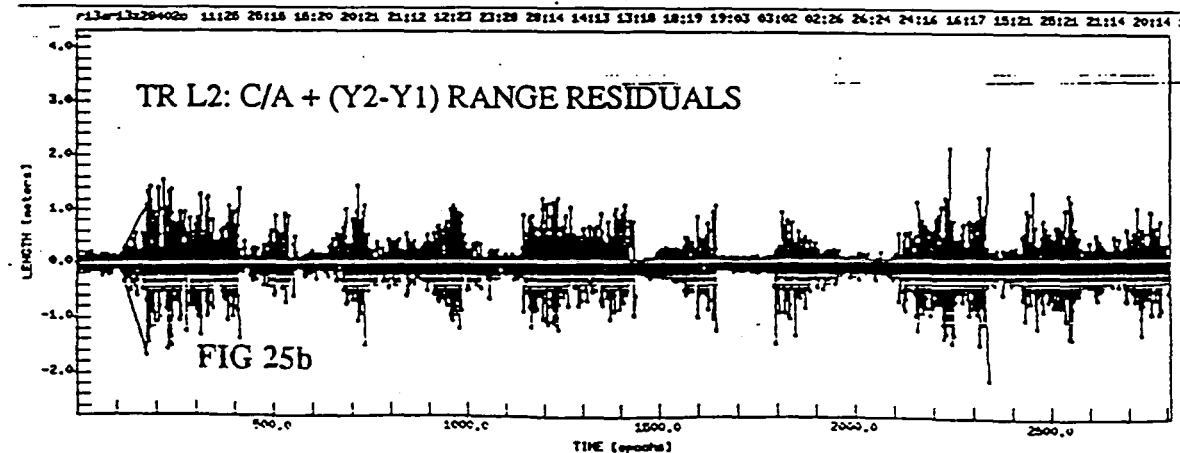
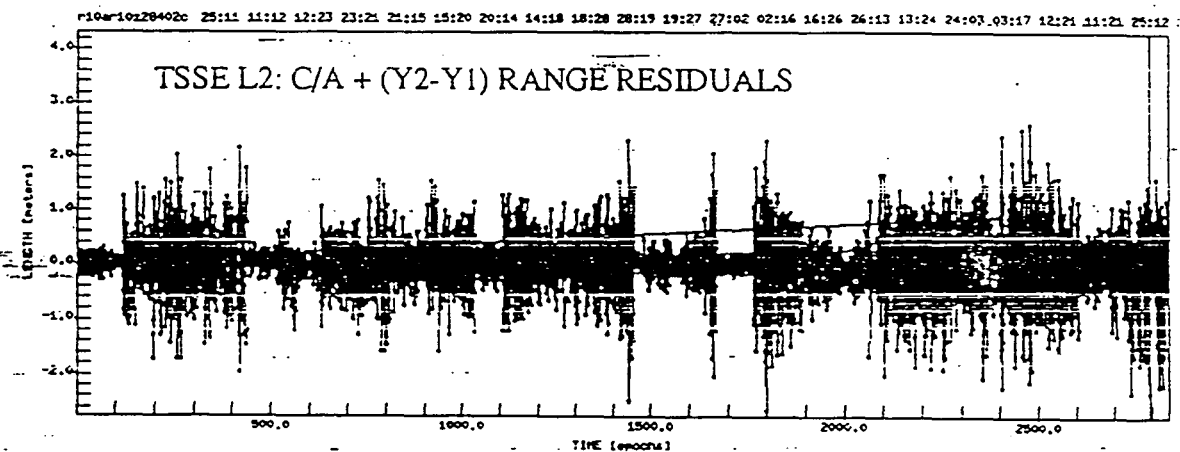
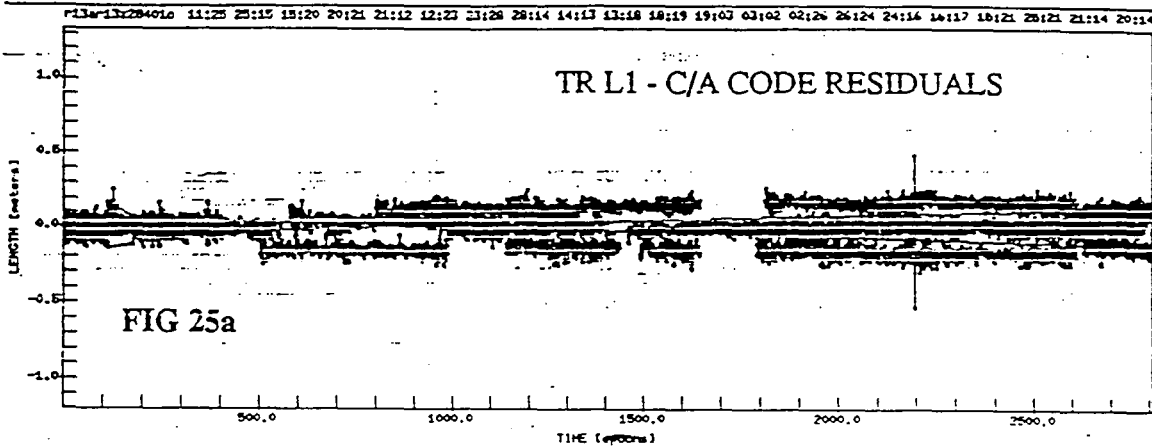
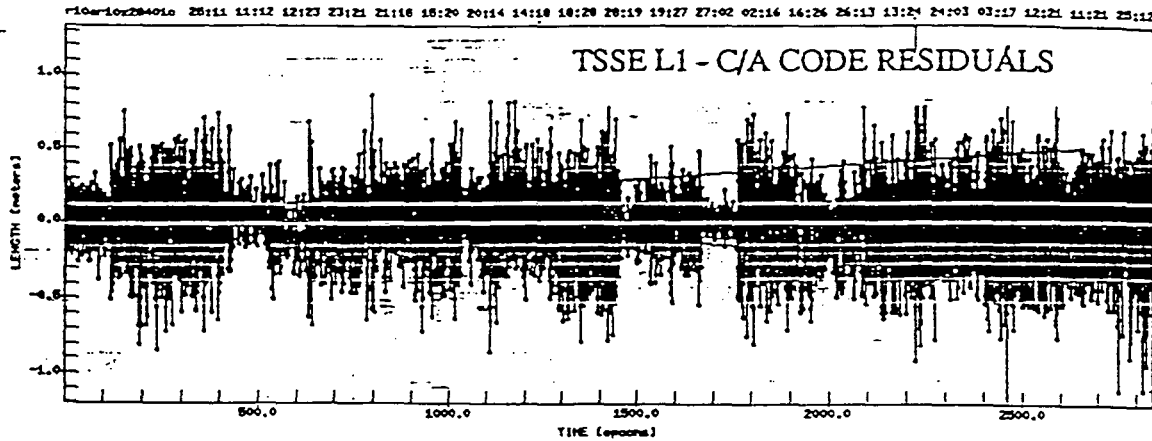
Figure 24a, 24b and 24c compare zero-baseline post-fit double difference residuals for the Trimble SSE and Osborne TR receivers. The Trimble and TR zero-baseline data were collected at the same time while A/S was on. Figure 24a on the previous page compare L1 and L2 post-fit residuals. The figure, 24c above shows residuals for the ionosphere-free linear combination. About 24-hours of data with an elevation cutoff of 15 degrees are shown for each receiver. Phase noise levels are higher than when A/S is not on. Note the increase of the noise level for the TR receiver with time. We think that this increase may be due to increasing mis-synchronization between the two TR receivers. Synchronization errors between two TRs can grow up to 10 msec. At such large synchronization errors S/A effects can become noticeable. Note that manual processing, including fixing of half L1 cycle slips and elimination of outliers was required to obtain the TR results shown here.

Table 14: Zero-Baseline Results with A/S

	TSSE LENGTH [mm]	TR LENGTH [mm]
L1-phase	0.2 (0.1)	0.1 (0.0)
L2-phase	1.3 (2.0)	0.1 (0.1)
L3-phase	1.5 ()	0.1 ()

Table 14 shows the zero-baseline lengths as computed with the Bernese software for the two compared receiver types. The results presented here were computed from data collected during A/S! All the results that are shown in this table were computed with an elevation cutoff of 15 deg. from carrier phase data with all ambiguities resolved. The values in parentheses are baseline lengths with free ambiguities.

COMPARISON OF TSSE - TR DOUBLE DIFFERENCE RANGE RESIDUALS
DATA TAKEN DURING A/S



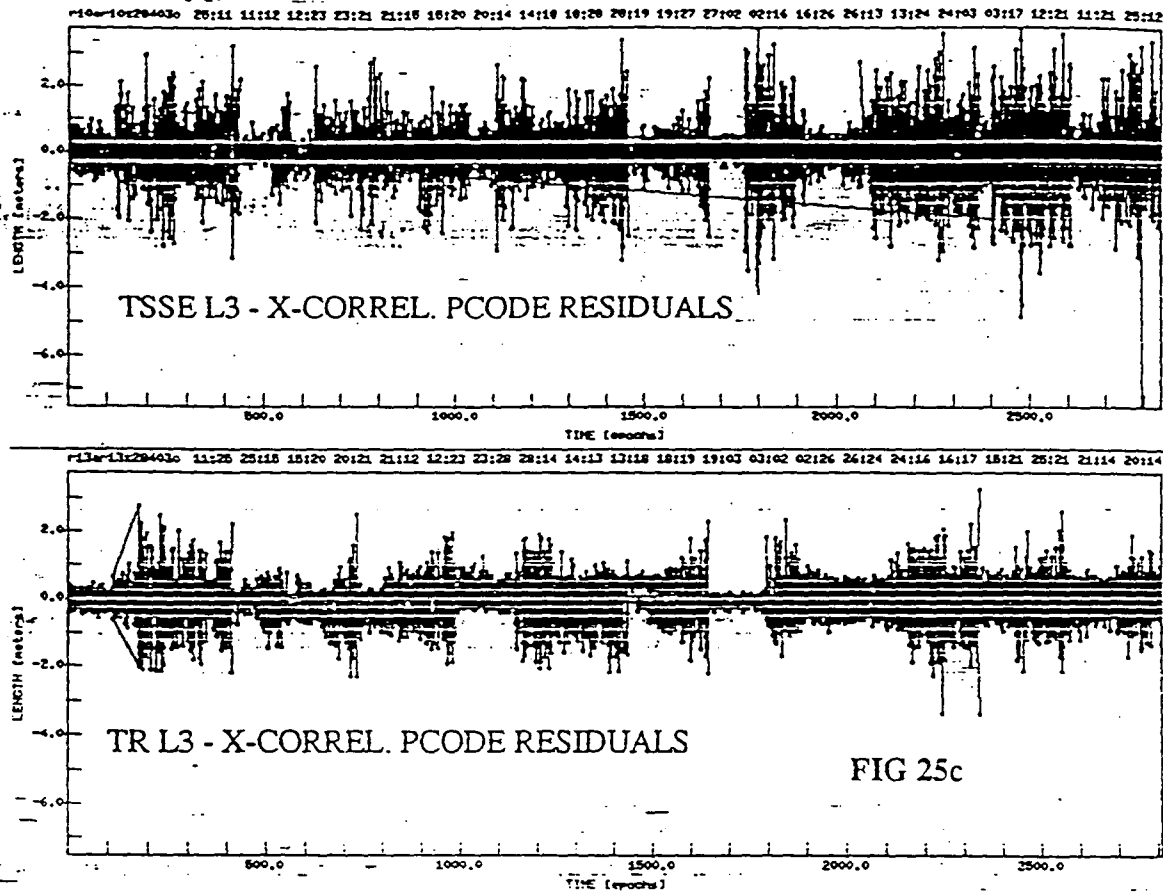


Figure 25a, 25b and 25c show pseudorange double difference post-fit residuals for the Trimble SSE and the Osborne TR receivers. The TSSE and the TR zero-baseline data were collected at the same time while A/S was on. About 24 hours of data, collected at a 30-sec sampling rate are shown. The data were processed with an elevation cutoff of 15 degrees. Figures 25a and 25b on the previous page compare L1 and L2 post fit residuals. L1 measurements during A/S are C/A code measurements, L2 is the sum of the C/A code plus the difference in Y2-Y1 codes. Figure 25c above shows the residuals for the ionospheric free linear combination of the two range measurements.

Table 15: Zero-Baseline Results with A/S

	TSSE LENGTH [mm]	TR LENGTH [mm]
L1-range	44.7	29.0
L2-range	87.0	14.3
L3-range	238.5	73.7

This table summarizes the results for the zero-baseline calculations as obtained with the Bernese processing software. Baseline lengths obtained from the L1 (C/A)-code, L2 (C/A + (Y2-Y1)) range measurements, and from the L3 linear combination are shown. All results were computed for a 15-degree elevation cutoff.

Table 16: GENERAL TRACKING PERFORMANCE COMPARISON BETWEEN TSSE AND OSBORNE SNR-8000 (TR) RECEIVERS DURING A/S

	SSE (A)	SSE (B)	TR (A)	TR(B)
# of Obs. L1+L2+P1+P2	12208	11726	11738	11644
# of Cycle Slips < 20 deg.	11	11	11	10
# of Cycle Slips > 20 deg.	11	11	13	19
# Obs / Slip *	763.0	781	5869	5822
Average Elevation Angle	43.8	43.8	43.3	43.4
P1 Multipath[m]	0.5609	0.5610	0.3340	0.3696
P2 Multipath[m]	0.6565	0.6227	0.5531	0.5143
Comment	A/S DATA 15 deg cutoff	A/S DATA 15 deg cutoff	A/S DATA 15 deg cutoff	A/S DATA 15 deg cutoff
REC #	1187	1188	r13a2840	r13z2840

This table summarizes general tracking performance comparison between 2 T SSE and 2 Osborne SNR-8000 receivers. The two Trimble receivers were operated from the same Trimble antenna, and the TR receivers were operated off the same choke-ring antenna. Data from exactly the same time window are compared. The first row shows how many common observation of L1, L2 phase and P1 and P2 pseudoranges were taken during the ~24 hour time window. Only data down to 15-degrees in elevation are compared. Rows 2 + 3 show the number of cycle slips below and above satellite elevations of 20 degrees. Row 4 shows the average number of observation/cycle slip (* Only cycle slip detected based on apparent "ionospheric jumps" were counted for computing the numbers in the # Obs / Slip column). Row 5 shows the average elevation angle of all common L1+L2+P1+P2 observation taken by the receivers. P1 (MP1) and P2 multipath (MP2) in rows 6 and 7 are computed from linear combinations between P1, L1 and L2 for MP1 and a linear combination of P2, L1 and L2 for MP2.

Table 17: POWER REQUIREMENTS AND PHYSICAL DIMENSIONS

	<u>Ashtech</u>	<u>Trimble</u>	<u>Osborne SNR-8000</u>
Power Requirements			
Consumption w/o antenna, backlight off	14.2W stdv=0.03W	7.9W stdv=0.01W	13.1W ^{**1} stdv=0.1W
15sec recording intervals, backlight off	16.4W stdv=0.01W SV's=5	8.2W stdv=0.07W SV's=5	15.3W ^{**1} stdv=0.004W SV's=6
15sec recording intervals backlight on	16.9W stdv=0.01W SV's=5	8.6W stdv=0.01W SV's=4	18.0W ^{**1} stdv=0.006W SV's=5
30sec recording intervals backlight off	16.4W stdv=0.02W SV's=5	8.4W stdv=0.03W SV's=5	15.4W ^{**1} stdv=0.06W SV's=7
30sec recording intervals, backlight on	16.9W stdv=0.01W SV's=5	8.3W stdv=0.03W SV's=4	18.0W ^{**1} stdv=0.1W SV's=7
Voltage Maximum	36V	36V	36 V
Voltage Minimum	9.6V	11.1V	9.8V
Physical			
Weight	8.6lbs	6.4lbs	9.2lbs
Size	9inx4.25inx8.75in	9.75inx2.06inx4.125in +9inx3.125inx8.94in	9.125inx2.625inx11.625in
Volume	335 cu. in.	334 cu. in.	278 cu. in.
User Interface			
RS232 Ports	2 ports, 11 pin female connector	2 ports, 5pin female connector	2 ports, 9 pin male DB9 connector
Power Ports	2 ports, 3 pin female connector	2 ports, (same ports as RS232)	1 port, 4 pin male connector
Antenna Port	1 port, 1 pin female connector	1 port, 1 pin female connector	1 port, 1 pin female connector
External Clock	1 port, 1-20 MHz IN, in 20kHz steps 1 pin female connector	1 port, 5MHz IN 1 pin female connector	2 ports, 5MHz IN, 5MHz OUT

AshtechTrimbleOsborne SNR-8000

Other Ports	Camera In Port 1 PPS OUT Port	2 ports, 1PPS OUT Port	1 PPS OUT Port
General			
Maximum No. of SVs tracked	tracked: 7 according to spec: 12	tracked: 7 according to spec: 9	tracked: 8 according to spec: 8
Data Logging Memory	500 kbyte	512 kbyte	4 Mbyte flash card *2
P-Code Tracking Interval	1sec - 999 sec	1sec - 900 sec	1sec - 3600 sec
C/A + Squaring Tracking	1sec - 999 sec		
C/A -L1 + Y-Code Cross-Correlation Tracking		1sec - 900 sec	5sec - 3600 sec in 5sec intervals *3
Downloading while Logging	Yes, but data is lost.	Yes, but data is lost	Yes

The power consumption was determined by monitoring the voltage and current requirement of each receiver. A fluke 45 digital multimeter was used to accomplish this task. These tests were accomplished with a Hewlett-Packard 6439B DC Power Supply, converting 120VAC to a steady 13 VDC and amperage range of 100mA to 5A. All electronic test and physical measurements were conducted and observed by UNAVCO Equipment Services Group engineers (Ed Manzanaras, Stephanie Perry, and Tony Stephens). For further information and specifications refer to the individual manufactures documentation.

*1 - Maximum Voltage was only tested up to 28V at UNAVCO because of a "typo" in the Osborne SNR-8000 specifications.

*2 - Flash cards up to 10 Mbyte are available from Intel

*3 - This sampling interval will be modified to 1sec - 3,600 sec

**1 See table on following page for updated Osborne SNR-8000 power requirements

New power management software was installed in the Osborne SNR-8000 receiver after the UNAVCO tests. This software adjusts the CPU clock speed according to software load. The following table was provided to UNAVCO for the improved power requirements of the SNR-8000 receiver. These values were not verified at UNAVCO (UNAVCO tested the firmware version 2.1 in October, 1992).

Table 17b: NEW TR POWER USE:

MODE	POWER new SW @ JPL	POWER old SW @ UNAVCO
w/o antenna backlight off	10.8 W	13.1 W
30 sec recording interval backlight off	12.9 W (4 SVs) 13.8 W (7 SVs)	15.3 W (7 SVs)
30 sec recording backlight on	15.5 W (4 SVs) 15.5 W (7 SVs)	18.0 W (7 SVs)

Example of TSSE L2-Pcode Pseudorange Jump

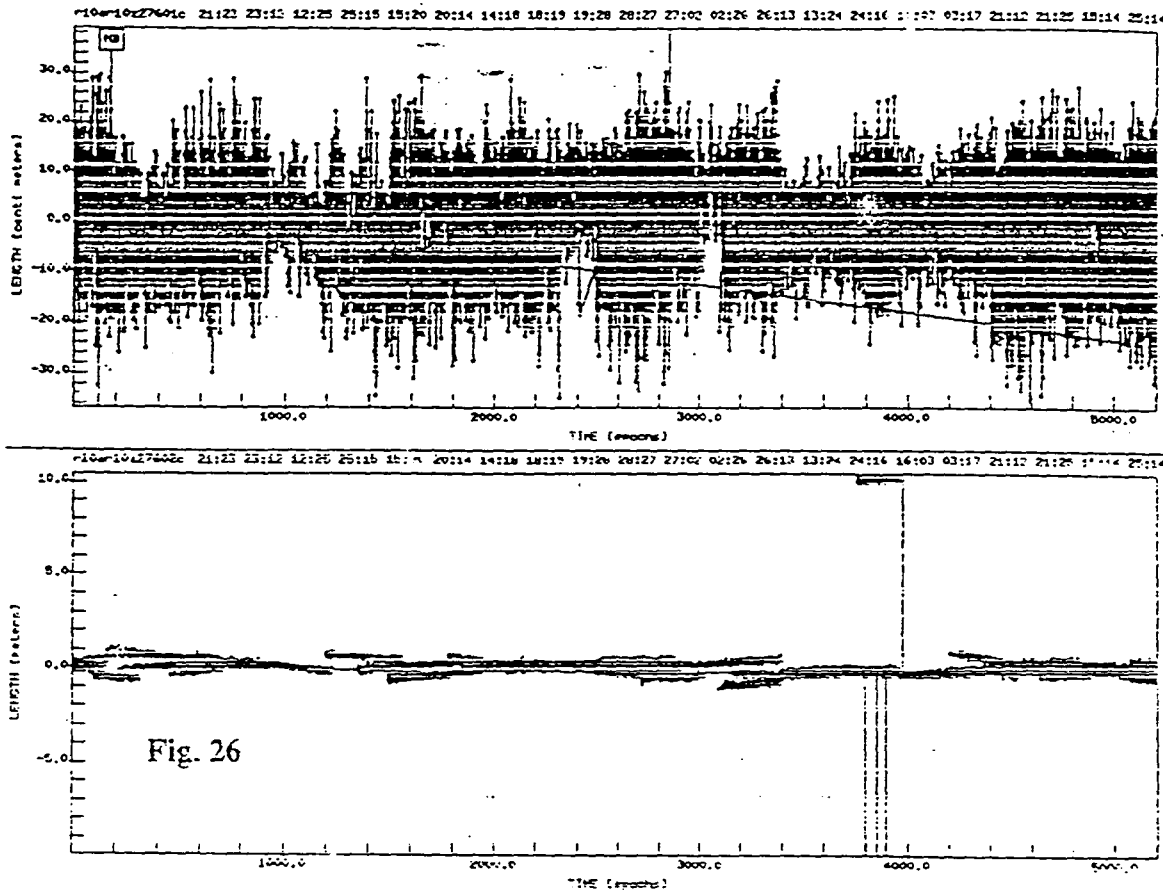


Fig. 26

Figure 26 shows a problem that we encountered with TSSE P-code data. ZBL double difference post-fit residuals are shown. L1 in the top panel L2 in the bottom panel. Note the ~ 10-meter "slip" in the L2 pseudoranges for satellite 20.

EXAMPLE OF NON-INTEGER L1 CYCLE SLIPS FOR THE TR RECEIVER

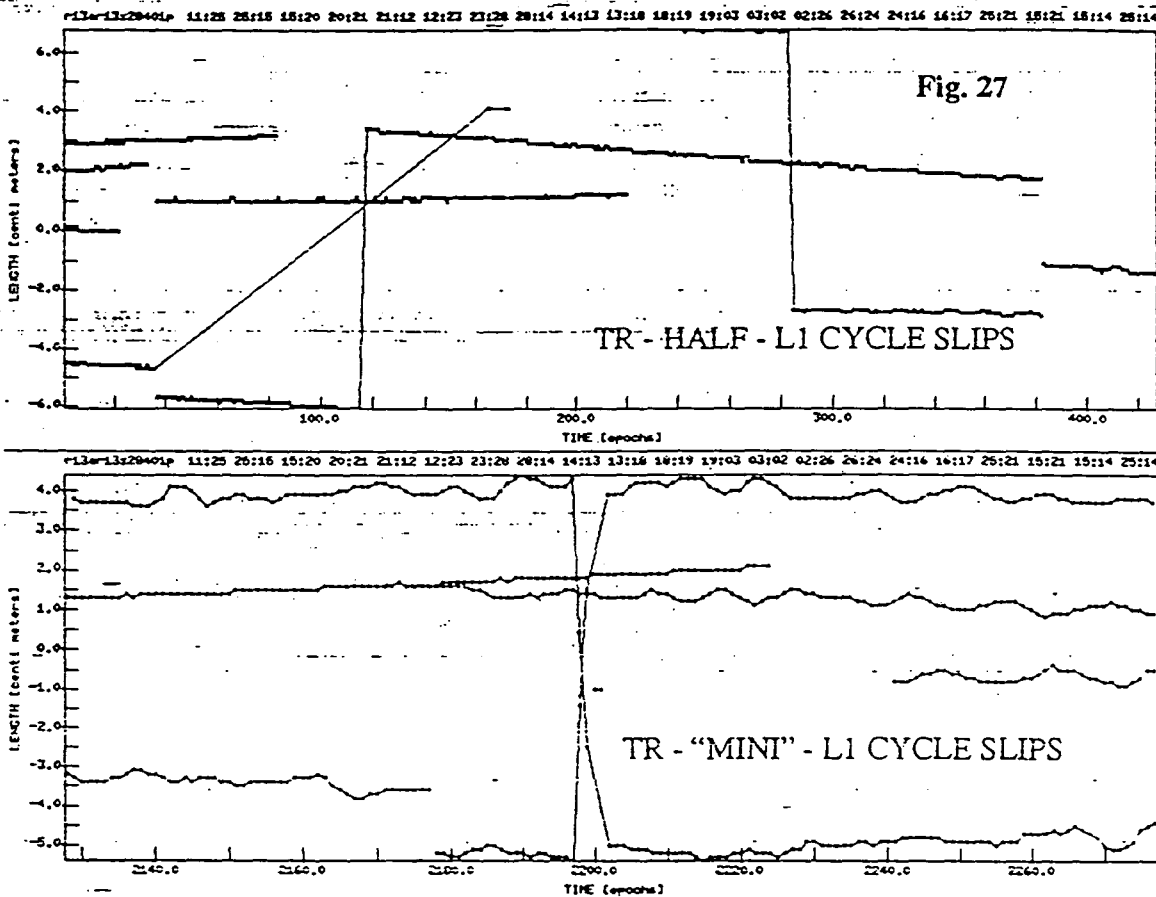


Figure 27: The double difference residuals above present evidence for half L1 phase cycle slips for the TR receiver (top panel). The two slips shown in the top panel were repaired when we allowed the cycle slip fixer to apply half L1 slips. The much smaller slips in the bottom panel could not be repaired without deleting some points manually. The data above were collected during A/S.

EXAMPLE OF ASHTECH DATA SET WITH MANY CYCLE SLIPS
 PLOT OF DION DAY 280

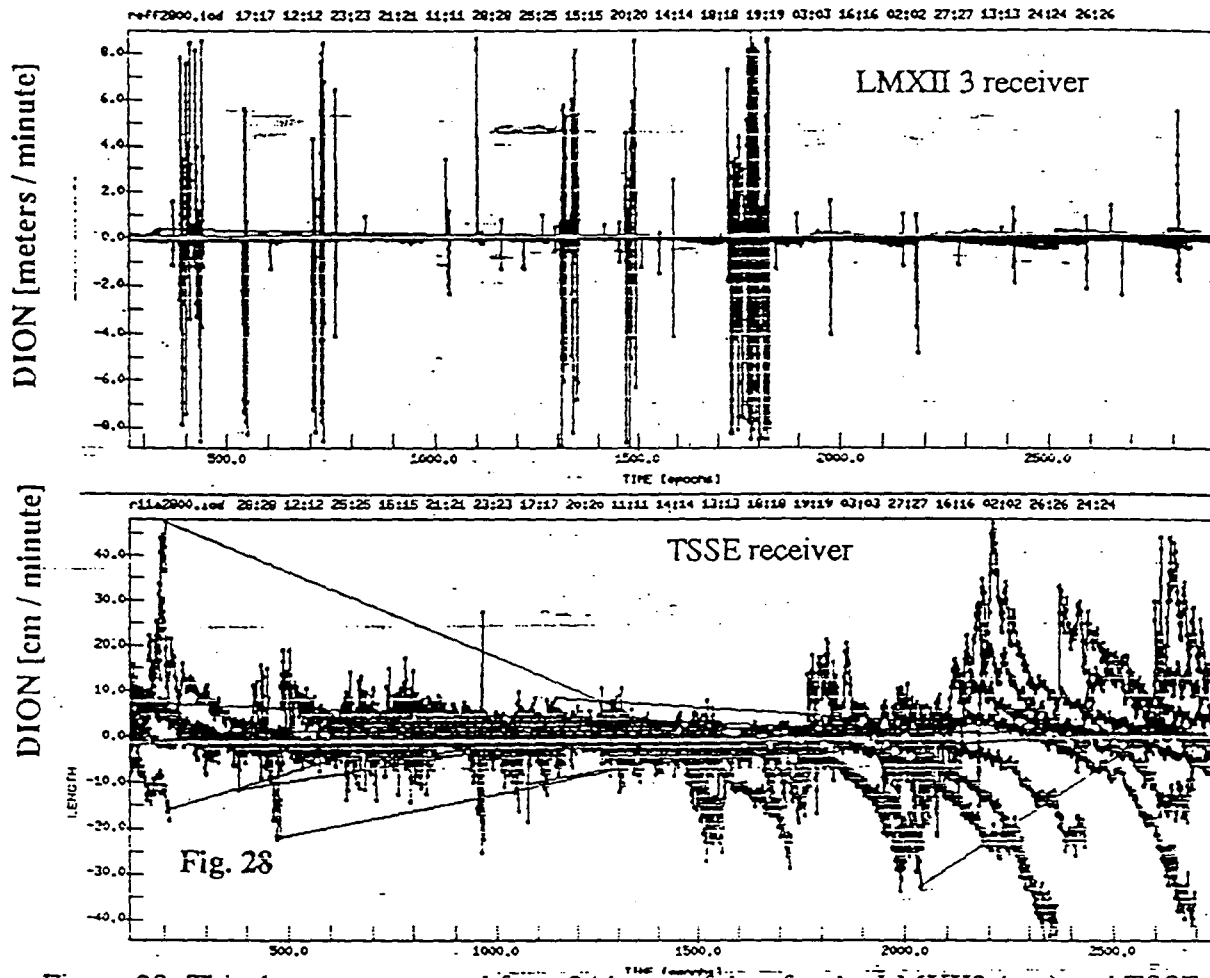


Figure 28: This data set computed from 24 hours of data for the LMXIIB (top) and TSSE (bottom panel) receivers shows what the DION linear combination looks like on days when the Ash-
 tech collected data with hundreds of cycle slips. Each spike in the trace in the top panel shows is a cycle slip. (The shown cycle slips are those that remain after a few hundred of the largest slips have already been removed) The first part of the data up to ~ epoch 2000 was impossible to process because of the large number of cycle slips. The pseudorange data during this period also provided bad point positions. The TSSE data in the bottom trace (Note the difference in scale!) show that ionospheric gradients are larger towards the end of the data set, when the Ashtech receiver started to perform normal.

Recent Advances in GPS Hardware & Software



Precise positioning with the Global Positioning System continues to emerge as a powerful tool for surveying and geodesy. Centimeter-level precisions are regularly achieved using static and kinematic relative positioning techniques where the carrier phase signals are observed.

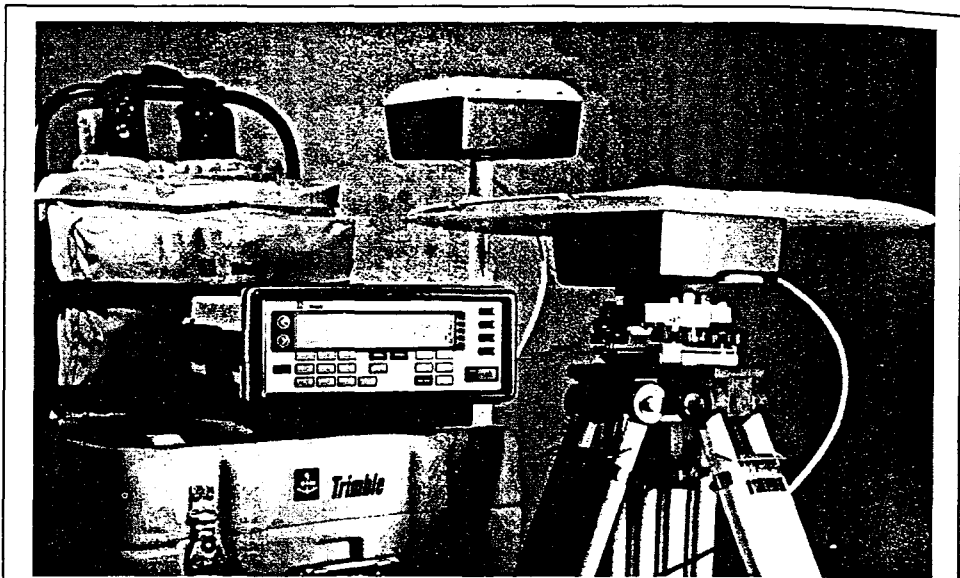
Carrier phase measurements give rise to the so-called integer phase ambiguities which must be correctly resolved during data reduction to obtain utmost precision from the system. Many techniques have been proposed for rapidly and reliably estimating the integer phase ambiguities. The most successful resolution strategies have taken advantage of dual-frequency phase and P-code measurements. FastStatic™ positioning and On-The-Fly ambiguity resolution schemes are two recently developed GPS surveying techniques that benefit from dual-frequency GPS data. Unfortunately, when the Global Positioning System becomes fully operational, the P-code will be encrypted; this will restrict its use to authorized (military) users. Some GPS receivers are capable of tracking the L2 carrier when encryption is active by using a squaring technique. However, these receivers do not measure L2 code in this state.

The new Trimble 4000SSE™ receiver continuously tracks P-code with parallel channels when it is available and utilizes cross-correlation measurements during times of encryption. This enables full-cycle L1 and L2 phase signal recovery and dual-frequency code tracking at all times.

This paper introduces Trimble's GPSurvey™ GPS data processing package and explains the FastStatic positioning algorithm it uses to compute baselines using dual-frequency GPS code and phase measurements collected with 4000SSE receivers.

Introduction

The precise positioning capabilities of the Global Positioning System have rapidly evolved with the development of accessible hardware and software processing packages. Precise GPS positioning requires the observation and reduction of carrier phase data. Unlike the C/A-code and P-code measurements, L1 and L2 carrier phase measurements are ambiguous because of



The new Trimble Geodetic Surveyor features the 6th Observable™, P-code on L1 and L2 frequencies, and FastStatic surveying capability. The system supports the full range of GPS surveying techniques, from static and pseudostatic to kinematic and FastStatic.

the receiver's inability to directly measure the whole number of cycles to the satellites at the instant of signal acquisition. Therefore integer ambiguity resolution is necessary. If one can successfully resolve the integer ambiguities, centimeter-level relative positioning accuracy is achievable over baselines a few tens of kilometers in length.

The importance of ambiguity resolution to GPS has been reflected by the wide variety of data processing algorithms published on the subject [Counselman and Gourevitch, 1981; Hatch, 1982; Melbourne, 1985; Remondi, 1985; Frei and Beutler, 1990; Hatch, 1991; Talbot, 1991]. The manner in which GPS data is collected in the field is dictated by how the post-processing software computes the integer ambiguities.

Static Positioning

Static Positioning has its roots in Very Long Baseline Interferometry technology. Two or more static receivers collect carrier phase data to a common set of satellites for one to several hours. The baseline reduction process makes use of changes in satellite geometry to resolve the integer carrier phase ambiguities and baseline vector components [Counselman and Gourevitch, 1981; Goad and Remondi, 1984].

Kinematic Positioning

Kinematic Positioning was the next major innovation [Remondi, 1985]. This technique assumes that you can resolve the phase ambiguities at the start of a survey. The instanta

neous relative location of a moving receiver can be computed thereafter, so long as both of the receivers maintain continuous phase tracking to a sufficient number of satellites.

FastStatic Surveying

Faststatic surveying uses site occupations of several minutes to achieve accuracies comparable to static GPS observations [Blewitt, et., al., 1989]. Improved ambiguity resolution algorithms and receiver hardware developments have made FastStatic surveying a cost-effective alternative to traditional static positioning.

On-The-Fly (OTF) ambiguity resolution

On-The-Fly (OTF) ambiguity resolution techniques enable the acquisition of the integer phase ambiguities while a receiver is moving [Mader, 1990]. In essence, on-the-fly ambiguity resolution removes the phase continuity requirement of kinematic positioning, while maintaining the efficiency of kinematic positioning. Research into on-the-fly ambiguity initialization methods continue today, but initial results are very encouraging [Mader, 1990; Remondi, 1991].

Reliable on-the-fly initialization, FastStatic surveying, and long baseline estimation techniques, all benefit from the presence of accurate dual-frequency code and phase information.

The Importance of Four-Observables

The ability to measure full-cycle L1 and L2 (19cm and 24cm) carrier phase and dual-frequency code measurements has been well recognized [Hatch 1982; Blewitt, 1989; Allison, 1991]. Four-observable (L1 and L2 phase and code) measurements provide a wealth of information that can be exploited during data reduction. Dual-frequency phase combinations, such as the wide-lane (86cm wavelength) and ionosphere-free observables, are just two of the existing and useful phase combinations. Similarly, four-observable processing schemes often make use of narrow-lane and ionospheric-free dual-frequency code observables.

The threat of P-code encryption to a secret Y-code has cast a shadow of doubt over four-observable processing techniques that rely solely on the presence of P-code data. When encryption is active, many receivers must switch to a codeless mode in which:

- L1 C/A-code is used for pseudorange,
- L2 carrier tracking is accomplished with squaring, thus halving its effective wavelength (to 12cm),
- L2 ranging is impossible.

Overcoming P-code Encryption

Trimble's latest surveying hardware innovation provides four-observable tracking, even during times of P-code encryption. The 4000SSE receiver derives the following observables when the P-code is available:

- full-cycle L1 and L2 phase measurements,
- L1 and L2 P-code measurements.

When Anti-Spoofing (A/S) is on, and the P-code is encrypted to the secret Y-code, the 4000SSE automatically switches to a mode whereby the following four observables are obtained:

- full-cycle L1 and L2 phase measurements,
- precise L1 C/A-code,
- cross-correlated Y-code data.

The cross-correlation technique relies on the fact that both the L1 and L2 Y-codes are identical, although the Y-code is not necessarily known. The difference in group delay between the L1 and L2 signals is precisely determined by the cross-correlation technique.

The cross-correlation observation can be added to the L1 C/A-code observable to derive an L2 range measurement which is used in a variety of ways during data reduction.

The remainder of the paper presents:

- the measurement models for four-observable GPS data processing
- an analysis of dual-frequency code and phase data combinations for carrier phase ambiguity resolution
- the design goals and existing features of the GPSurvey processing package

GPS Observables

The simplified carrier phase measurement models can be expressed as:

$$\Phi_{L1} = -\rho - \frac{a}{f_{L1}} \lambda_{L1} + \lambda_{L1} n_{L1} \quad \text{meters, (1)}$$

$$\Phi_{L2} = -\rho - \frac{a}{f_{L2}} \lambda_{L2} + \lambda_{L2} n_{L2} \quad \text{meters, (2)}$$

where:

Φ_{L1} , Φ_{L2} L1 and L2 carrier phase measurements in meters,

RECEIVER TYPE	L1 Pseudo-range (P_{L1})		L2 Pseudo-range (P_{L2})		L1 Carrier Phase (Φ_{L1})		L2 Carrier Phase (Φ_{L2})	
	AS-Off	AS-On	AS-Off	AS-On	AS-Off	AS-On	AS-Off	AS-On
L1 C/A Code	C/A	C/A	none	none	L1-full	L1-full	none	none
Dual-Freq P-Code	P	C/A	P	none	L1-full	L1-full	L2-full	L2-half
Dual Freq C/A & P-Code	C/A	C/A	P	none	L1-full	L1-full	L2-full	L2-half
Dual Freq Codeless L2	C/A	C/A	none	none	L1-full	L1-full	L2-full	L2-half
Geodetic Surveyor	P	C/A	P	C/A, X	L1-full	L1-full	L2-full	L2-full

AS-Off denotes the availability of the P-Code;
 AS-On indicates the Anti-spoofing mode in which the P-code is encrypted
 C/A is C/A-code pseudorange
 P is the P-code pseudorange
 X is the cross-correlation of the precise (10.23Mhz) L1 and L2 codes

TABLE 1: Tracking capabilities of various GPS survey receivers

- ρ geometric range containing the receiver and satellite co-ordinates,
- a ionospheric error term,
- f_{L1}, f_{L2} L1 and L2 carrier frequencies ($f_{L1}=1575.42\text{Mhz}$; $f_{L2}=1227.60\text{Mhz}$). If the L2 signal is reconstructed using squaring, then the effective frequency is doubled (i.e., $f_{L2}=2455.20\text{Mhz}$).
- $\lambda_{L1}, \lambda_{L2}$ wavelengths of the L1 and L2 carriers, which are approximately 19cm and 24cm respectively for full-cycle data. The squared L2 signal has a wavelength of approximately 12cm.
- n_{L1}, n_{L2} integer phase ambiguity terms for the L1 and L2 bands.

Equations (1), (2) and the following measurement models, are all in terms of double differences. The use of double differences reduces the impact of satellite- and receiver- common errors and yields simplified mathematical expressions. The double differenced code measurement models follow directly from the phase equations, but do not contain integer ambiguity terms:

$$P_{L1} = \rho - \frac{a}{f_{L1}} \lambda_{L1} \quad \text{meters, (3)}$$

$$P_{L2} = \rho - \frac{a}{f_{L2}} \lambda_{L2} \quad \text{meters, (4)}$$

where:

$$P_{L1}, P_{L2} \quad \text{L1 and L2 code pseudorange observables.}$$

Table 1, above, lists GPS observable combinations that can be tracked with different GPS receiver types.

The importance of four observable data will become evident in the next section where some useful dual-frequency data combinations are presented.

Linear Four-Observable GPS Data Combinations

GPS data reduction procedures can utilize many different linear combinations of Φ_{L1}, Φ_{L2} and p_{L1}, p_{L2} . Each linear combination has certain characteristics. For example, the ambiguity resolution process often incorporates the wide-lane phase combination, formed by differencing L1 and L2 phase measurements, because of its long (86cm) wavelength. For long baselines estimation, where the differential ionospheric effect is large, the ionospheric-free phase combination is frequently

used [Blewitt, 1989]. An innovative *optimal* linear combination of dual-frequency GPS data was proposed by Sjöberg [1990], in which the L1 and L2 phase or code measurements are weighted according to the ionospheric error. The *optimal* combination provides a least squares minimum of the ionospheric bias and measurement noise.

Apart from combining L1 and L2 phase measurements, it is sometimes useful to link code and phase together in a single equation. Mader [1986] provides a good example of the cooperative relationship between code and phase data for cycle slip detection and repair.

A general equation for combining L1 and L2 phase data is given by:

$$\Phi_i = \left(a \frac{\Phi_{L1}}{\lambda_{L1}} + b \frac{\Phi_{L2}}{\lambda_{L2}} \right) \lambda_i \quad \text{meters, (5)}$$

where the coefficients a and b are selected to give the new observable, Φ_i , the desired characteristics (see below); λ_i refers to the wavelength of the combination.

An analogous expression can be formed for the code measurements:

$$P_i = \left(c \frac{P_{L1}}{\lambda_{L1}} + d \frac{P_{L2}}{\lambda_{L2}} \right) \lambda_i \quad \text{meters, (6)}$$

Table 2. summarizes some commonly used dual-frequency phase and code combinations, some of which will be addressed later.

Symbol	Combination	Coefficient		Effective Wavelength		¹ Iono-Bias	² Noise
CARRIER		a	b	full-cycle L1 and L2 (cm)	full-cycle; ³ half L2 (cm)		(mm)
Φ_{L1}	L1	+1	0	19.0	19.0	0.779	3.0
Φ_{L2}	L2	0	+1	24.4	12.2	1.283	3.9
Φ_{Δ}	Wide-Lane	+1	-1	86.2	43.1	-1.000	19.4
Φ_{Σ}	Narrow Lane	+1	+1	10.7	5.4	+1.000	2.4
Φ_0	Iono-Free	$\approx +9$	≈ -7	≈ 5.4	≈ 2.7	0.000	10.3
CODE		c	d				(m)
P_{L1}	L1	+1	0	-	-	-0.779	0.47
P_{L2}	L2	0	+1	-	-	-1.283	0.47
P_{Δ}	Wide-Lane	+1	-1	-	-	+1.000	2.68
P_{Σ}	Narrow Lane	+1	+1	-	-	-1.000	0.33
P_0	Iono-Free	$\approx +9$	≈ -7	-	-	0.000	1.4

¹ Iono-Bias refers to the amplification of the ionospheric error in the observable (see Wübbena [1985])

² Noise values are quoted at one-sigma levels for *undifferenced* data and assume that:

- L1 and L2 phase errors are uncorrelated and both equal 0.1 radians
- L1 and L2 code errors are equal to 0.47 meters and are uncorrelated

³ The coefficients a & b, the iono-bias and the noise terms assume that the half-cycle L2 phase output by a squaring receiver has been divided by two. This means that half-cycle ambiguities must be resolved during processing.

TABLE 2: Characterization of some useful linear dual frequency data combinations (adapted from Wübbena [1985]).

When evaluating which phase observable to use for data processing, it is important to consider the following attributes:

- Effective wavelength,
- Noise level,
- Ionospheric bias,
- Integer nature of the ambiguity term.

A perfect phase observable would be one which had a long wavelength, small noise level, minimal ionospheric bias and an integer ambiguity — unfortunately no such combination exists! There are, however, some usable compromises.

The wide-lane phase measurement model is given by the following expression:

$$\Phi_{\Delta} = \left(\frac{\Phi_{L1}}{\lambda_{L1}} - \frac{\Phi_{L2}}{\lambda_{L2}} \right) \lambda_{\Delta} = -\rho - a \left(\frac{1}{f_{L1}} - \frac{1}{f_{L2}} \right) \lambda_{\Delta} + \lambda_{\Delta} n_{\Delta}$$

meters, (7)

where:

$$\lambda_{\Delta} = \frac{c}{(f_{L1} - f_{L2})} \quad \text{wide-lane wavelength (=86.2cm),}$$

$$n_{\Delta} = n_{L1} - n_{L2} \quad \text{wide-lane phase ambiguity.}$$

The wide-lane phase combination is particularly valuable for ambiguity resolution since:

- the effective wavelength is 86cm, which is more than 4 times longer than the L1 phase wavelength,
- the noise level is only a small percentage of the wavelength (compare this to the iono-free combination),
- the magnitude of the ionospheric-bias is similar to the L1 and L2 observables,
- the combination has an integer bias term.

There is an intrinsic relationship between the narrow-lane phase observable and the wide-lane phase combination:

$$\Phi_{\Sigma} = \left(\frac{\Phi_{L1}}{\lambda_{L1}} + \frac{\Phi_{L2}}{\lambda_{L2}} \right) \lambda_{\Sigma} = -\rho - a \left(\frac{1}{f_{L1}} + \frac{1}{f_{L2}} \right) \lambda_{\Sigma} + \lambda_{\Sigma} n_{\Sigma}$$

meters, (8)

where:

$$\lambda_{\Sigma} = \frac{c}{(f_{L1} + f_{L2})} \quad \text{narrow-lane wavelength (=10.7cm),}$$

$$n_{\Sigma} = n_{L1} + n_{L2} \quad \text{narrow-lane phase ambiguity.}$$

The narrow-lane phase ambiguity is formed from the sum of the L1 and L2 ambiguities, whereas the wide-lane phase

ambiguity is formed from the difference of the L1 and L2 ambiguities. This leads to an important result — *If the wide-lane integer phase ambiguity is even/odd, then the narrow-lane integer ambiguity must also be even/odd.* If, for example, the wide-lane integer ambiguity is correctly resolved for a particular double difference, then the effective wavelength of the narrow-lane observable is doubled by the even/odd relationship. Given a correct solution for both the integer wide-lane and narrow-lane ambiguities, any other fixed ambiguity L1/L2 phase combination can be directly formed.

The narrow-lane pseudorange observable has some very important properties:

- the noise level is smaller than the separated L1 and L2 code measurements (assuming there is no correlation between the L1 and L2 code measurements),
- the ionospheric bias has the same magnitude as the wide-lane phase observable

The narrow-lane pseudorange observable can be modelled as follows:

$$P_{\Sigma} = \left(\frac{P_{L1}}{\lambda_{L1}} + \frac{P_{L2}}{\lambda_{L2}} \right) \lambda_{\Sigma} = +\rho - a \left(\frac{1}{f_{L1}} + \frac{1}{f_{L2}} \right) \lambda_{\Sigma}$$

meters, (9)

The wide-lane phase equation (7), can be equated to the narrow-lane code model (9), to provide a direct estimate of the

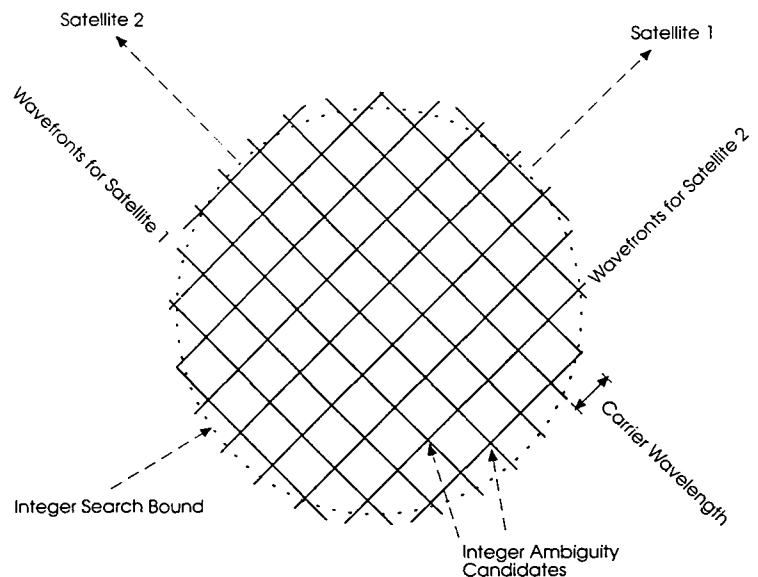


FIGURE1: Integer ambiguity combinations using two satellites in two-dimensions (Adapted from Hatch [1991]).

wide-lane phase ambiguity:

$$n_{\Delta} = \frac{P_{\Sigma} + \Phi_{\Delta}}{\lambda_{\Delta}} \text{ cycles, (10)}$$

Equation (10) is free of atmospheric, ephemeris, satellite clock and receiver clock errors. The noise and multipath on the narrow-lane code measurements dominate the noise-level of n_{Δ} . Generally a time average is used to refine the estimate of n_{Δ} .

It is important to consider the impact of squared L2 data on the resolution of n_{Δ} using equation (10). If the wide-lane wavelength, λ_{Δ} , is halved, then the error in estimating n_{Δ} , in terms of cycles, doubles and causes the averaging time to increase by a factor of four. Site occupation times for FastStatic surveys would therefore have to be longer with squared L2 phase data. This assumes that measurement noise has a zero mean and is Gaussian. Multipath will generally be the dominant error source in (10). Multipath culminates as a periodic error on n_{Δ} which can be minimized by sufficient averaging.

Ambiguity Resolution Using Geometric Information

The ambiguity resolution strategy presented so far has centered on the use of code information to *calibrate* the phase ambiguities. Satellite geometry also plays a key role in the ambiguity resolution process. To help explain the importance of satellite geometry, let us consider ambiguity resolution in two-dimensional space.

Consider a case where there are two orthogonal satellites relative to a user whose location is yet unknown (Figure 1, left). Wave fronts can be constructed on the plot for each satellite as lines which are orthogonal to the direction vector to the satellite. The wavelength of the phase observable being used dictates the wave front spacing; the wide-lane data would confer a wave front spacing of 86cm; narrow-lane data only 10cm.

The correct integer combination is indeterminate given just two satellites. Any one of the grid locations is a possible solution to the integer resolution problem. Now, with the introduction of a third satellite (as shown in Figure 2), it is immediately possible to visually discount different grid locations by studying the size of the *triangles of error*. In this simplified example, the correct

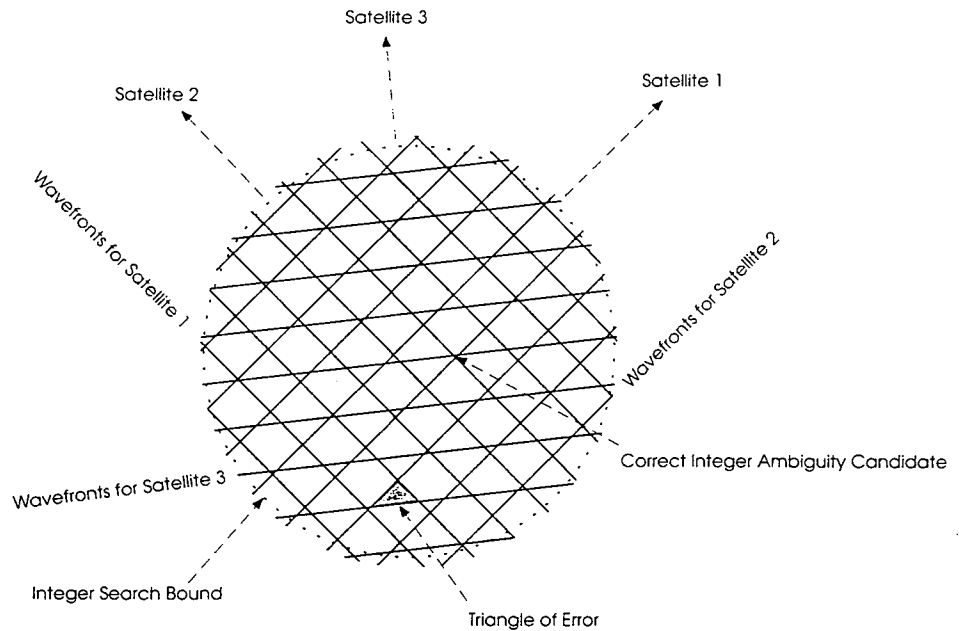


FIGURE 2: Ambiguity resolution with three satellites in two-dimensions. (Adapted from Hatch [1991]).

integer combination is the one where the *triangle of error* is minimal. The analytic equivalent to the visual *triangle of error* is the weighted sum of the squares of the measurement residuals ($\mathbf{v}^T \mathbf{P} \mathbf{v}$). Given error-free measurements, the $\mathbf{v}^T \mathbf{P} \mathbf{v}$ statistic of the correct combination is zero.

Even in the theoretical scenario of error-free measurements, the grid pattern will be harmonic, a unique answer may not be immediately apparent. Additional satellites will reduce the erroneous combinations further, as will time accumulation of the $\mathbf{v}^T \mathbf{P} \mathbf{v}$ statistics with changing satellite geometry.

The ambiguity search domain is a vital aspect of the resolution process. If the accuracy of the ambiguities is less than half a cycle, it is possible to ignore the search completely and simply round the estimated ambiguity terms to their nearest integer values. In practice, the processor must scan a limited search bound for the correct combination.

The GPSurvey System

GPS hardware is progressively becoming more portable, affordable and field data collection is moving towards highly automated systems. A successful GPS survey requires more than just suitable hardware; a smooth flow must exist between each aspect of the survey process. The GPSurvey package is Trimble's latest generation GPS data management and reduction platform which provides a unified processing environment

for a wide range of high precision and low-order positioning applications. The key design parameters of the GPSurvey system include:

- Open platform for including a wide-range of GPS positioning modules
- Microsoft Windows user-friendly graphical interface
- Automated and advanced user control over baseline reduction
- General import/export to other data processing packages

The GPSurvey software currently includes the following features:

- Supports a full implementation of the Microsoft Windows user interface
- Project management via an integrated project database
- Graphical mission planning
- Automated FastStatic baseline processing
- Report Generation
- Graphical point and baseline display and editing

FastStatic Positioning

The WAVE™ (Weighted Ambiguity and Vector Estimator) software is used for GPS baseline reduction in the GPSurvey package. Currently, the WAVE software provides FastStatic baseline reduction support for dual-frequency carrier phase receivers such as the 4000SST Geodesist IIP and the 4000SSE. Multi-baseline processing is still supported through the TRIMVEC Plus™ suite. Future releases of the GPSurvey software will incorporate complete support for single-frequency receivers and kinematic positioning.

The WAVE software undertakes automated FastStatic baseline reduction in the following manner:

- Utilize differential pseudorange processing to provide a reliable estimate of the baseline components. Use the best available pseudorange information for this step.
- Incorporate baseline components and full a posteriori statistical information from the differential code solution as a priori information for a wide-lane carrier phase data pass. Estimate double difference wide-lane phase ambiguities and refined baseline components.
- Initiate a wide-lane ambiguity search with the search bounds set from the formal statistics of the wide-lane adjustment.

Search techniques that use satellite subsets to accelerate the computations (see Hatch [1990]), can miss the correct integer candidate, hence the WAVE processor conducts a rigorous and exhaustive search during this step.

- Display a definitive wide-lane integer ambiguity combination only if it can be statistically distinguished from all other search candidates.
- Given that the wide-lane ambiguity search was successful, initiate a narrow-lane ambiguity search. The even/odd relationship between the wide-lane and narrow-lane integer ambiguities effectively doubles the narrow-lane wavelength to approximately 21cm, thus reducing the number of potential search combinations.
- Statistical testing provides a final check on the correct resolution of the narrow-lane phase ambiguities.
- After correctly resolving the wide-lane and narrow-lane ambiguities, make an optimal pass using either the narrow-lane observable for short baselines, or the iono-free combination for long baselines.

Conclusion

Precise surveying with the Global Positioning System (GPS) relies heavily on carrier phase measurements, which are subject to unknown integer ambiguity terms. Rapid, reliable ambiguity resolution is the key to efficient precise GPS positioning. To achieve this goal, it is advantageous to extract as much information as possible from the GPS signals by observing full-cycle L1 & L2 phase measurements and L1 & L2 code information (four observables). Trimble's recently developed 4000SSE receiver provides full-parallel dual-frequency P-code and full-cycle carrier information when the P-code is available. During times of P-code encryption, the 4000SSE receiver is still able to log full-cycle L1 & L2 carrier phase data, as well as dual-frequency code information.

The GPSurvey package provides a user-friendly platform for completely planning, managing, and processing a GPS survey project and accomplishes FastStatic baseline reduction using the Weighted Ambiguity Vector Estimator (WAVE) software.

Acknowledgments

The tireless efforts of Timo Allison, Dom Farmer, Wil Hand, Gary Lennen, Kreg Martin and Bruce Peetz during hardware

and firmware development are acknowledged. Thanks to Brian Rohring, Timo Allison, Cheryl Quirion, Ken Doucet, Ron Hyatt and Bruce Peetz for their useful suggestions regarding the content of the paper.

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Additional Information

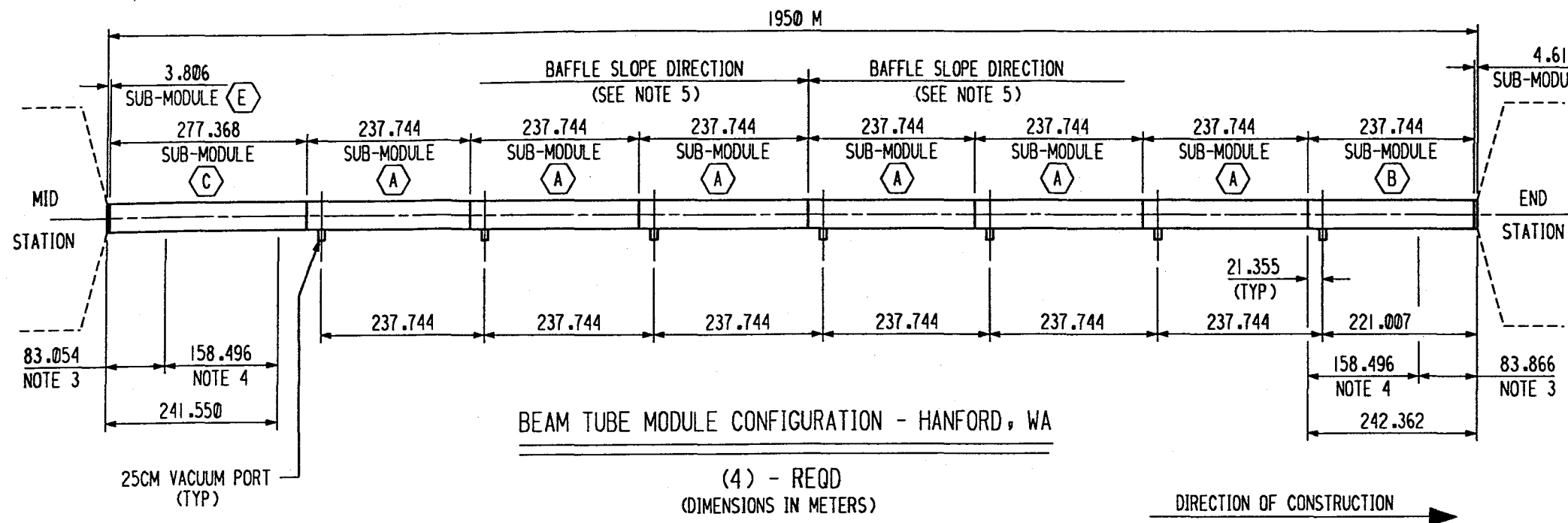
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Recent Advances in GPS Surveying

by Nicholas C. Talbot

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Presented at the National Conference on GPS Surveying, conducted by the Department of Land Information, RMIT, and the School of Surveying, UNSW, Sydney, Australia, June 25-26, 1992.

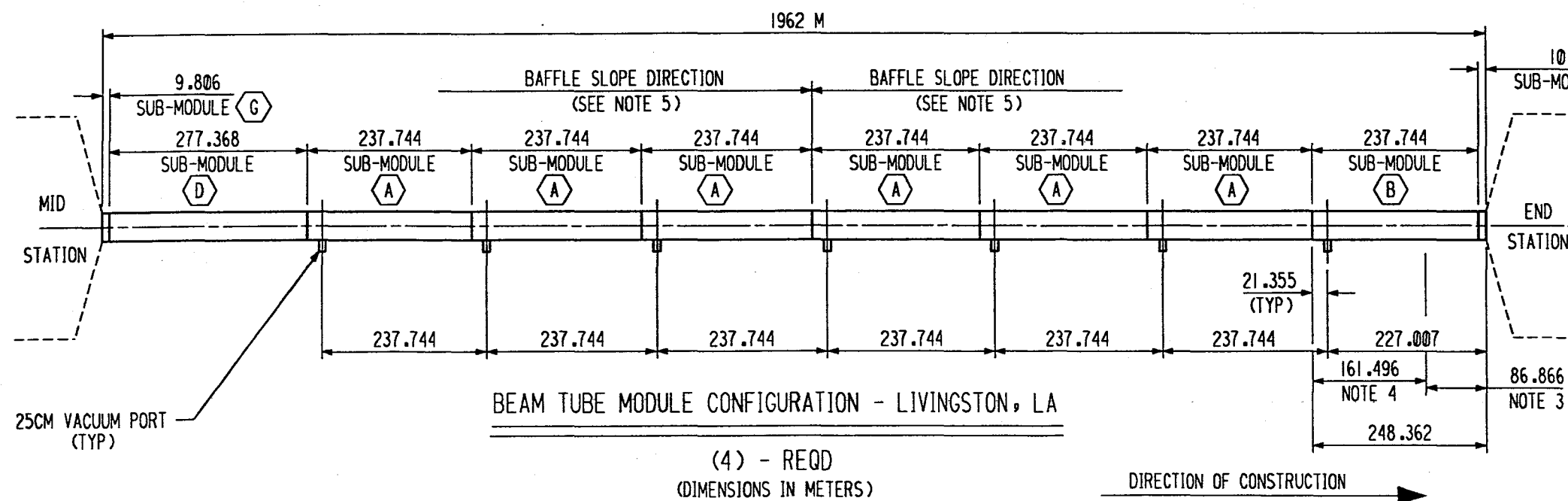
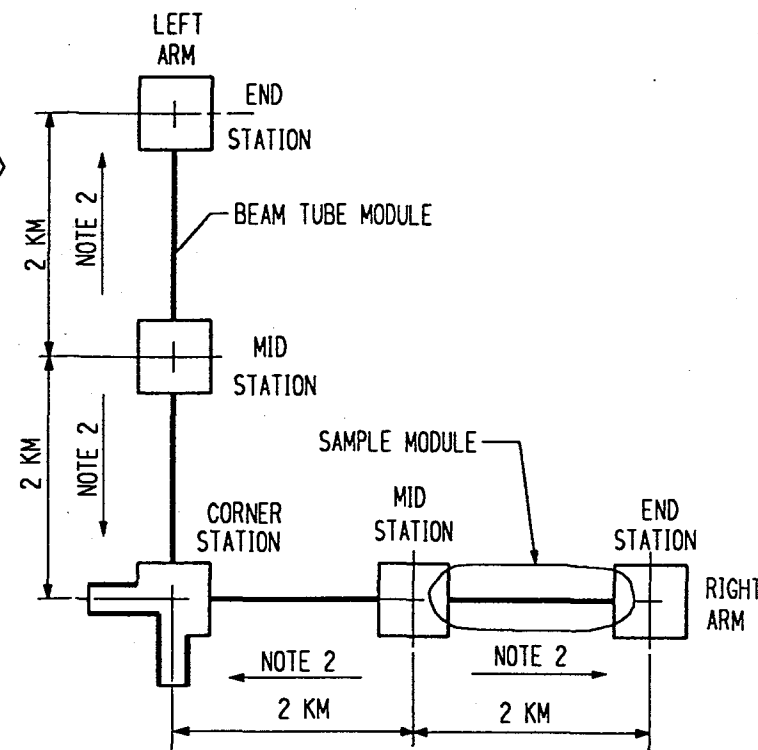


BEAM TUBE MODULE CONFIGURATION - HANFORD, WA

(4) - REQD
(DIMENSIONS IN METERS)

DIRECTION OF CONSTRUCTION →

- | | |
|----------------------------------|--------------------------|
| (49) - BEAM TUBE SECTIONS, LONG | (32) - BAFFLE STIFFENERS |
| (49) - BEAM TUBE SECTIONS, SHORT | (122) - BAFFLES |
| (2) - END SECTIONS | (7) - VACUUM PORTS |
| (50) - EXPANSION JOINTS | (49) - SUPPORTS, FIXED |
| (2428) - VACUUM STIFFENERS | (50) - SUPPORTS, GUIDED |
| (149) - SUPPORT RINGS | |



BEAM TUBE MODULE CONFIGURATION - LIVINGSTON, LA

(4) - REQD
(DIMENSIONS IN METERS)

DIRECTION OF CONSTRUCTION →

- | | |
|----------------------------------|--------------------------|
| (49) - BEAM TUBE SECTIONS, LONG | (16) - BAFFLE STIFFENERS |
| (49) - BEAM TUBE SECTIONS, SHORT | (111) - BAFFLES |
| (2) - END SECTIONS | (7) - VACUUM PORTS |
| (50) - EXPANSION JOINTS | (49) - SUPPORTS, FIXED |
| (2460) - VACUUM STIFFENERS | (50) - SUPPORTS, GUIDED |
| (149) - SUPPORT RINGS | |

NOTES:

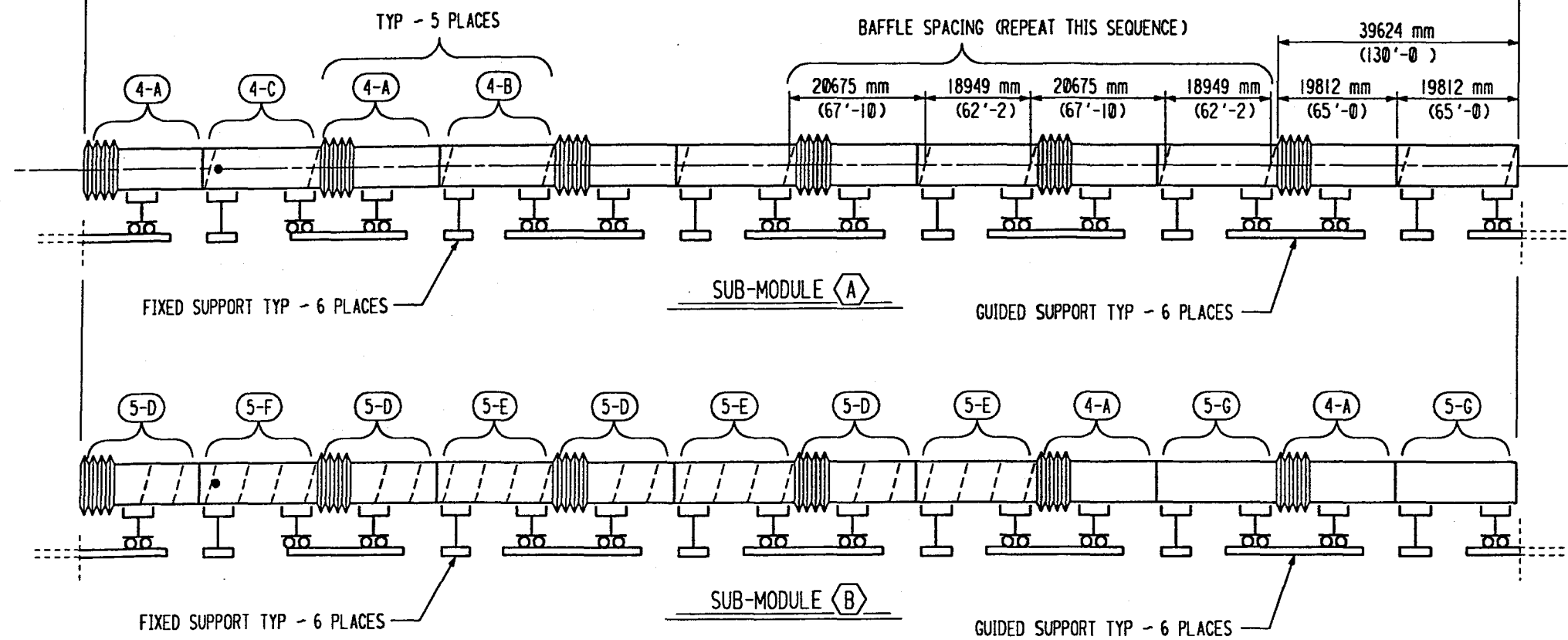
1. PUMP PORTS TO FACE OUT BOARD OF THE ANGLE BETWEEN THE ARMS.
2. CONSTRUCTION WILL START AT MIDSTATIONS AND PROCEED BOTH WAYS SIMULTANEOUSLY TOWARDS THE END STATION AND THE CORNER STATION.
3. NO BAFFLES.
4. BAFFLES LOCATED AT SUPPORTS & THIRD POINTS BETWEEN SUPPORTS. SEE SUB MODULE DETAILS FOR SPECIFIC LOCATIONS.
5. PROJECTING EDGE OF BAFFLE SHALL ALWAYS FACE FROM TUBE WALL TO THE CENTER OF THE MODULE.

		CBI		SUPPLIER'S / PURCHASER'S NO	
LIGO BEAM TUBE MODULES HANFORD, WA & LIVINGSTON, LA					
GENERAL MODULE CONFIGURATION AND VACUUM PORT LOCATION					
CUSTOMER'S NO		CONTRACT NO			
BY DAP CHKD WJC DATE 4-4-94		930212			
D.E. THORN		DWG 1		REV 8	
ENGINEERING SUPERVISOR		SHT			
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INDICATES CHANGE FROM PREVIOUS ISSUE

12 BEAM SUB-ASSEMBLIES AT 19812 = 237744

(12 AT 65'-0" = 780'-0")



(A) SUB-MODULE CONSISTING OF THE FOLLOWING:

6	(4-A)	BEAM ASSEMBLY W/EXPANSION JOINT
5	(4-B)	BEAM ASSEMBLY W/2 BAFFLES
1	(4-C)	BEAM ASSEMBLY W/VACUUM PORT
6	-	FIXED SUPPORT (DWG # 6, 7, & 8)
6	-	GUIDED SUPPORT (DWG # 17, 18, & 19)

(B) SUB-MODULE CONSISTING OF THE FOLLOWING:

2	(4-A)	BEAM ASSEMBLY W/EXPANSION JOINT
4	(5-D)	BEAM ASSEMBLY W/EXPANSION JOINT AND 2 BAFFLES
3	(5-E)	BEAM ASSEMBLY W/4 BAFFLES
1	(5-F)	BEAM ASSEMBLY W/4 BAFFLES AND VACUUM PORT
2	(5-G)	BEAM ASSEMBLY - NO BAFFLES
6	-	FIXED SUPPORT (DWG # 6, 7, & 8)
6	-	GUIDED SUPPORT (DWG # 17, 18, & 19)

(C) SUB-MODULE CONSISTING OF THE FOLLOWING:

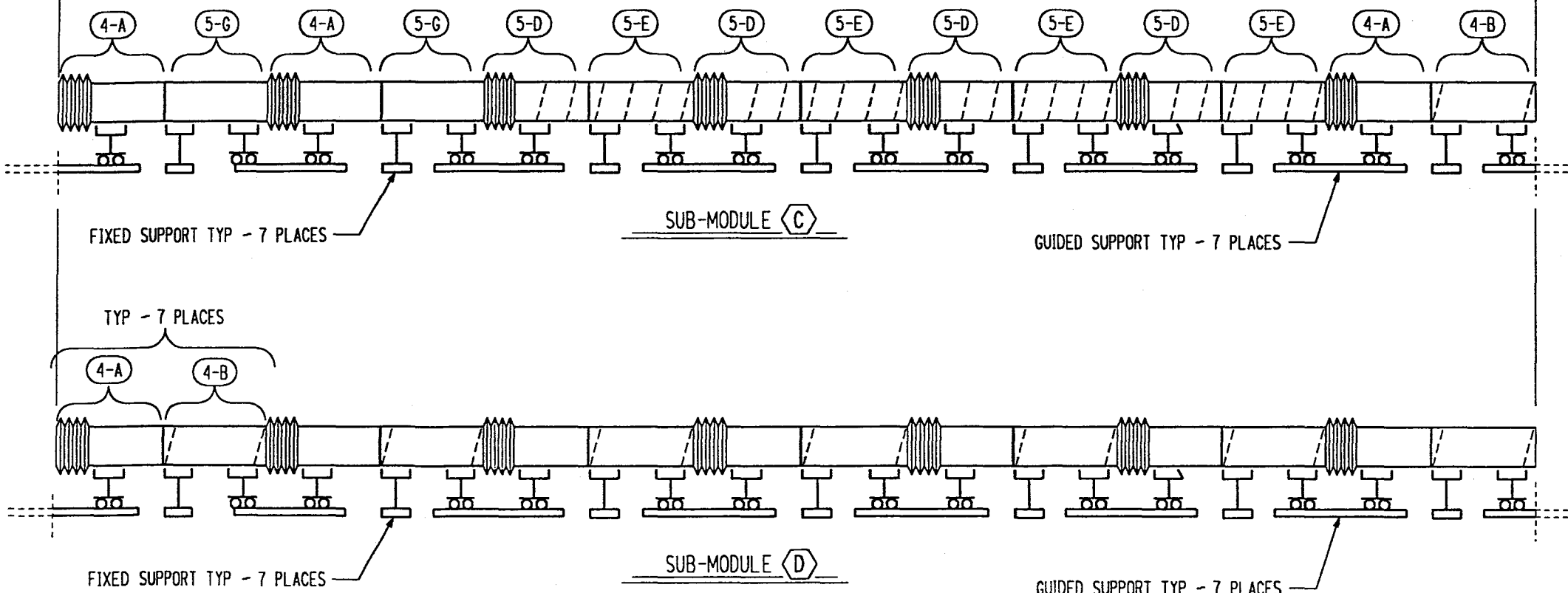
3	(4-A)	BEAM ASSEMBLY W/EXPANSION JOINT
1	(4-B)	BEAM ASSEMBLY W/2 BAFFLES
4	(5-D)	BEAM ASSEMBLY W/EXPANSION JOINT AND 2 BAFFLES
4	(5-E)	BEAM ASSEMBLY W/4 BAFFLES
2	(5-G)	BEAM ASSEMBLY - NO BAFFLES
7	-	FIXED SUPPORT (DWG # 6, 7, & 8)
7	-	GUIDED SUPPORT (DWG # 17, 18, & 19)

(D) SUB-MODULE CONSISTING OF THE FOLLOWING:

7	(4-A)	BEAM ASSEMBLY W/EXPANSION JOINT
7	(4-B)	BEAM ASSEMBLY W/2 BAFFLES
7	-	FIXED SUPPORT (DWG # 6, 7, & 8)
7	-	GUIDED SUPPORT (DWG # 17, 18, & 19)

14 BEAM SUB-ASSEMBLIES AT 19812 = 23774

(14 • 65'-0" = 910'-0")

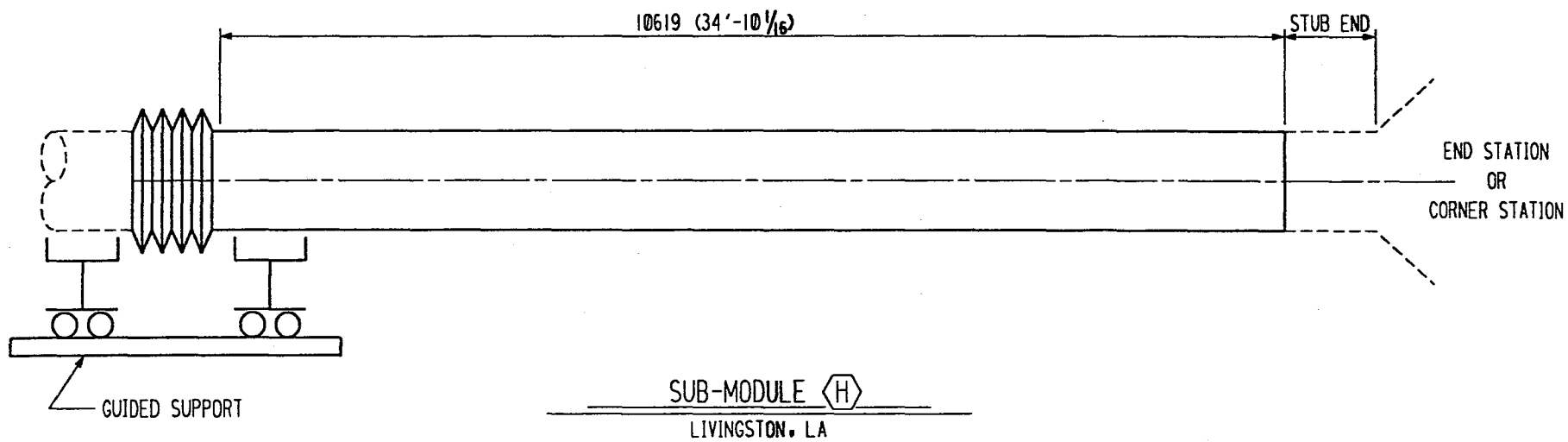
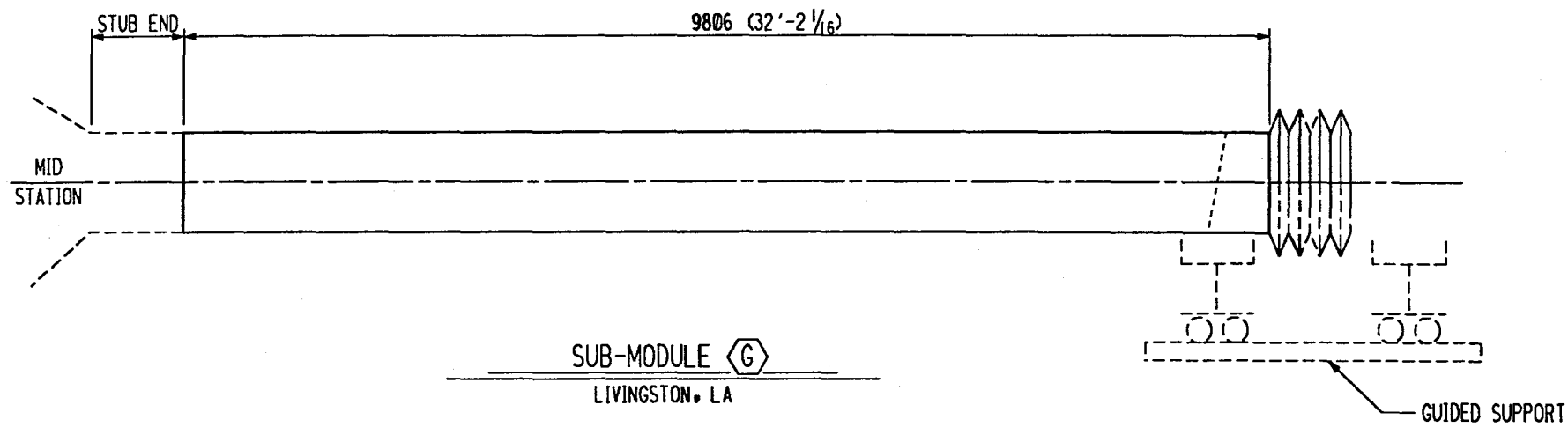
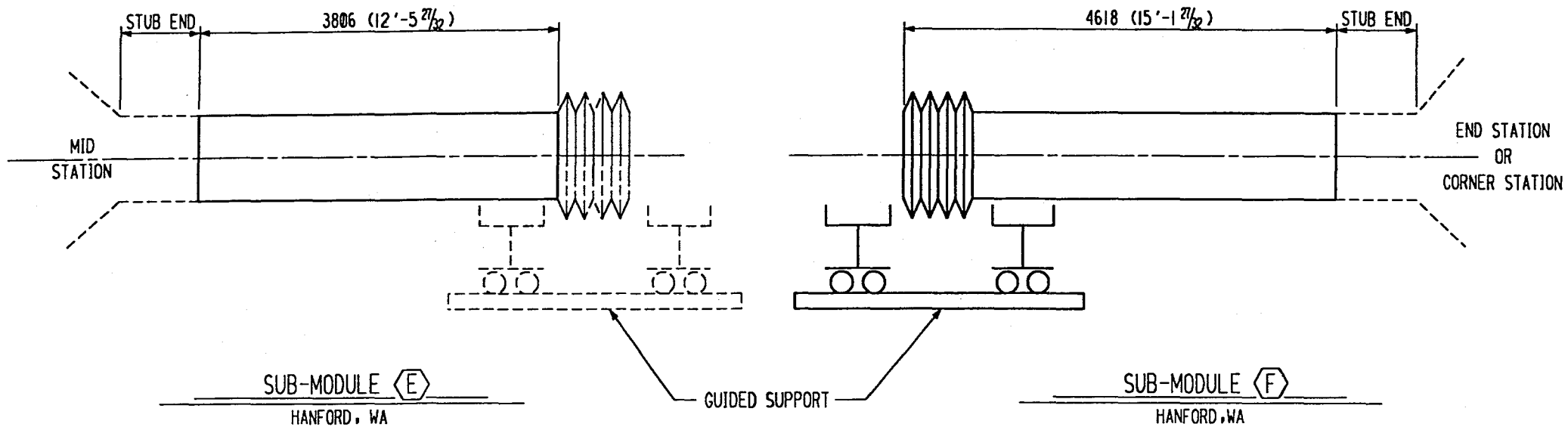


- BAFFLE (AS SHOWN INDICATES SLOPE TO RIGHT)
- VACUUM PORT
- FIXED SUPPORT (6-A)
- GUIDED SUPPORT (10-A)

REVISIONS		REMARKS	
		<p align="center">CBI</p> <p align="center">LIGO BEAM TUBE MODULES HANFORD, WA & LIVINGSTON, LA</p> <p align="center">SUB-MODULES (A) (B) (C) (D)</p>	
BY	DATE	CUSTOMER'S NO	CONTRACT NO
BY	DATE	BY KJR CHKD WJC DATE 4-4-94	930212
BY	DATE	D.E. Thom	DWG 2
BY	DATE	ENGINEERING SUPERVISOR	SHT 0
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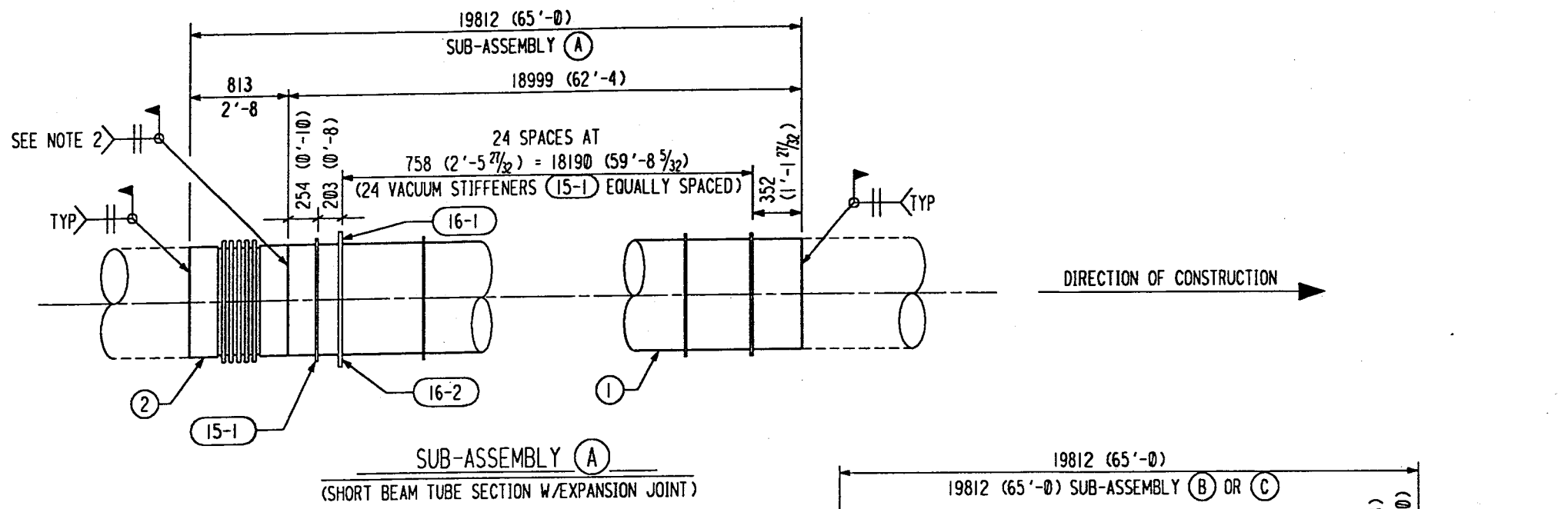
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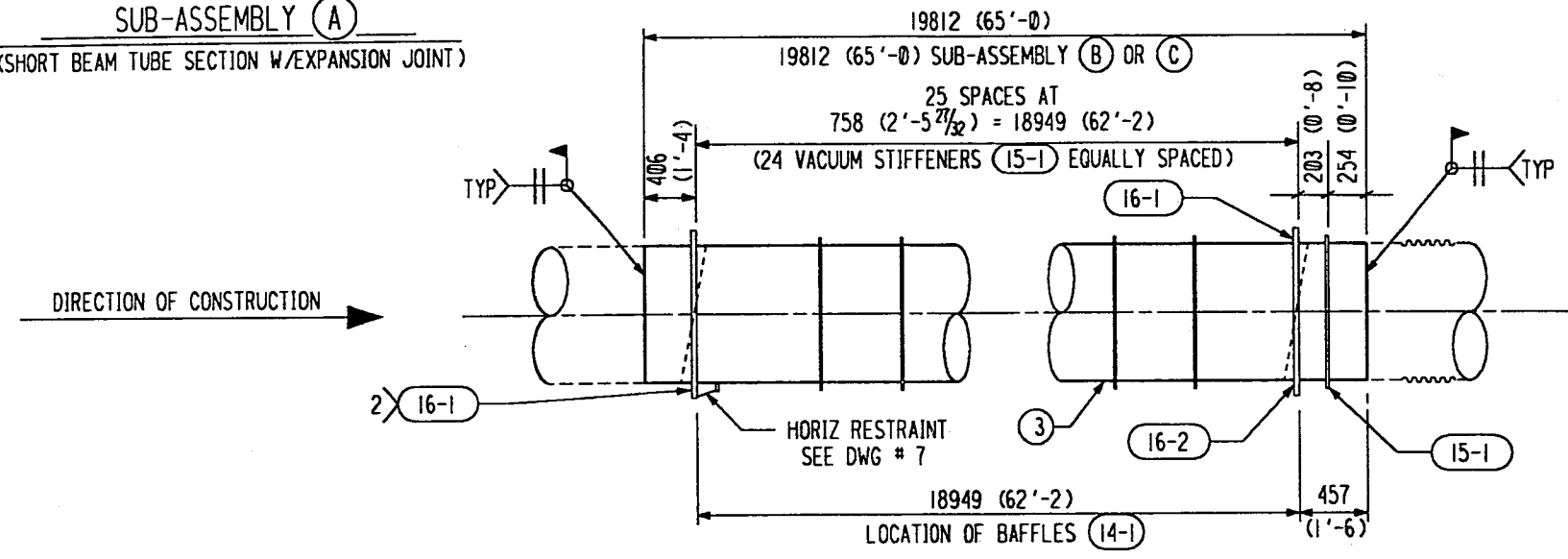
- (E) SUB-MODULE CONSISTING OF THE FOLLOWING:
- 1 (9-H) BEAM ASSEMBLY
- (F) SUB-MODULE CONSISTING OF THE FOLLOWING:
- 1 (9-J) BEAM ASSEMBLY W/EXPANSION JOINT
 - 1 - GUIDED SUPPORT (DWG # 17, 18, & 19)
- (G) SUB-MODULE CONSISTING OF THE FOLLOWING:
- 1 (9-K) BEAM ASSEMBLY W/BAFFLE
- (H) SUB-MODULE CONSISTING OF THE FOLLOWING:
- 1 (9-L) BEAM ASSEMBLY W/EXPANSION JOINT
 - 1 - GUIDED SUPPORT (DWG # 17, 18, & 19)

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

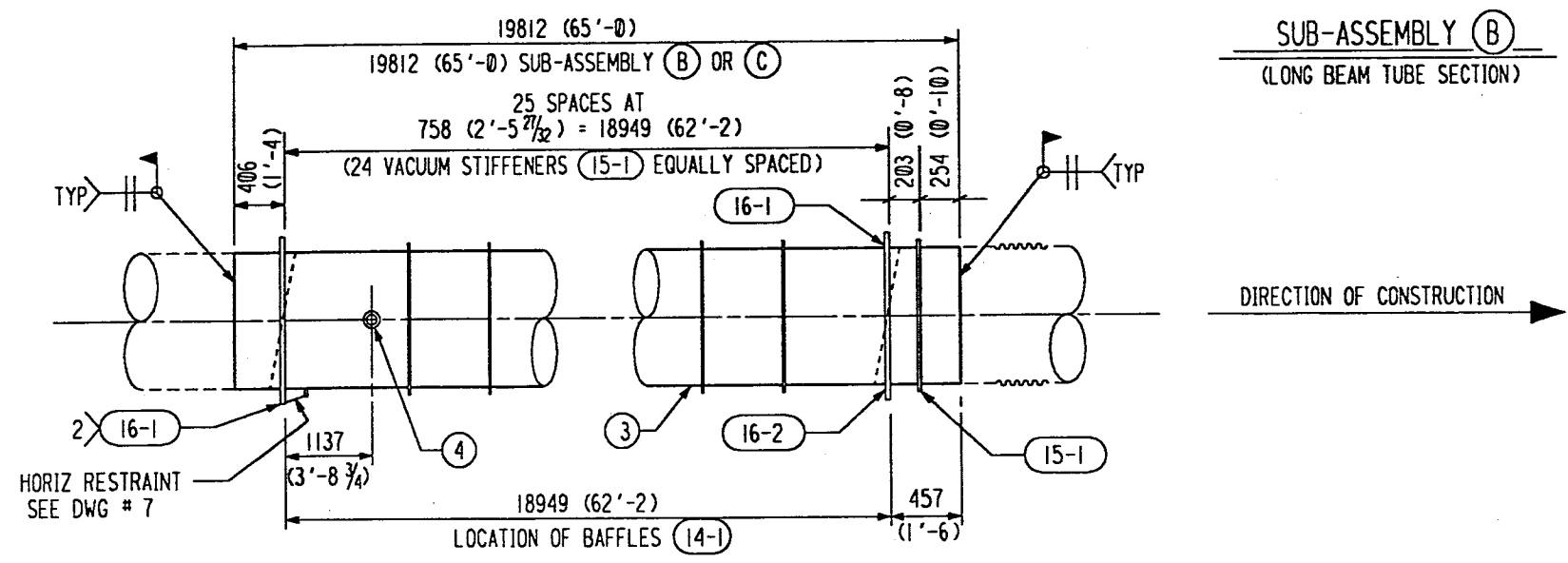
REVISIONS		REMARKS	
		<p>CBI</p> <p>LIGO BEAM TUBE MODULES HANFORD, WA & LIVINGSTON, LA</p> <p>SUB-MODULES (E) (F) (G) (H)</p>	
BY	DATE	CUSTOMER'S NO	CONTRACT NO
CHKD	DATE	BY K.F. CHKD WJC DATE 4-4-94	930212
BY	DATE	D.E. Thom	DWG 3
CHKD	DATE	ENGINEERING SUPERVISOR	REV 0
		SHT	
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SUB-ASSEMBLY (A)
(SHORT BEAM TUBE SECTION W/EXPANSION JOINT)



SUB-ASSEMBLY (B)
(LONG BEAM TUBE SECTION)



SUB-ASSEMBLY (C)
(LONG BEAM TUBE SECTION W/VACUUM PORT)

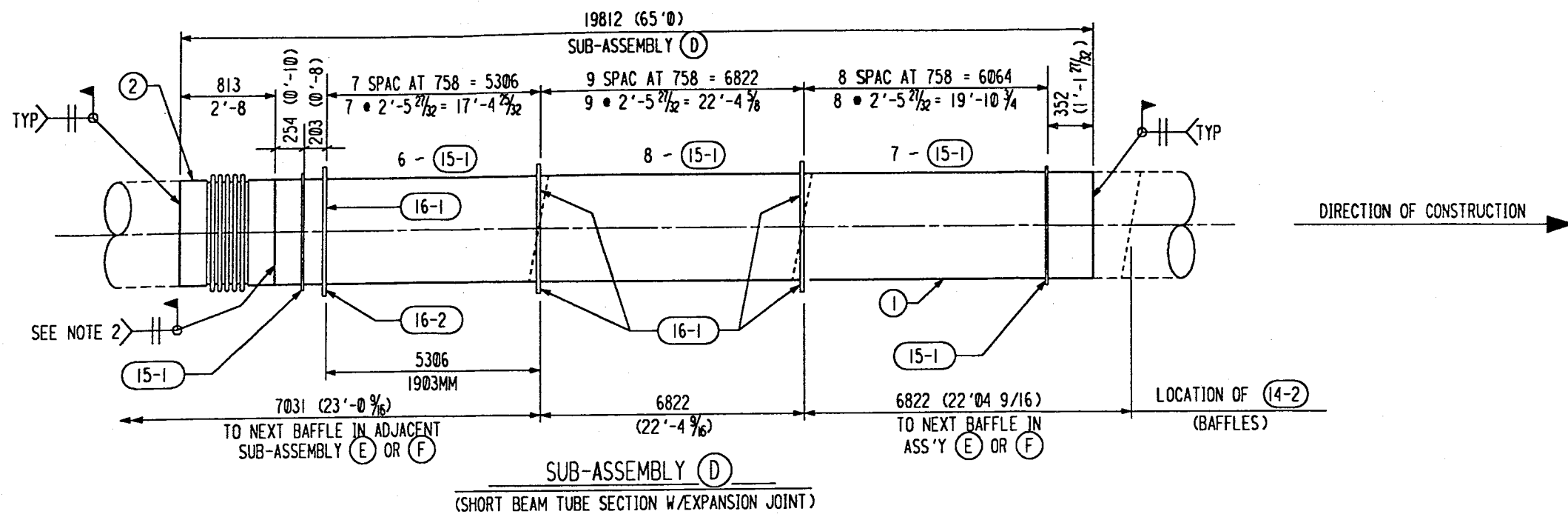
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	4-A		- BEAM ASSEMBLY -		
	4-1	1	BEAM TUBE 1245 x 3.2 (49.00 OD x 0.127" THK x 62'-4 LG)	18999	
	4-2	1	EXPANSION JOINT	813	
	15-1	25	VACUUM STIFFENERS		
	16-1	1	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		
	4-B		- BEAM ASSEMBLY -		
	4-3	1	BEAM TUBE 1245 OD x 3.2 THK (49.00 OD x 0.127" THK x 65'-0 LG)	19812	
	14-1	2	BAFFLES		
	15-1	25	VACUUM STIFFENERS		
	16-1	3	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		
	4-C		- BEAM ASSEMBLY -		
	4-3	1	BEAM TUBE 1245 OD x 3.2 THK (49.00 OD x 0.127" THK x 65'-0 LG)	19812	
	4-4	1	VACUUM PORT		
	14-1	2	BAFFLES		
	15-1	25	VACUUM STIFFENERS		
	16-1	3	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		

NOTES:

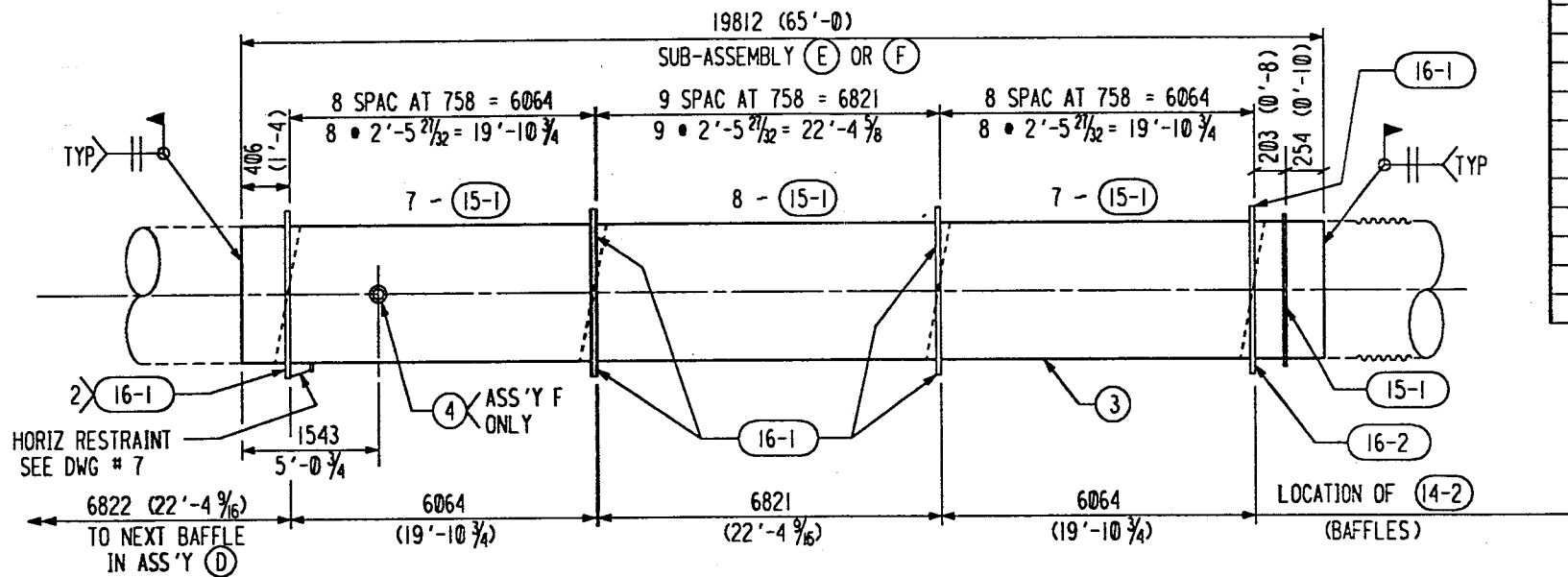
1. DURING CONSTRUCTION, THE CLEAN ROOM WILL SLIDE OVER ENDS WITHOUT AN EXPANSION JOINT.
2. CIRCUMFERENTIAL SEAM WILL BE WELDED BEFORE CLEANING AND LEAK TESTING.

BY		CHKD		DATE		REVISIONS		REMARKS	
CBI								SUPPLIER'S / PURCHASER'S NO	
LIGO BEAM TUBE HANFORD, WA & LIVINGSTON, LA									
SUB-ASSEMBLIES (A) (B) & (C)									
CUSTOMER'S NO						CONTRACT NO			
BY KJR CHKD WJC DATE 4-4-94						930212			
D.F. Thom						DWG 4		REV 0	
ENGINEERING SUPERVISOR						SHT			
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INDICATES CHANGE FROM PREVIOUS ISSUE

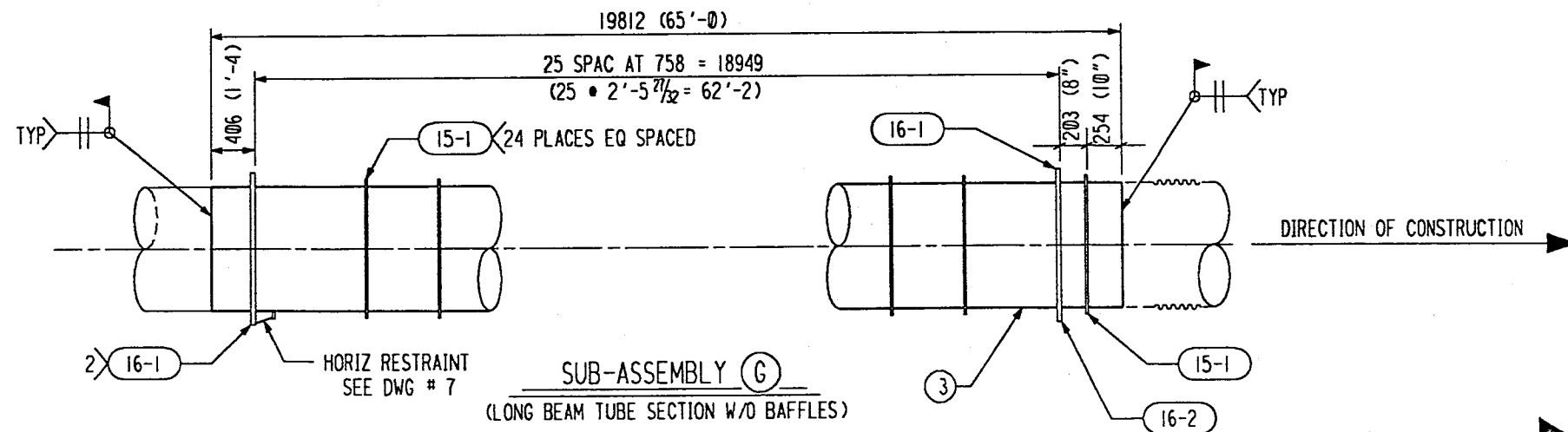


SUB-ASSEMBLY (D)
(SHORT BEAM TUBE SECTION W/EXPANSION JOINT)



SUB-ASSEMBLY (E)
(LONG BEAM TUBE SECTION)

SUB-ASSEMBLY (F)
(LONG BEAM TUBE SECTION W/VACUUM PORT)



SUB-ASSEMBLY (G)
(LONG BEAM TUBE SECTION W/O BAFFLES)

PC	MARK	PC	DESCRIPTION	MM	SPEC
	5-D		- BEAM ASSEMBLY -		
	5-1	1	BEAM TUBE 1245 x 3.2 (49.00 OD x 0.127" THK x 62'-4 LG)	18999	
	5-2	1	EXPANSION JOINT	813	
	14-1	2	BAFFLES		
	15-1	23	VACUUM STIFFENERS		
	16-1	5	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		
	5-E		- BEAM ASSEMBLY -		
	5-3	1	BEAM TUBE 1245 OD x 3.2 THK (49.00 OD x 0.127" THK x 65'-0 LG)	19812	
	14-1	4	BAFFLES		
	15-1	23	VACUUM STIFFENERS		
	16-1	7	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		
	5-F		- BEAM ASSEMBLY -		
	5-3	1	BEAM TUBE 1245 OD x 3.2 THK (49.00 OD x 0.127" THK x 65'-0 LG)	19812	
	5-4	1	VACUUM PORT		
	14-1	4	BAFFLES		
	15-1	23	VACUUM STIFFENERS		
	16-1	7	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		
	5-G		- BEAM ASSEMBLY -		
	5-3	1	BEAM TUBE 1245 OD x 3.2 THK	19812	
	15-1	25	VACUUM STIFFENERS		
	16-1	3	SUPPORT RING/BAFFLE STIFFENER HALF		
	16-2	1	SUPPORT RING HALF		

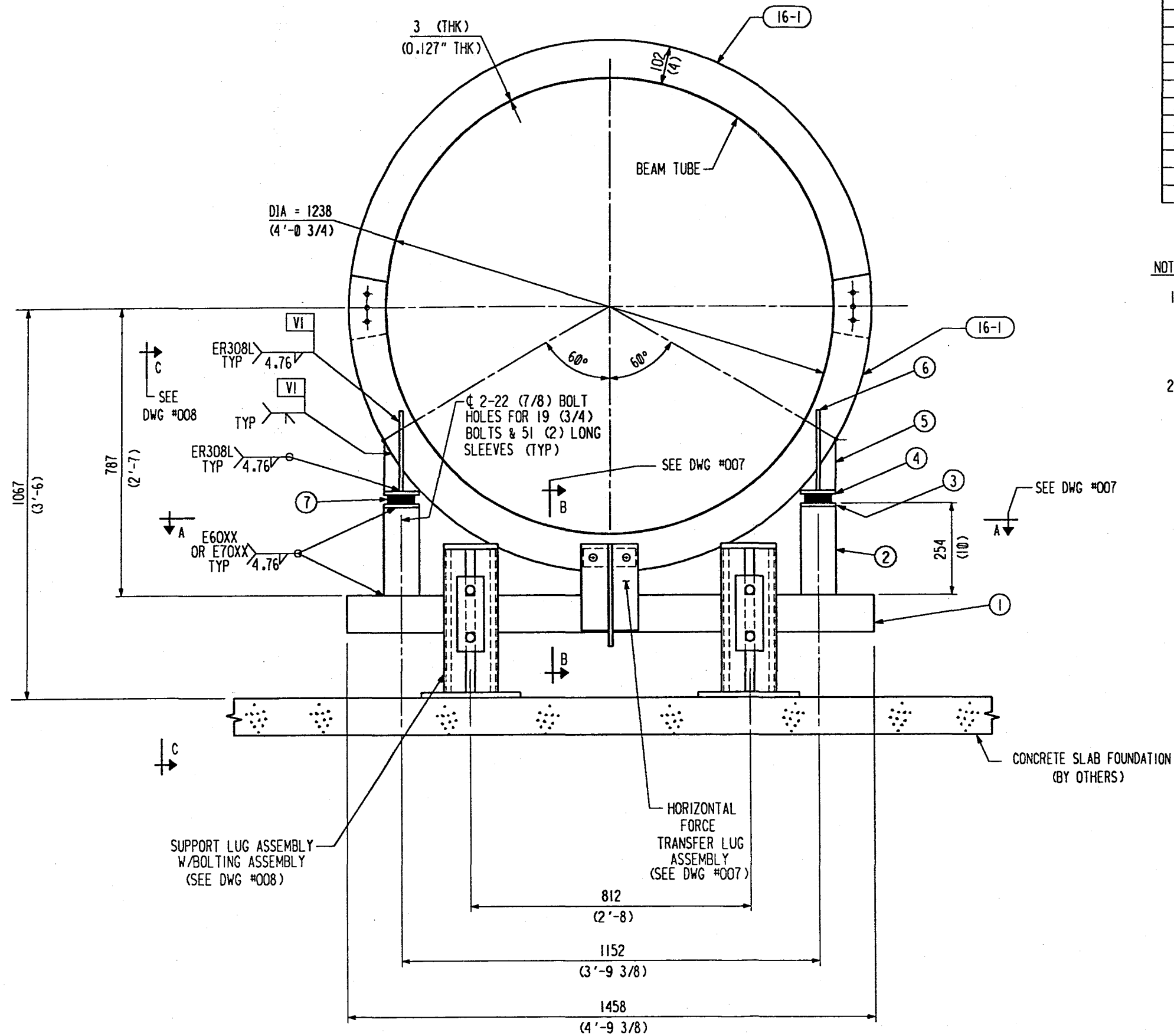
NOTES:

1. DURING CONSTRUCTION, THE CLEAN ROOM WILL SLIDE OVER ENDS WITHOUT AN EXPANSION JOINT.
2. CIRCUMFERENTIAL SEAM WILL BE WELDED BEFORE CLEANING AND LEAK TESTING.

REVISIONS		REMARKS	
BY	DATE		
BY	DATE		
BY	DATE		
BY	DATE		
BY	DATE		
BY	DATE		

CBI		SUPPLIER'S / PURCHASER'S NO	
LIGO BEAM TUBE HANFORD, WA & LIVINGSTON, LA			
SUB-ASSEMBLIES (D E F & G)			
CUSTOMER'S NO		CONTRACT NO	
BY K.R. CHKD WJC DATE 4-4-94		930212	
D.E. Thom		DWG 5	REV 0
ENGINEERING SUPERVISOR		SHT	
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INDICATES CHANGE FROM PREVIOUS ISSUE



SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH MM	SPEC
			FIXED SUPPORT		
1	6-1		TUBULAR STEEL 102 X 102 X 10 (4 X 4 X 3/8)	1458 4'-9 3/8	A500 Gr-B
2	6-2		TUBULAR STEEL 102 X 102 X 10 (4 X 4 X 3/8)	244 9 5/8"	A500 Gr-B
2	6-3		PL 102 X 10 THK (4 X 3/8) W/HOLES	254 (10'-10)	A36
2	6-4		PL 102 X 10 THK (4 X 3/8) W/HOLES	254 (10'-10)	A240-324L
2	6-5		PL SK X 10 THK (10'-3/8)		A240-324L
4	6-6		PL SK X 10 THK (10'-3/8)	203 (8)	A240-324L
2	6-7		MICARTA BLOCK 76 X 254 X 25 (3 X 10 X 1) (GRADE G11) W/HOLES		

NOTES ON INSULATION OF BEAM TUBE

1. THE BEAM TUBE MUST BE FULLY COVERED BY AT LEAST 4 INCHES OF INSULATION HAVING THERMAL CONDUCTIVITY, K, AT 284°F LESS THAN OR EQUAL TO 0.54 BTU IN/HR FT² °F, FOR AT LEAST 36 INCHES ON EITHER SIDE OF SUPPORT RING (16-1)
2. PIECES (6-2), (6-3), (6-4), (6-5), (6-6), AND (6-7) MUST BE FULLY COVERED BY AT LEAST 2 INCHES OF THE INSULATION MENTIONED IN NOTE #1 ABOVE.

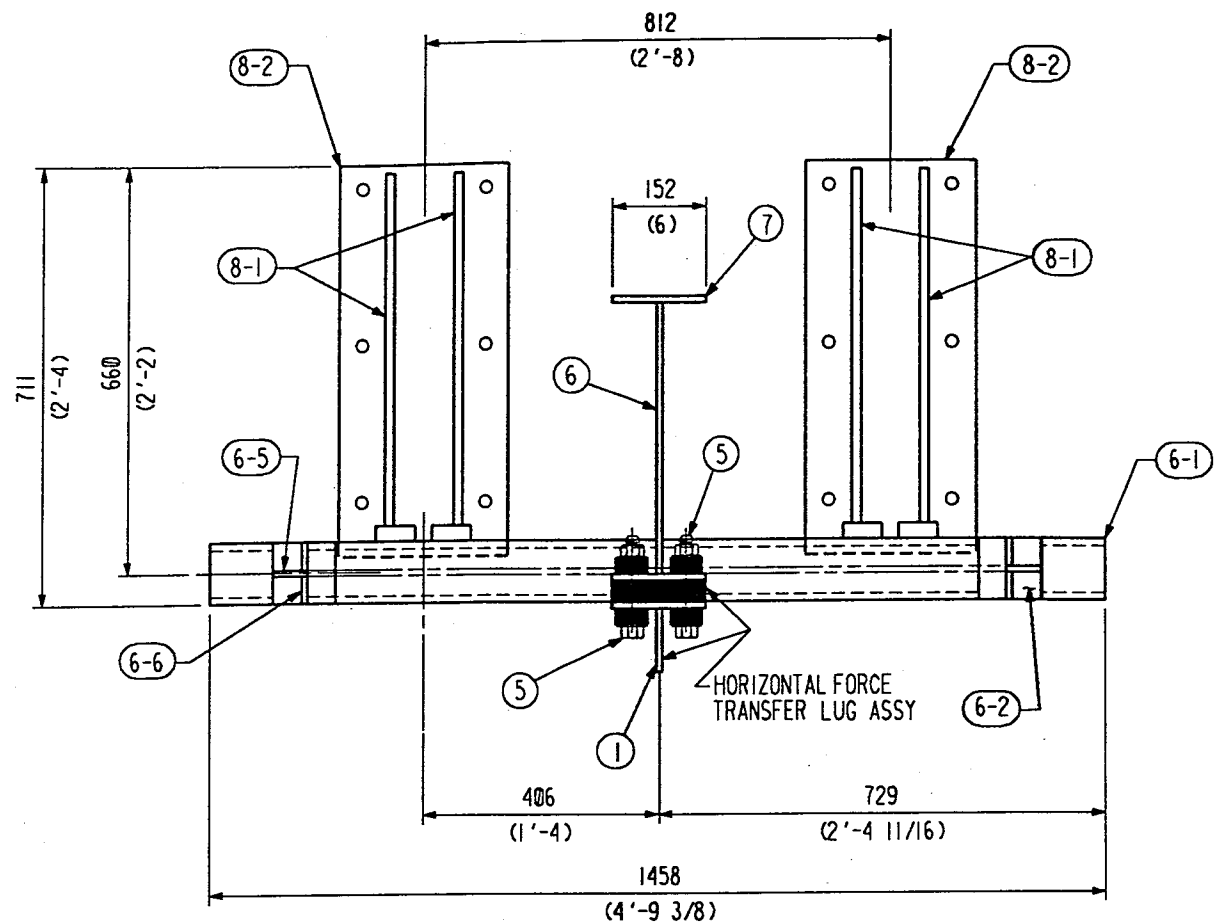
NOTES

1. WORK THIS DWG WITH DWG #007 AND #008.
2. BILLED FOR ONE (1) FIXED SUPPORT. TOTAL OF 392 FIXED SUPPORTS REQD.
3. ALL CARBON STEEL MEMBERS TO BE GALVANIZED.

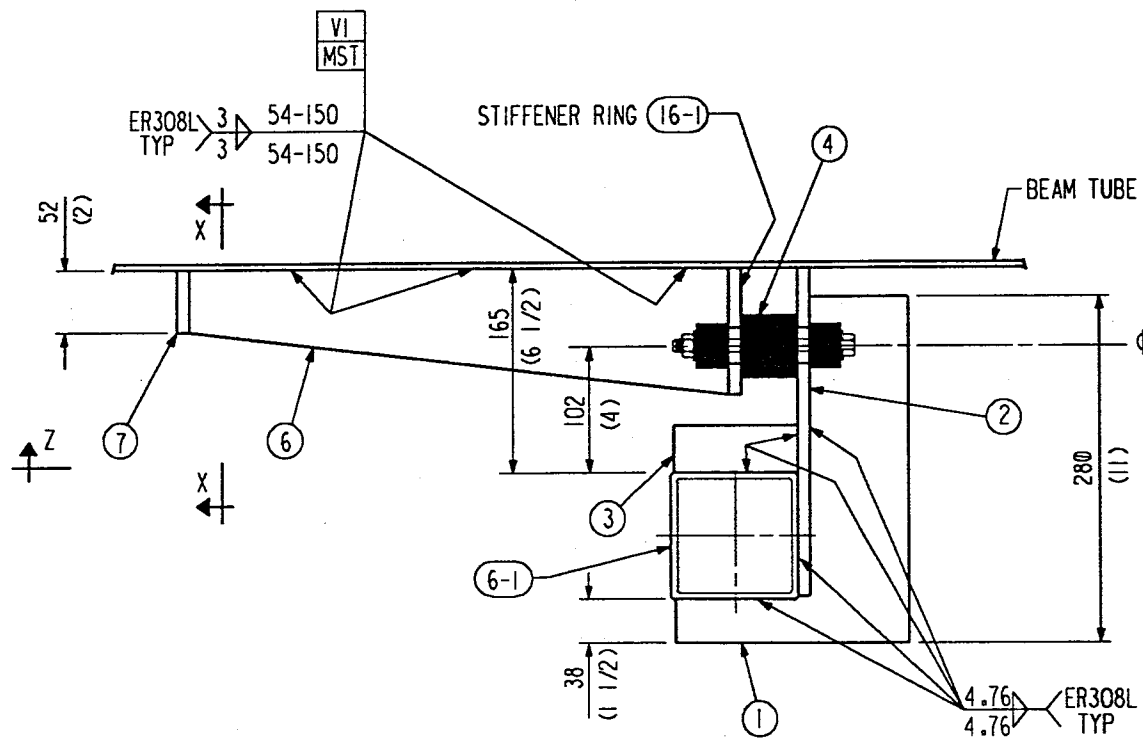
		CBI		SUPPLIER'S / PURCHASER'S NO	
		ELEVATION			
		BEAM TUBE FIXED SUPPORT			
		LIGO			
		HANFORD, WA. AND LIVINGSTON, LA.			
		CUSTOMER'S NO		CONTRACT NO	
		BY WAW CHKD WJC DATE 4-4-94		930212	
		D.E. THORN		DWG 006 REV	
		ENGINEERING SUPERVISOR		SHT C	
		REVISIONS			
BY	CHKD	DATE	DATE	DATE	DATE
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BEAM TUBE SUPPORT ELEVATION

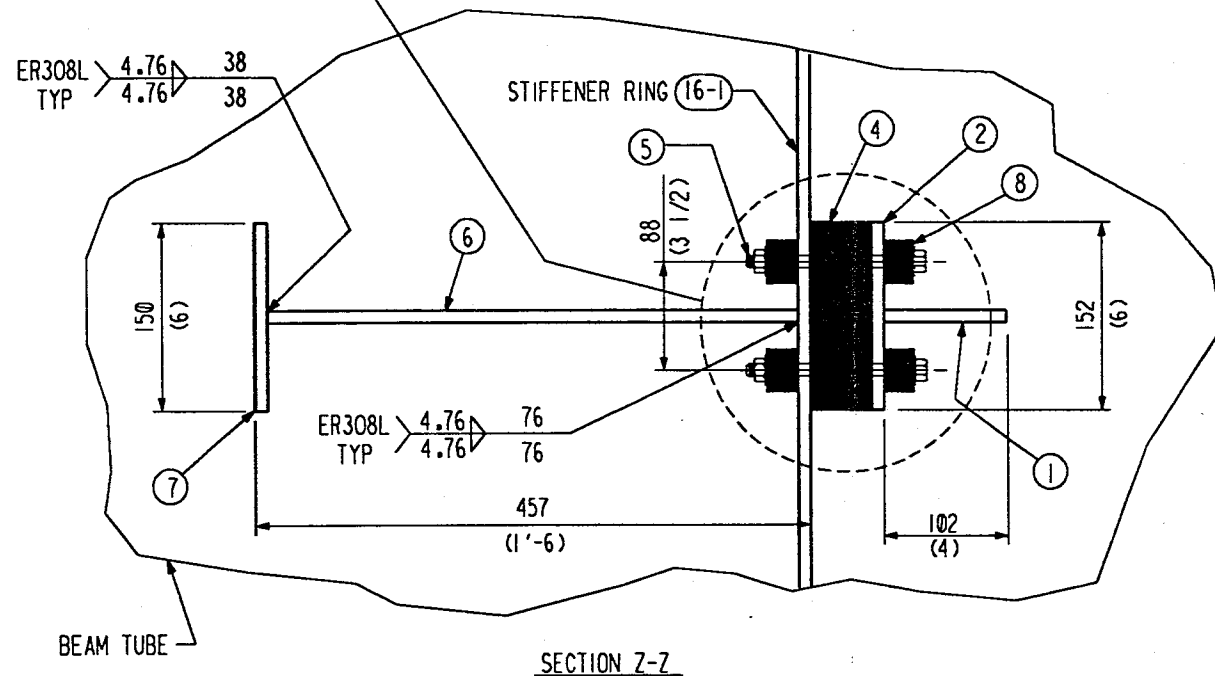
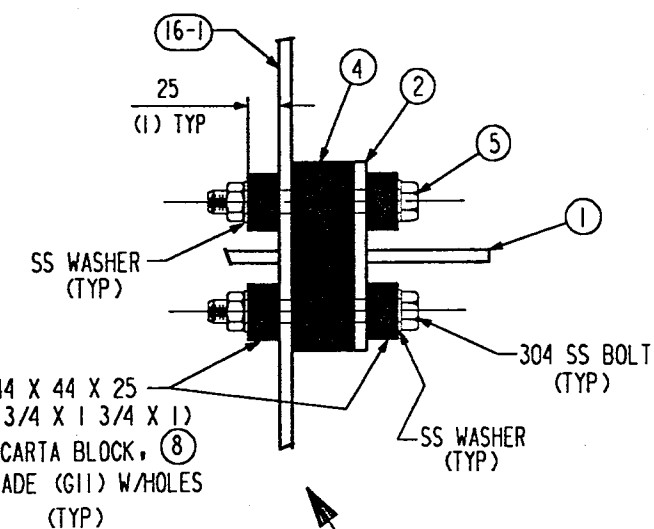
▶ INDICATES CHANGE FROM PREVIOUS ISSUE



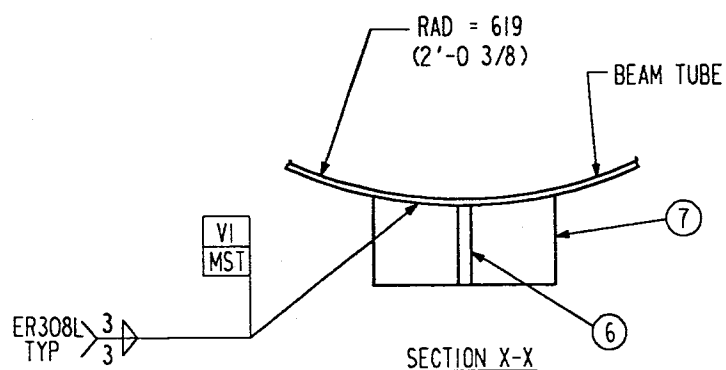
PLAN VIEW 'A-A'
(FROM DWG #006)
(SUPPORT BASE)



SECTION B-B
(FROM DWG #006)



SECTION Z-Z



SECTION X-X

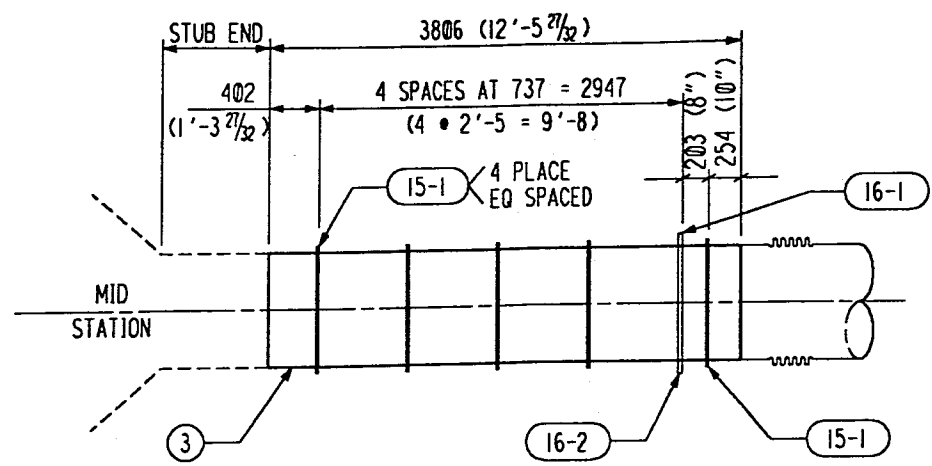
SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH MM	SPEC
			FIXED SUPPORT		
1	7-1		PL SK X 10 (3/8) THK	280	A240-304L
			(11)		
1	7-2		PL 150 X 10 (0'-6 X 3/8) THK	241	A240-304L
			W/HOLES	0'-9 1/2	
1	7-3		PL 38 X 10 (0'-1 1/2 X 3/8) THK	83	A240-304L
				0'-3 1/4	
2	7-4		MICARTA BLOCK 50 X 152 X 25 W/HOLES		
			(2 X 6 X 1) (GRADE G11)		
2	7-5		BOLT 19 (3/4) DIA HVY HEX W/ HEX NUT	178	304 SS
			AND 1/32 THK X 76 (3) LONG MYLAR	(0'-7)	
			INSULATING SLEEVE.		
			(FROM F.H.MALONEY CO.)		
1	7-6		PL SK X 10 (3/8) THK	457	A240-304L
				(1'-6)	
1	7-7		PL 50 X 10 (0'-2 X 3/8) THK	152	A240-304L
				(0'-6)	
2	7-8		MICARTA BLOCK 44 X 44 X 25 W/HOLES		
			(1 3/4 X 1 3/4 X 1) GRADE G11		

NOTES

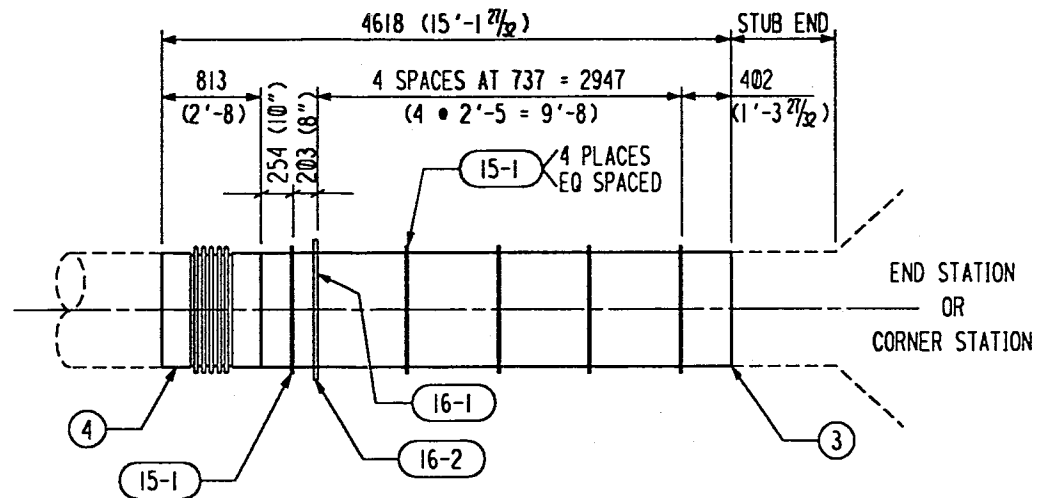
1. WORK THIS DWG WITH DWG #006 AND #008.
2. BILLED FOR ONE (1) FIXED SUPPORT. TOTAL OF 392 FIXED SUPPORTS REQD.

CBI		SUPPLIER'S / PURCHASER'S NO	
PLAN VIEW AND DETAILS			
BEAM TUBE FIXED SUPPORT			
LIGO			
HANFORD, WA AND LIVINGSTON, LA.			
CUSTOMER'S NO		CONTRACT NO	
BY NAW CHD WJC DATE 4-4-94		930212	
D.E. THOMAS		DWG 007 REV 0	
ENGINEERING SUPERVISOR		SHT	
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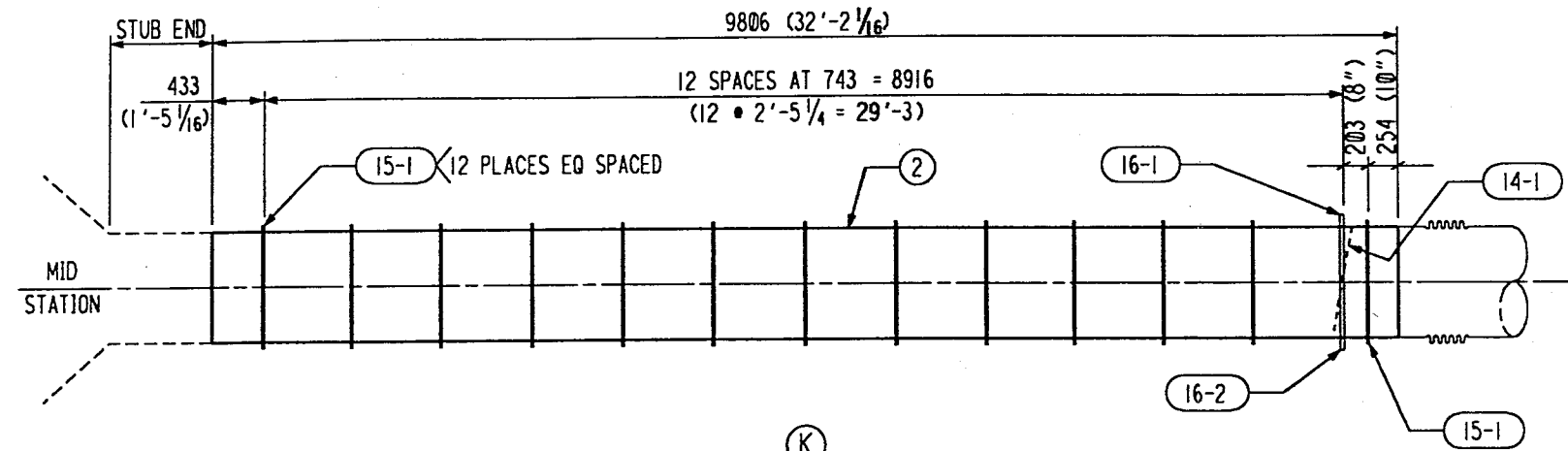
▶ INDICATES CHANGE FROM PREVIOUS ISSUE



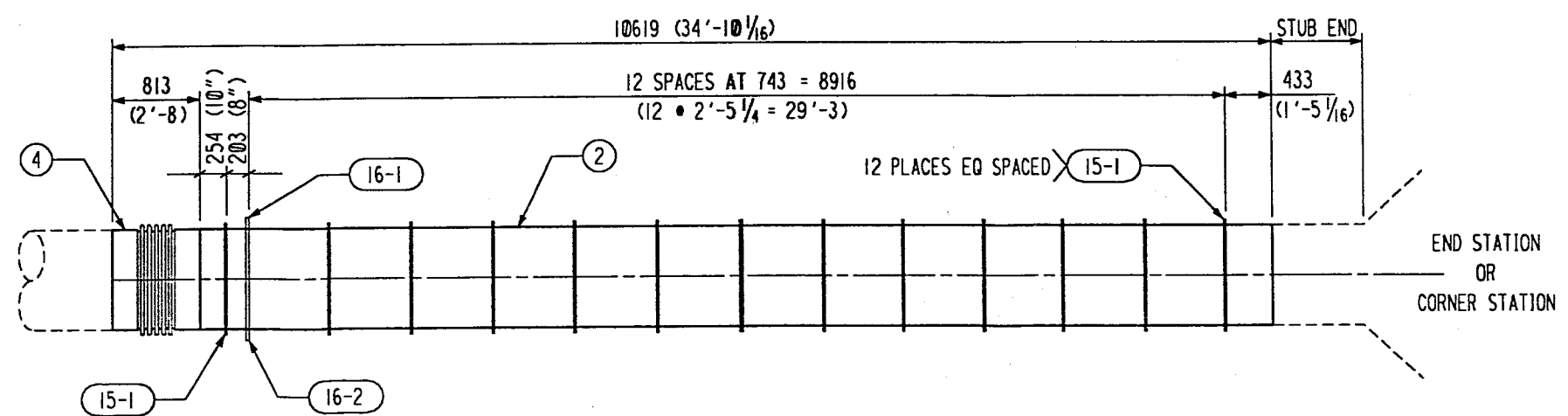
(H)



(J)



(K)

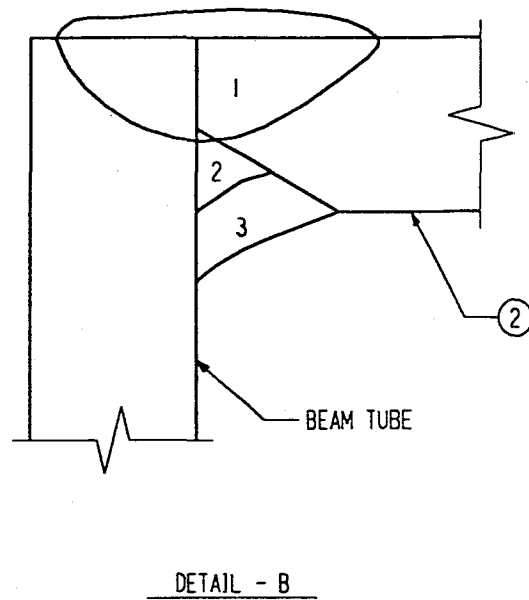
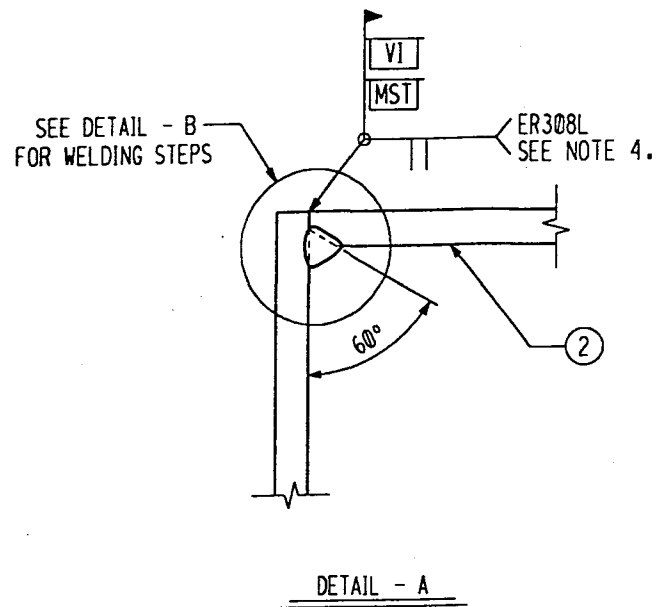


(L)

PC	QTY	PC	DESCRIPTION	MM	SEC
			- BEAM ASSEMBLY -		
9-H	1		BEAM TUBE 1245 x 3.2	3806	
15-1	5		VACUUM STIFFENERS		
16-1	1		SUPPORT RING/BAFFLE STIFFENER HALF		
16-2	1		SUPPORT RING HALF		
			- BEAM ASSEMBLY -		
9-J	1		BEAM TUBE 1245 x 3.2	4618	
9-4	1		EXPANSION JOINT		
15-1	5		VACUUM STIFFENERS		
16-1	1		SUPPORT RING/BAFFLE STIFFENER HALF		
16-2	1		SUPPORT RING HALF		
			- BEAM ASSEMBLY -		
9-K	1		BEAM TUBE 1245 x 3.2	9806	
9-2	1		BEAM TUBE 1245 x 3.2	9806	
14-1	1		BAFFLE		
15-1	13		VACUUM STIFFENERS		
16-1	1		SUPPORT RING/BAFFLE STIFFENER HALF		
16-2	1		SUPPORT RING HALF		
			- BEAM ASSEMBLY -		
9-L	1		BEAM TUBE 1245 x 3.2	9806	
9-2	1		BEAM TUBE 1245 x 3.2	9806	
9-4	1		EXPANSION JOINT		
15-1	13		VACUUM STIFFENERS		
16-1	1		SUPPORT RING/BAFFLE STIFFENER HALF		
16-2	1		SUPPORT RING HALF		

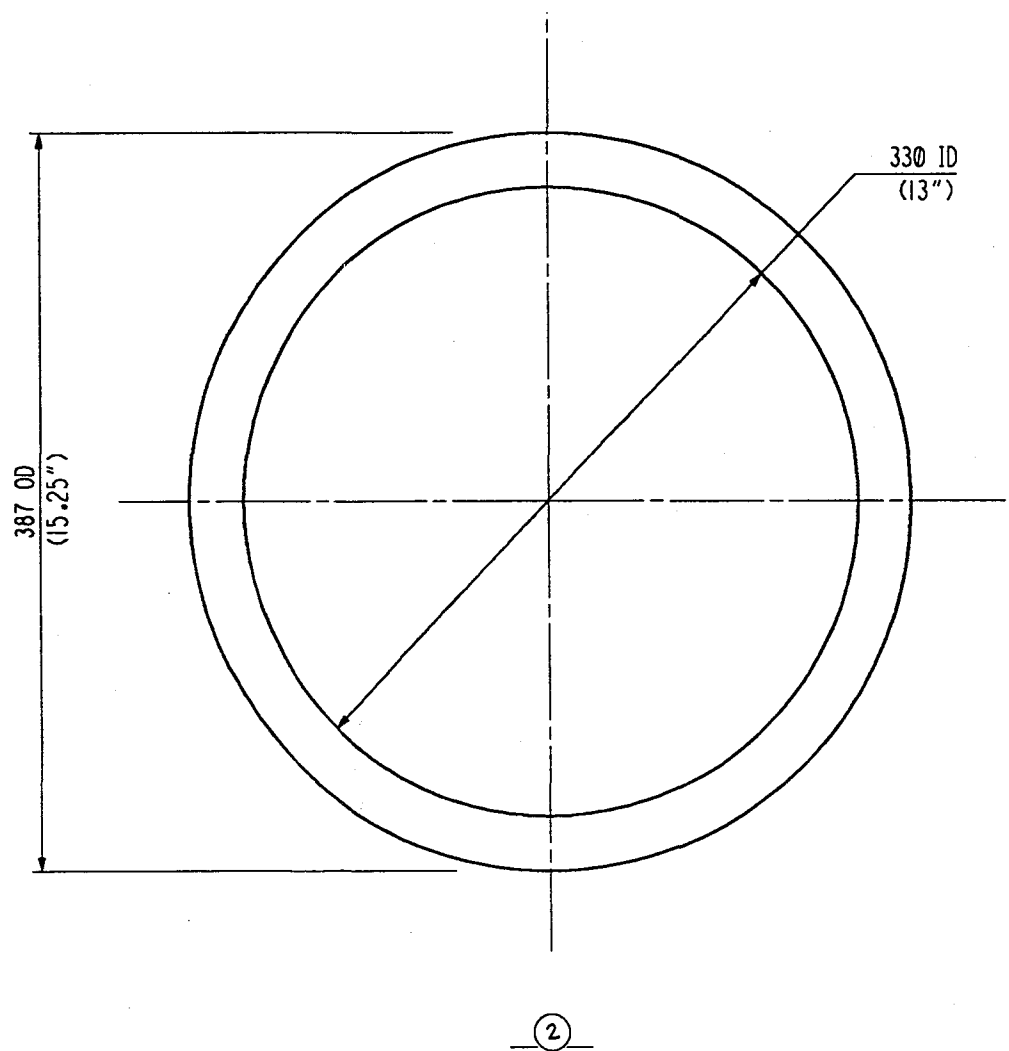
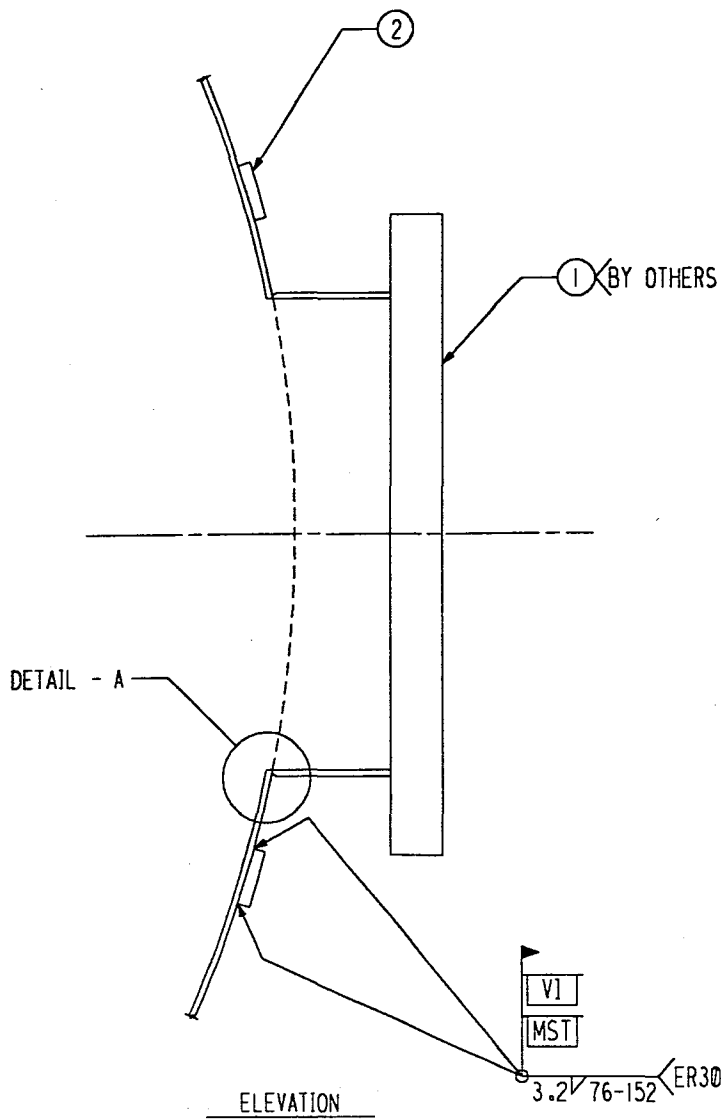
BY		CHKD		DATE		BY		CHKD		DATE		REVISIONS
CBI												SUPPLIER'S / PURCHASER'S NO
LIGO BEAM TUBE MODULES HANFORD, WA & LIVINGSTON, LA												
SUB-ASSEMBLIES (H) (J) (K) (L)												
CUSTOMER'S NO						CONTRACT NO						
BY KJR CHKD WJC DATE 4-4-94						930212						
D.E. Thom						DWS 9 REV						
ENGINEERING SUPERVISOR						SMT						
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INDICATES CHANGE FROM PREVIOUS ISSUE



PASS 1: AUTOGENOUS FROM INSIDE OF PORT
 PASS 2: AUTOGENOUS FROM OUTSIDE OF PORT
 PASS 3: ER308L FILLER METAL FROM OUTSIDE OF PORT

SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH MM	SPEC
PUMP PORTS					
56	13-1		CONFLAT FLANGE 13 1/4" OD		SA 240-304
			W/PIPE 254 OD x 3.05 THK	63	
			(10" OD x 0.12" THK)	(2.5")	
56	13-2		PL 387 OD x 6.35 x 330 ID		304 SS
			(15.25" OD x .25" x 13" ID)		



SHOP:

REFER TO FABRICATION SPECIFICATION FOR INSTRUCTIONS.

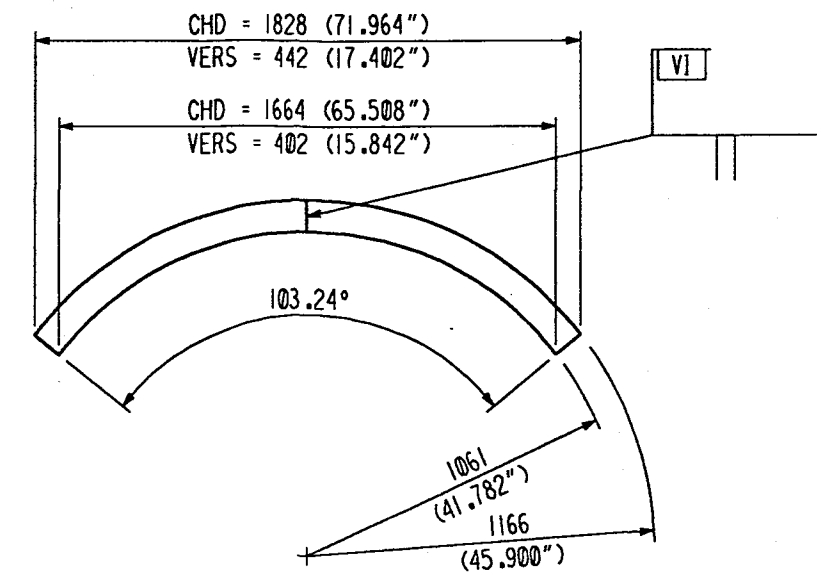
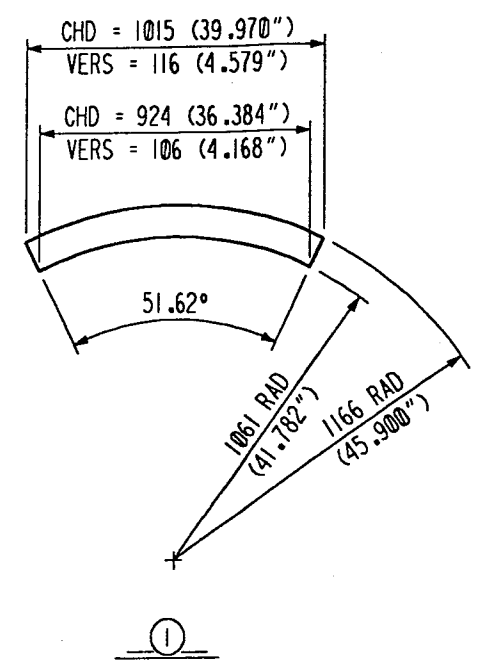
NOTES:

1. NOZZLE NECK MAY BE SUPPLIED BY THE FLANGE SUPPLIER.
2. PUMP PORTS TO BE INSTALLED ON THE HORIZONTAL C OF THE BEAM TUBE.
3. REFER TO GENERAL MODULE CONFIGURATION FOR LOCATION & ORIENTATION.
4. VISUAL INSPECTION REQ'D BEFORE WELDING OUTSIDE.

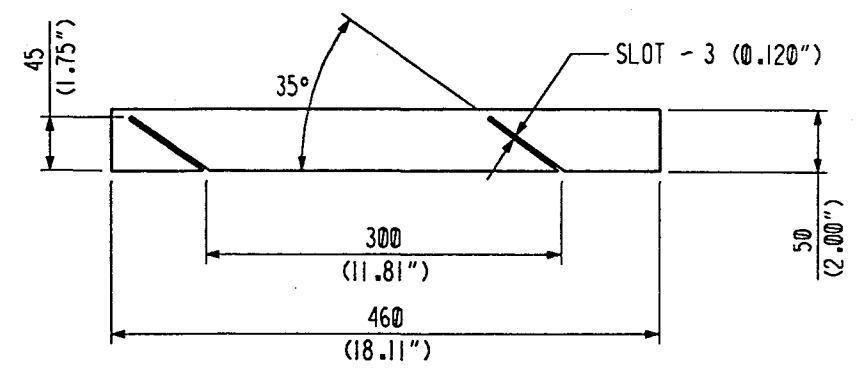
CBI		SUPPLIER'S / PURCHASER'S NO	
PUMP PORTS			
LIGO BEAM TUBE HANFORD, WA & LIVINGSTON, LA			
CUSTOMER'S NO		CONTRACT NO	
BY <u>KJR</u> CHKD <u>WJC</u> DATE <u>4-4-94</u>		DWG 13	
D.E. THOMAS ENGINEERING SUPERVISOR		REV 0	
REVISIONS		REMARKS	
BY	DATE	REMARKS	

INDICATES CHANGE FROM PREVIOUS ISSUE

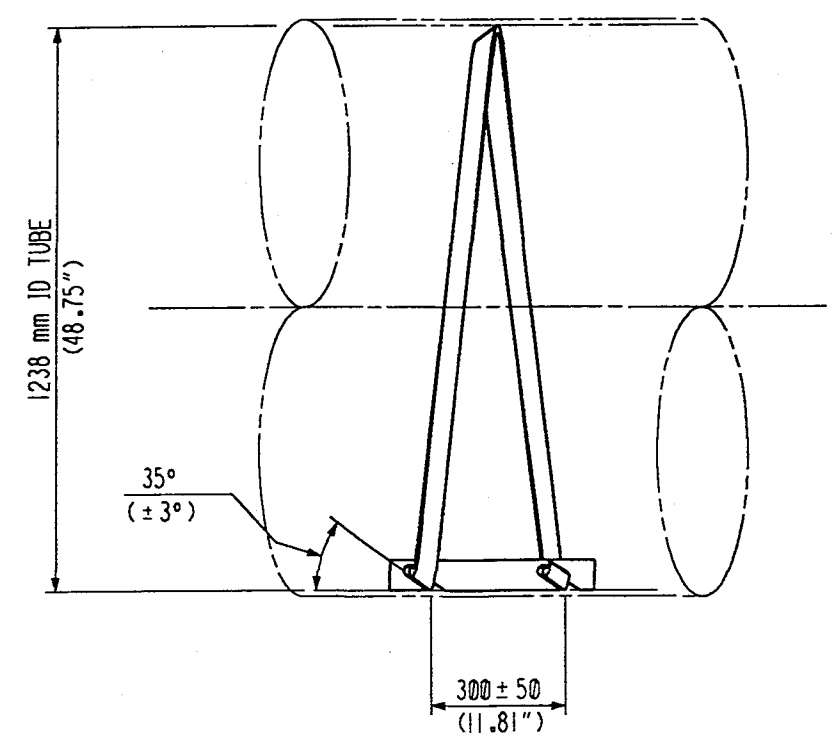
SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH MM	SPEC
932	14-A		- BAFFLE ASSEMBLY -		
	14-1	3728	PL SK x 3.05 (Ø.12")		A240 TP304
932	14-2		PL 50 X W/SLOTS	460	



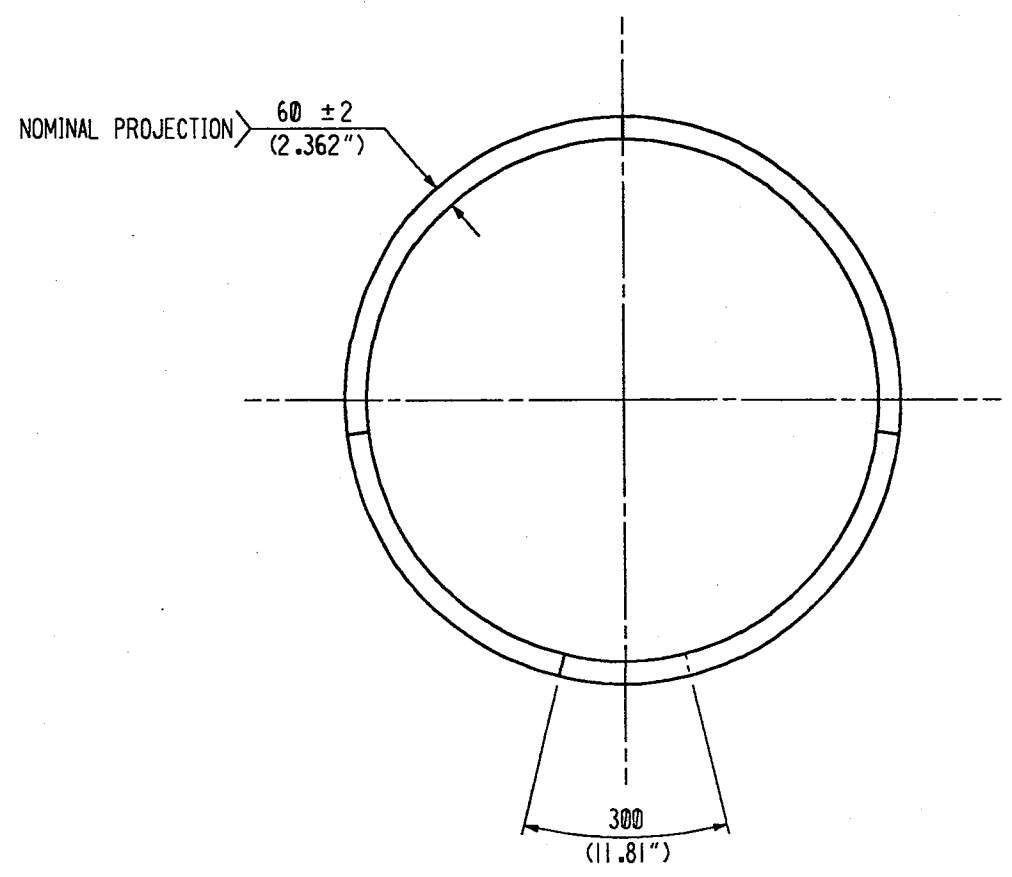
INTERMEDIATE ASSEMBLY
(2 - PC ①)



②



ELEVATION



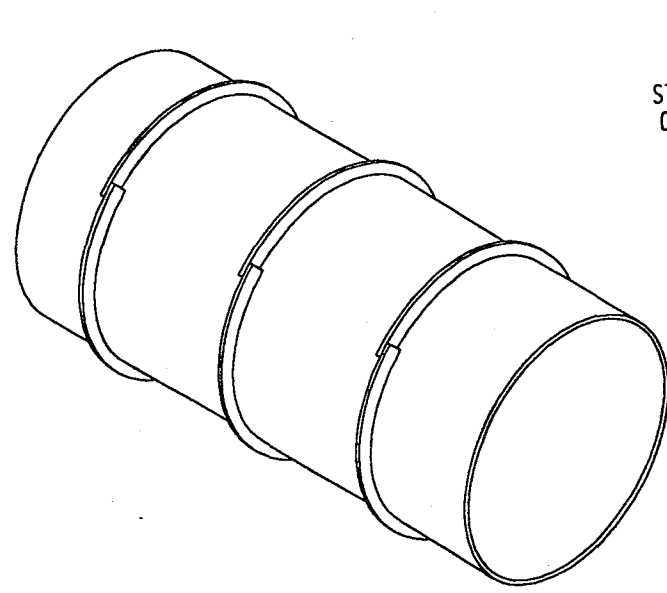
TYP BAFFLE (A)
AFTER ROLLING

SHOP:
REFER TO FABRICATION SPECIFICATION FOR INSTRUCTIONS.

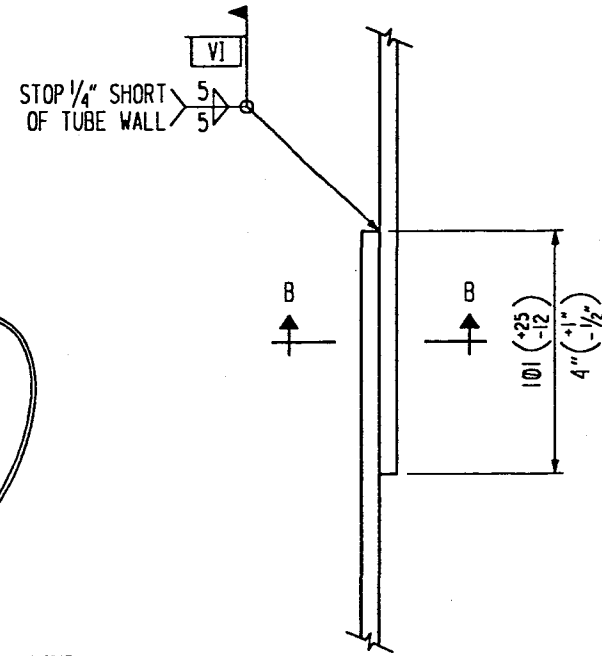
REVISIONS		REMARKS		CBI		SUPPLIER'S / PURCHASER'S NO	
						BAFFLES	
BY: _____ DATE: _____		BY: _____ DATE: _____		CUSTOMER'S NO		CONTRACT NO	
				BY: KJR CHKD WJC DATE 4-4-94		930212	
BY: _____ DATE: _____		BY: _____ DATE: _____		D.E. Thern		Dwg 14	
				ENGINEERING SUPERVISOR		REV 2	
BY: _____ DATE: _____		BY: _____ DATE: _____		SHT		SHT	
				SHT		SHT	
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INDICATES CHANGE FROM PREVIOUS ISSUE

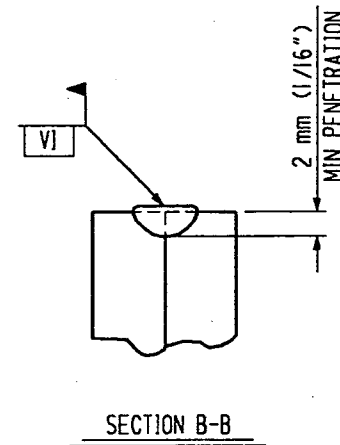
PC	MARK	PC	DESCRIPTION	MM	SPEC
			VACUUM STIFFENERS		
19552	15-1		BAR 44 x 5	ROLL	4102
			(1 3/4 x 3/16 x 13'-5 1/2)		A240-304L



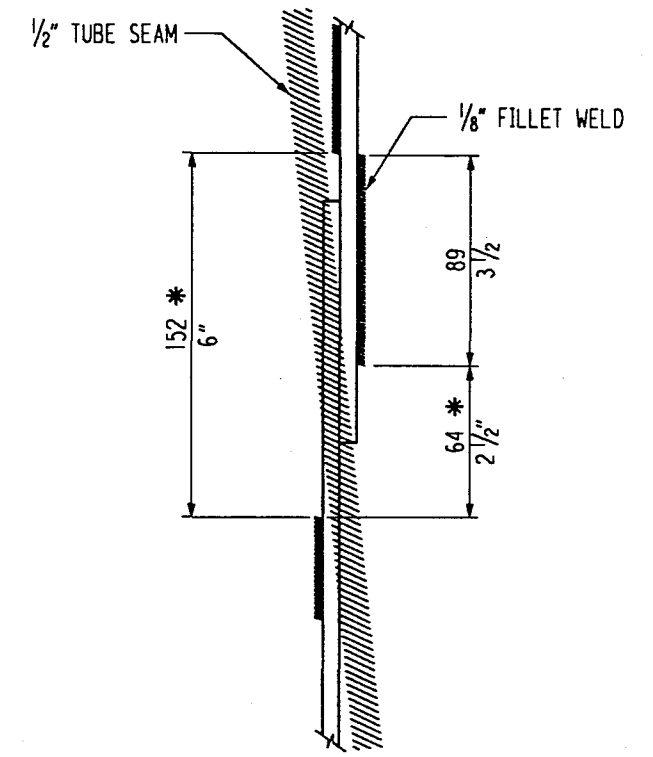
TYP STIFFENER LAYOUT
SEE SUB-MODULE DRAWINGS (# 2 & 3) FOR EXACT SPACING



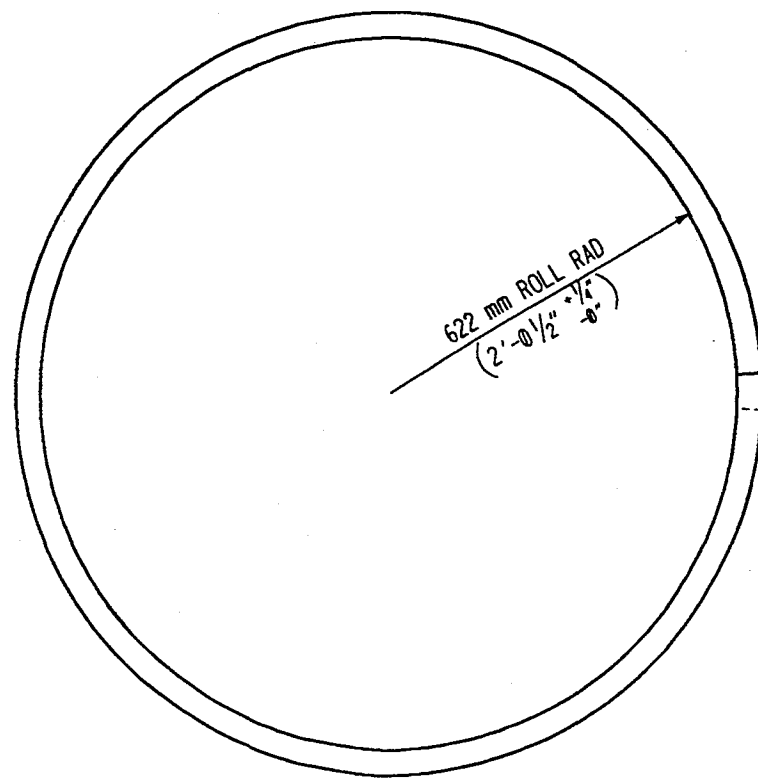
DETAIL - A
TYP LAP WELD



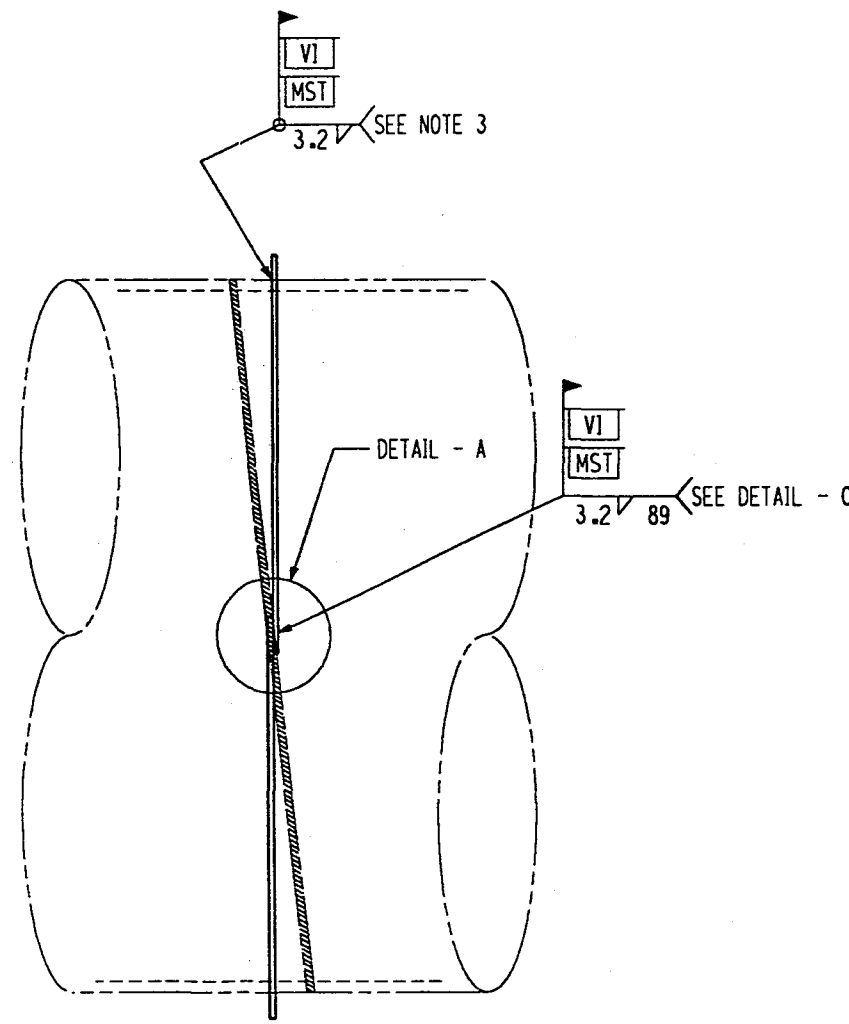
SECTION B-B



DETAIL - C
FILLET WELD GAP



VACUUM STIFFENER ①



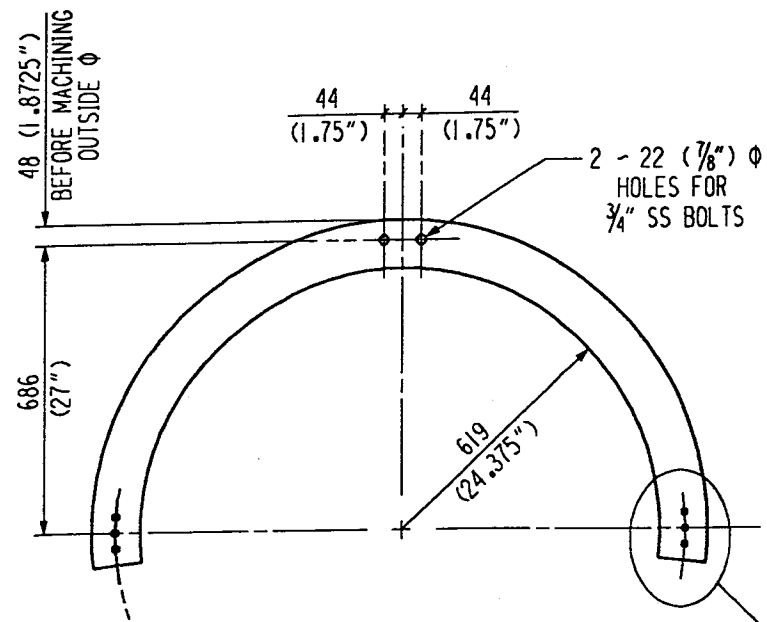
NOTES:

1. STIFFENERS TO BE A SINGLE CONTINUOUS PIECE FORMED BY ROLLING 3/16" X 1 3/4" FLATS; ONLY THE ENDS OF THE STIFFENER TO BE CUT EDGES.
 2. STIFFENERS ARE TO BE INSTALLED BY EXPANDING OVER THE TUBE AND RELEASING INTO PLACE WITH A TIGHT FIT AROUND THE TUBE.
 3. DISCONTINUE FILLET WELD WHERE STIFFENER CROSSES TUBE SPIRAL WELD. SEE DETAIL - C.
- * UNWELDED AREA BE MAY DECREASE BY LOCATING SPLICE CAREFULLY WITH LAP ON RIGHT SIDE.

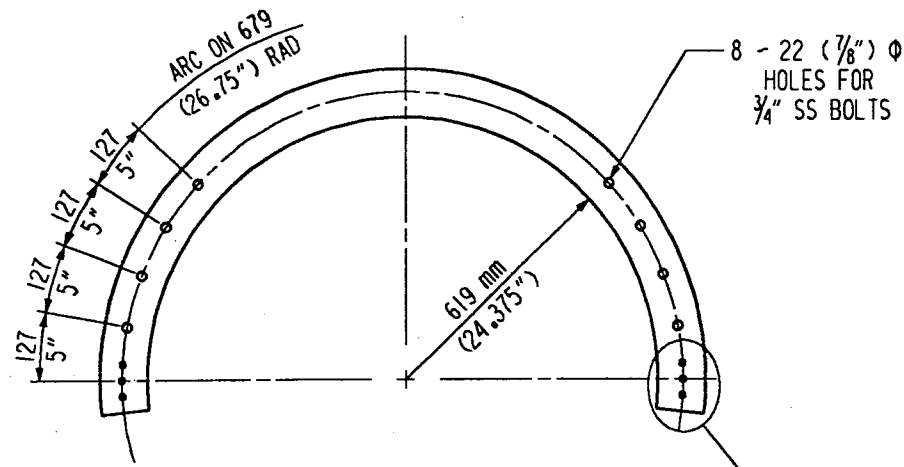
		CBI		SUPPLIER'S / PURCHASER'S NO	
		VACUUM STIFFENER			
		LIGO BEAM TUBE HANFORD, WA & LIVINGSTON, LA			
		CUSTOMER'S NO		CONTRACT NO	
		BY KJR CHKD WJC DATE 4-4-94		930212	
		D.E. Thom		DWG IS	REV
		ENGINEERING SUPERVISOR		SHT	0
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3212A015

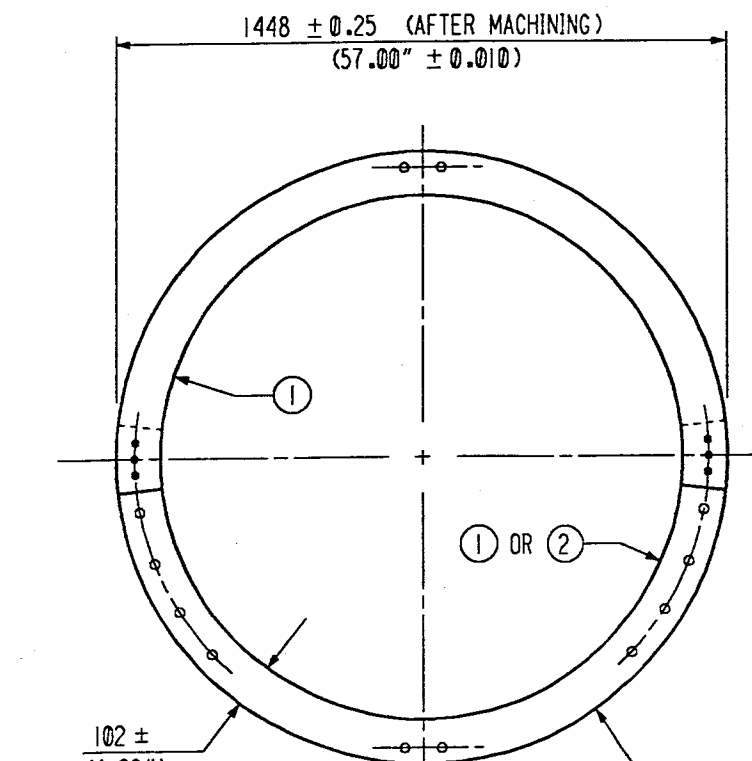
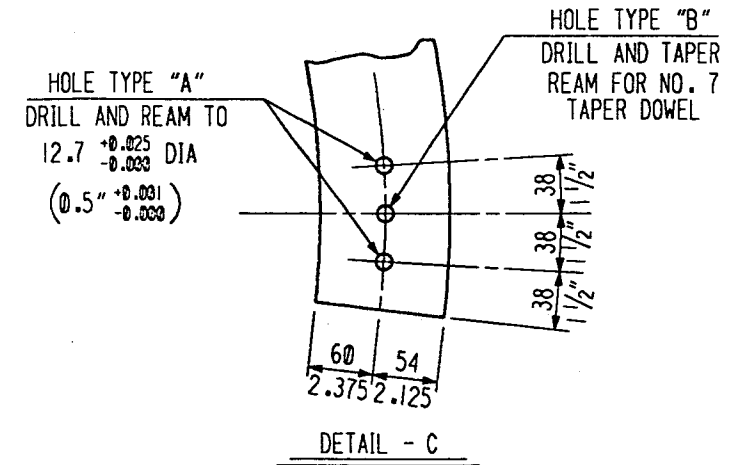


SUPPORT RING/BAFFLE STIFFENER ①

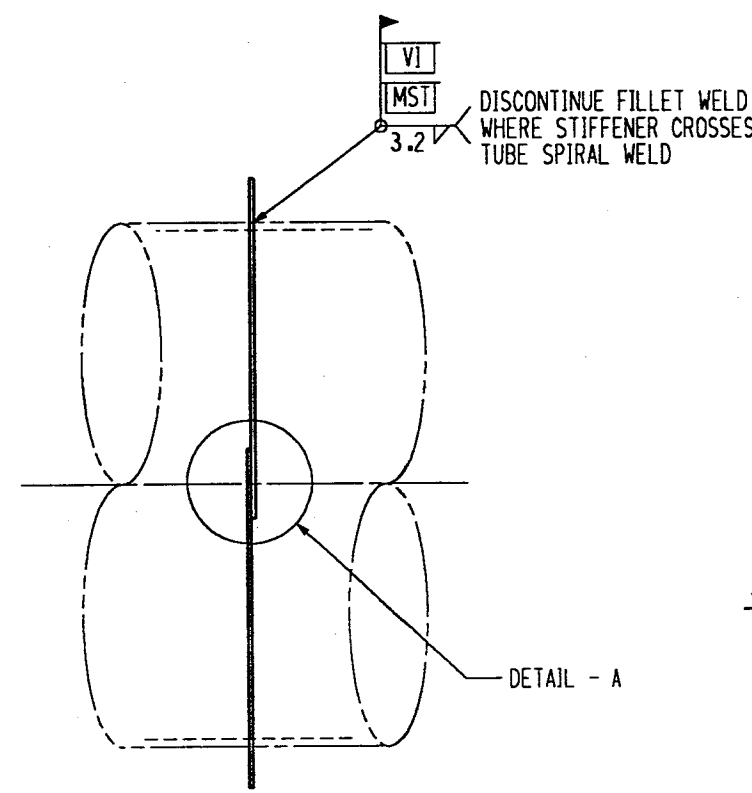


SUPPORT RING ②

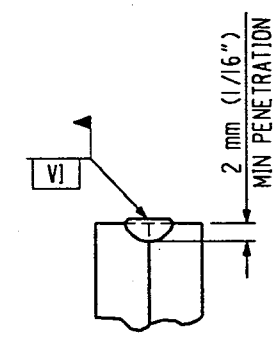
PC	MM	PC	DESCRIPTION	MM	SPEC
1968	16-1		BAR 114 x 9.5 ROLL FIN (4 1/2 x 3/8 x 7'-5 5/8)	2277	A240-304L
800	16-2		BAR 114 x 9.5 ROLL FIN (4 1/2 x 3/8 x 7'-5 5/8)	2277	A240-304L
5536	16-3		SHOULDER BOLT 1/2" DIA SOCKET HD WITH NUT 5/8" SHOULDER LENGTH 3/8" - 16 UNC-3A THD		
2768	16-4		BOLT 3/8" - 16 UNC-2A W/NUT	38	(1 1/2")
2768	16-5		NO. 7 TAPER DOWEL PIN	152	



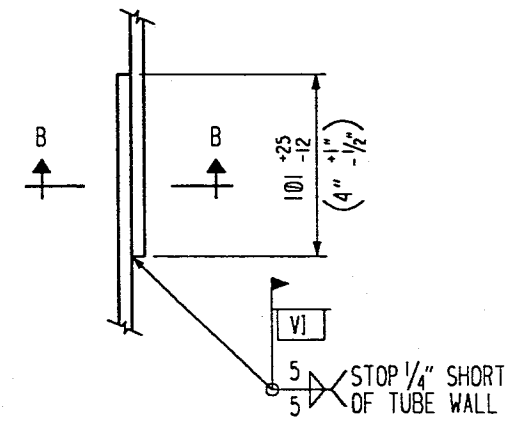
BOLTED ASSEMBLY (TYP)



DETAIL - A



SECTION B-B



DETAIL - A TYP LAP WELD

SHOP:

REFER TO FABRICATION SPECIFICATION FOR INSTRUCTIONS.

FIELD

1. MEASURE THE CIRCUMFERENCE OF THE TUBE WHERE THE STIFFENER SUPPORT WILL BE PLACED. CALCULATE THE OD OF THE TUBE.
2. MACHINE THE SUPPORT RING ID TO THE EXACT OD OF THE TUBE WHERE IT WILL BE ATTACHED.
3. REMOVE BOLTS AFTER ALL MACHINING IS FINISHED. FIT SUPPORT AROUND BEAM TUBE, USING A NO. 7 DOWEL PIN TO LOCATE THE HOLE CENTERS.
4. USE CARE TO MAKE SURE EACH SUPPORT IS FITTED TO THE PLACE IT WAS MACHINED FOR.
5. WELD THE SUPPORT TO THE TUBE. REMOVE ALL FASTENERS AFTER WELDING.

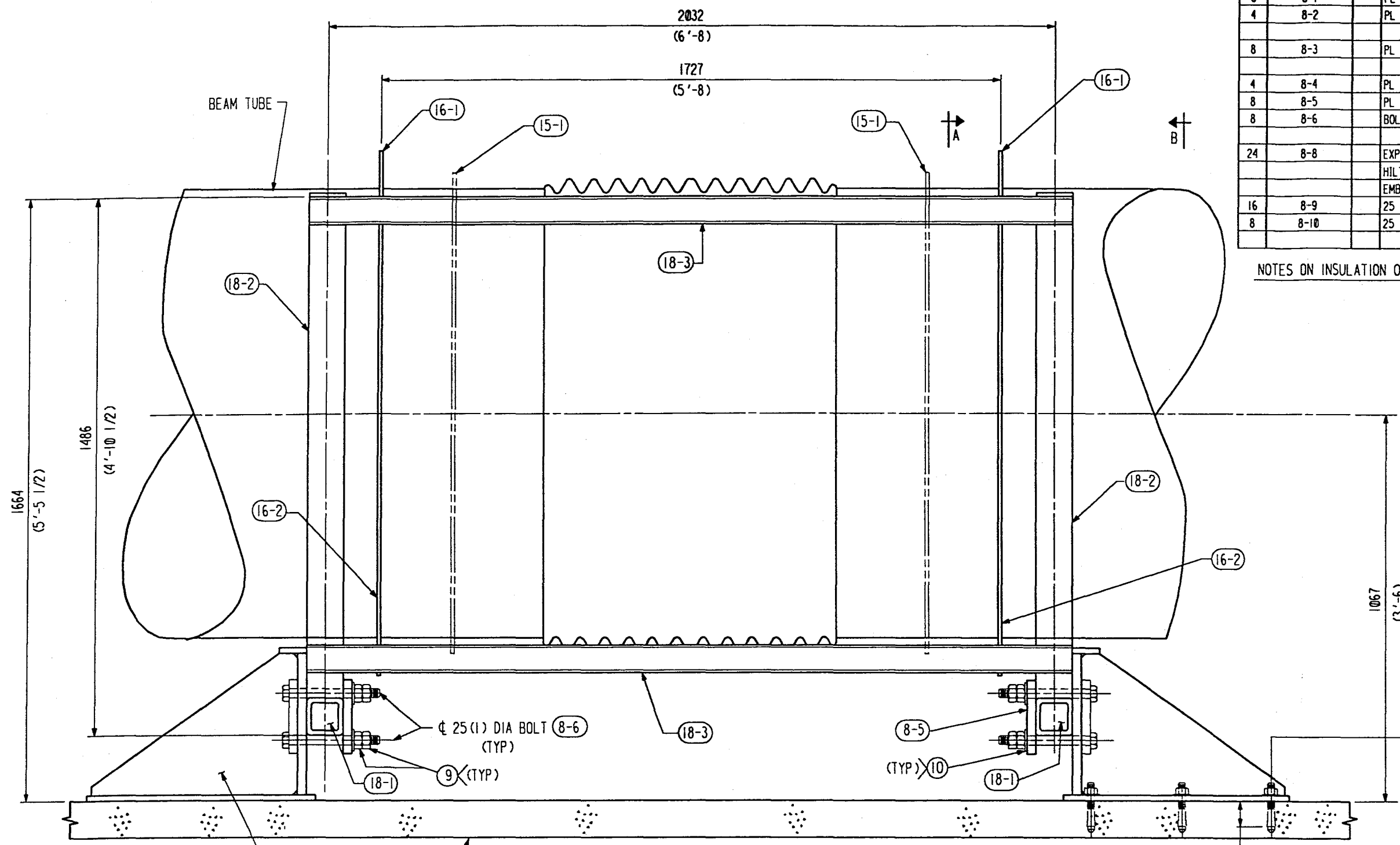
CBI		SUPPLIER'S / PURCHASER'S NO	
SUPPORT RING / BAFFLE STIFFENER			
LIGO BEAM TUBE			
HANFORD, WA & LIVINGSTON, LA			
CUSTOMER'S NO		CONTRACT NO	
BY K.R. CHKD WJC DATE 4-4-94		930212	
D.E. IYER		DWG 16	REV 0
ENGINEERING SUPERVISOR		SHT	0
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INDICATES CHANGE FROM PREVIOUS ISSUE

SHIP PC	MARK	ASSEM PC	DESCRIPTION	LENGTH MM	SPEC
8	8-1		PL SK X 15 (5/8") THK		A36
4	8-2		PL 279 X 15 THK (11 X 5/8) W/HOLES	635	A36
				(2'-1)	
8	8-3		PL 63 X 25 THK (2 1/2 X 1)	390	A36
				1'-3 3/8	
4	8-4		PL 76 X 15 (3 X 5/8)	152 (6)	A36
8	8-5		PL 76 X 25 THK (3 X 1) W/HOLES	203 (8)	A36
8	8-6		BOLT 25 (1) DIA HVT HEX W/HEX NUTS	267	A307
				(10 1/2)	
24	8-8		EXPANSION ANCHORS 15 (5/8) DIA	120	CS
			HILTI KB11 58-434 W/70 (2 3/4)	(4 3/4)	
			EMBEDMENT DEPTH OR EQ.		
16	8-9		25 (1) HVT HEX NUT		A307
8	8-10		25 (1) WASHER		CS

NOTES ON INSULATION OF BEAM TUBE

- THE BEAM TUBE MUST BE FULLY COVERED BY AT LEAST 4 INCHES OF INSULATION HAVING THERMAL CONDUCTIVITY, K, AT 284°F LESS THAN OR EQUAL TO 0.54 BTU IN/HR FT² °F, FOR AT LEAST 36 INCHES ON EITHER SIDE OF SUPPORT RING (16-1)



SUPPORT LUG ASSEMBLY
W/BOLTING ASSEMBLY
(SEE DWG #008 FOR DETAILS)
(SEE THIS DWG #017 FOR BILLING)
(TYP)

CONCRETE SLAB FOUNDATION
(BY OTHERS)

ELEVATION

NOTES

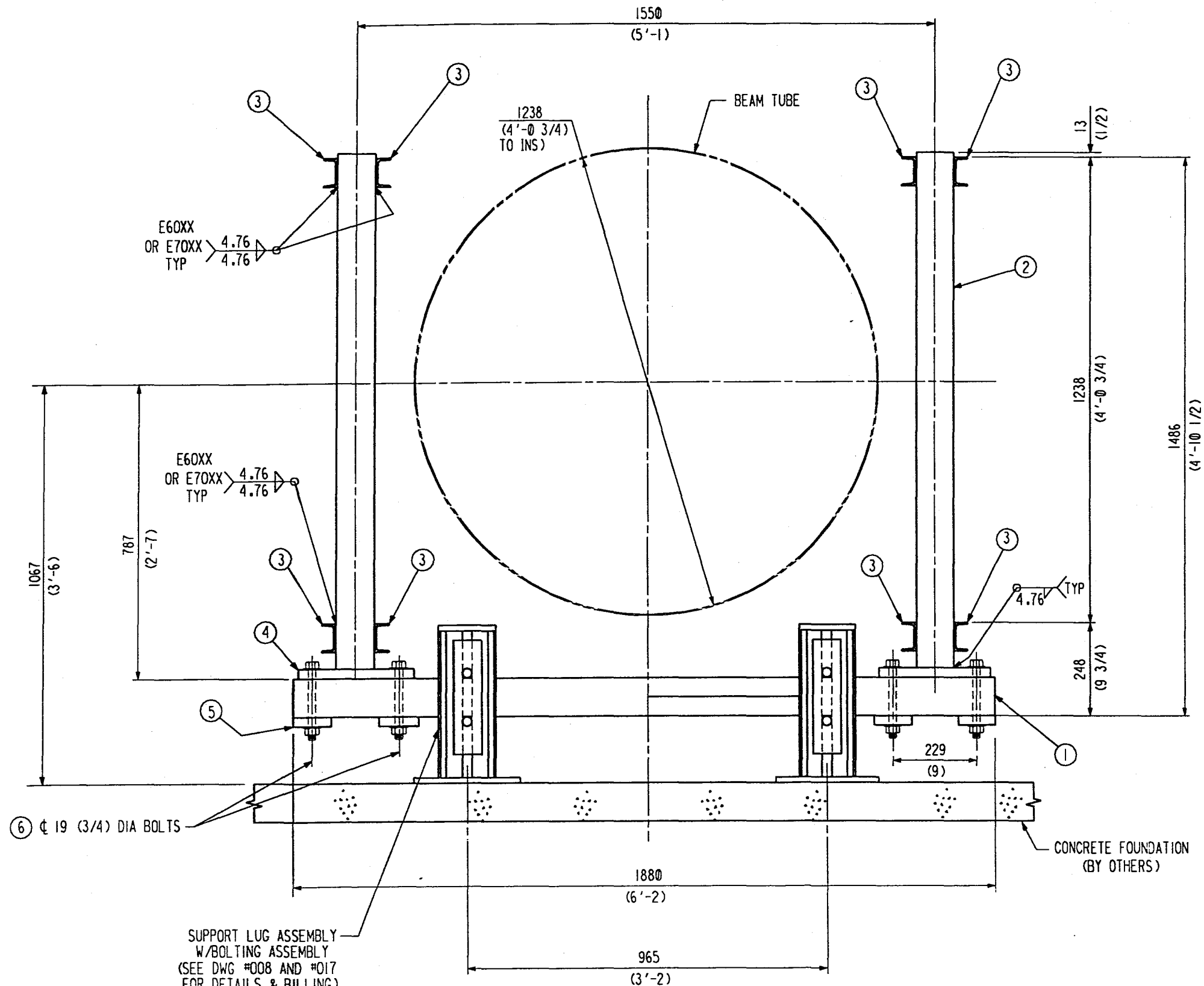
- WORK THIS DWG WITH DWG #008, #018 AND #019.
- BILLED FOR ONE (1) FIXED SUPPORT. TOTAL OF 400 GUIDED SUPPORTS REQD.
- ALL CARBON STEEL MEMBERS TO BE GALVANIZED.

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Ø 15 (5/8) DIA EXPANSION ANCHORS. HILTI KB 11 58-434 (SEE DWG #008 FOR DETAILS) (SEE THIS DWG #017 FOR BILLING) (TYP)

REVISIONS		REMARKS		CBI		SUPPLIER'S / PURCHASER'S NO	
						ELEVATION	
BEAM TUBE GUIDED SUPPORT LUG				HANFORD, WA AND LIVINGSTON, LA.			
CUSTOMER'S NO		CONTRACT NO		BY		DATE	
BY WAW		930212		D.E. THONN		4-4-94	
ENGINEERING SUPERVISOR		DWG 017		REV		SHT	
						0	
THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.							

110121017



SHIP PC	MARK	ASSEM PC	DESCRIPTION	LENGTH MM	SPEC
2	18-1		TUBULAR STEEL 102 X 102 X 10 (4 X 4 X 3/8 W/HOLES	1880	A500 Gr-B
				6'-2	
4	18-2		TUBULAR STEEL 102 X 102 X 10 (4 X 4 X 3/8	1372	A500 Gr-B
				4'-6	
8	18-3		C 3 X 4.1 PBE	2134	A36
				(7'-0)	
4	18-4		PL 102 X 25 (4 X 1) W/HOLES	305	A36
				(1'-0)	
8	18-5		PL 102 X 25 (4 X 1) W/HOLES	102	A36
				(0'-4)	
8	18-6		BOLTS 19 (3/4) DIA HYV HEX W/HEX NUT AND WASHERS	203	A307
				(0'-8)	

NOTES

1. WORK THIS DWG WITH DWG #008, #017 AND #019.
2. BILLED FOR ONE (1) FIXED SUPPORT. TOTAL OF 400 GUIDED SUPPORTS REQD.
3. ALL CARBON STEEL MEMBERS TO BE GALVANIZED.

SECTION B-B
 (FROM DWG #017)
 (SECTIONS NOT SHOWN FOR CLARITY)

		SUPPLIER'S / PURCHASER'S NO	
		SECTION DETAILS	
BEAM TUBE GUIDED SUPPORT		LIGO	
HANFORD, WA. AND LIVINGSTON, LA.		CUSTOMER'S NO	
BY WAW DKO WJC DATE 4-4-94		CONTRACT NO 930212	
D.E. THORN		DWG 018	REV 0
ENG'NEER NG SUPERVISOR		SHT	0
<small>THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.</small>			

INDICATES CHANGE FROM PREVIOUS ISSUE



CONSTRUCTION SERVICES DEPT. PRINT ORDER AND TRANSMITTAL

PRINTS															
CHG CONTRACT FILE	CHG/CAD	TIM MURPHY	CHG CAD OPERATOR	CBICL HOU / KEN FLESSAS	PLAINFIELD / MARTY TELLALIAN	MWG / BOB GRIMSLEY-RICK PRIOR	MWG / CHUCK SHERLOK	CHG / JLR/ DKL / RDS						CUSTOMER / CALTECH	TOTAL PRINTS

DRAWING NO.	REVISION NO.
-------------	--------------

ER-3	4														4	12
ER-4	3														4	12
ER-5	0														4	12
ER-7	0														4	12
ER-14	0														4	12
ER-15	0														4	12
ER-16	0														4	12
ER-20	3														4	12
ER-21	1	-	-	-	-	-	-	-							4	4
ER-22	1														4	12
ER-23	0	-	-	-	-	-	-	-							4	4
ER-24	1														4	12
ER-25	0	-	-	-	-	-	-	-							4	4
ER-26	0	-	-	-	-	-	-	-							4	4
ER-27	0	-	-	-	-	-	-	-							4	4

REMARKS:

PURPOSE OF PRINTING

- REVISION
- PRELIMINARY
- CUSTOMER FOR APPROVAL
- CUSTOMER FINAL
- RELEASED FOR FABRICATION
- OTHER _____

MADE BY: B.S. AYZENSHTAT

DATE: 4-7-94

JOB DESCRIPTION: LIGO PROJECT

JOB LOCATION: HANFORD, WASHINGTON

9 3 0 2 1 2 ER

CONTRACT NUMBER



CONSTRUCTION SERVICES DEPT.
PRINT ORDER AND TRANSMITTAL

PRINTS															
CHG CONTRACT FILE	CHG/CAD	CHG CAD OPERATOR	CBICL HOU / KEN FLESSAS	PLAINFIELD / MARTY TELLALIAN	MWG / BOB GRIMSLEY-RICK PRIOR	MWG / CHUCK SHERLOK	CHG / JLR/ DKL / RDS							CUSTOMER / CALTECH	TOTAL PRINTS

DRAWING NO.	REVISION NO.
-------------	--------------

DRAWING NO.	REVISION NO.	CHG CONTRACT FILE	CHG/CAD	CHG CAD OPERATOR	CBICL HOU / KEN FLESSAS	PLAINFIELD / MARTY TELLALIAN	MWG / BOB GRIMSLEY-RICK PRIOR	MWG / CHUCK SHERLOK	CHG / JLR/ DKL / RDS										CUSTOMER / CALTECH	TOTAL PRINTS
ER-62	1																		4	12
ER-63	1																		4	12
ER-64	1																		4	12
ER-65	1																		4	12
ER-66	1																		4	12
ER-67	1																		4	12
ER-68	1																		4	12
ER-69	1																		4	12
ER-70	1																		4	12
ER-71	1																		4	12
ER-72	1																		4	12
ER-73	1																		4	12
ER-74	1																		4	12
ER-75	1																		4	12
ER-76	1																		4	12

REMARKS:

PURPOSE OF PRINTING

- REVISION
- PRELIMINARY
- CUSTOMER FOR APPROVAL
- CUSTOMER FINAL
- RELEASED FOR FABRICATION
- OTHER _____

MADE BY: B.S. AYZENSHTAT DATE: 4-7-94

JOB DESCRIPTION: LIGO PROJECT

JOB LOCATION: HANFORD, WASHINGTON

9 3 0 2 1 2 ER



CONSTRUCTION SERVICES DEPT.
PRINT ORDER AND TRANSMITTAL

PRINTS															
CHG CONTRACT FILE	CHG/CAD	CHG CAD OPERATOR	CBICL HOU / KEN FLESSAS	PLAINFIELD / MARTY TELLALIAN	MWG / BOB GRIMSLEY-RICK PRIOR	MWG / CHUCK SHERLOK	CHG / JLR/ DKL / RDS							CUSTOMER / CALTECH	TOTAL PRINTS

DRAWING NO.	REVISION NO.
-------------	--------------

ER-77	1														4	12
ER-96	0														4	12
ER-110	1														4	12
ER-111	0	-	-	-	-	-	-	-							4	4
ER-112	0	-	-	-	-	-	-	-							4	4
ER-113	0	-	-	-	-	-	-	-							4	4
ER-114	1														4	12
ER-115	1														4	12
ER-116	1														4	12
ER-123	1														4	12
ER-124	0	-	-	-	-	-	-	-							4	4
ER-125	1														4	12
ER-126	0	-	-	-	-	-	-	-							4	4
ER-133	1														4	12
ER-134	1														4	12

REMARKS:

PURPOSE OF PRINTING

- REVISION
- PRELIMINARY
- CUSTOMER FOR APPROVAL
- CUSTOMER FINAL
- RELEASED FOR FABRICATION
- OTHER _____

MADE BY: B.S. AYZENSHTAT

DATE: 4-7-94

JOB DESCRIPTION: LIGO PROJECT

JOB LOCATION: HANFORD, WASHINGTON

9 3 0 2 1 2 ER

CONTRACT NUMBER

CBI	DRAWING SUMMARY SHEET	LIST OF BILLS AND MISCELLANEOUS
STRUCTURE <u>LIGO PROJECT</u>	SUPPLIER INSPECTION BY _____	SUMMARY SHEETS ("0"-SHT)
CUSTOMER <u>CALTECH</u>	SHOP INSP BY _____	FINAL BILLS
LOCATION <u>HANFORD, WASHINGTON</u>	FIELD INSP BY _____	"W" SHTS
	SANDBLAST: SHOP _____ FIELD _____	STDS
	PICKLE PAINT: SHOP _____ FIELD _____	
	(SEE "P" SHEETS)	
WEIGHT SUMMARY FROM _____ ESTIMATED WEIGHT _____ DIRECTS _____ TOTAL ↑ _____		

REMARKS:

DRAWINGS COMPLETE YES NO

FINAL BILLS COMPLETE YES NO

BILLS	DWG NUMBER	REV	DESCRIPTION	SHEET
	ER-3	4	HANFORD SITE LAYOUT; HOR. TUBE CONSTR.	CONTRACT NO. 930212ER
	ER-4	3	HANFORD BUILDING LAYOUT	
	ER-5	0	FAB SHOP CROSS SECTION	ENG COORDINATOR JLR
	ER-7	1	HANFORD SITE; POWER DISTRIBUTION	
	ER-14	0	CROSS SECTION OF TRUCK LOADING	CHECKED BY _____ DATE _____
	ER-15	0	ELEVATION OF TRUCK LOADING	
	ER-16	0	TRANSPORT AND HANDLING FRAME	MADE BY BSA DATE 4-6-94
	ER-20	3	EXTERNAL STIFFENER FIT UP SEQUENCE	
	ER-21	1	ROUNDING JIG/PIPE SUPPORT	CONST ASSIGNED NSS
	ER-22	1	RANGE OF OPERATION FOR ROUNDING JIG SUPP.	
	ER-23	0	LOWER SUPPORT ASSEMBLY	MFG ASSIGNED KKK
	ER-24	1	PLAN VIEW OF ACTUATOR LAYOUT	
	ER-25	0	ANTI-SWAY GUIDES	ENG ASSIGNED CHG
	ER-26	0	UPPER SECTION OF ROUND-OUT RING	
	ER-27	0	ROLLER DETAILS	NO. _____
	ER-44	0	INFLATABLE PURGE RING	
	ER-45	2	FIT UP CLAMP	DATE _____
	ER-46	2	FIT UP CLAMP DETAILS	
	ER-50	0	LEAK TEST STATION; ISOMETRIC VIEW	MADE BY _____
	ER-51	3	HELIUM HOOD; LEAK TEST STATION	
	ER-52	1	SPEC. HOOD TEST ENCLOSURE; TOP SECTION	CHKD BY _____
	ER-53	1	SPEC. HOOD TEST ENCLOSURE; BOTTOM SECTION	
	ER-54	1	ST. HOOD TEST ENCLOSURE; TOP SECTION	DATE _____
	ER-55	1	ST. HOOD TEST ENCLOSURE; BOTTOM SECTION	
	ER-56	1	HOOD TEST ENCLOSURE; HELIUM HOOD DETAILS	CONTINUE ON "0-1" SHEET
	ER-57	3	SADDLE AND HINGE; HELIUM HOOD	
	ER-58	3	SADDLE AND HINGE DETAILS	
	ER-59	1	HELIUM HOOD ENCLOSURE EQUIPMENT	
	ER-60	1	VACUUM PUMP END SEAL	
	ER-61	1	VACUUM PUMP END SEAL ASSY	
	ER-62	1	VACUUM PUMP END SEAL; CARRIAGE SUBASSY	
	ER-63	1	VAC. PUMP END SEAL; ROLLING BASE SUBASSY	
	ER-64	1	VACUUM PUMP END SEAL; END CAP SUBASSY	
	ER-65	1	VAC. PUMP END SEAL; LIFTING FRAME SUBASSY	
	ER-66	1	MECHANICAL VACUUM PUMP LINE SUBASSY	
	ER-67	1	DIFFUSION PUMP LINE SUBASSY	
	ER-68	1	CROSS-OVER LINE SUBASSY	
	ER-69	1	INTERSPACE VAC. PUMP LINE SUBASSY	

GBI LIST OF DRAWINGS AND BILLS CONTINUED FROM "0" SHEET (DRAWING SUMMARY SHEET)

BILLS	DWG NUMBER	REV	DESCRIPTION	BILLS	DWG NUMBER	REV	DESCRIPTION
	ER-70	I	COLD TRAP END SEAL				
	ER-71	I	COLD TRAP END SEAL ASSY				
	ER-72	I	COLD TRAP END SEAL ; CARRIAGE SUBASSY				
	ER-73	I	COLD TRAP END SEAL ; ROLLING BASE SUBASSY				
	ER-74	I	COLD TRAP END SEAL ; END CAP SUBASSY				
	ER-75	I	COLD TRAP END SEAL ; LIFTING FRAME SUBASSY				
	ER-76	I	COLD TRAP END SEAL ; COLD TRAP LINE SUBASSY				
	ER-77	I	COLD TRAP END SEAL ; COLD TRAP EVAC. LINE SUBASSY				
	ER-96	0	PROTECTIVE END CAP				
	ER-110	I	WELD STATION SHELTER ; ISOMETRIC VEIW				
	ER-111	0	WELD STATION SHELTER ; FRAME "A" ASSY				
	ER-112	0	WELD STATION SHELTER ; BLIND AND DOOR END ASSY				
	ER-113	0	WELD STATION SHELTER ; ROOF AND SIDE WALLS				
	ER-114	I	WELD STATION SHELTER ; WHEEL ATTACHMENT				
	ER-115	I	WELD STATION SHELTER ; GAS CYLINDER BASKET				
	ER-116	I	WELD STATION SHELTER ; SIDE AND BOTTOM CLOSURE				
	ER-123	0	HELIUM MASS SPECTROMETR TEST ARRANGEMENT				
	ER-124	0	CIRCUFERENTIAL JOINT LEAK TEST BOX				
	ER-125	I	VACUUM PORT LEAK TEST BOX				
	ER-126	0	PIECES VACUUM PORT LEAK TEST BOX				
	ER-133	I	FIT-UP WELDING AND LEAK TESTING CONFIGURATIONS AT FIXED SUPP.				
	ER-134	I	FIT-UP WELDING AND LEAK TESTING CONFIGURATIONS AT GUIDE SUPP.				
	ER-140	0	ELEVATION VEIW OF TUBE INSTALLATION				
	ER-141	I	PLAN VIEW OF TUBE INSTALLATION				

NO.	MADE BY	DATE	ENG ASSIGNED	MFG ASSIGNED	CONST ASSIGNED	MADE BY	CHECKED BY	ENG COORDINATOR	CONTRACT NO.	SHEET
	CHKD BY					BSA				
						DATE 4-6-94				

CHG

KKK

NSS

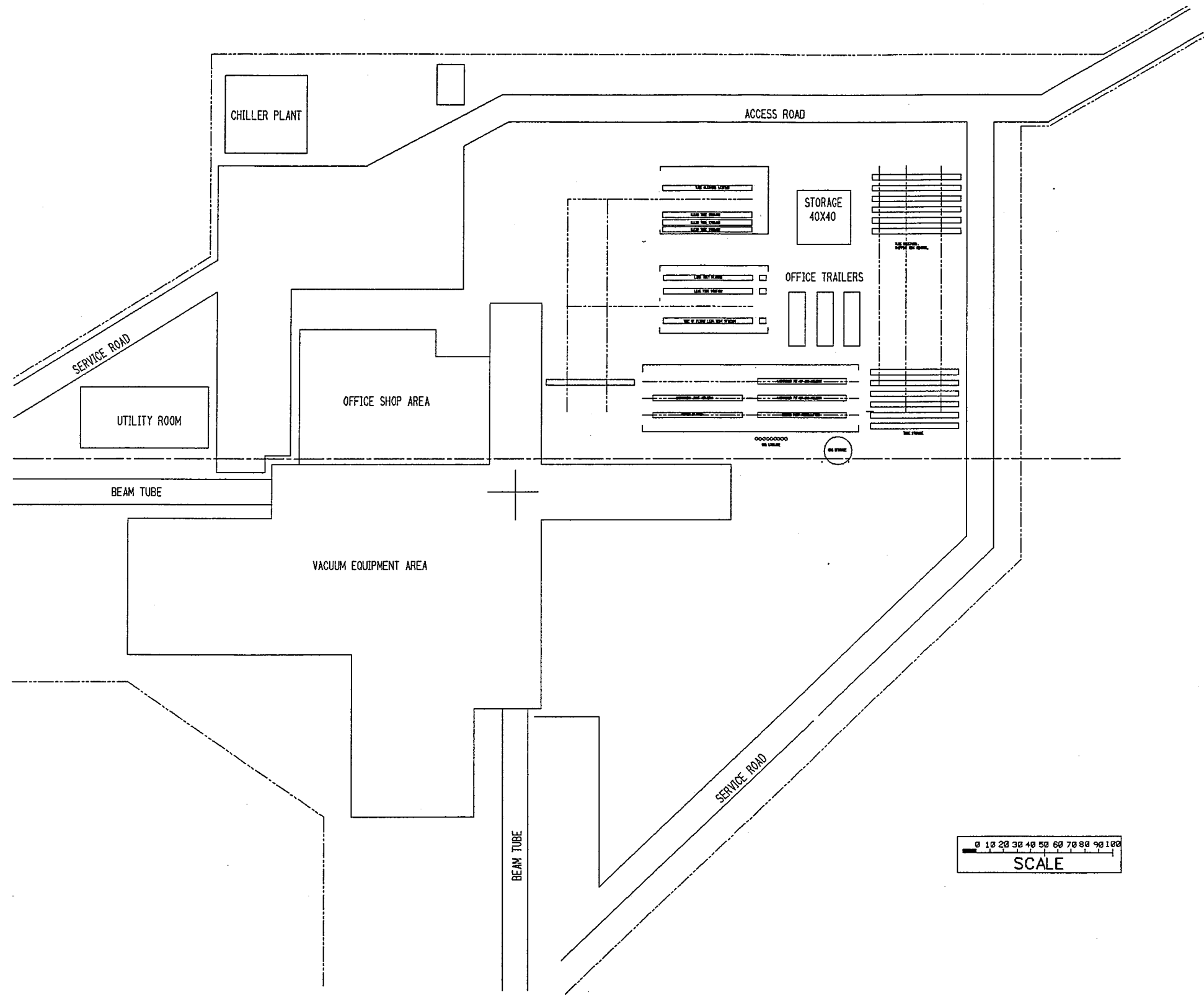
DATE 4-6-94

DATE

JLR

930212ER

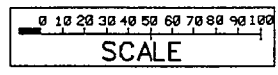
"0"



NOTES:

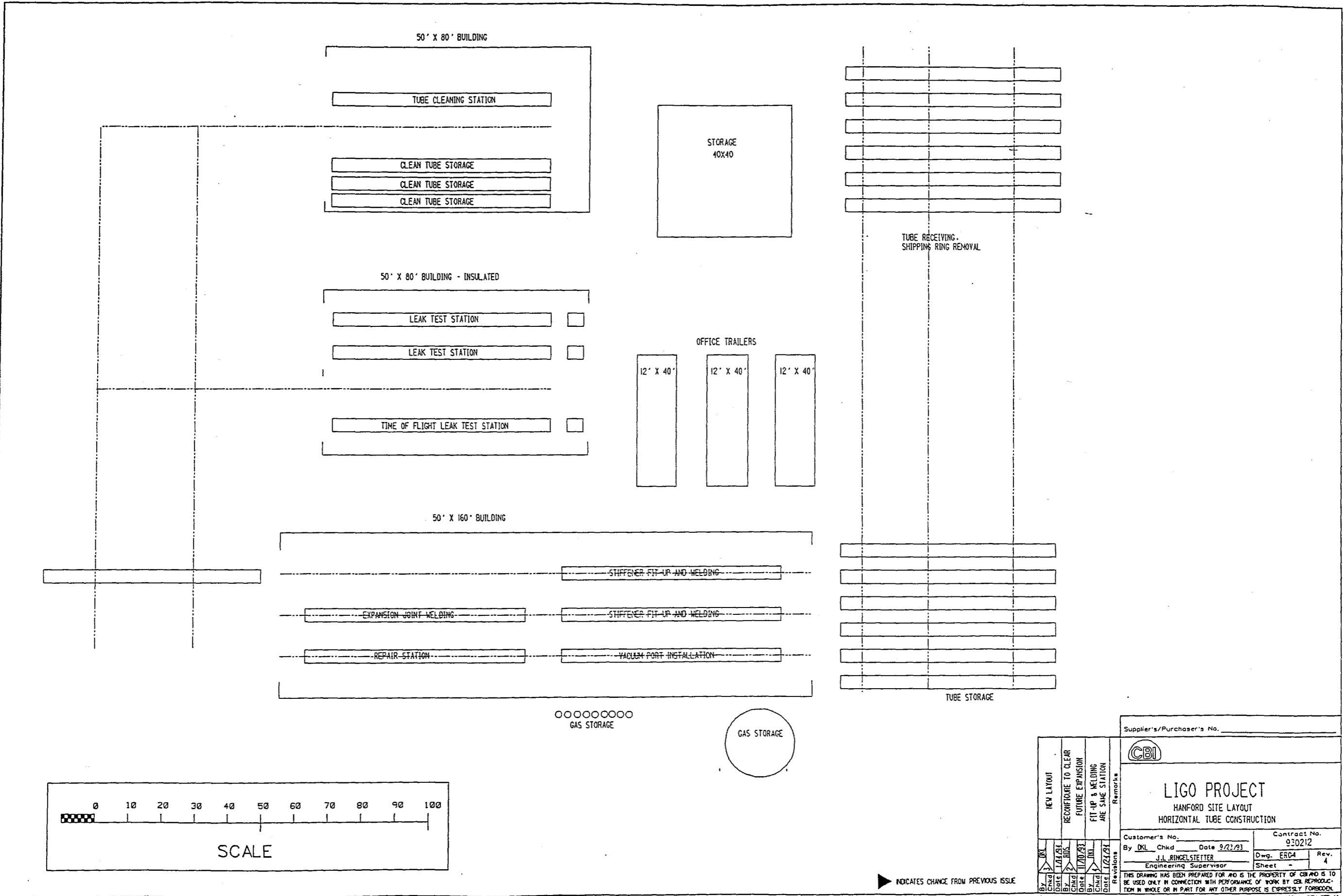
- 1. SEE ER-04 FOR LARGER VIEW OF TUBE FAB AREA.

CAD FILE 30212003.DGN

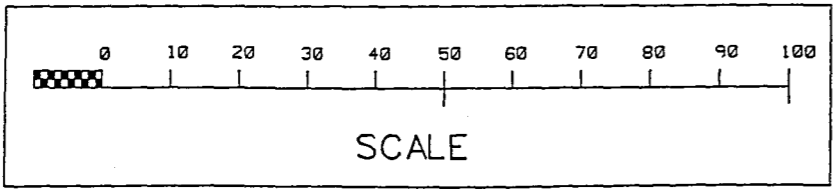


▶ INDICATES CHANGE FROM PREVIOUS ISSUE

NEW LAYOUT		RECONFIGURE TO CLEAR		FUTURE EXPANSION		FIT-UP AND WELD STATIONS COMBINED		Remarks	
By	Chkd	Date	By	Chkd	Date	By	Chkd	Date	Revisions
DLK	DLK	7/14/94	RUS	RUS	11/20/93	DLK	DLK	3-21-94	
Customer's No.				Contract No.					
By DLK Chkd				Date 9/23/93					
J.J. RINGELSTETTER				Dwg. ER-03					
Engineering Supervisor				Rev. 4					
Sheet -				4					
<p align="center">LIGO PROJECT HANFORD SITE LAYOUT HORIZONTAL TUBE CONSTRUCTION</p>									
<p align="center">Supplier's/Purchaser's No. _____</p>									
<p align="center">CBI</p>									
<p align="center">THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.</p>									

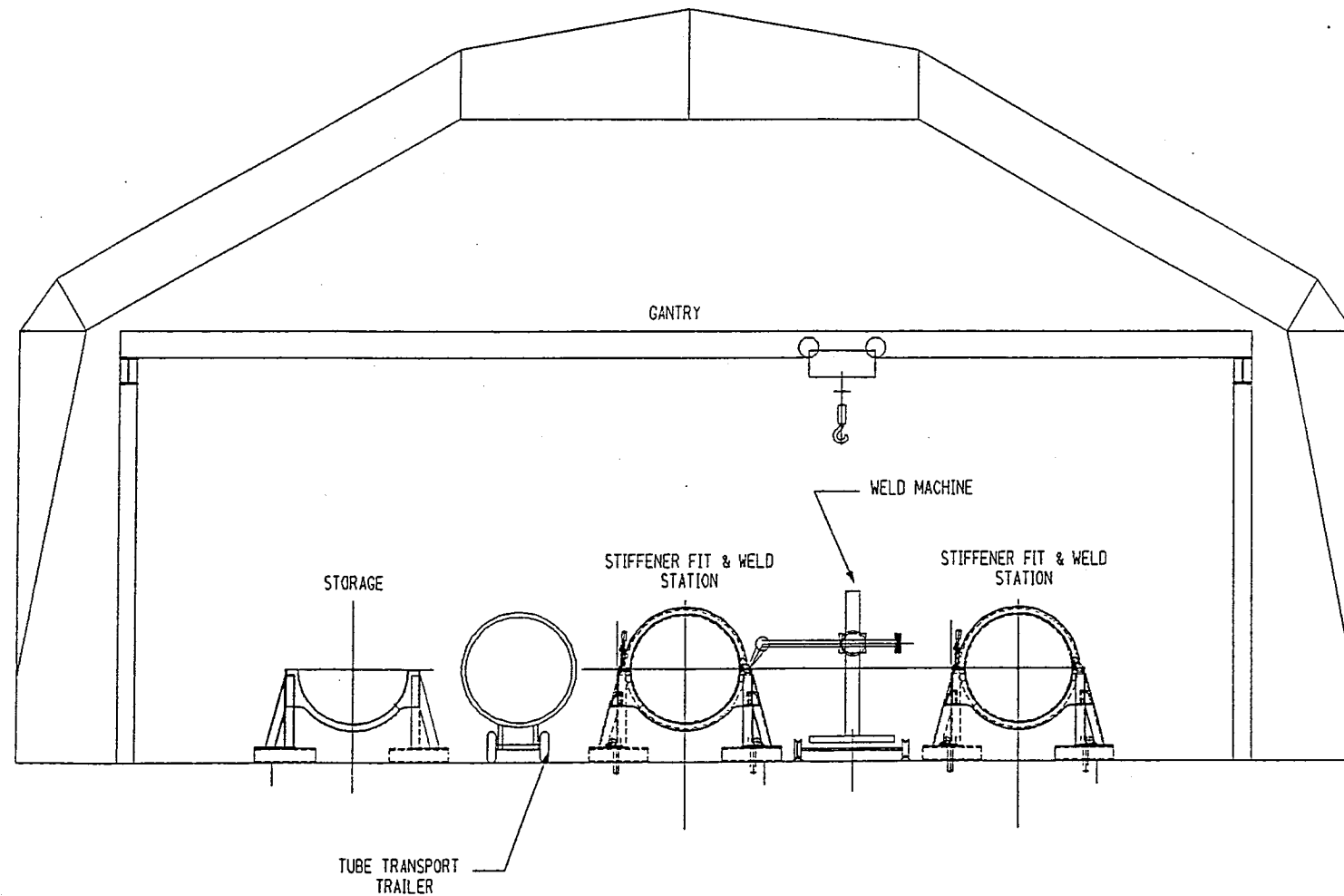


CAD FILE 30212004.DGN




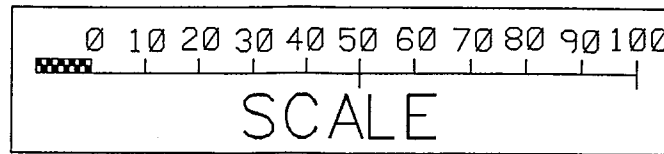
▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT HANFORD SITE LAYOUT HORIZONTAL TUBE CONSTRUCTION	
Customer's No. _____	Contract No. 930212
By <u>DKL</u> Chkd _____ Date <u>9/22/93</u>	Dwg. ERD4 Rev. 4
J.L. RINGELSTETTER Engineering Supervisor	
Sheet -	
THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN. THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. 1040 FORM CHG 30 A REV SEP 93	



▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
	
LIGO PROJECT FABRICATION SHOP CROSS SECTION	
Customer's No. _____	Contract No. 930212
By <u>DL</u> Chkd _____ Date 3-22-94	Dwg. EROS Rev. 0
J.L. RINGELSTETTER Engineering Supervisor	Sheet -
<small>THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.</small>	
<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (LDC) FORM CHG 30 A REV SEP 83</small>	



CLEANING SHOP
80' X 50'

STORAGE
40X40

LEAK TEST SHOP
80' X 50'

OFFICE TRAILERS

WELD FABRICATION SHOP
160' X 50'

OFFICE SHOP AREA

VACUUM EQUIPMENT AREA

ACCESS ROAD

RUN POWER 2KM.
TO MID STATION

PERMANENT POWER

GAS STORAGE

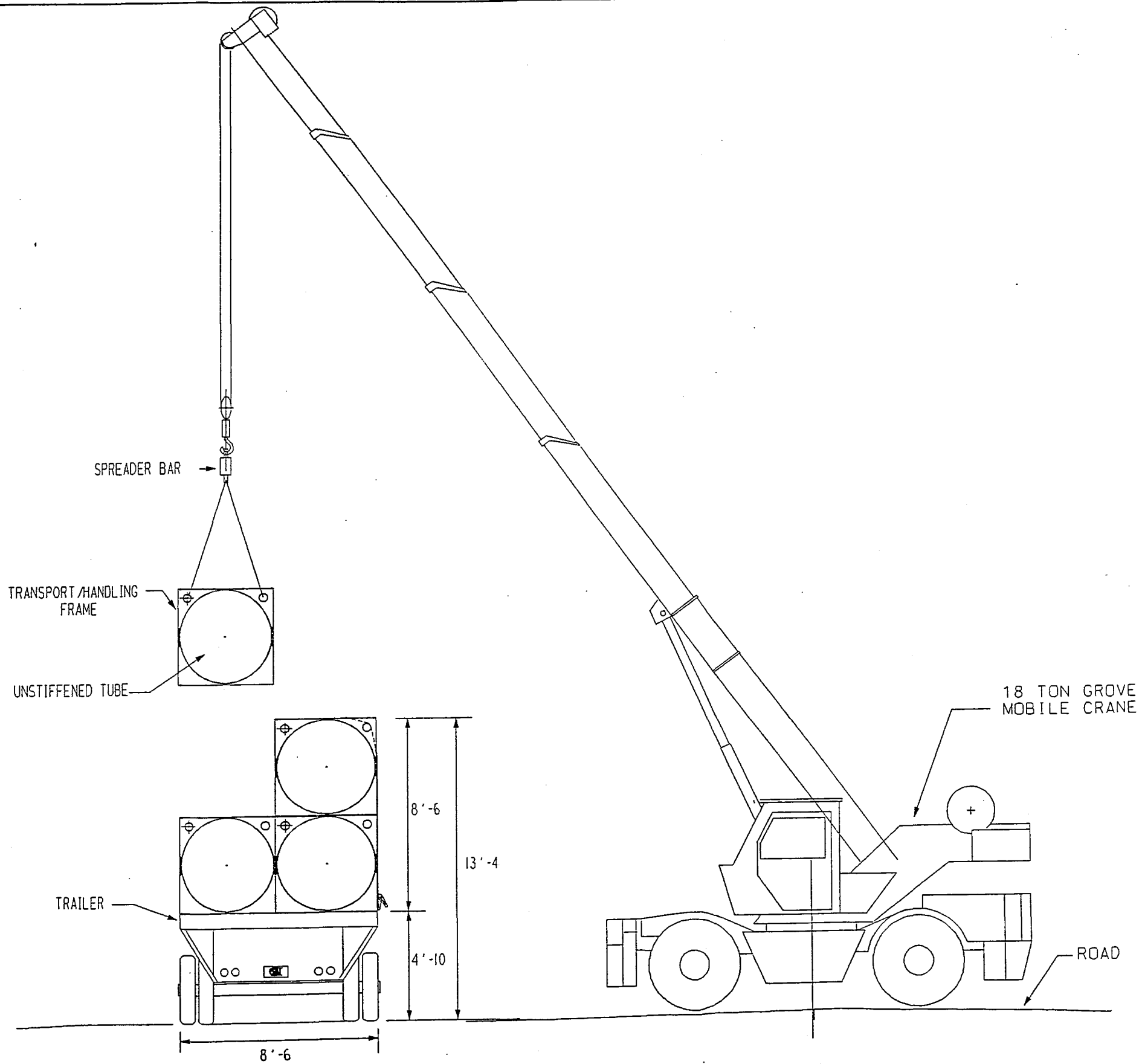
GAS STORAGE

RUN POWER 2KM.
TO MID STATION

INDICATES CHANGE FROM PREVIOUS ISSUE

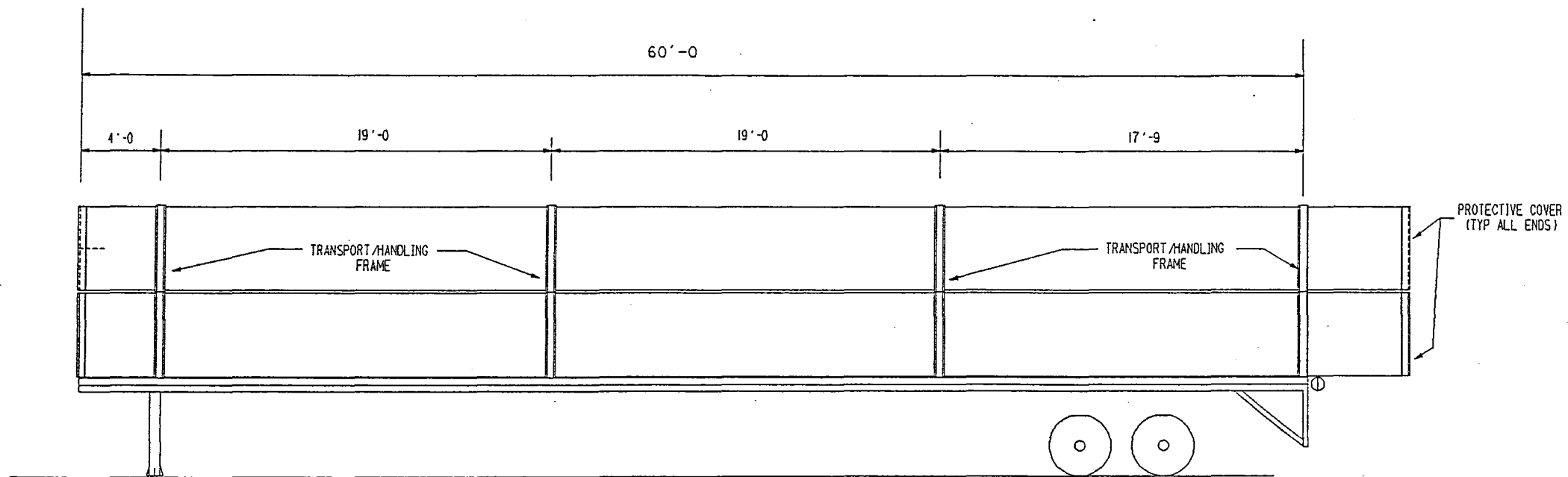
CAD FILE 3021202.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT HANFORD SITE LAYOUT POWER DISTRIBUTION	
Customer's No. _____	Contract No. 930212ER
By <u>DKL</u> Chkd _____ Date 3/10/94	Dwg. ER-07 Rev. _____
J.L. RINGELSTETTER Engineering Supervisor	Sheet # 1
<small>THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.</small>	
<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHG 30 A REV SEP 93</small>	




INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT CROSS SECTION OF TRUCK LOADING	
Customer's No. _____	Contract No. 930212
By <u>DKL Chkd</u> Date <u>3-23-94</u>	Dwg. <u>ER014</u> Rev. <u>0</u>
<u>J.L. RINGELSTETTER</u> Engineering Supervisor	Sheet - <u>0</u>
<small>THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.</small>	
<small>THIS DRAWING WAS PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (DCI) FORM CHG 30 A REV SEP 93</small>	

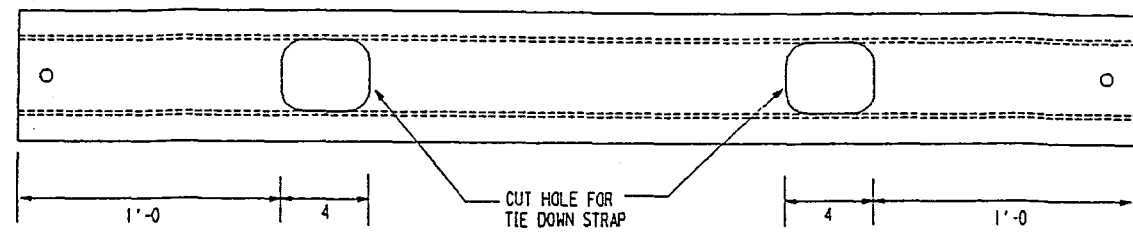


▶ INDICATES CHANGE FROM PREVIOUS ISSUE

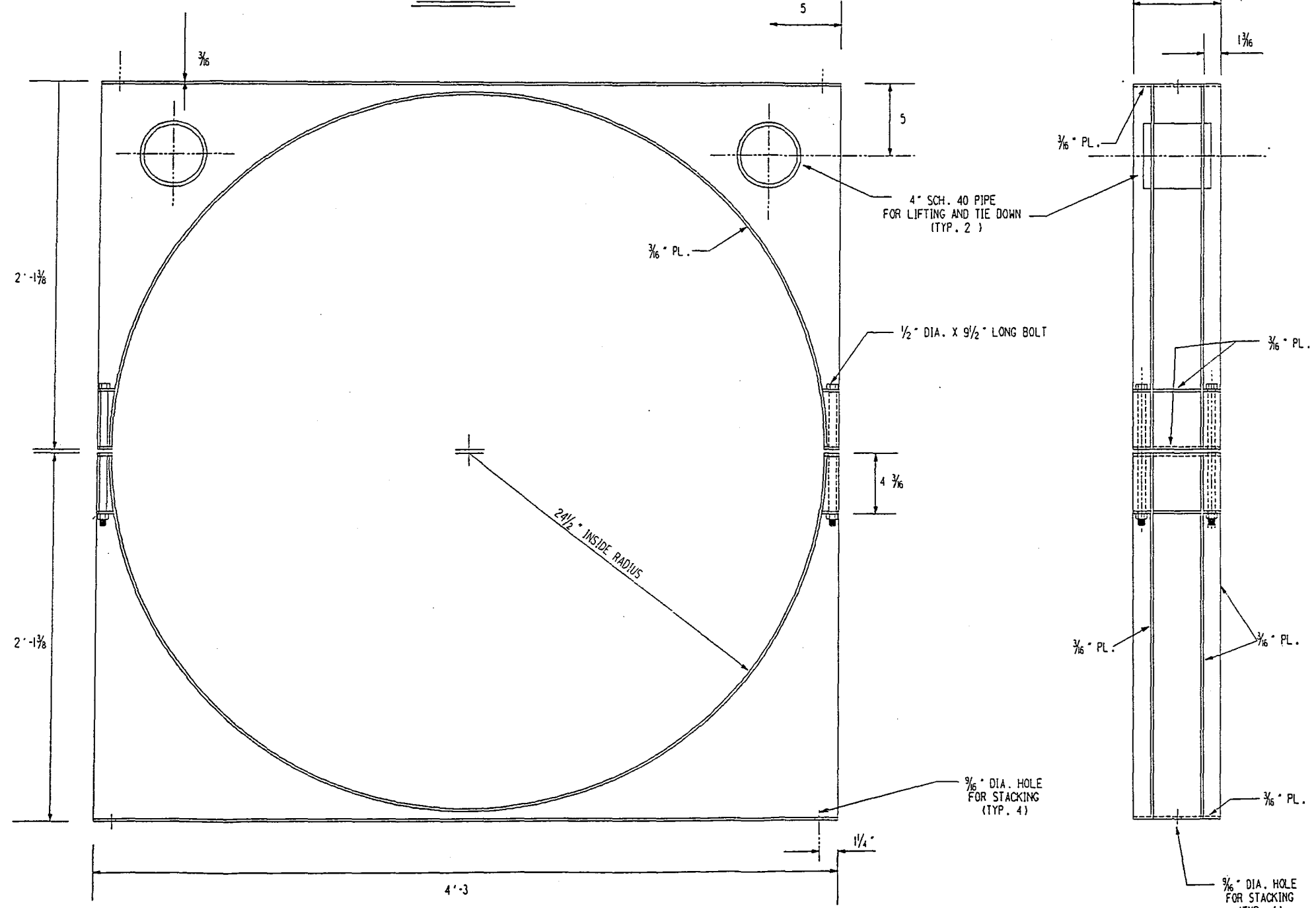
Supplier's/Purchaser's No. _____	
 LIGO PROJECT ELEVATION OF TRUCK LOADING	
Customer's No. _____	Contract No. 930212
By <u>DKL</u> Chkd _____ Date <u>3-23-94</u>	Dwg. <u>ERO15</u> Rev. <u>0</u>
<u>J.J. RINGELSTETTER</u> Engineering Supervisor	Sheet <u>-</u>
<small>THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.</small>	
<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (HCD) FORM CHG 30 A REV SEP 93</small>	

By	Chkd	Date	By	Chkd	Date

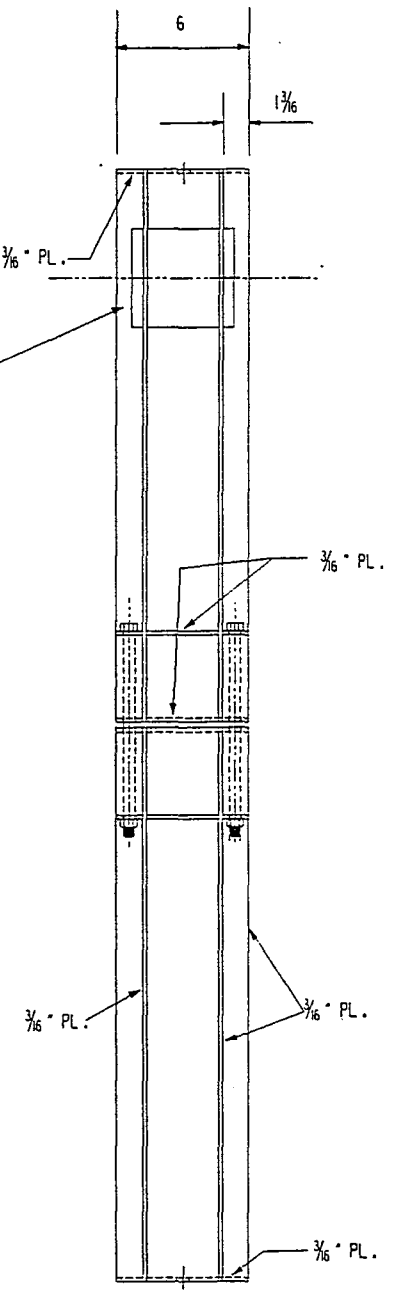
Revisions



TOP VIEW



ELEVATION VIEW



SIDE VIEW

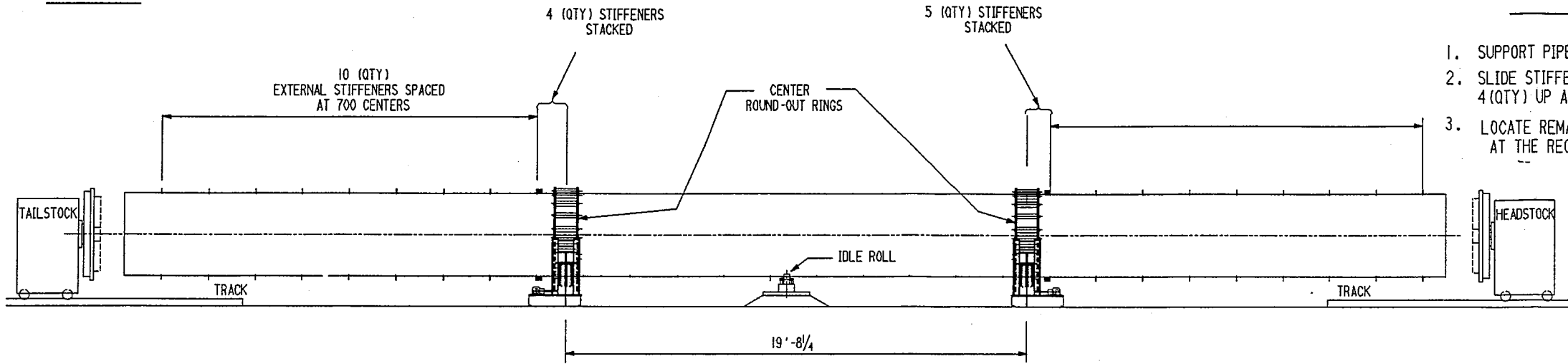
▶ INDICATES CHANGE FROM PREVIOUS ISSUE

NOTES:

- 1. USE 3/16" THICK RUBBER SHEETING AS SOFTENER BETWEEN FRAME AND TUBE SHELL.

Supplier's/Purchaser's No.		Contract No. 930212	
Customer's No.		By <u>DRL</u> Chkd <u>J.J. RINGELSTETTER</u> Date <u>3-23-94</u>	
Engineering Supervisor		Dwg. <u>ER16</u>	Rev. <u>0</u>
Sheet		THIS DRAWING HAS BEEN PREPARED FOR AND IS THE PROPERTY OF CBI AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY CBI. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.	
BY	CHKD	DATE	REVISIONS

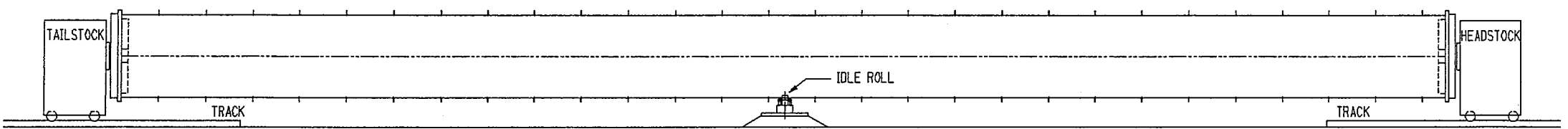
STEP 1



STEP 1

1. SUPPORT PIPE SECTION ON TWO CENTER ROUND-OUT JIGS IN HIGH POSITION.
2. SLIDE STIFFENERS UP AGAINST ROUND-OUT JIGS AS FOLLOWS :
4 (QTY) UP AGAINST LEFT JIG & 5 (QTY) UP AGAINST RIGHT JIG .
3. LOCATE REMAINING STIFFENERS TO LEFT AND RIGHT OF CENTER SUPPORTS ,
AT THE REQUIRED CENTERS .

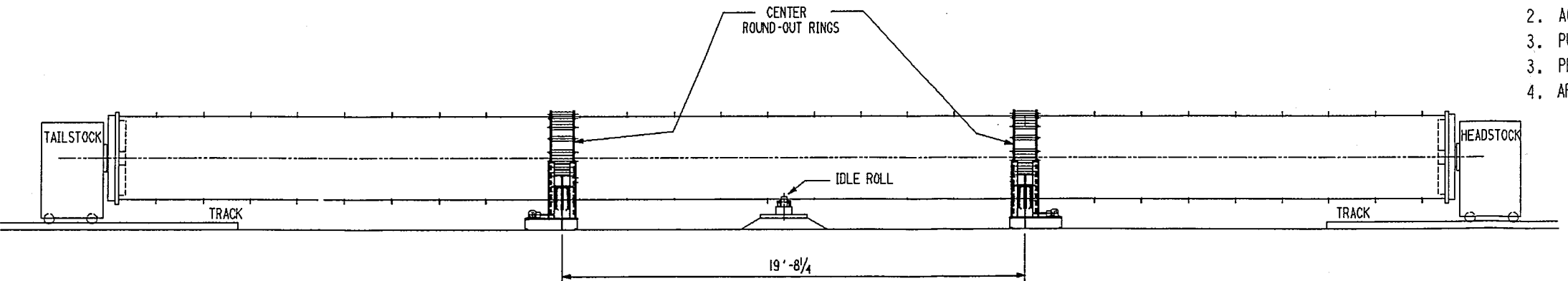
STEP 2



STEP 2

1. ENGAGE HEADSTOCK & TAILSTOCK AT ENDS OF TUBE .
2. LOWER CENTER SUPPORTS AWAY FROM THE PIPE .
3. SLIDE THE LOOSE STIFFENERS TO
THEIR CORRECT LOCATIONS .

STEP 3



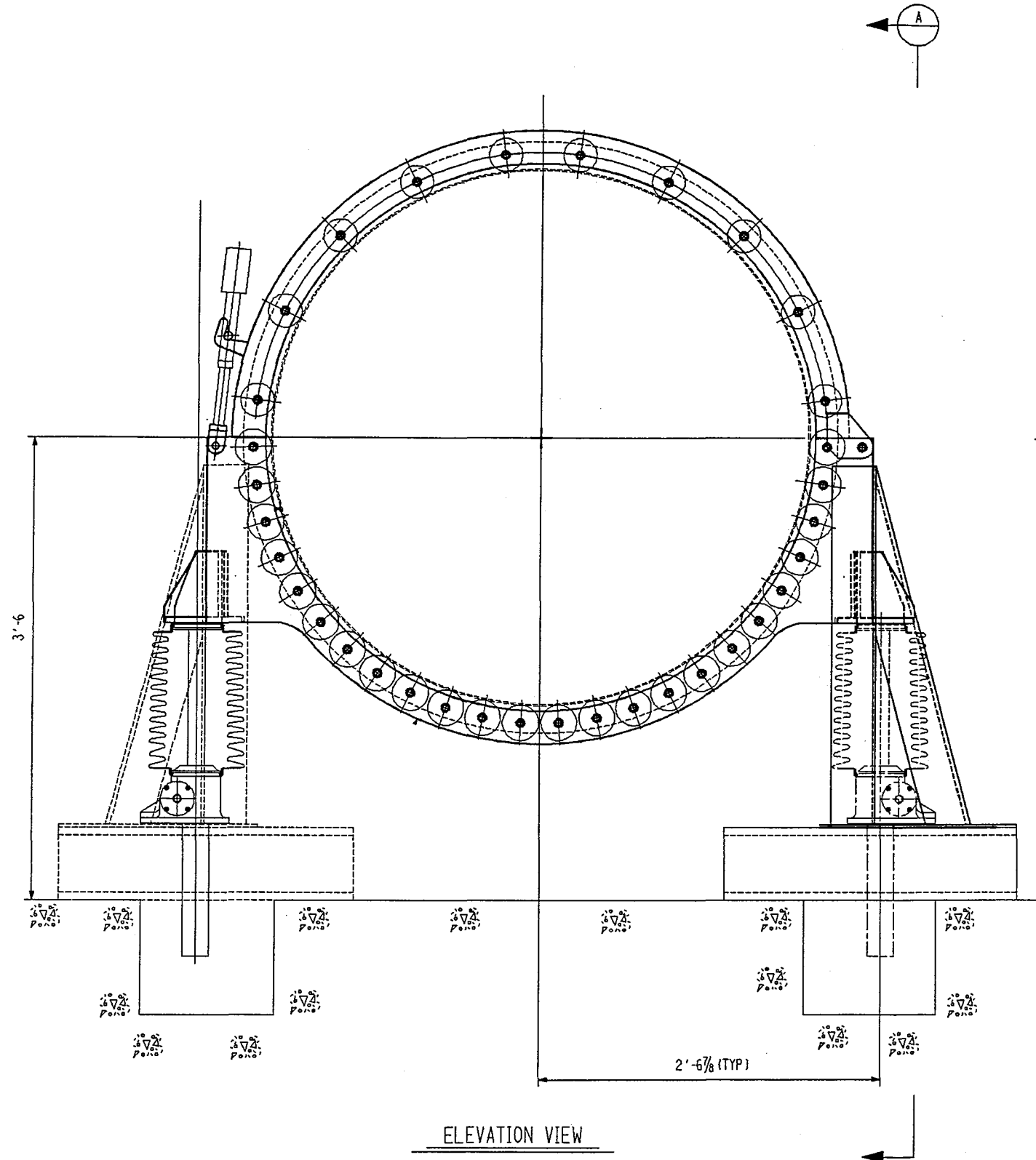
STEP 3

1. RAISE THE CENTER SUPPORTS .
2. ACTIVATE THE 2 ROUND-OUT RINGS TO ROUND-OUT THE PIPE .
3. PURGE INSIDE TUBE
3. PROCEED TO FIT ALL STIFFENERS TIGHT AGAINST THE PIPE .
4. AFTER ALL STIFFENERS ARE FIT WELDING CAN START.

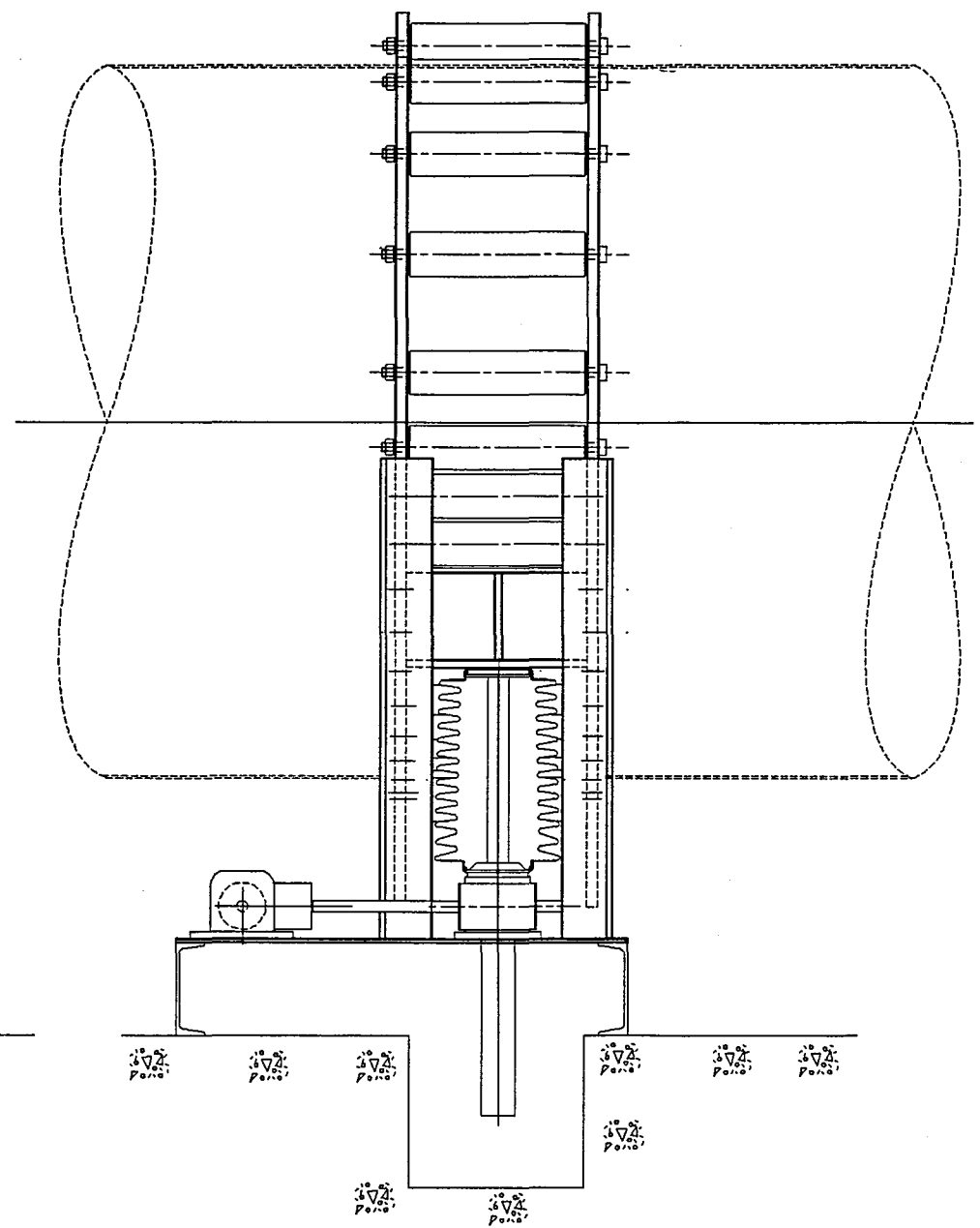
CAD FILE 30212020.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT	
EXTERNAL STIFFENER FITTING SEQUENCE	
Customer's No. _____	Contract No. 930212ER
By AVR Chkd _____ Date 04-NOV-93	Dwg. ER-20 Rev. 3
J.L. RINGELSTETTER Engineering Supervisor	
Revisions By Chkd Date 1 BSA 4-5-94 2 JKL 3-21-94 3 AVR 20K-93 4 _____ 5 _____	
Remarks REVISED TO SHOW HEADSTOCK - TAILSTOCK REVISED DIMENSIONS AS SHOWN & ALTERED SUPPORT DETAILS	
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE



ELEVATION VIEW

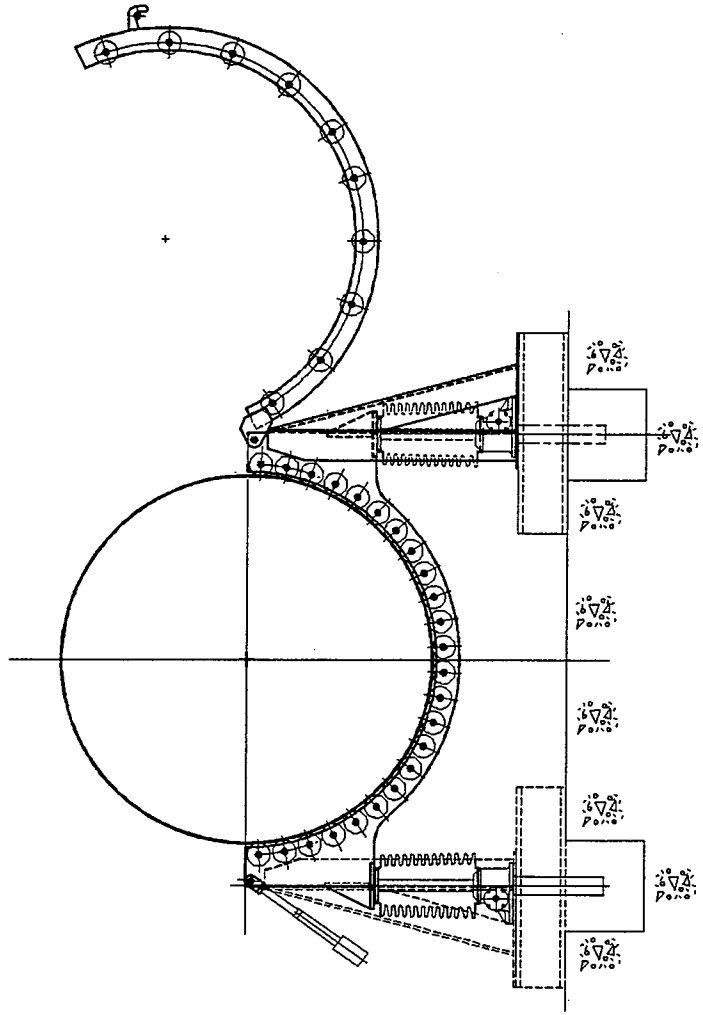


VIEW A

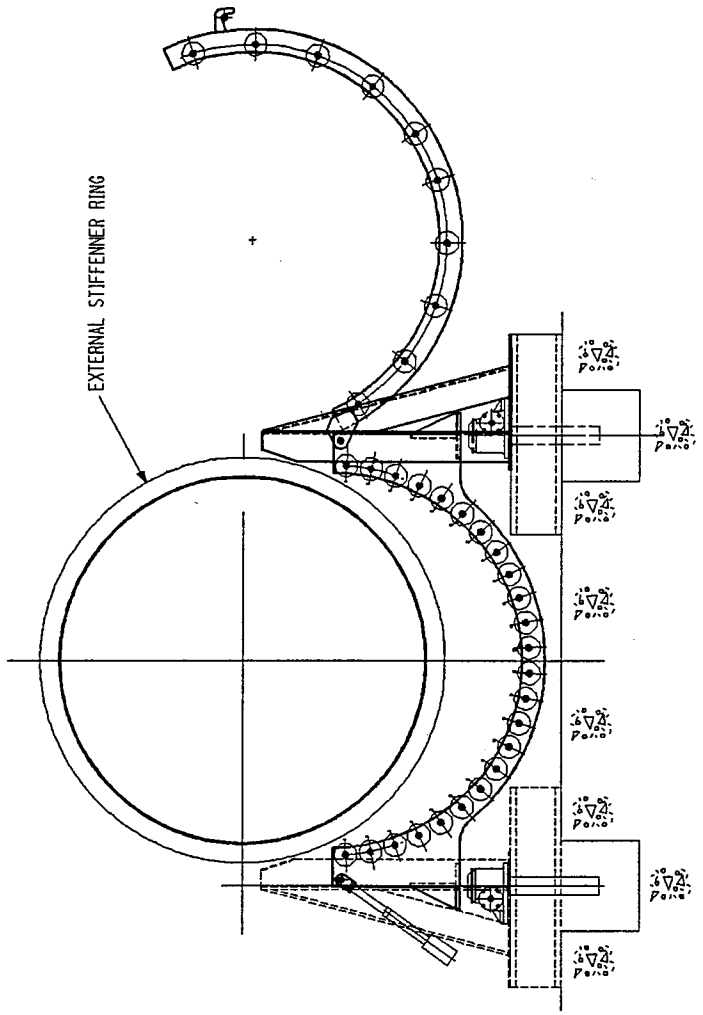
CAD FILE: 30212021.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

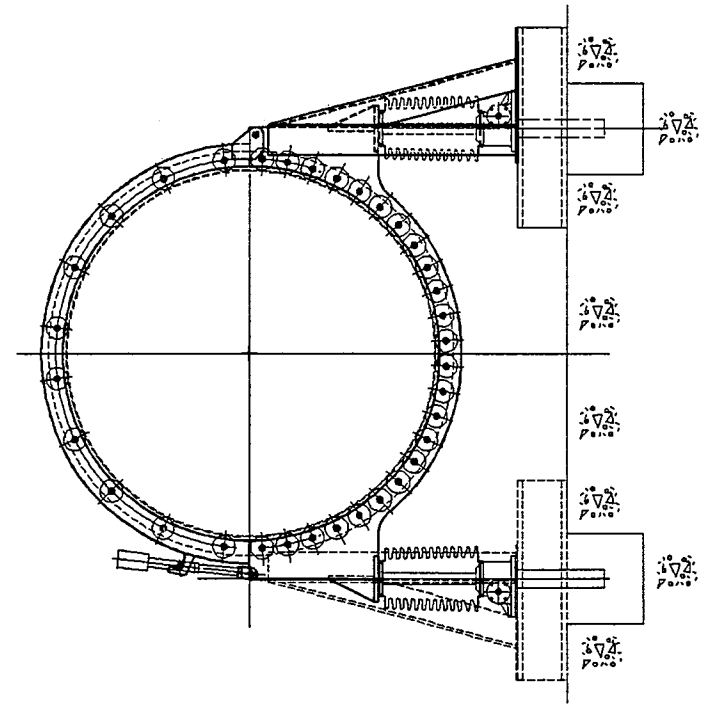
Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT PROPOSED ROUNDING JIG / PIPE SUPPORT	
Customer's No. _____	Contract No. 930212ER
By AVR Chkd Date 8 NOV 93	Dwg. ER-21 Rev. 1
J.L. RINGELSTETTER Engineering Supervisor	
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HIGH POSITION - UPPER HALF OPEN



LOW POSITION - UPPER HALF OPEN



HIGH POSITION - UPPER HALF CLOSED
TO ROUND OUT THE PIPE

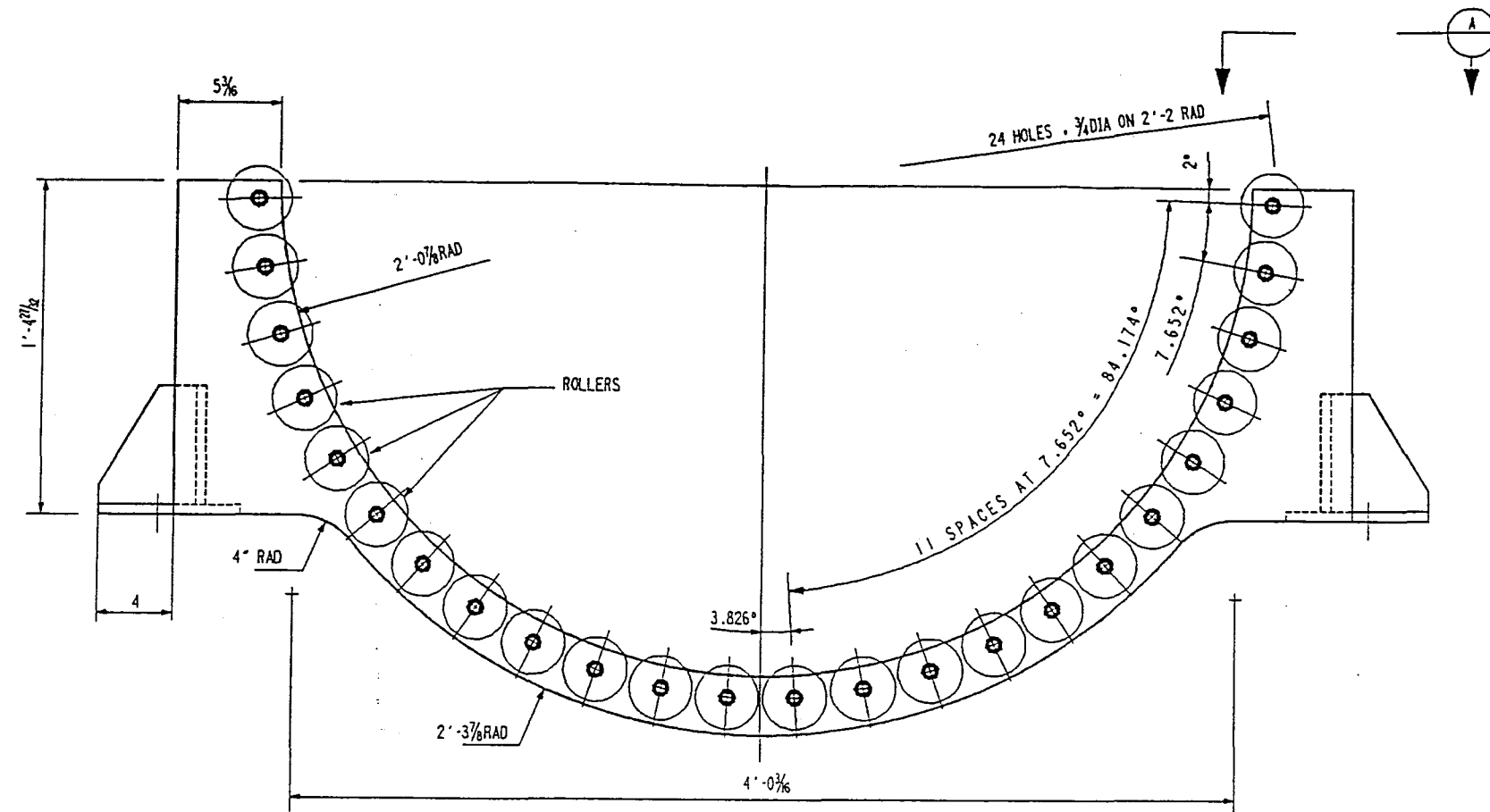
NOTES:

- 1. READ THIS DRAWING WITH ER-20 .

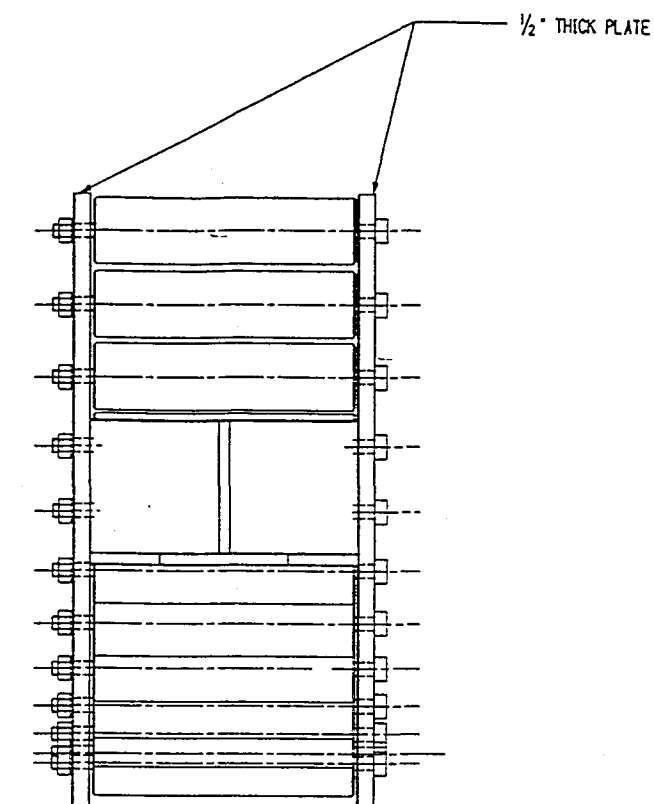
CAD FILE 30212022.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT	
RANGE OF OPERATION FOR	
ROUNDING JIG/PIPE SUPPORT	
Customer's No. _____	Contract No. 930212ER
By AVR Chkd _____ Date 2 DEC 93	Dwg. ER-22 Rev. 1
JIM RINGELSTETTER Engineering Supervisor	
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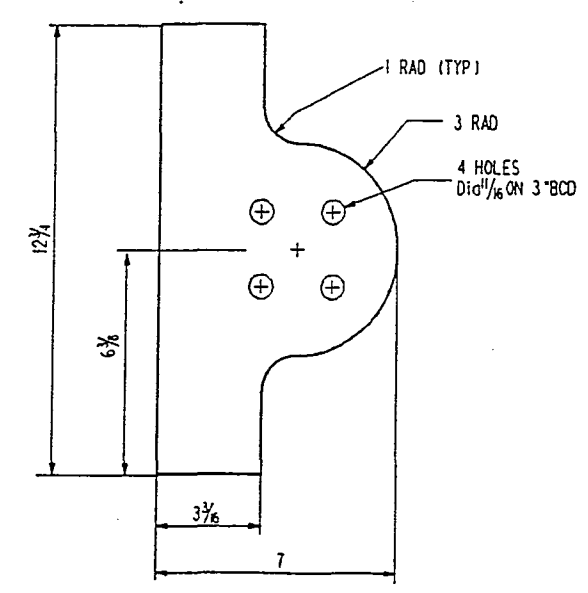
▶ INDICATES CHANGE FROM PREVIOUS ISSUE



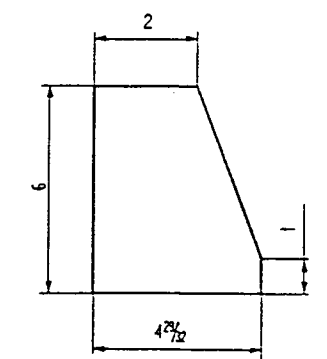
ELEVATION VIEW



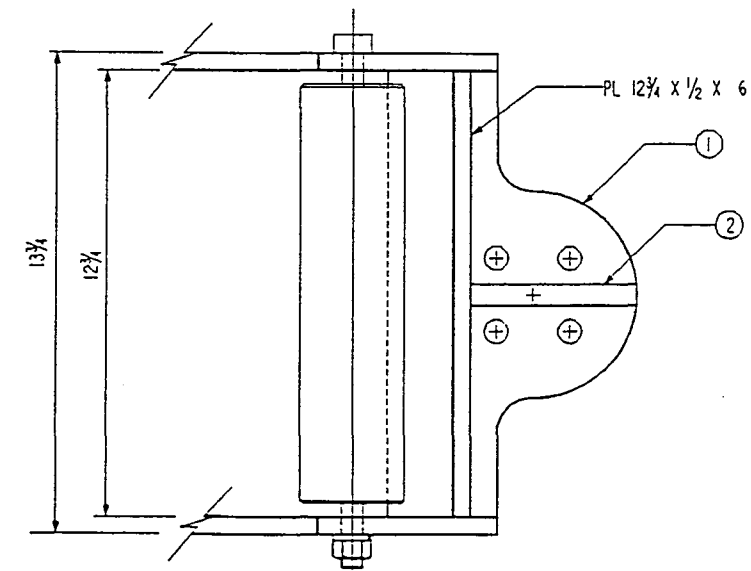
SIDE VIEW



①
PL 1/2 THK



②
PL 1/2 THK



VIEW A

INDICATES CHANGE FROM PREVIOUS ISSUE

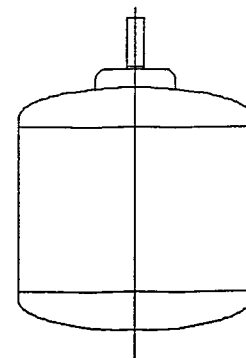
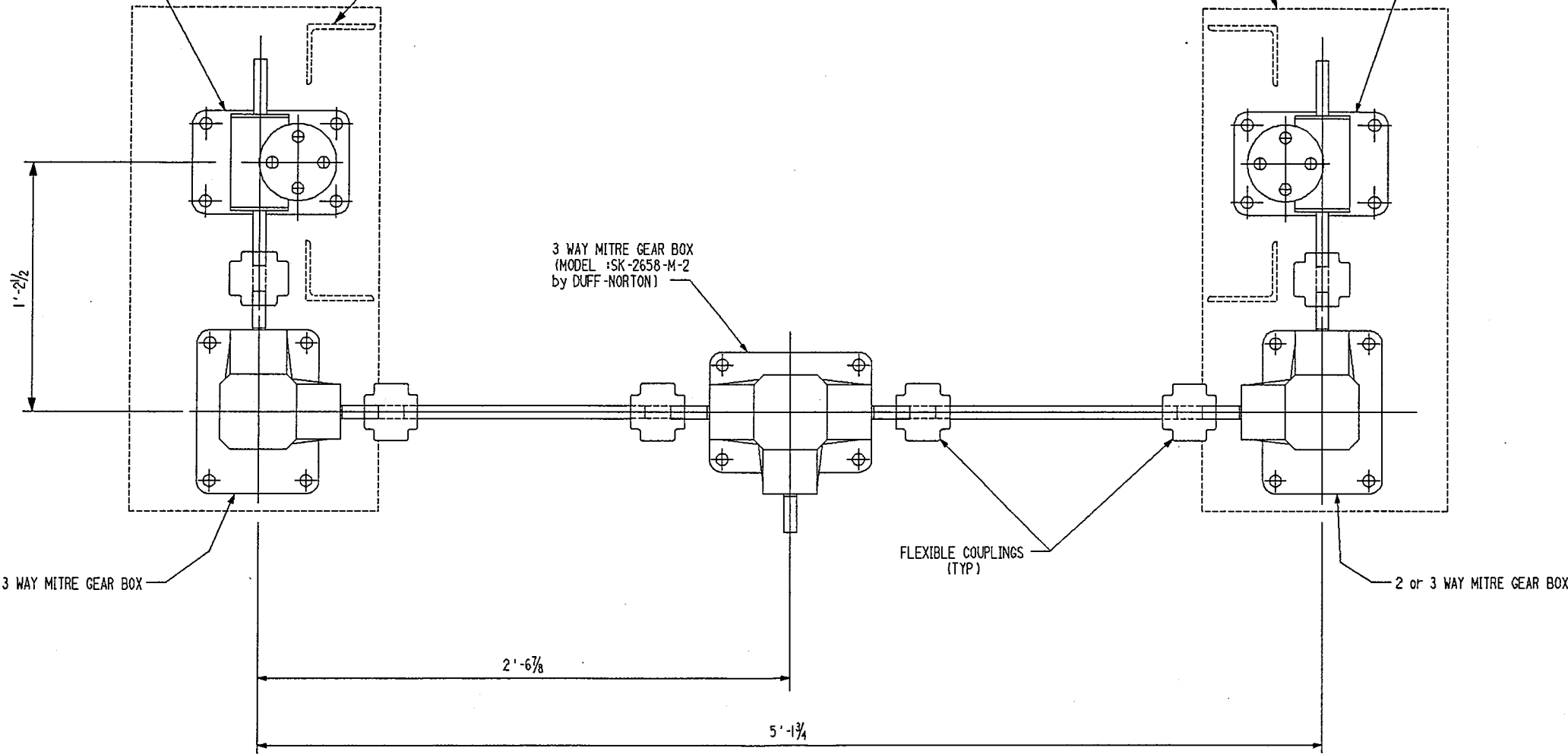
CAD FILE: 30212023.DGN

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT LOWER SUPPORT ASSEMBLY	
Customer's No.	Contract No.
By <u>APR Chka</u> Date <u>23 NOV 93</u>	<u>930212ER</u>
<u>JIM RINDELSTETTER</u> Engineering Supervisor	Dwg. <u>ER23</u> Rev Sheet <u>0</u>
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<small>THIS DRAWING HAS BEEN PREPARED BY HUSTON CONSTRUCTION SERVICES, INC. FORM CUC 30-A REV SEP 82</small>	

MACHINE SCREW ACTUATOR WITH 15" LIFT SCREW (MODEL 9005 BY DUFF-NORTON)

SEE ER-25 FOR DETAILS OF ANTI-SWAY GUIDE

MACHINE SCREW ACTUATOR WITH 15" LIFT SCREW (MODEL 9005 BY DUFF-NORTON)

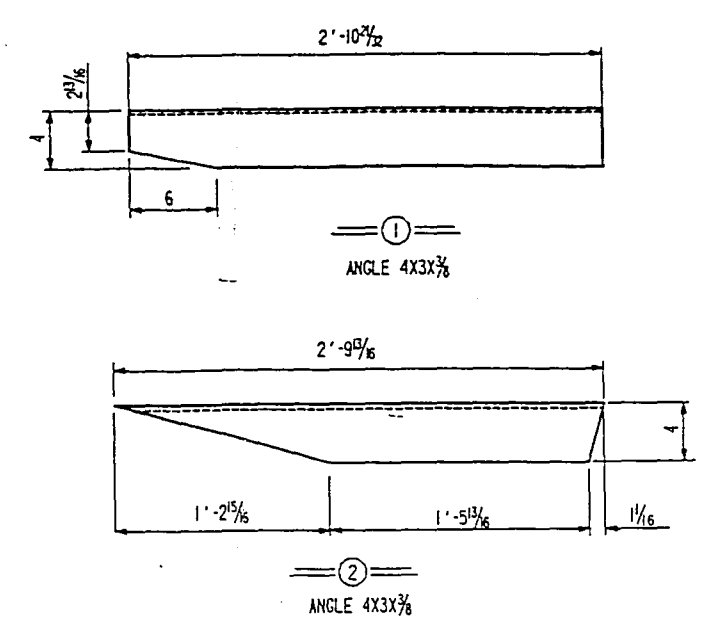
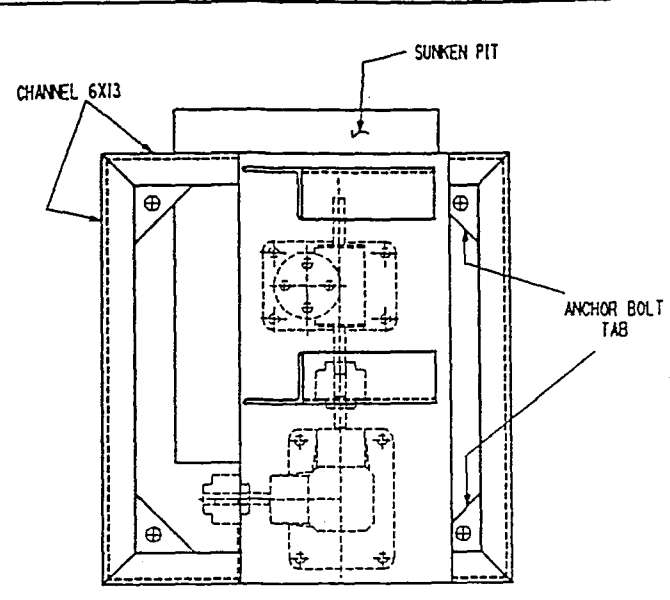
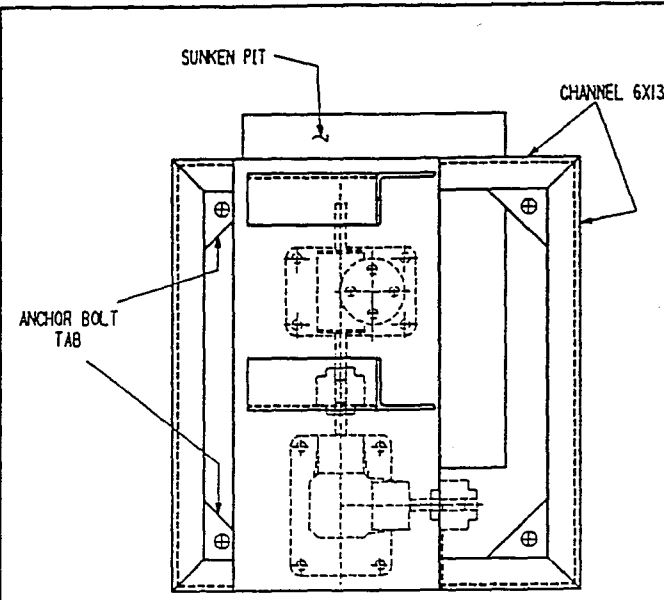


1800 RPM X 3/4 HORSEPOWER GEAR MOTOR WITH GEAR REDUCTION RATIO OF 7.5:1 (THIS WILL PROVIDE A 15" LIFT IN 30 SECONDS)

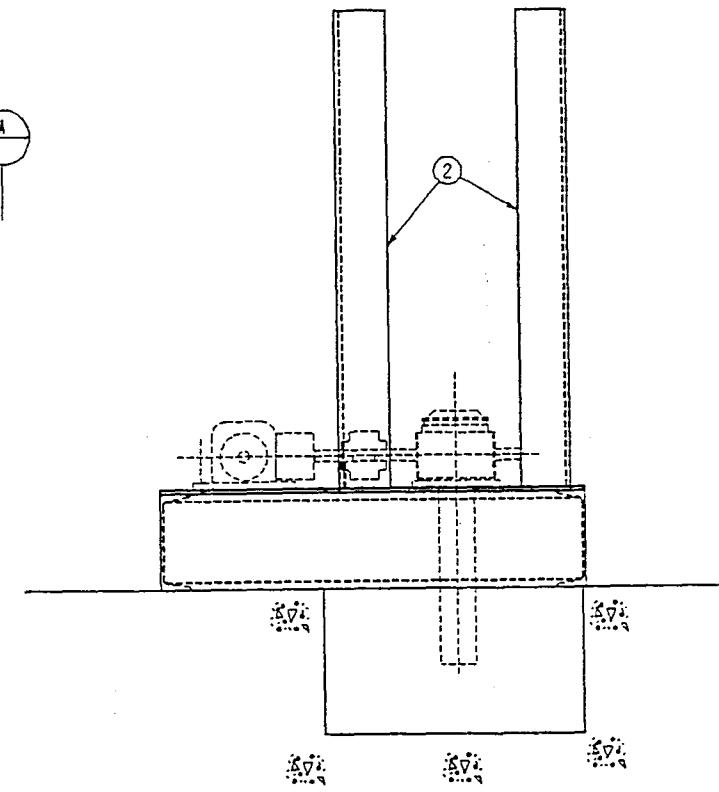
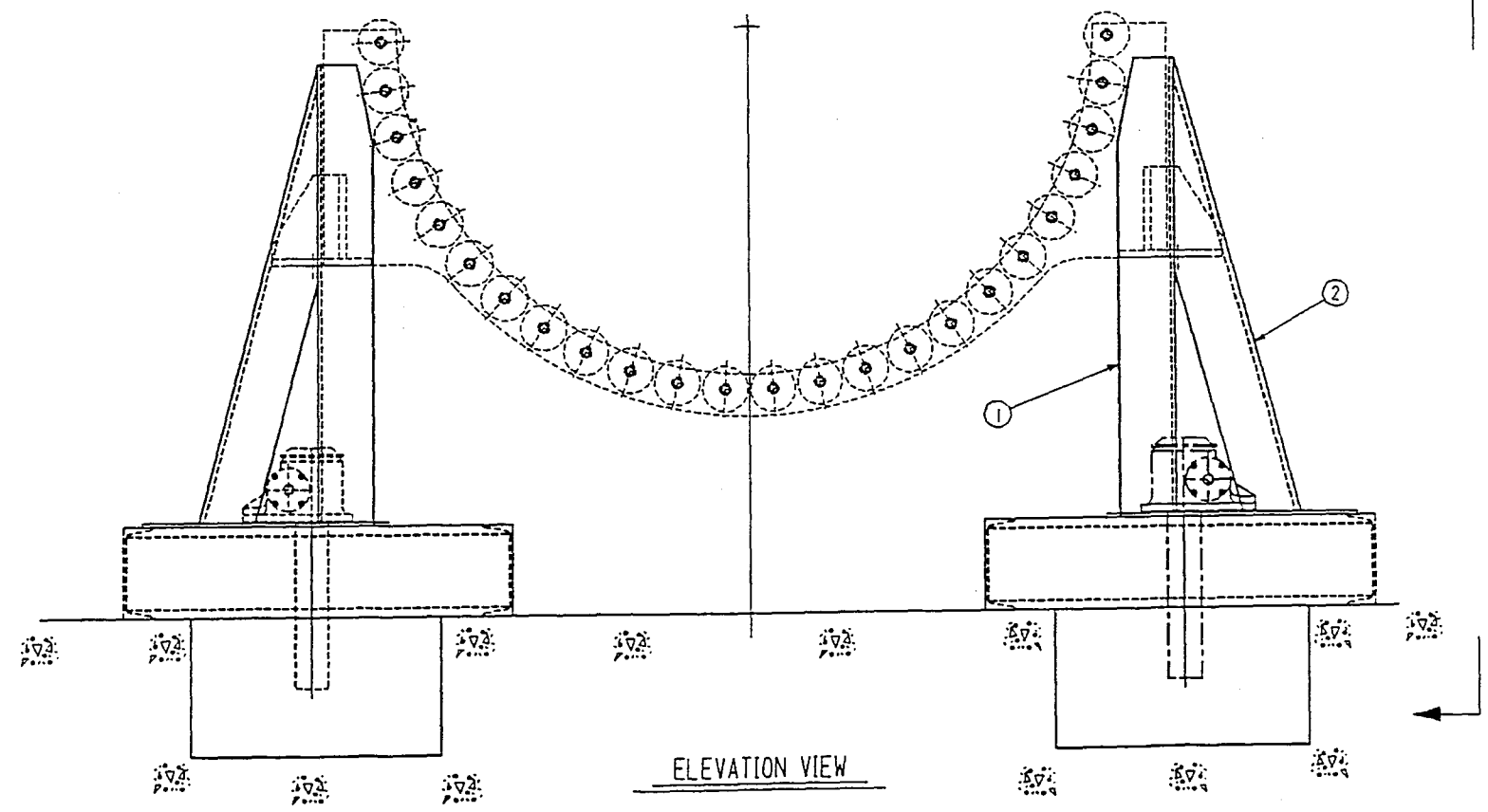
CAD FILE 30212024.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT PLAN VIEW OF ACTUATOR LAYOUT	
Customer's No.	Contract No.
By <u>AVR</u> Chkd _____ Date <u>2 DEC 93</u>	<u>930212ER</u>
JIM RINGESTETTER Engineering Supervisor	Dwg. ER-24 Rev. 1 Sheet - 1
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PLAN VIEW
LOWER SUPPORT OMITTED FOR CLARITY

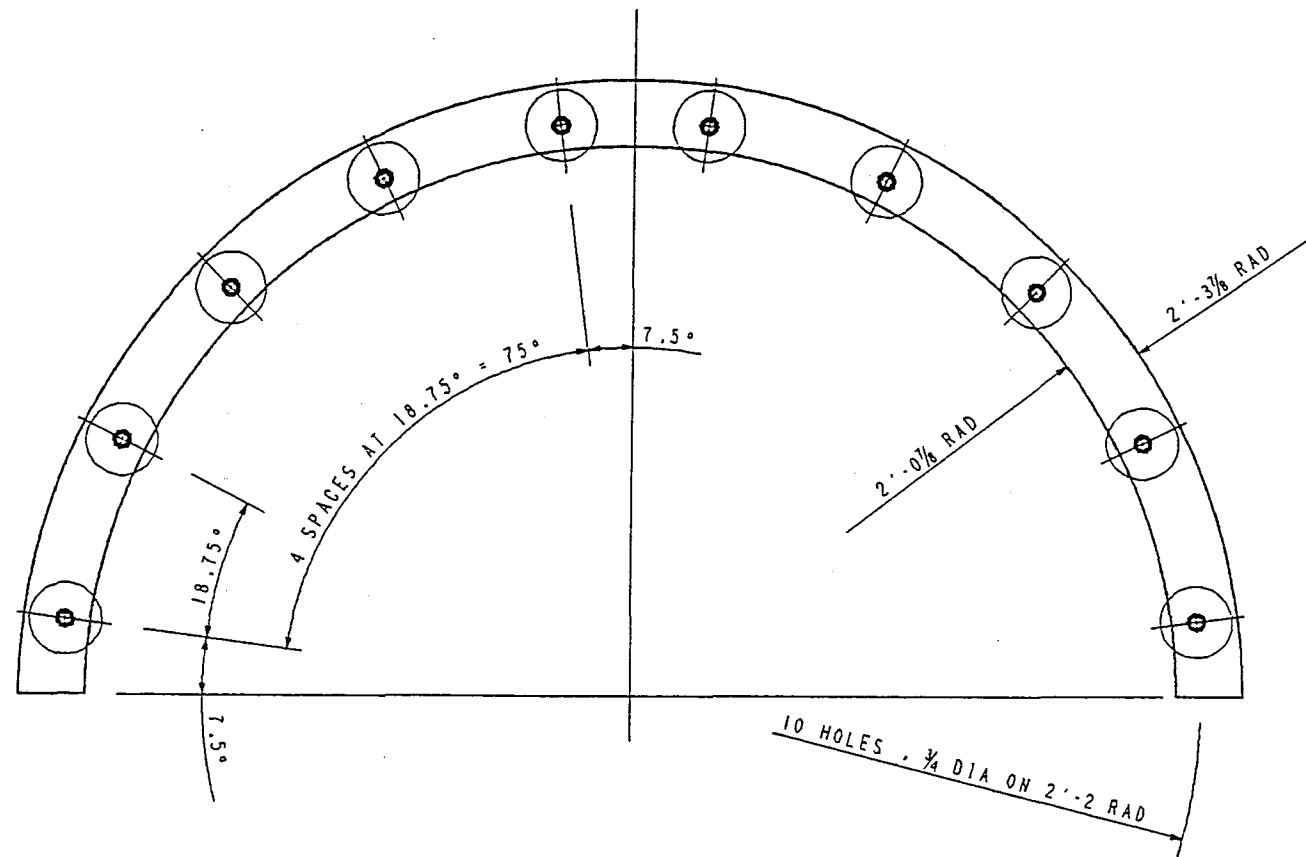


VIEW A

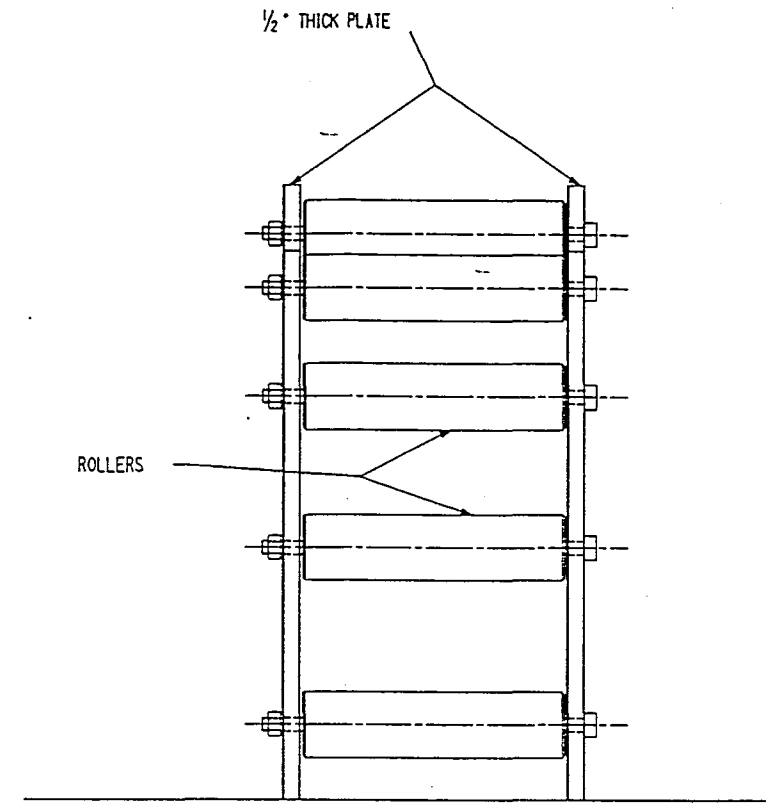
CAD FILE 3022025.DGN

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT ANTI-SWAY GUIDES	
Customer's No.	Contract No.
By <u>JHR Chka</u> Date <u>2 DEC 93</u>	<u>930212ER</u>
Engineering Supervisor	Dwg. <u>ER25</u> Rev. <u>0</u>
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE




ELEVATION VIEW



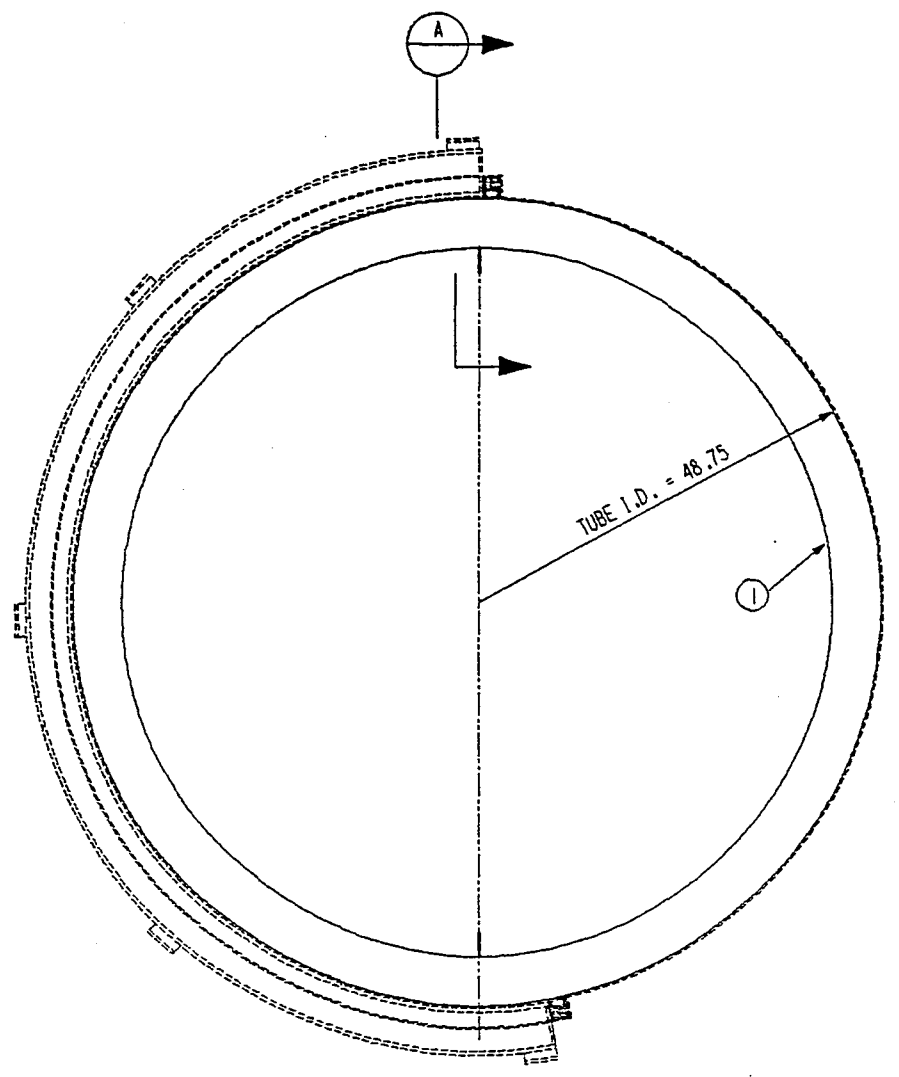
SIDE VIEW

CAD FILE 30212026.dgn

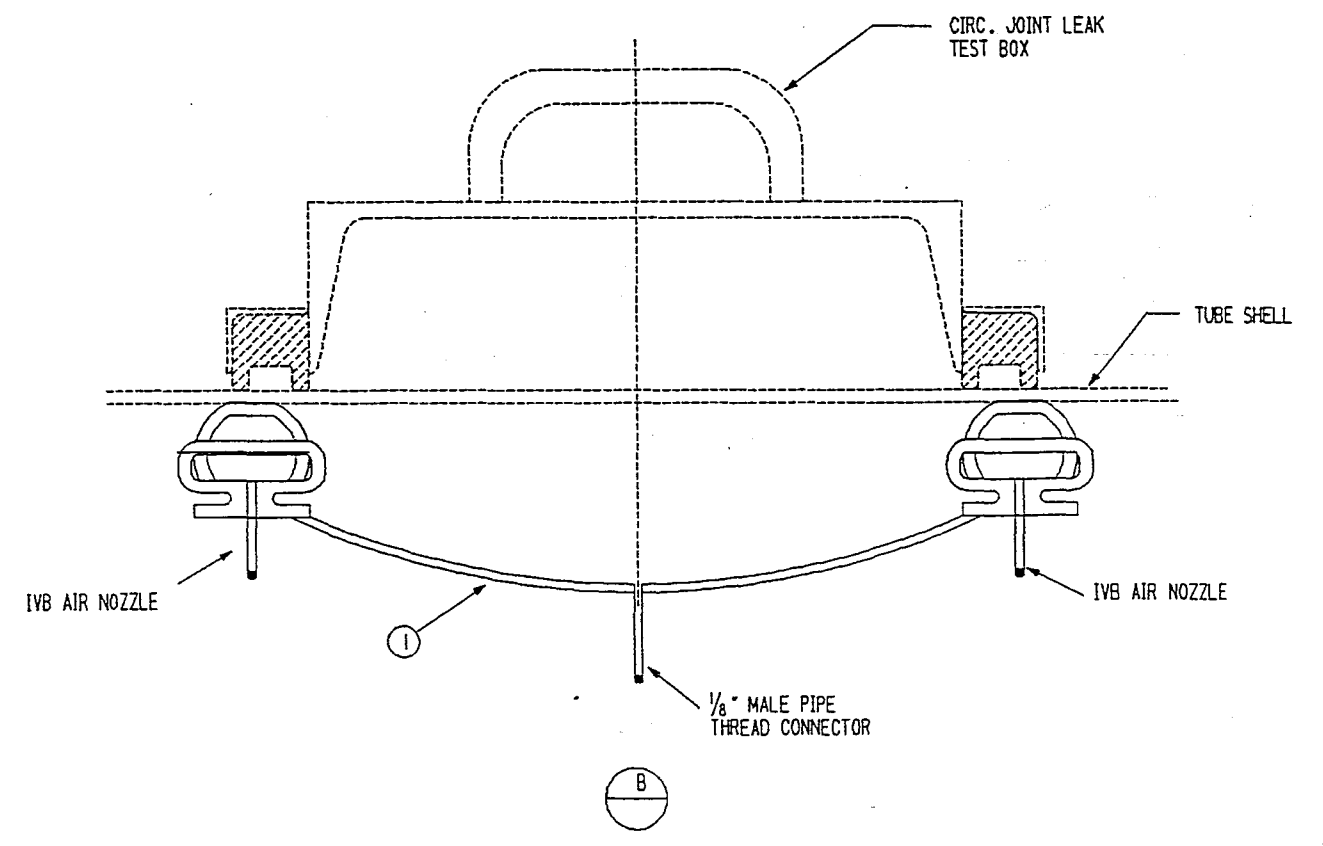
▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
 LIGO PROJECT UPPER SECTION OF ROUND-OUT RING	
Customer's No. _____	Contract No. 930212ER
By <u>JYR Chkd</u> Date <u>2 DEC 93</u>	Dwg. <u>ER26</u> Rev. <u>0</u>
<u>JM RINGELSTETTER</u> Engineering Supervisor	Sheet <u>-</u>
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<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES INC. FORM CHG 50 A REV SEP 93</small>	

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
	44-1	1	INFLATABLE PURGE RING			PRESRAY	



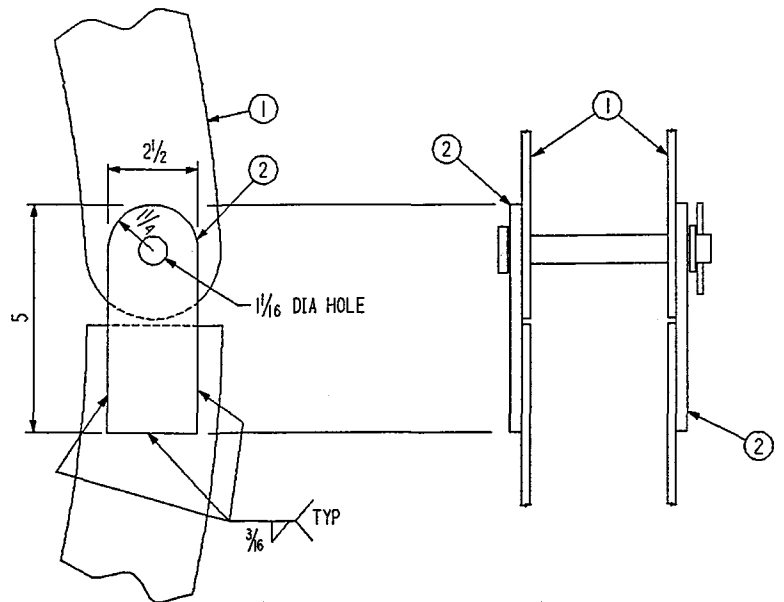
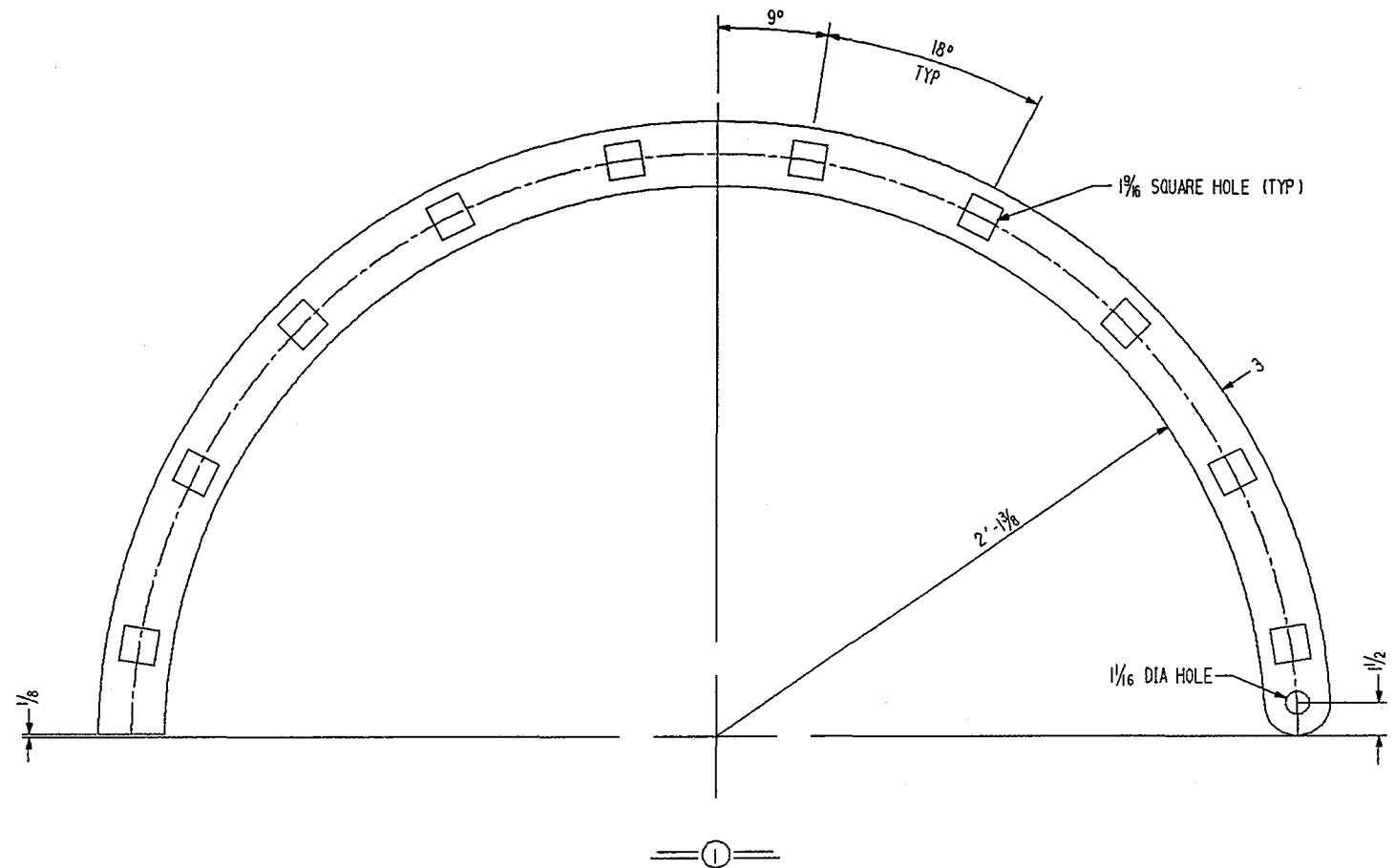
ELEVATION VIEW



CAD FILE 30212044.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT	
INFLATABLE PURGE RING	
Customer's No.	Contract No.
By <u>DKL</u> Chkd <u> </u> Date <u>2-9-94</u>	<u>930212</u>
<u>J.J. RINGELSTETTER</u> Engineering Supervisor	Dwg. <u>ER044</u> Rev. <u>0</u>
Sheet <u> </u>	
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DETAIL D ER45

SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	IN		
4	ER46-1		PL 3/16 X SK			A36	48
4	ER46-2		PL 1/4 X SK			A36	5
40			PL 2 X 3/8	0	3	A36	25
20			SQUARE TUBING 1/2 X 1/8 WALL	0	10	C.S.	20
4			SQUARE TUBING 1/2 X 1/8 WALL	0	4	C.S.	2
4			PL 2 1/2 X 3/4 X SK	0	3	C.S.	3
68			1/2 DIA SWIVEL SCREW CLAMPS (CARR LANE CL-40-SSC-S OR EQ)	0	4		
20			HAND KNOB ASSY W/ 1/2 DIA SCREW (CARR LANE CL-7C-HK4T OR EQUAL)	0	2		
48			1/2 DIA SQ NUT				

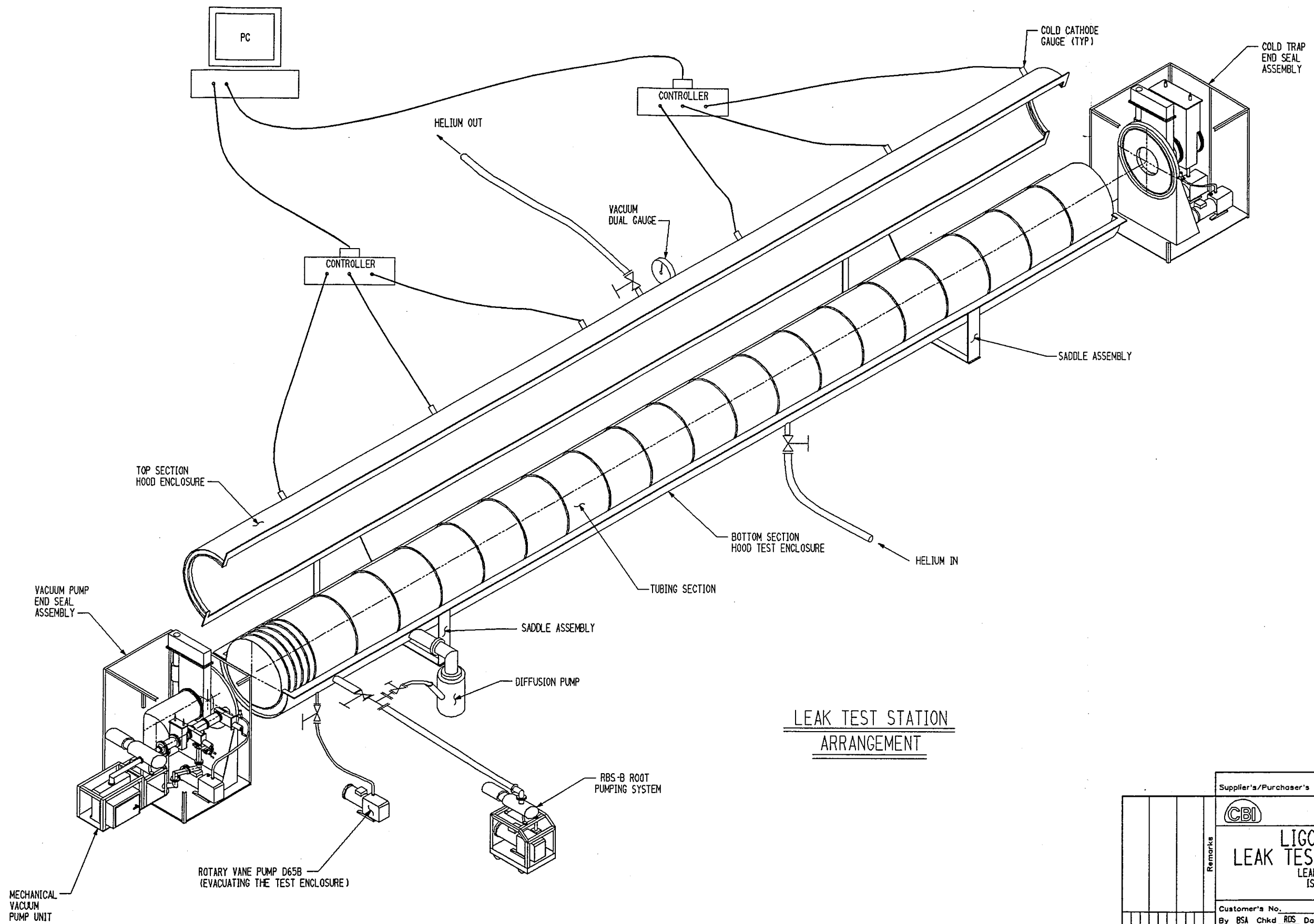
NOTES:

- 1. WORK WITH DRAWING ER45.

CAD FILE 30212046.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT FIT UP CLAMP DETAILS	
Customer's No. _____	Contract No. 930212ER
By <u>RER</u> Chkd _____ Date <u>11-12-93</u>	Dwg. <u>ER46</u> Rev. <u>2</u>
J. L. RINGELSTETTER Engineering Supervisor	
Sheet - <u>2</u>	
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<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHC 30 A REV SEP 93</small>	

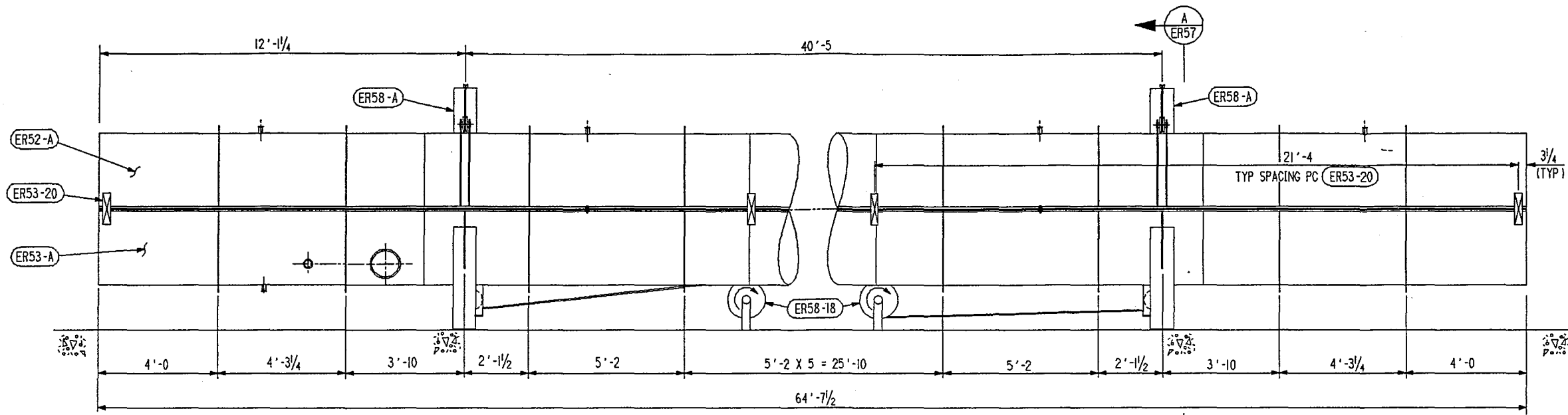


LEAK TEST STATION
ARRANGEMENT

CAD FILE: 30212050.DGN

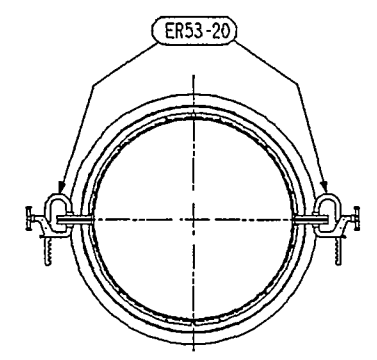
Supplier's/Purchaser's No.			
CBI		LIGO PROJECT	
LEAK TEST ARRANGEMENT		LEAK TEST STATION	
ISOMETRIC VIEW			
Customer's No.		Contract No.	
By BSA Chkd RDS Date 3-25-94		930212ER	
J.J. RINGELSTETTER		Dwg. ER-50	Rev.
Engineering Supervisor		Sheet	0
By	Chkd	Date	Revisions

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

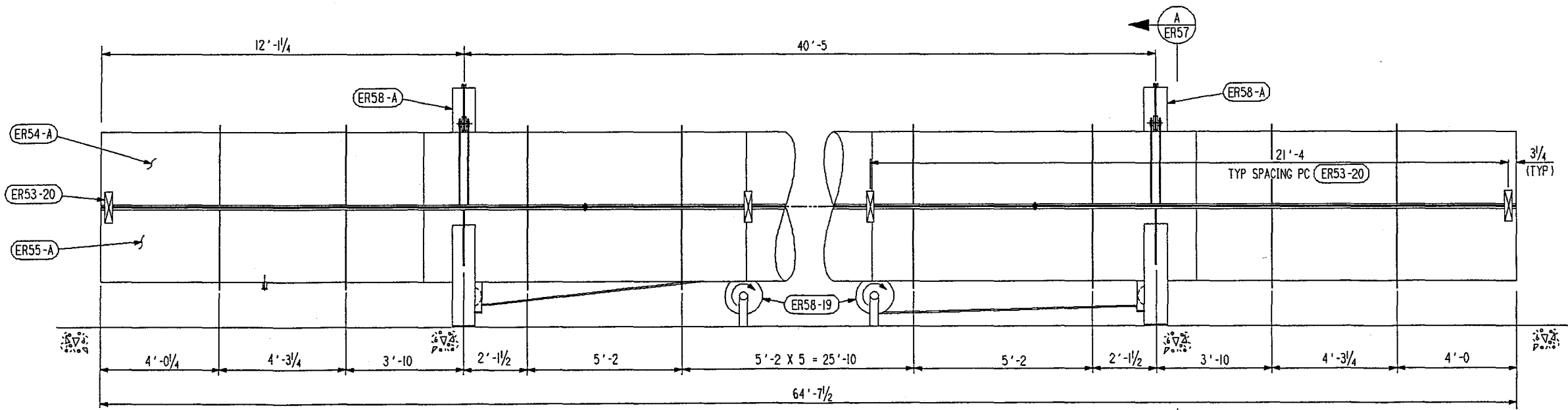


ELEVATION VIEW

SPECIAL HOOD
(1 REQUIRED)

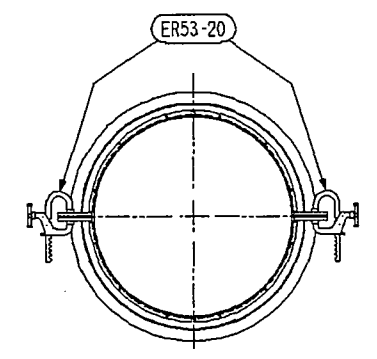


LEFT SIDE VIEW
(SADDLE AND HOIST NOT SHOWN)



ELEVATION VIEW

STANDARD HOOD
(2 REQUIRED)



LEFT SIDE VIEW
(SADDLE AND HOIST NOT SHOWN)

CAD FILE 30212051.DGN

GENERAL REV.		GENERAL		CHANGE DIMENSIONS AND UPDATE	
By	Date	By	Date	By	Date
BSA	4-4-94	BSA	3-7-94	RDS	2-11-94
Chkd		Chkd		Chkd	
3		2		2	

Supplier's/Purchaser's No. _____

CBI

LIGO PROJECT
LEAK TEST ARRANGEMENT
HELIUM HOOD
LEAK TEST STATION

Customer's No. _____ Contract No. **930212ER**

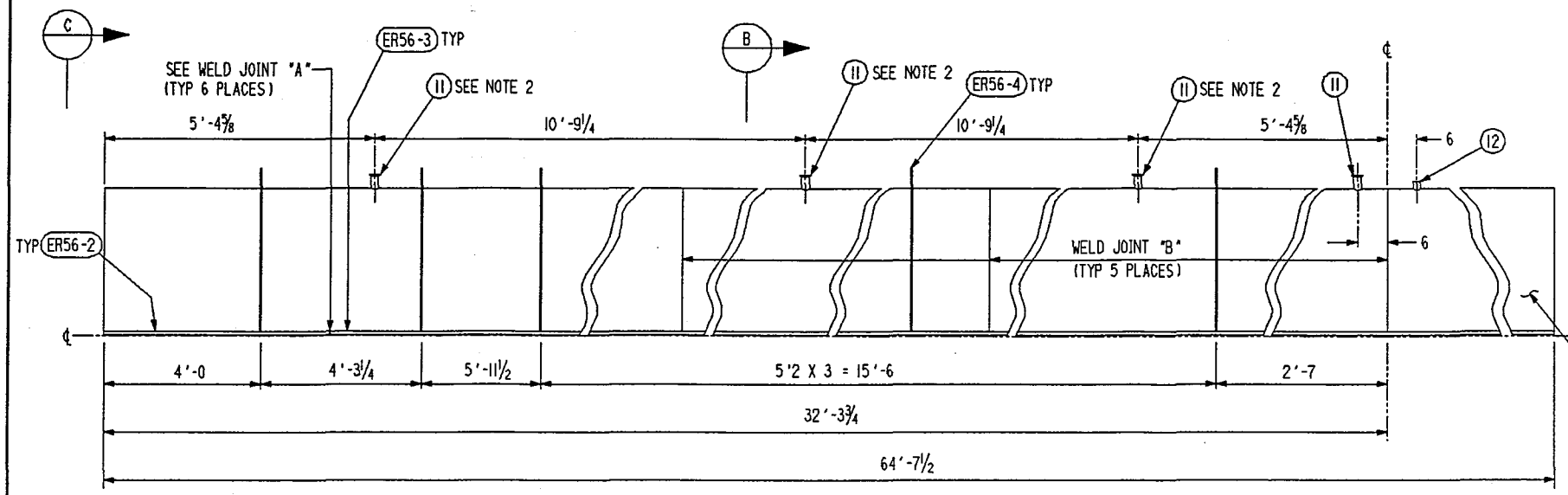
By **RDS** Chkd _____ Date **2-10-94**
By **J. L. RINGELSTETTER** Chkd _____ Date _____
Engineering Supervisor Sheet - 3

Revisions

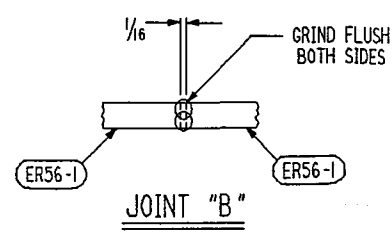
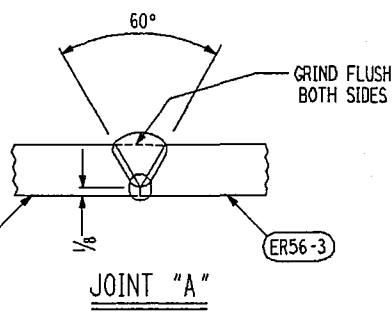
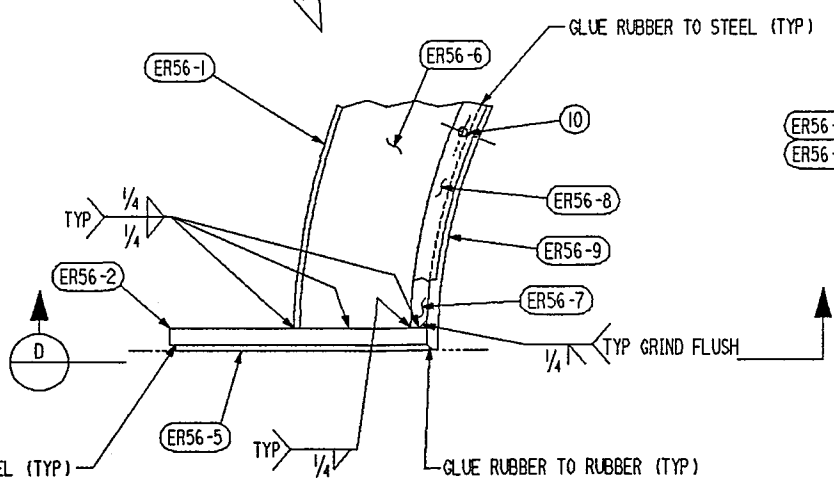
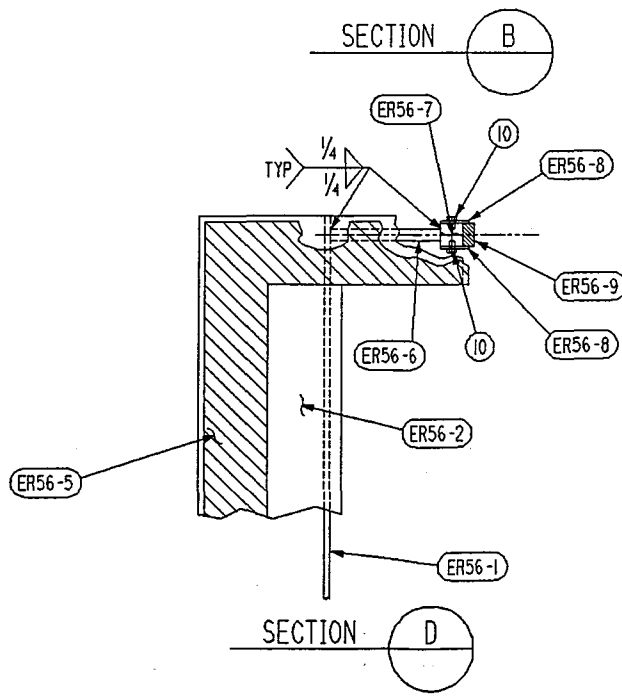
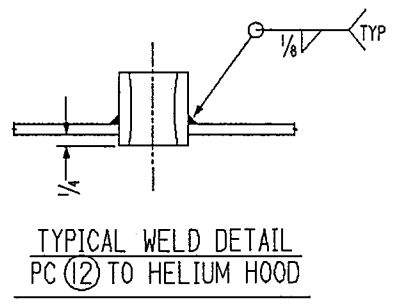
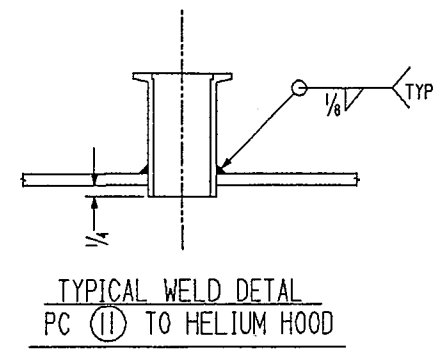
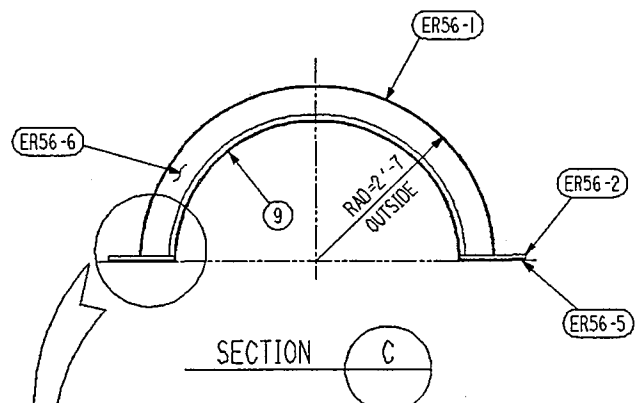
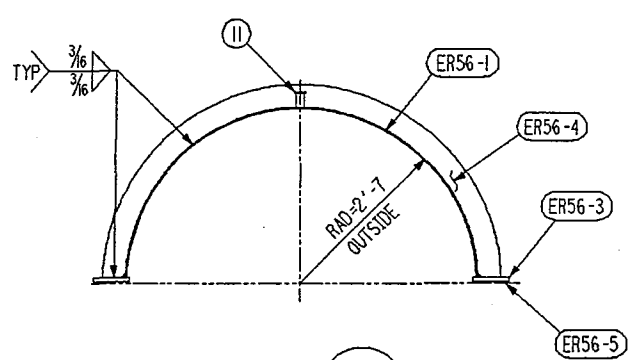
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FORM CHG 30 A REV SEP 93

▶ INDICATES CHANGE FROM PREVIOUS ISSUE



SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
1	ER52-A		SPECIAL TOP HOOD ASSEMBLY				7907
	ER56-1	6	PLATE SK X 1/4 (ROLL TO 2'-6 3/4 RAD)	10	9 7/32	A36	5217
	ER56-2	4	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC3 C8)	16	5	A36	1062
	ER56-3	4	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC2 C4)	15	10 3/4	A36	1013
	ER56-4	12	PLATE 4 X 1/4 X SK	FIN	8 5 5/8	A36	320
				SHR	11 5 5/8		
	ER56-5	2	RUBBER 1/4 X SK (S5-65 DUROMETER)		64 7	BUTYL	58
	ER56-6	2	PLATE 1/2 X SK (CF 31 1/4 X 5'-2 1/2 C1)			A36	120
	ER56-7	2	BAR 1" X SK	ROLL	FIN	6 5 3/4	A36
				SHR	9 5 3/4		
	ER56-8	8	BAR 1/8 X SK	FIN	3 2 1/16	A36	52
				SHR	6 2 1/16		
	ER56-9	2	RUBBER 1" X 1/2 (55-65 DUROMETER) BBE		6 6 5/32	BUTYL	5
	ER52-10	24	CAP SCREW 1/4 DIA HEX HEAD		0 7/8	SAE GR 2	1
	ER52-11	7	SMALL FLANGE LONG DN 40 ISO-KF		0 1 9/16	CARB STL	14
			"BALZERS" NR. BP 217 216 (70 MM-LENGTH)				
			OR EQUAL				
	ER52-12	1	1/4 DIA NPT PIPE COUPLING		0 1 3/8	FORGED STL	1

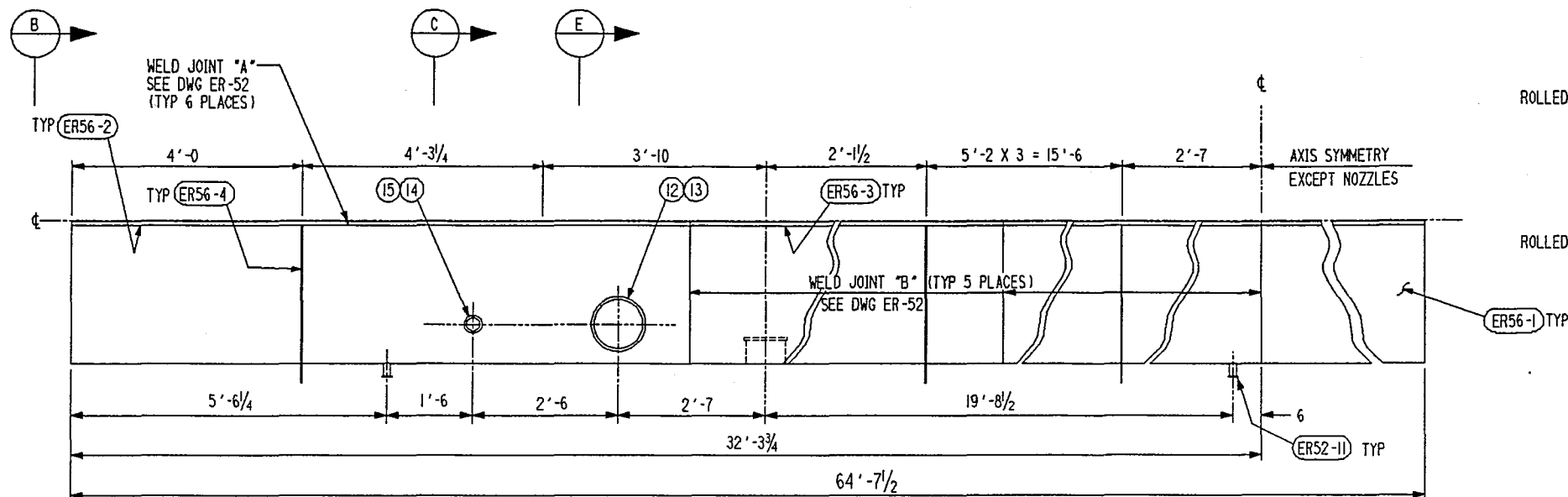


- NOTES:**
1. WORK THIS DWG WITH DWG ER-51 AND ER-56.
 2. THIS PC IS SYMMETRIC ABOUT ϕ .
 3. "C"-CLAMPS AND GLUE SUPPLY SEE DWG ER-53.

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
SPECIAL HOOD TEST ENCLOSURE TOP SECTION	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd ROS Date 3-3-94	Dwg. ER-52 Rev. 1
J. L. RINGELSTETTER Engineering Supervisor	Sheet - 1
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CAD FILE L30212052.DWG

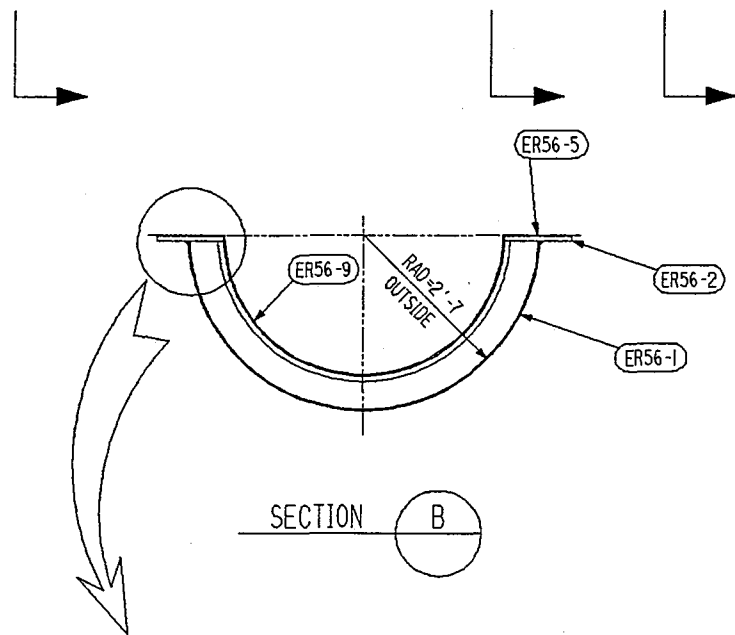
▶ INDICATES CHANGE FROM PREVIOUS ISSUE



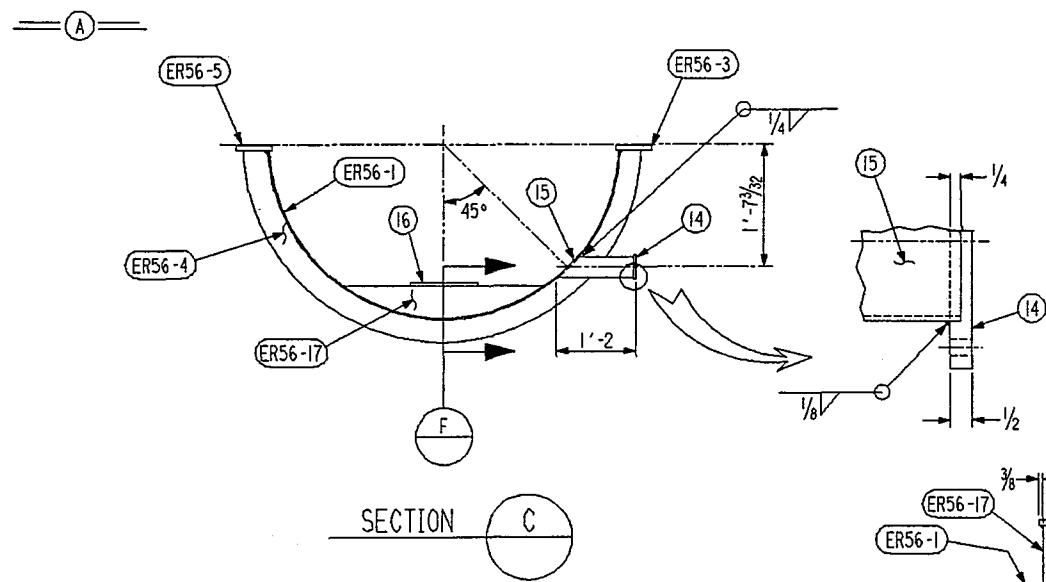
ROLLED HARD WAY

ROLLED HARD WAY

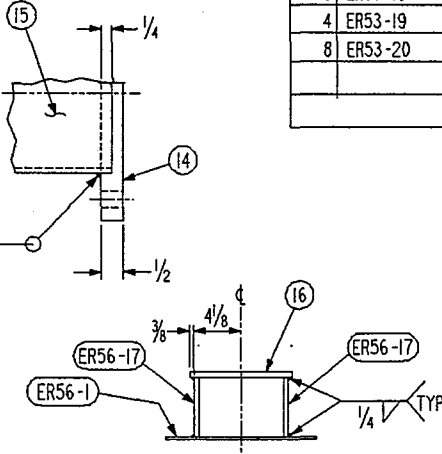
AXIS SYMMETRY EXCEPT NOZZLES



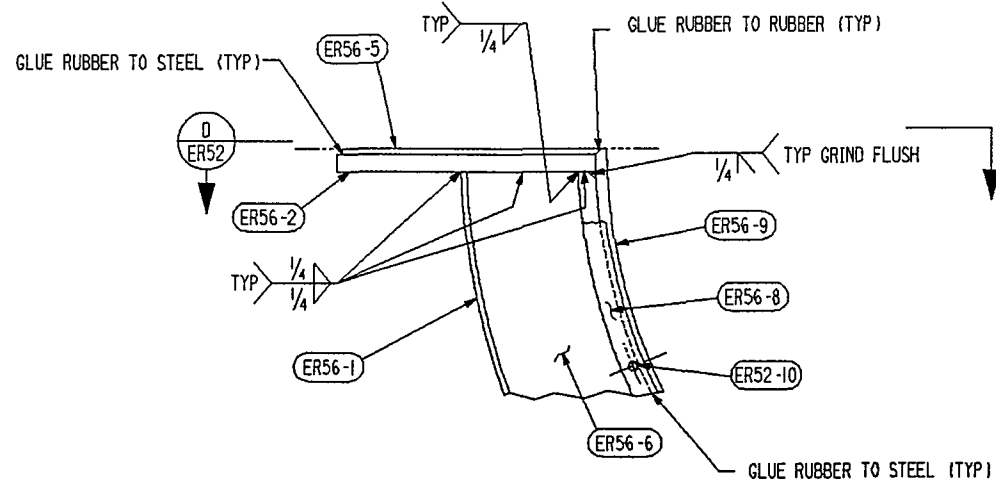
SECTION B



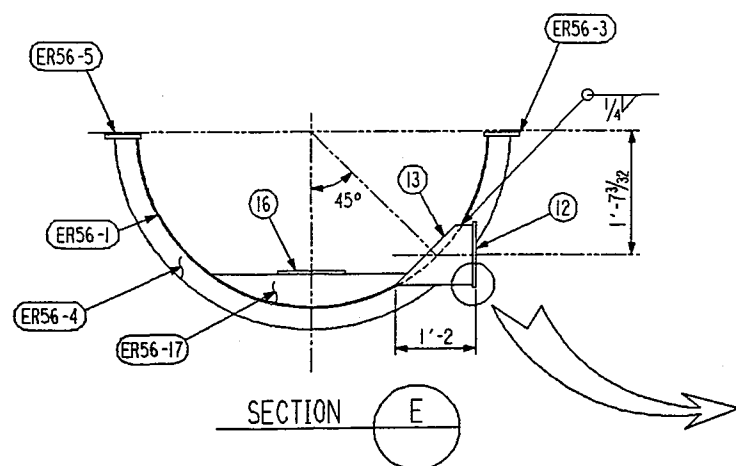
SECTION C



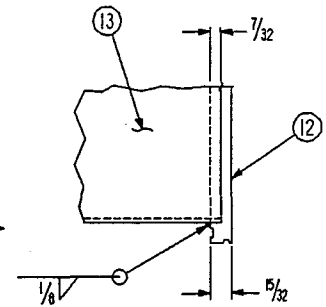
SECTION F



SECTION D



SECTION E



INDICATES CHANGE FROM PREVIOUS ISSUE

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT	
				FT	INCHES			
1	ER53-A		SPECIAL BOTTOM HOOD ASSEMBLY				8017	
	ER56-1	6	PLATE SK X 1/4 (ROLL TO 2'-6 3/4 RAD)	10	9 7/32	A36	5217	
	ER56-2	4	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC3 C8)	16	5	A36	1062	
	ER56-3	4	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC2 C4)	15	10 3/4	A36	1013	
	ER56-4	12	PLATE 4 X 1/4 X SK	FIN	8	5 5/8	A36	320
				SHR	11	5 5/8		
	ER56-5	2	RUBBER 1/4 X SK (55-65 DUROMETER)	64	7	BUTYL	58	
	ER56-6	2	PLATE 1/2 X SK (CF 31 1/4 X 5'-2 1/2 C1)			A36	120	
	ER56-7	2	BAR 1" X SK ROLL	FIN	6	5 3/4	A36	45
				SHR	9	5 3/4		
	ER56-8	8	BAR 1/8 X SK	FIN	3	2 1/6	A36	15
				SHR	6	2 1/6		
	ER56-9	2	RUBBER 1" X 1/2 (55-65 DUROMETER) BBE	6	6 7/32	BUTYL	5	
	ER52-10	24	CAP SCREW 1/4 DIA HEX HEAD	0	3/8	SAE GR 2	1	
	ER52-11	2	SMALL FLANGE LONG DN 40 ISO-KF	0	1 7/8	CARB STL	14	
			"BALZERS" NR. BP 217 216 (70 MM-LENGTH)					
			OR EQUAL					
	ER53-12	1	WELDING FLANGE DN 200 ISO-K "BALZERS"	0	1 5/32	STN STL	11	
			NR. BP 213 237-R (12 MM-LENGTH)					
			OR EQUAL					
	ER53-13	1	ROUND MECH TUBING 8 OD X 3/16 X SK	1	2 1/2	1015	18	
	ER53-14	1	FIXED, FLAT 3 ASA FLANGE "LESKER"	0	1 5/32	CARB STL	6	
			PART NO. ASA750X35 OR EQUAL					
	ER53-15	1	PIPE 3 STD X SK	1	2 1/2	1015	8	
	ER53-16	2	PLATE 9 X 1/2	1	0	A36	31	
	ER56-17	4	PLATE 3/8 X SK (CF 6 X 3'-1 C1)	2	11 3/16	A36	73	
			SUPPLY FOR HOOD ASSY ER52-A AND ER53-A					
8	ER53-18		GLUE - RUBBER TO STEEL (1/2 PINT CAN)				2	
4	ER53-19		GLUE - RUBBER TO RUBBER (5 OZ TUBE)					
8	ER53-20		"C"-CLAMP "DE-STA-CO" MODEL T257-6				160	
			OR EQUAL					

NOTES:

1. WORK THIS DWG WITH DWG ER-51, ER-52, AND ER-56.
2. WELD DETAIL OF PC (ER52-11) TO HOOD SEE DWG ER-52.

Supplier's/Purchaser's No. _____

CBI

LIGO PROJECT
LEAK TEST ARRANGEMENT
 SPECIAL HOOD TEST ENCLOSURE
 BOTTOM SECTION

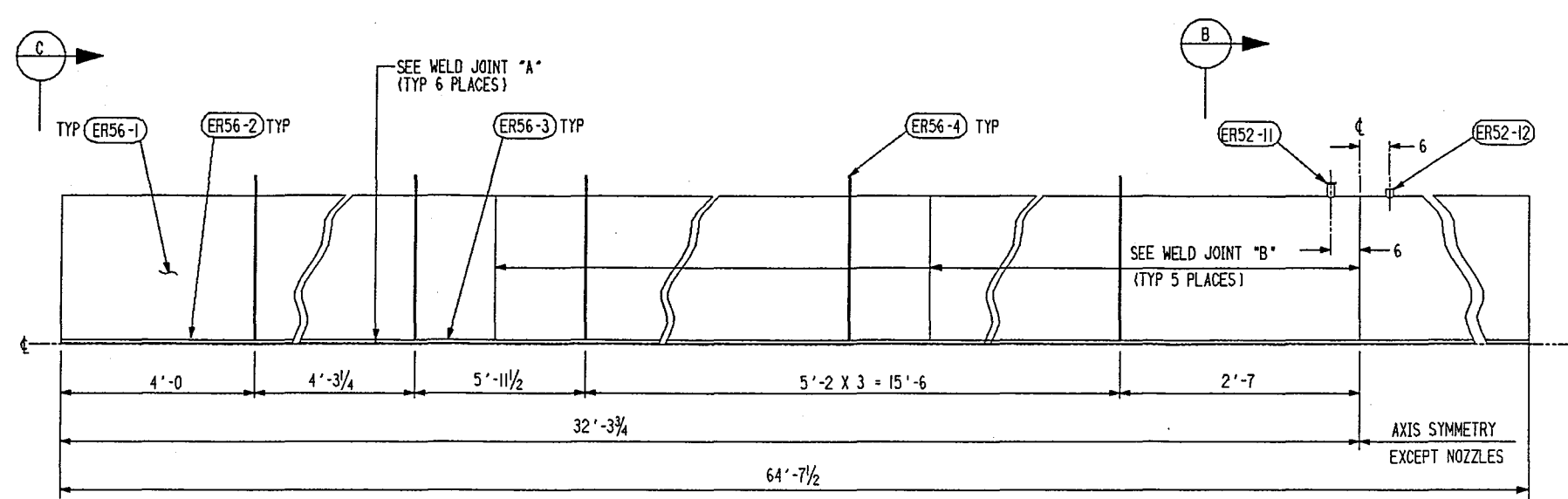
Customer's No. _____ Contract No. **930212ER**
 By **BSA** Chkd **RDS** Date **3-3-94**
J. L. RINGELSTETTER
 Engineering Supervisor

Dwg. ER-53 Rev. **1**
 Sheet - **1**

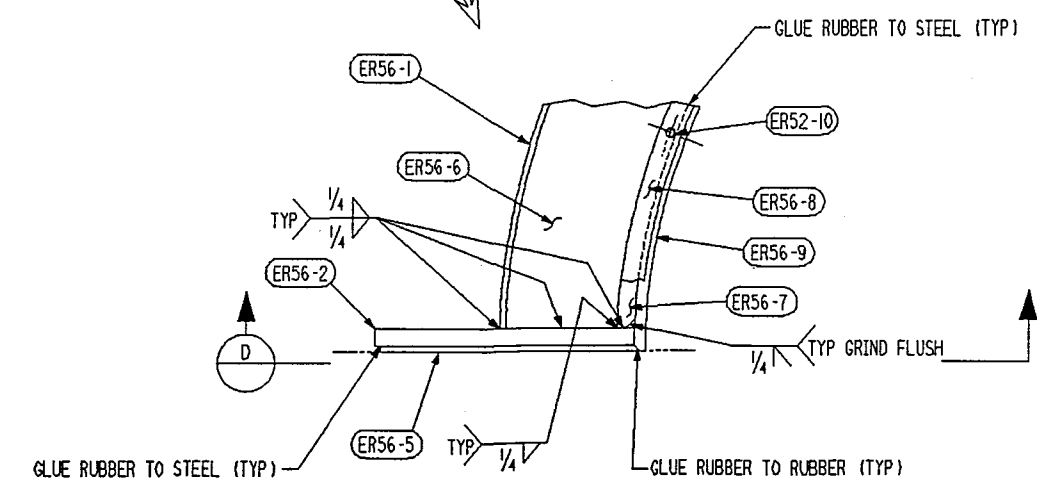
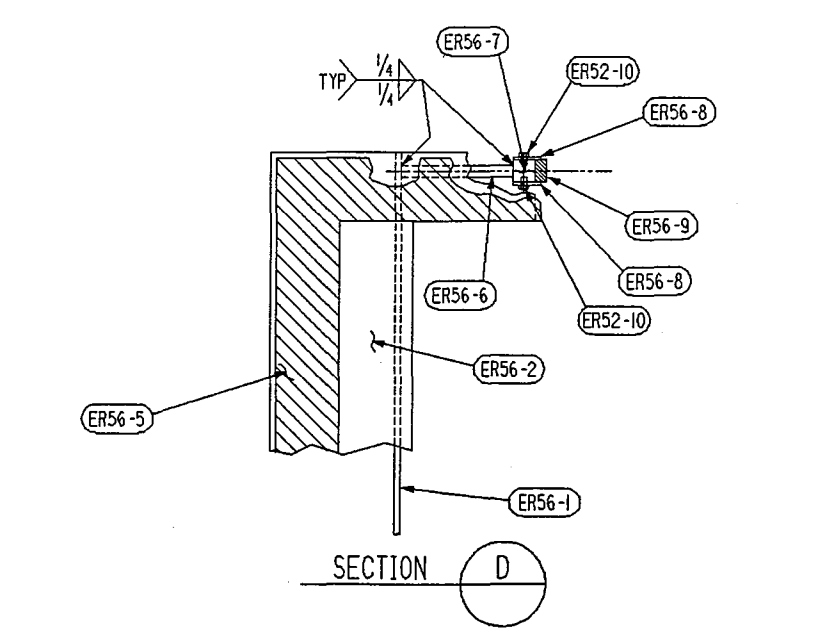
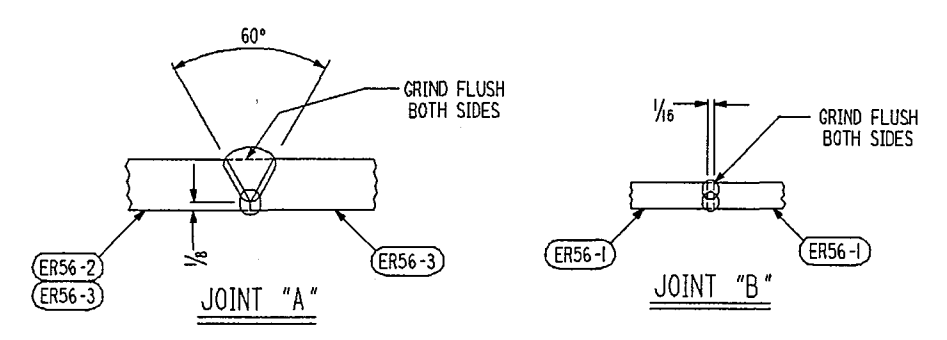
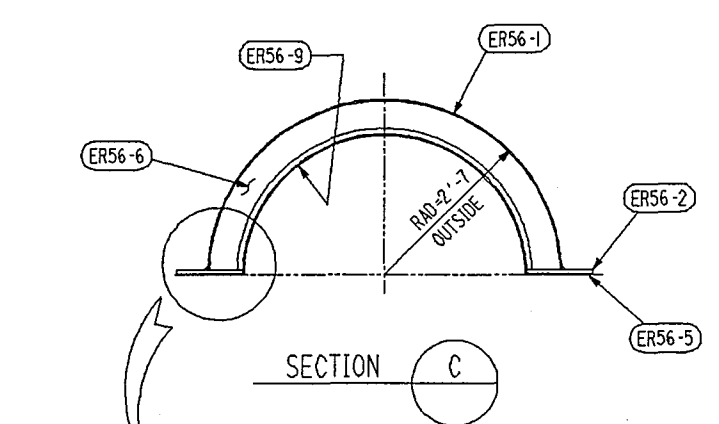
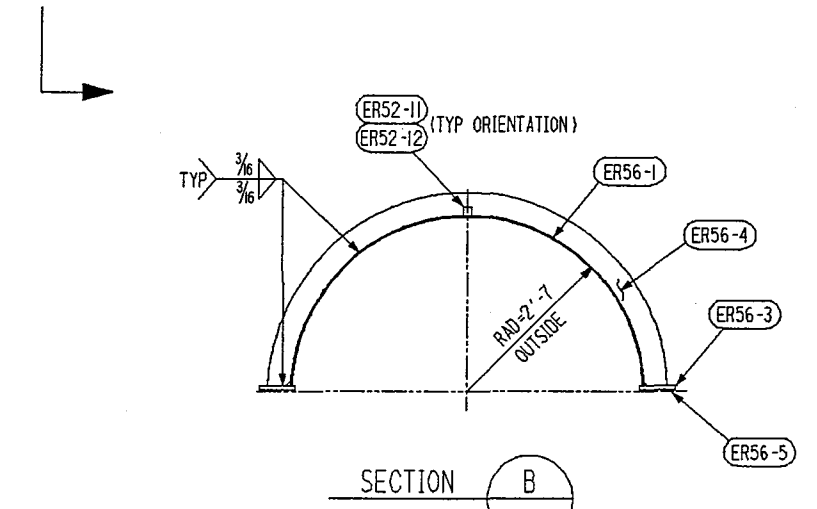
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THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHD) FORM CHC 30 A REV SEP 83

CAD FILE 30212053.DGN



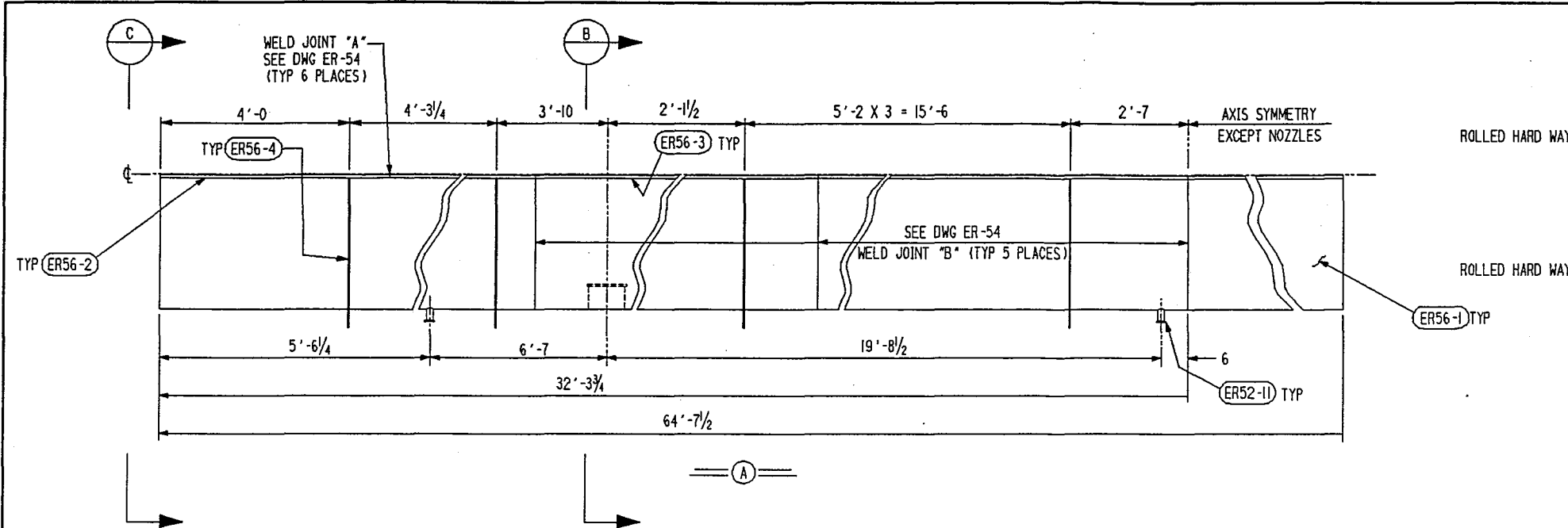
SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
2	ER54-A		STANDARD TOP HOOD ASSEMBLY				15718
	ER56-1	12	PLATE SK X 1/4 (ROLL TO 2'-6 3/4 RAD)	10	9 7/32	A36	10434
	ER56-2	8	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC3 C8)	16	5	A36	2124
	ER56-3	8	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC2 C4)	15	10 1/4	A36	2026
	ER56-4	24	PLATE 4 X 1/4 X SK	FIN	8	5 7/8	A36
				SHR	11	5 7/8	
	ER56-5	4	RUBBER 1/4 X SK (55-65 DUROMETER)	64	7	BUTYL	116
	ER56-6	4	PLATE 1/2 X SK (CF 31 1/4 X 5'-2 1/2 C1)			A36	240
	ER56-7	4	BAR 1" X SK ROLL	FIN	6	5 3/4	A36
				SHR	9	5 3/4	
	ER56-8	16	BAR 1/8 X SK	FIN	3	2 1/16	A36
				SHR	6	2 1/16	
	ER56-9	4	RUBBER 1" X 1/2 (55-65 DUROMETER) BBE	6	6 5/32	BUTYL	10
	ER52-10	48	CAP SCREW 1/4 DIA HEX HEAD	0	3/8	SAE GR 2	2
	ER52-11	2	SMALL FLANGE LONG DN 40 ISO-KF	0	1 1/8	CARB STL	4
			"BALZERS" NR. BP 217 216 (70 MM-LENGTH) OR EQUAL				
	ER52-12	2	1/4 DIA NPT PIPE COUPLING	0	1 3/8	FORGED STL	2



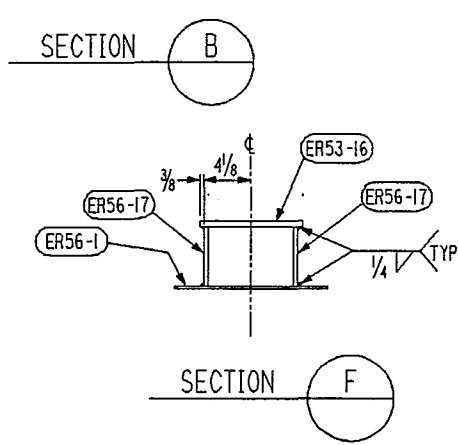
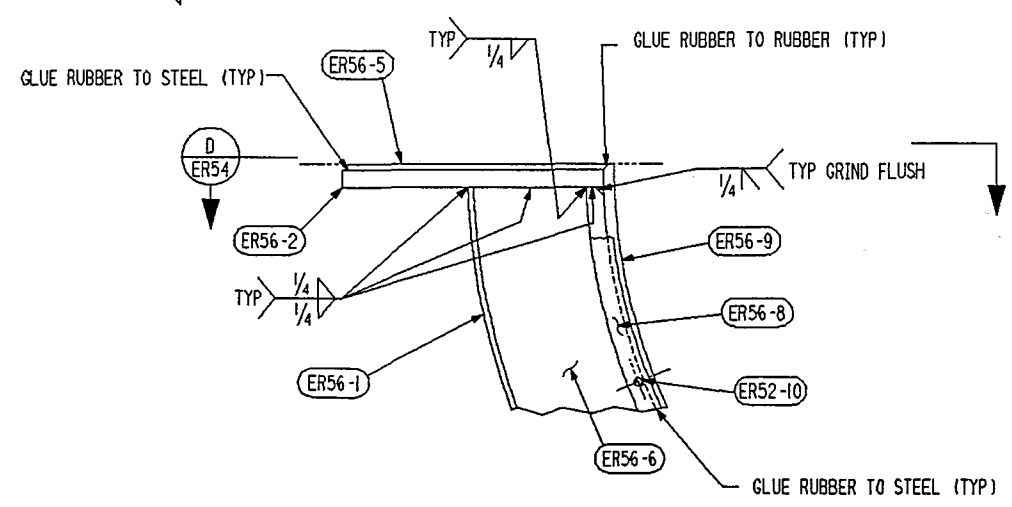
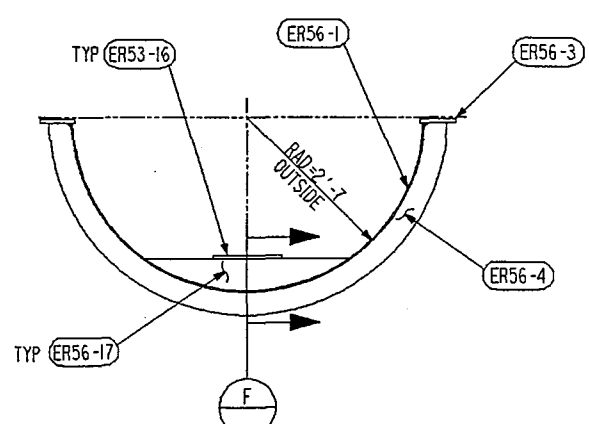
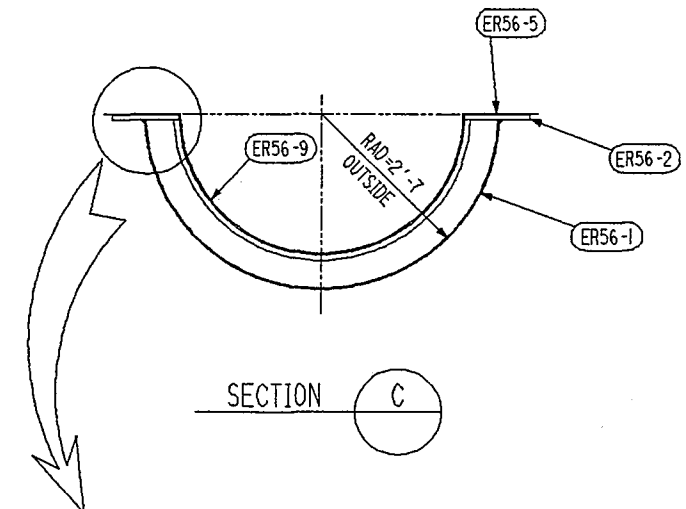
- NOTES:**
1. WORK THIS DWG WITH DWG ER-51 AND ER-56.
 2. "C"-CLAMPS AND GLUE SUPPLY SEE DWG ER-55.
 3. TYPICAL WELD DETAIL FOR PC (ER52-11) AND PC (ER52-12) SEE DWG ER-52.

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT STANDARD HOOD TEST ENCLOSURE TOP SECTION	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-4-94	Dwg. ER-54 Rev. 1
J. L. RINGELSTETTER Engineering Supervisor	
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SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
2	ER55-A		STANDARD BOTTOM HOOD ASSEMBLY				15732
	ER56-1	12	PLATE SK X 1/4 (ROLL TO 2'-6 3/4 RAD)	10	9 7/32	A36	10434
	ER56-2	8	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC3 C8)	16	5	A36	2124
	ER56-3	8	PLATE 3/4 X SK (CF 80 1/2 X 16'-5 3/4 W/PC2 C4)	15	10 3/4	A36	2026
	ER56-4	24	PLATE 4 X 1/4 X SK	8	5 5/8	A36	640
			SHR	11	5 5/8		
	ER56-5	4	RUBBER 1/4 X SK (55-65 DUROMETER)	64	7	BUTYL	116
	ER56-6	4	PLATE 1/2 X SK BURN			A36	240
	ER56-7	4	BAR 1" X SK ROLL	6	5 3/4	A36	90
			SHR	9	5 3/4		
	ER56-8	18	BAR 1/8 X SK	3	2 1/16	A36	30
			SHR	6	2 1/16		
	ER56-9	4	RUBBER 1" X 1/2 (55-65 DUROMETER) BBE	6	6 5/32	BUTYL	10
	ER52-10	48	CAP SCREW 1/4 DIA HEX HEAD	0	3/8	SAE GR 2	2
	ER52-II	4	SMALL FLANGE LONG DN 40 ISO-KF	0	1 9/16	CARB STL	4
			"BALZERS" NR. BP 217 216 (70 MM-LENGTH)				
			OR EQUAL				
	ER53-16	4	PLATE 9 X 1/2	1	0	A36	62
	ER56-17	8	PLATE 3/8 X SK (CF 6 X 3'-1 CI)	2	11 3/16	A36	146
			SUPPLY FOR HOOD ASSY ER54-A AND ER55-A				
4	ER55-18		GLUE - RUBBER TO STEEL (1/2 PINT CAN)				4
4	ER55-19		GLUE - RUBBER TO RUBBER (5 OZ TUBE)				
16	ER53-20		"C"-CLAMP "DE-STA-CO" MODEL T257-6				320
			OR EQUAL				

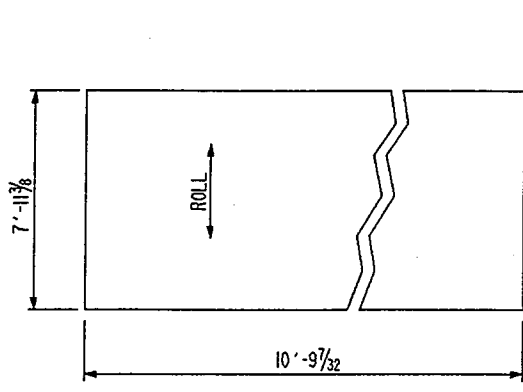


- NOTES:**
1. WORK THIS DWG WITH DWG ER-51, ER-54, AND ER-56.
 2. WELD DETAIL OF PC (ER52-II) TO HOOD SEE DWG ER-52.

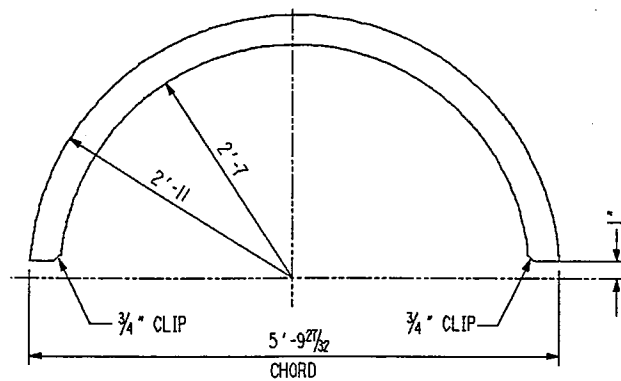
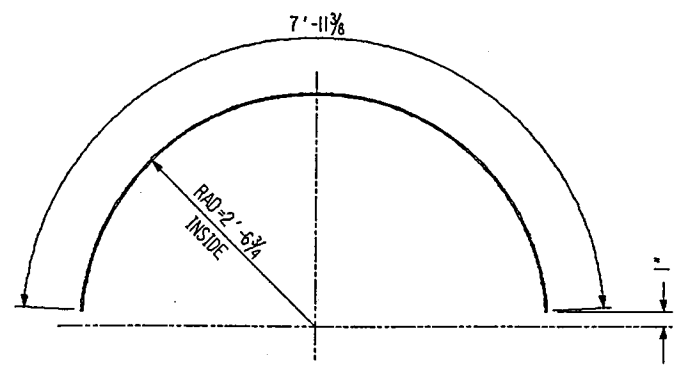
Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
STANDARD HOOD TEST ENCLOSURE BOTTOM SECTION	
Customer's No.	Contract No.
By BSA Chkd RDS Date 3-4-94	930212ER
J. L. RINGELSTETTER Engineering Supervisor	Dwg. ER-55 Rev. 1 Sheet - 1
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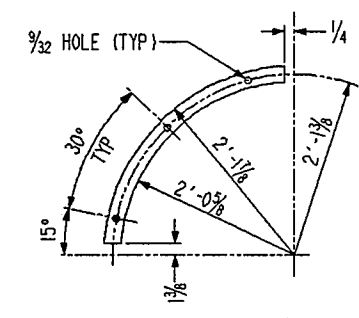
SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
			SEE DWG ER-52, ER-53, ER-54 AND ER-55 FOR BILLING				



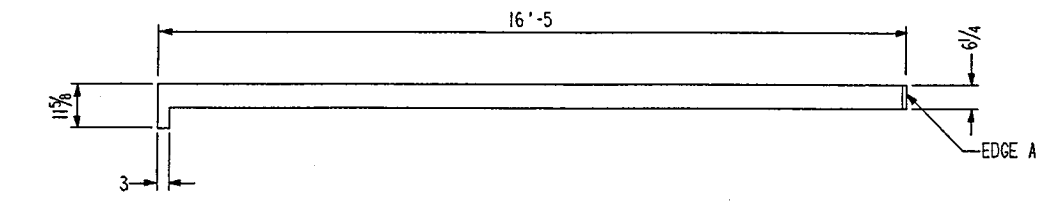
①
1/4 THICK



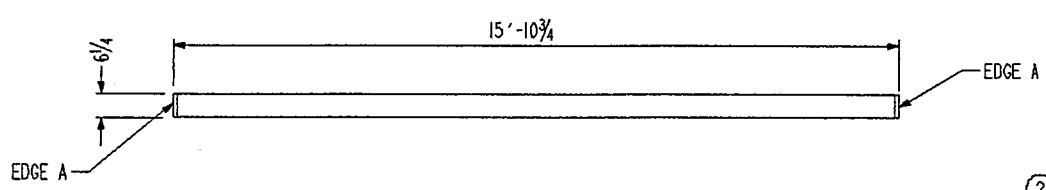
④
1/4 THICK



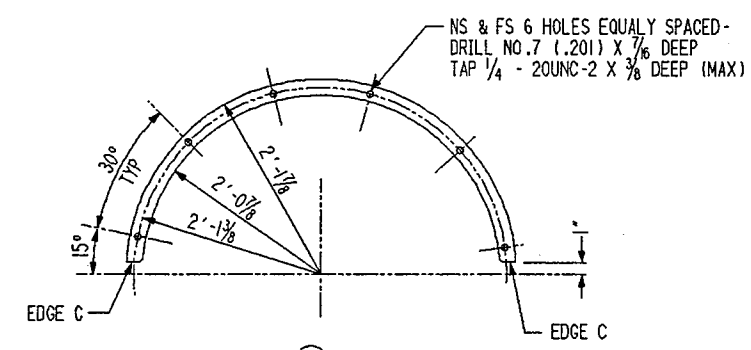
⑧
1/8 THICK



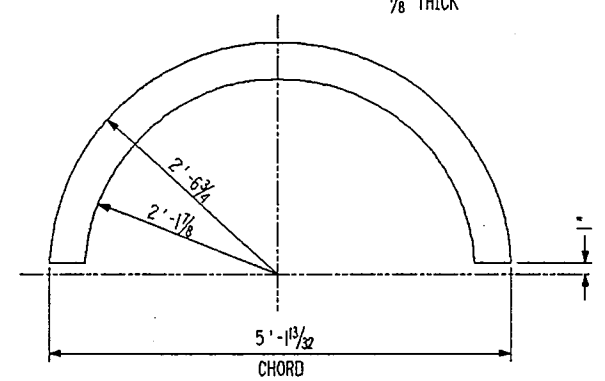
②
3/4 THICK



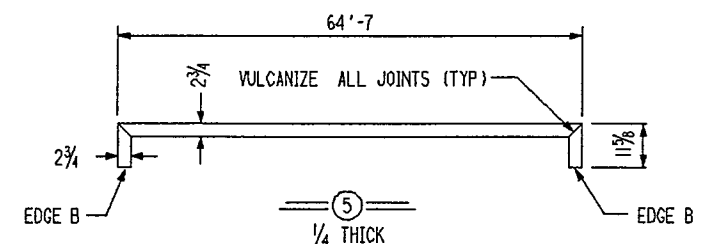
③
3/4 THICK



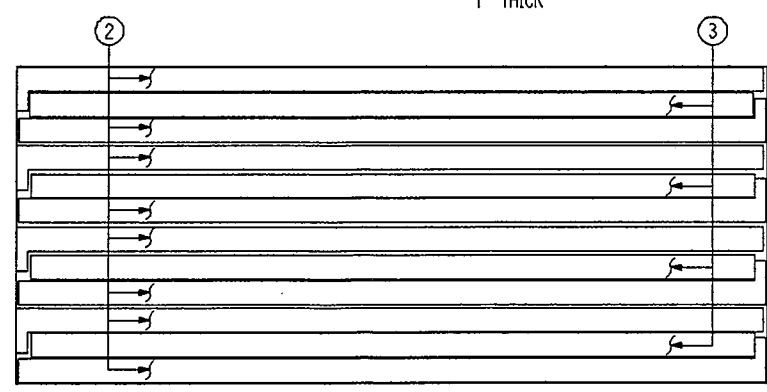
⑦
1" THICK



⑥
1/2 THICK



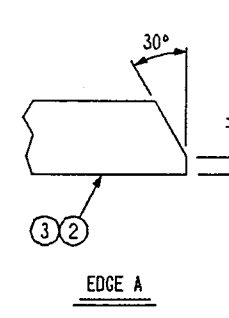
⑤
1/4 THICK



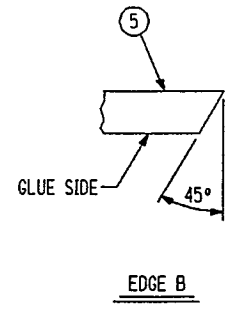
TEMPLATE FOR CUTTING PC ② AND PC ③
(SEE NOTE 2)

NOTES:

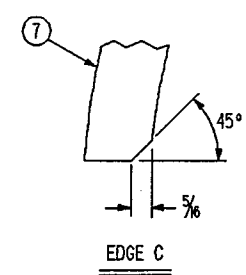
1. WORK THIS DWG WITH ER-52, ER-53, ER-54 AND ER-55.
2. CUTS 8 PC ② AND 4 PC ③ FROM PLATE 80 1/2 X 16'-5 3/4 X 3/4 THK.



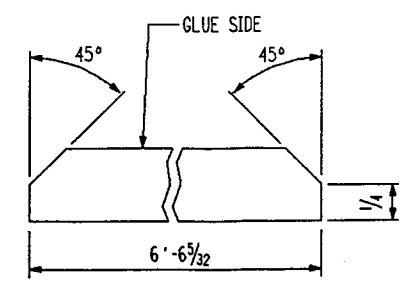
EDGE A



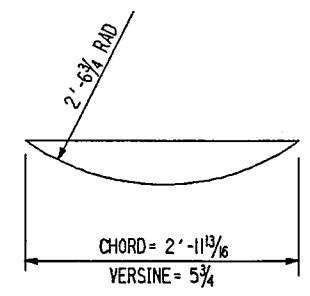
EDGE B



EDGE C



⑨

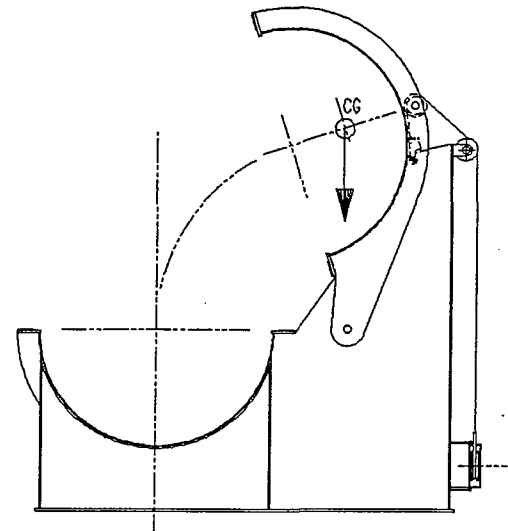


⑬

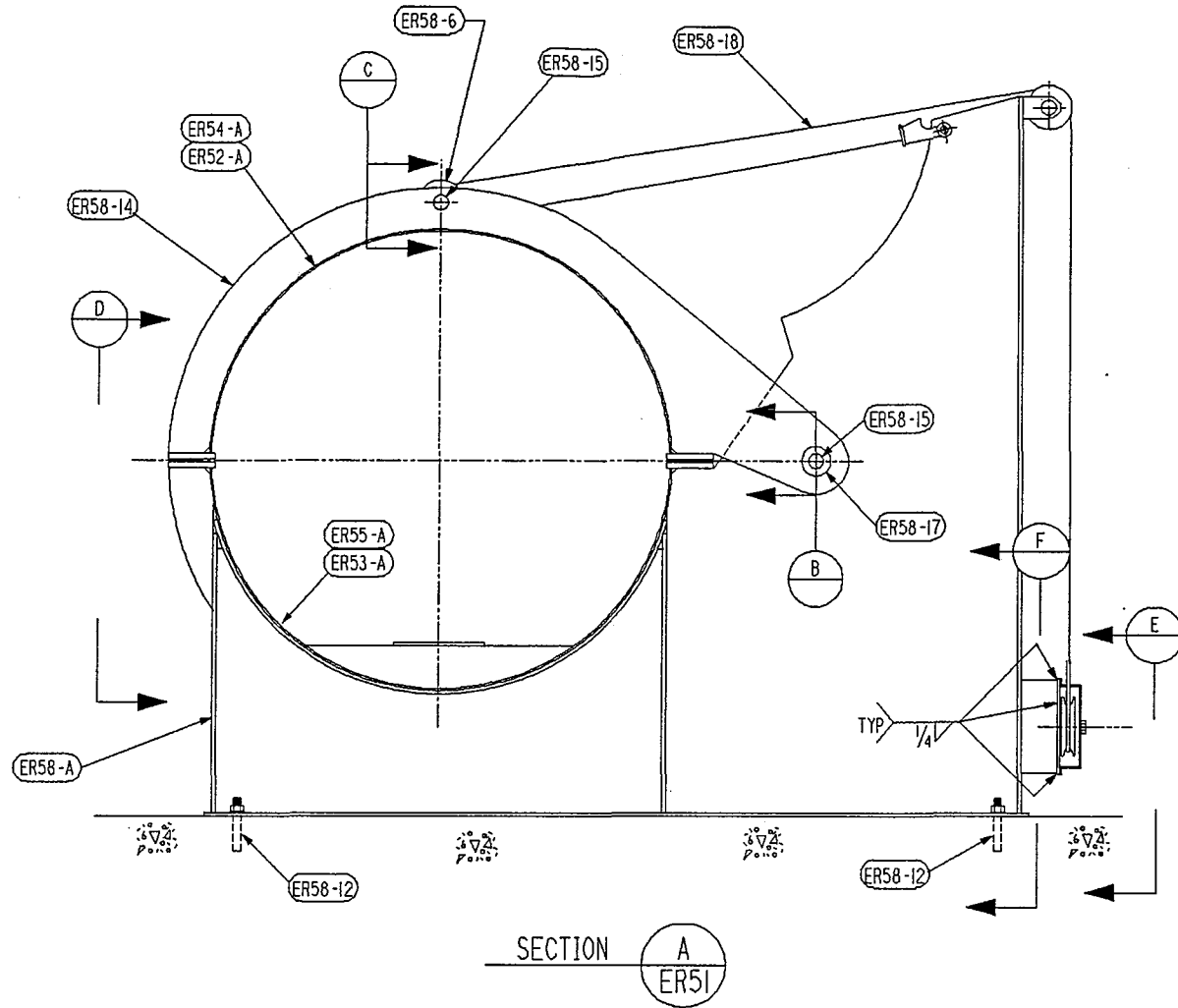
INDICATES CHANGE FROM PREVIOUS ISSUE

CAD FILE: 30212056.DGN

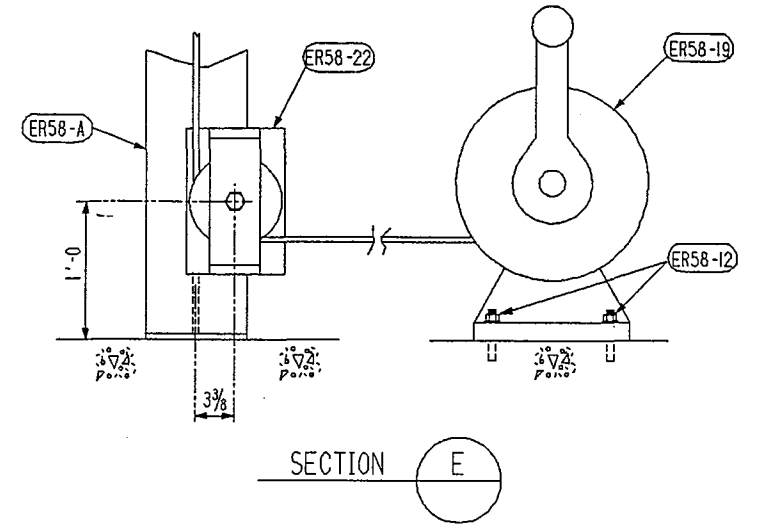
Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
HOOD TEST ENCLOSURE HELIUM HOOD DETAILS	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-4-94	Dwg. ER-56 Rev. 1
J. L. RINGELSTETTER Engineering Supervisor	
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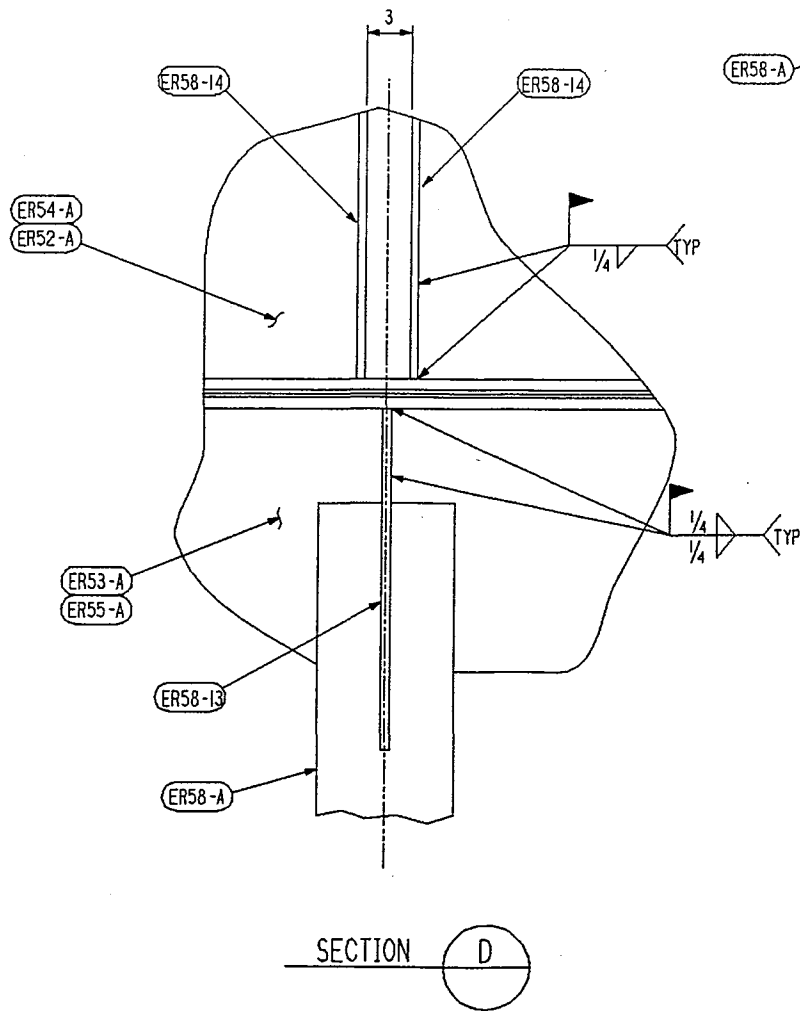
OPEN CONFIGURATION



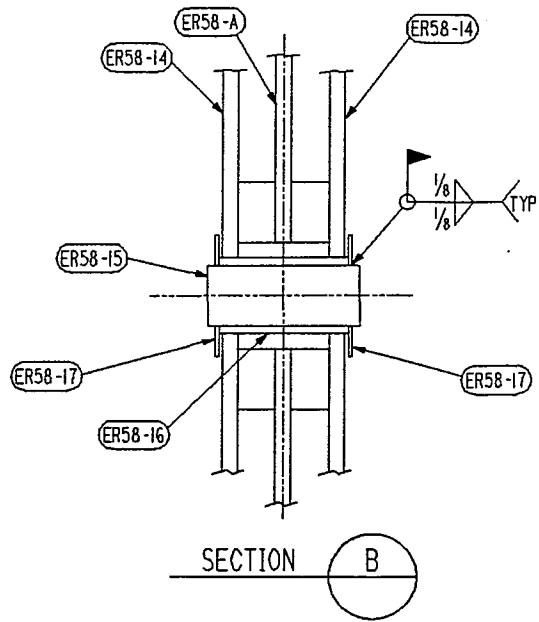
SECTION A
ER51



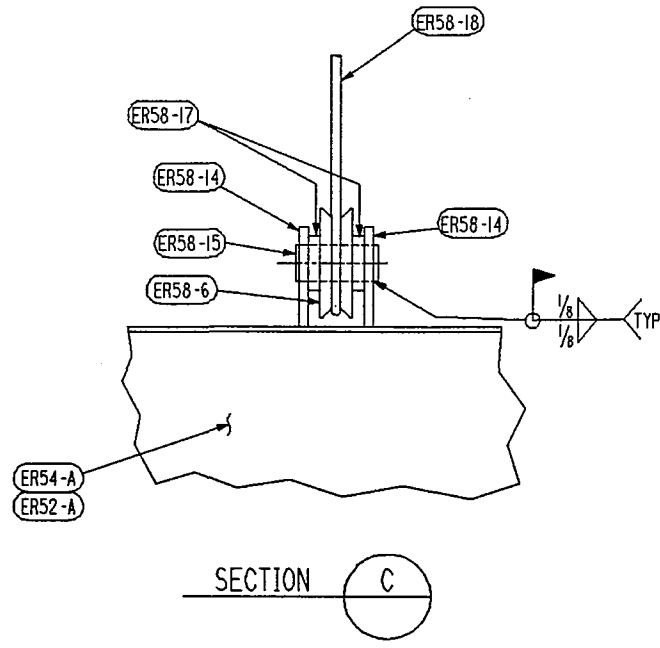
SECTION E



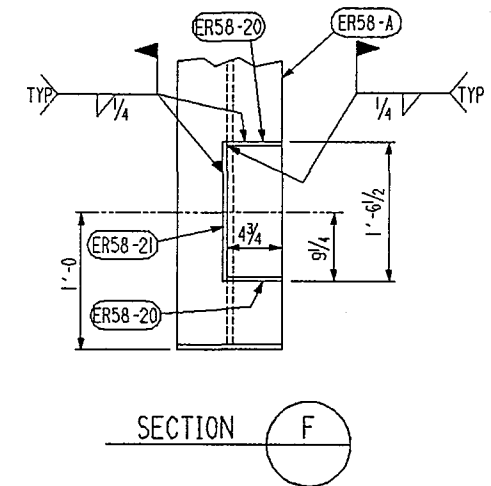
SECTION D



SECTION B



SECTION C



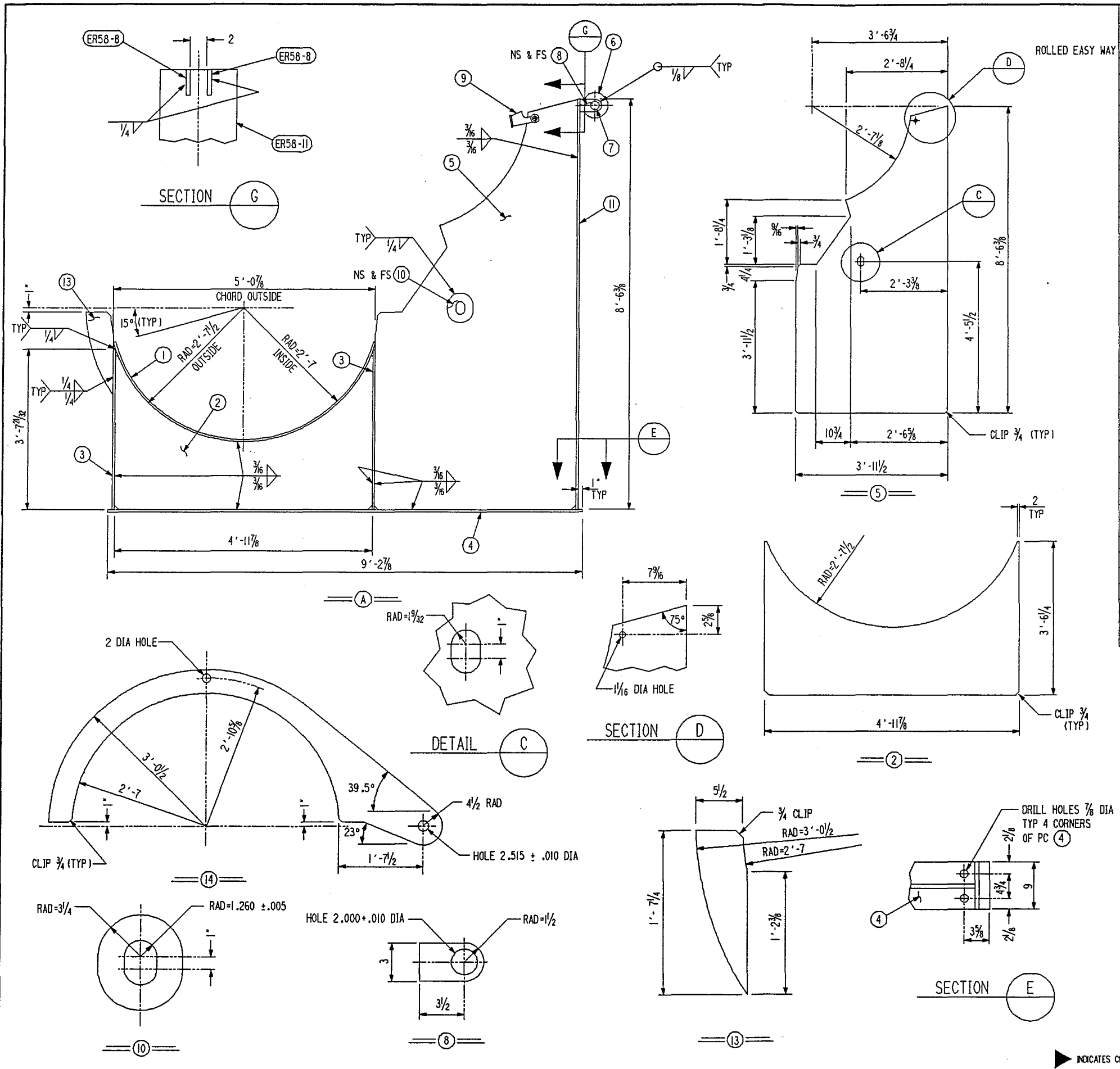
SECTION F

NOTES:

1. WORK THIS DWG WITH ER-51 AND ER-58.

CAD FILE: 30212057.DGN

GENERAL REV.		GENERAL		REVISED SECTION C-G		Remarks	
By	Chkd	Date	By	Chkd	Date	By	Date
USA	RDS	3-28-94	USA	RDS	2-2-94	USA	2-11-94
By	Chkd	Date	By	Chkd	Date	By	Date
USA	RDS	3-28-94	USA	RDS	2-2-94	USA	2-11-94
Customer's No. _____				Contract No. 930212ER			
By RDS Chkd RDS Date 2-10-94				Dwg. ER-57 Rev. 3			
J. L. RINGELSTETTER Engineering Supervisor				Sheet - 3			
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SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
6	ER58-A		SADDLE ASSEMBLY				7690
	ER58-1	6	PLATE 9 X 1/2 ROLL TO 2'-7 RADIUS	6	9 9/16	A36	627
	ER58-2	6	PLATE SK X 1/2 (CF 43 X 5'-0 C1)	4	11 1/8	A36	1293
	ER58-3	12	PLATE 9 X 1/2	3	7 1/32	A36	670
	ER58-4	6	PLATE 9 X 1/2 W/HOLES	9	2 7/8	A36	850
	ER58-5	6	PLATE SK X 1/2 (CF 47 1/2 X 8'-7 C1)	8	0 3/8	A36	3132
	ER58-6	6	WIRE ROPE SHEAVE W/ ROLLER BEARINGS 6 NOM OD-FOR 1/2 WIRE ROPE "McKISSIK" STOCK NO. 472875 OR EQUAL				42
	ER58-7	6	SHAFT 1.997 OD (MACHINING)	0	3/4	C1018	18
	ER58-8	12	PLATE SK X 3/8 (CF 3 X 5 1/2 C1)	0	5	A36	15
	ER58-9	6	WEDGE SOCKET S-421 "CROSBY" FOR 1/2 DIA WIRE ROPE STOCK NO. 1040322 OR EQUAL			CAST STL	30
	ER58-10	12	PLATE SK X 1/4 (CF 7 1/2 X 8 1/2 C1)	0	7 1/2	A36	138
	ER58-11	6	PLATE 9 X 1/2	8	6 3/8	A36	785
	ER58-13	6	PLATE SK X 1/2 (CF 6 X 1'-8 C1)			A36	90
			SHEAVE AND HINGE FIELD ASSEMBLY				4777
12	ER58-14		PLATE SK X 1/2 (CF 42 X 8'-9 C1)			A36	558
12	ER58-15		SHAFT 1.997 OD (MACHINING)	0	5	C1018	107
6	ER58-16		SAE-660 CAST BROZE BEARING W/BORE=2 2 1/2 OD (CF BEARING 5" LENGTH) "McMASTER-CARR" NO. 6381K374	0	4 1/8	BRONZE	15
24	ER58-17		PLAIN WASHER 2 DIA WIDE			CARB STL	12
6	ER58-6		WIRE ROPE SHEAVE W/ ROLLER BEARINGS 6 NOM OD-FOR 1/2 WIRE ROPE "McKISSIK" STOCK NO. 472875 OR EQUAL				42
6	ER58-18		1/2 DIA WIRE ROPE	75	0	IPS W/TWRC	105
6	ER58-19		RADIAL PISTON TUGGER HOIST SERIES HMKL 3000 LBS RATED CAPACITY FOR 1/2 DIA WIRE ROPE "GARDNER-DENVER" NO. 75213AA7 OR EQUAL				3630
12	ER58-20		PLATE 4 3/4 X 3/8	0	4 3/4	A36	29
6	ER58-21		PLATE 4 7/8 X 3/8	1	6 1/2	A36	57
6	ER58-22		HORIZONTAL LEAD BLOCK W/8 DIA SHEAVE 2 1/2-TON WORKING LOAD, 1/2 DIA WIRE ROPE "CROSBY" NO. 772015 OR EQUAL				126
48	ER58-12		STANDARD KWIK BOLT II -SIZE 3/4 "HILTI" ITEM NO. 000453779 OR EQUAL	0	8	CARB STL	96

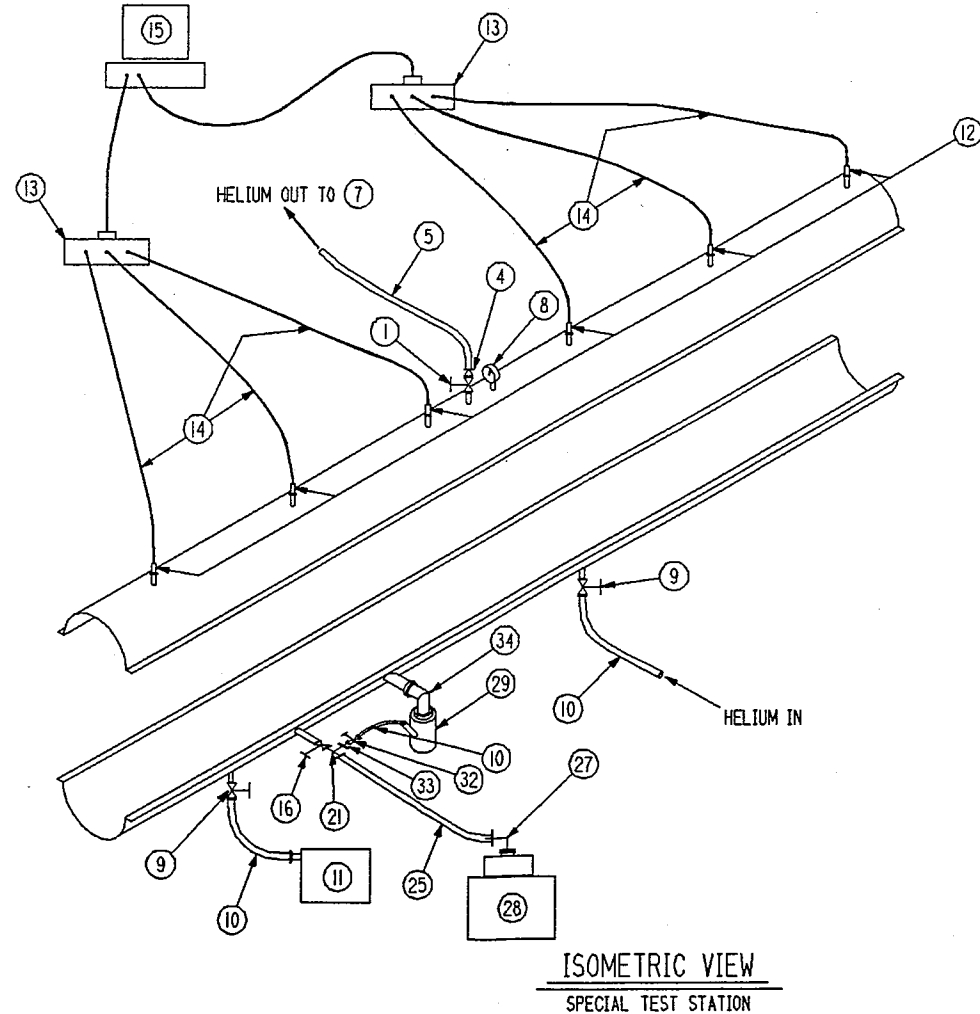
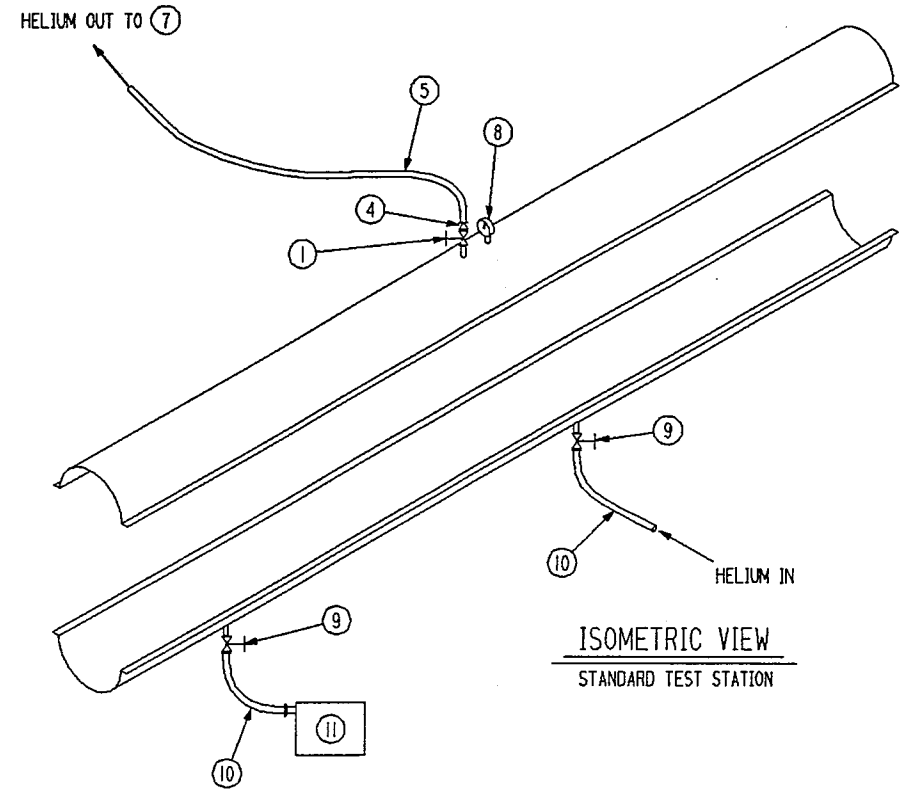
NOTES:

1. WORK THIS DWG WITH DWG ER57.

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT SADDLE AND HINGE DETAILS	
Customer's No. _____	Contract No. 930212ER
By RDS Chkd RDS Date 2-10-94	Dwg. ER-58 Rev. 3
J. L. RINGELSTETTER Engineering Supervisor	
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CAD FILE: 30212058.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE



SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
			BASIC EQUIPMENT FOR LEAK TEST STATIONS (3 REQUIRED: 2-STANDARD, 1-SPECIAL)				X
3	ER59-A		EXHAUST LINE 40 MM				
	ER59-1	3	KF BELLOWS-SEALED STRAIT-THROUGH VALVE ELECTROPNEUMATICALLY OPERATED DN 40 KF "LEYBOLD" CAT. NO. 299 23 OR EQUAL			STN STL	X
	ER59-2	6	CLAMPING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 217 428-T OR EQUAL			ALUM	X
	ER59-3	6	CENTERING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 213 143-T OR EQUAL			STN/VITON	X
	ER59-4	3	HOSE NIPPLE DN 40 ISO-KF-45 "BALZERS" ORDER NO. BP 220 327 OR EQUAL	0	1 1/2	ALUM	X
	ER59-5	3	PVC HOSE WITH EMBEDDED STEEL WIRE SPIRAL -45 NOM. DIA "BALZERS" ORDER NO. B 2359 837BR OR EQUAL	40	0	PVC	X
	ER59-6	6	HOSE CLIP -45 NOM. DIA "BALZERS" ORDER NO. B 4163 111B OR EQUAL			STN STL	X
1	ER59-7		EXHAUST HOOD			CARB STL	X
3	ER59-8		6 DIA VACUUM DIAL GAUGE, WITH 1/4 MPT BOTTOM CONNECTION, HIGH ACCURACY "McMASTER-CARR" NO. 4105K2 OR EQUAL			BRONZE	X
3	ER59-8		EVACUATING ENCLOSURE LINE 40 MM				X
	ER59-9	3	KF BELLOWS-SEALED RIGHT-ANGLE VALVE W/QUICK-ACTING KNOB-MANUALLY OPERATED DN 40 KF "LEYBOLD" CAT. NO. 288 13 OR EQUAL			STN STL	X
	ER59-2	9	CLAMPING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 217 428-T OR EQUAL			ALUM	X
	ER59-3	9	CENTERING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 213 143-T OR EQUAL			STN/VITON	X
	ER59-10	3	PVC HOSE DN 40 ISO-KF "BALZERS" ORDER NO. BP 226 417-T OR EQAL	3	3 3/8	PVC	X
	ER59-11	3	TRIVAC B ROTARY VANE PUMP MODEL D65B 53.0 CFM (1500 LTR/MIN), POWER 3 HP, VOLTAGE 200-230/460 VAC, FREQ. 60 HZ, W/HYDROCARBON OIL, 40 KF FLANGE "LEYBOLD" CAT. NO. 91296-2 OR EQUAL				561
	ER59-C		BACKFILLING LINE 40 MM				X
	ER59-9	3	KF BELLOWS-SEALED RIGHT-ANGLE VALVE W/QUICK-ACTING KNOB-MANUALLY OPERATED DN 40 KF "LEYBOLD" CAT. NO. 288 13 OR EQUAL			STN STL	X
	ER59-2	6	CLAMPING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 217 428-T OR EQUAL			ALUM	X
	ER59-3	6	CENTERING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 213 143-T OR EQUAL			STN/VITON	X
	ER59-10	3	PVC HOSE DN 40 ISO-KF "BALZERS" ORDER NO. BP 226 417-T OR EQAL	3	3 3/8	PVC	X
			ADDITIONAL EQUIPMENT FOR SPECIAL HOOD ENCLOSURE (1 REQUIRED)				
1			LEAK INDICATORS (LEAKS BY TIME OF FLIGHT MEASUREMENT)				X
	ER59-12	6	COLD CATHODE GAUGE TUBE NW 40 KF "HPS-SENSAVAC" SERIES 937 OR EQUAL				X
	ER59-2	6	CLAMPING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 217 428-T OR EQUAL			ALUM	X
	ER59-3	6	CENTERING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 213 143-T OR EQUAL			STN/VITON	X
	ER59-13	2	CONTROLLER "HPS-SENSAVAC" SERIES 937 WITH 3 STANDARD COLD CATHODE BOARDS OR EQUAL; WITH COMMUNICATION PORT RS-232/485				X
	ER59-14	6	COLD CATHODE CABLE "HPS-SENSAVAC" SERIES 937, PART NO. 100006173 OR EQUAL	50	0		X
	ER59-15	1	486DX2/50 PC W/MONITOR, DAS HIGH SPEED DATA ACQUISITION BOARD AND SPLITTER WITH RS 232 CABLE				X

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
1			MECHANICAL VACUUM PUMP (3 DIA LINE)				X
	ER59-16	1	GATE VALVE 3 ID ASA FLANGE-GROOVED W/HANDWHEEL "GNB CORP" MODEL G3W PART NO. 42755A OR EQUAL	0	4	STN STL	34
	ER59-17	1	O-RING 3.975 DIA "GNB" NO. 345			VITON	X
	ER59-18	8	STUD 3/8 -11 UNC	0	3	B7	X
	ER59-19	20	NUT 3/8 DIA REG FIN HEX			A563A	X
	ER59-20	8	LOCK WASHER 3/8 DIA STD SPLIT TYPE			CARB STL	X
	ER59-21	1	TEE ROTATABLE 3 DIA ASA GROOVED FLANGE "LESKER" PART NO. AFT07X306NR OR EQUAL			STN STL	X
	ER59-22	3	O-RING 3 ID "LESKER" PART NO. 0-V247 OR EQUAL			VITON	X
	ER59-23	12	BOLT 3/8 DIA REG FIN HEX HEAD	0	2	A307B	X
	ER59-24	12	PLAIN WASHER 3/8 DIA WIDE			CARB STL	X
	ER59-25	1	HIGH VACUUM HOSE 3 DIA "STOKES" MODEL NO. 820-206 OR EQUAL	20	0	PVC/ALUM	40
	ER59-26	2	FLANGE GASKET 3 DIA "STOKES"				X
	ER59-27	1	MITERED 90° ELBOW (ROTATABLE) 3 ID ASA GROOVED FLANGES "LESKER" PART NO. AFEM07X306RB OR EQUAL				X
	ER59-28	1	RBS-B ROOT PUMPING SYSTEM "LEYBOLD" MODEL 501/D65 SERIES WAU501/D65B 267 CFM (7556 LTR/MIN), POWER 3 HP, VOLTAGE 208/230/460 VAC, FREQ. 60 HZ, INLET- 3 DIA ASA FLANGE, EXHAUST- 40 KF FLANGE, "LEYBOLD" CAT. NO. RBS-B-26B00101111				X
1			DIFFUSION PUMP (200 MM DIA) LINE W/FORELINE 40 MM				X
	ER59-29	1	DIFFUSION PUMP DIF 200 "BALZERS" ORDER NO. BP D08 504, INLET DN 200 ISO-KF OUTLET DN 40 ISO-KF OR EQUAL			STN STL	36
	ER59-30	1	GASKET SET DIF "BALZERS" ORDER NO. BN 841078-T OR EQUAL				X
	ER59-31	24	CLAMPING SCREW DN 200 ISO "BALZERS" ORDER NO. BP 217 508-T OR EQUAL			PLTD STL	X
	ER59-3	3	CENTERING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 213 265-T OR EQUAL			STN/VITON	X
	ER59-2	3	CLAMPING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 217 428-T OR EQUAL			ALUM	X
	ER59-10	1	PVC HOSE DN 40 ISO-KF "BALZERS" ORDER NO. BP 226 417-T OR EQUAL	3	3 3/8	PVC	X
	ER59-32	1	KF BELLOWS-SEALED STRAIGHT-THROUGH VALVE W/QUICK-ACTING KNOB-MANUALLY OPERATED DN 40 KF "LEYBOLD" CAT. NO. 289 13 OR EQUAL			STN STL	X
	ER59-34	1	90° MITERED ELBOW ISO 200-K "LESKER" PART NO. QF200-E90K OR EQUAL			STN STL	X
	ER59-33	1	ADAPTER OF 40-3" ASA "LESKER" PART NO. QF200-E90K OR EQUAL			STN STL	X
	ER59-3	1	CENTERING RING 200 ISO-K "LESKER" PART NO. QF200-SAVR OR EQUAL			STN/VITON	X

CAD FILE 30212059.DGN

CONTINUE ON RIGHT COLUMN ► INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____

CBI

**LIGO PROJECT
LEAK TEST ARRANGEMENT**
HELIUM HOOD ENCLOSURE EQUIPMENT

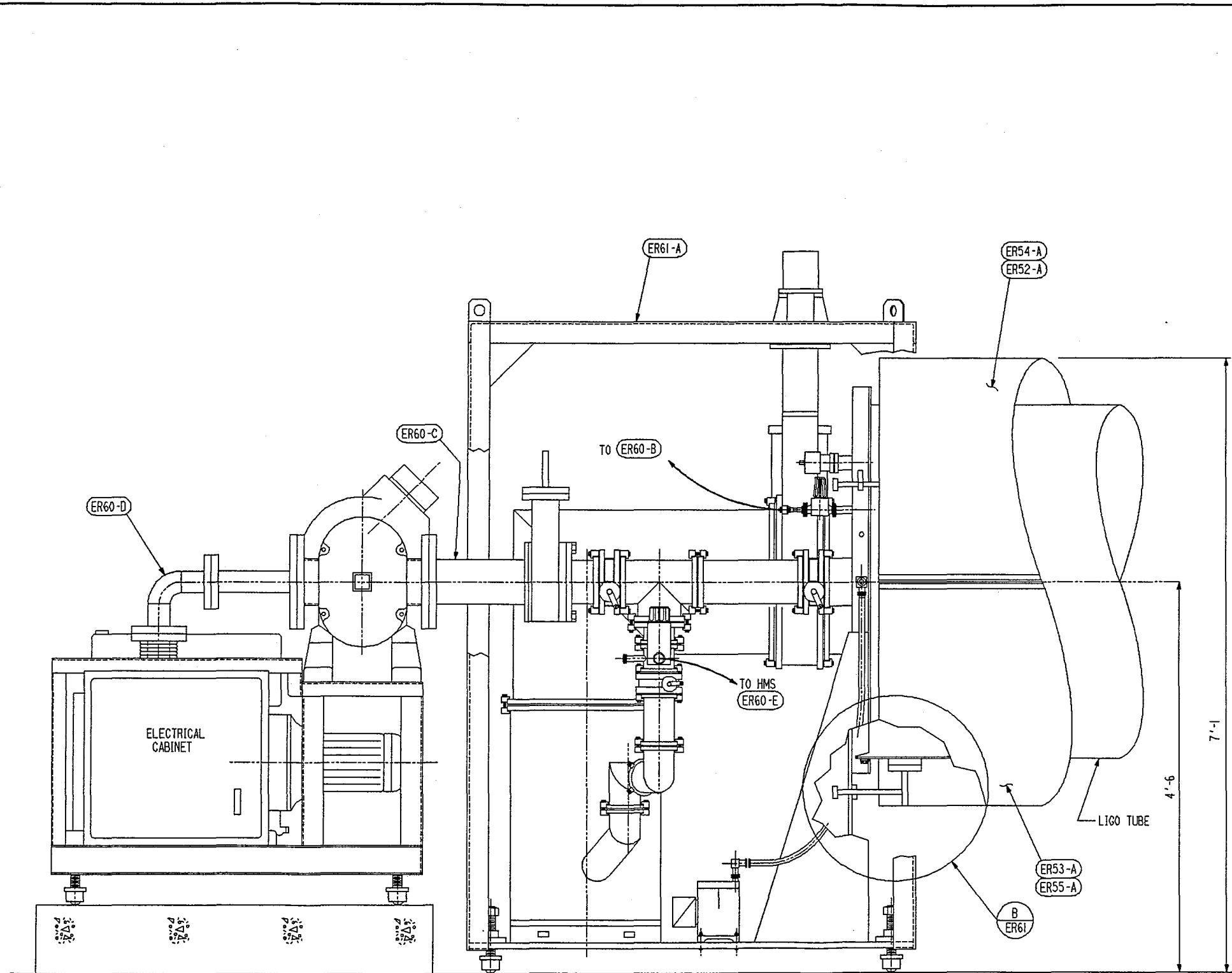
Customer's No. _____ Contract No. 930212ER

By BSA Chkd RDS Date 3-9-94
J. L. RINGELSTETTER
Engineering Supervisor

Dwg. ER-59 Rev. _____
Sheet - 1

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ELEVATION VIEW

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
*	ER61-A		ROLLING VACUUM END SEAL ASSEMBLY				X
*	ER60-B		UHV MULTI-GAUGE 115 VAC/60 HZ "VARIAN" PART NO. L8321301				X
*	ER60-C		SPOOL ASSEMBLY				X
	ER60-1	1	FULL NIPPLE WITH 8 ASA ROTTABLE TWO GROOVED FLANGES "LESKER" PART NO. AFN11X060L62R OR EQUAL			STN STL	X
	ER60-2	2	O-RING 6 ASA SIZE "LESKER" PART NO. O-V265 OR EQUAL			VITON	X
	ER60-3	16	BOLT 3/4 DIA REG FIN HEX HEAD	0	2 1/2	A307B	X
	ER60-4	16	PLAIN WASHER 3/4 DIA NARROW			CARB STL	X
	ER60-5	16	NUT 3/4 DIA REG FIN HEX			A563A	X
*	ER60-D		MECHANICAL VACUUM PUMP UNIT				2300
	ER60-6	1	ASSEMBLY OF "LEYBOLD" RUVAC WAU2001 SINGLE-STAGE ROOT PUMP CAT. NO. 91751-1 AND DK200 ROTARY PISTON PUMP CAT. NO. 89503-1 MOUNTING ON 32-INCH WIDE FRAME "INDELCO"				X
	ER60-7	4	ACME ROD 1/4 DIA - 5TPI RIGHT-HAND THD "McMASTER-CARR" NO. 98935A131	0	6	CARB STL	X
	ER60-8	4	FLANGE MOUNTED UNIT - 1/2 DIA BALL TRANSVER HIGH CAP. "McMASTER-CARR" NO. 2415T64 ZINC PLATED			CARB STL	X
	ER60-9	4	ACME NUT 1/4 DIA - 5TPI RIGHT-HAND THD "McMASTER-CARR" NO. 94815A116			CARB STL	X
	ER60-10	4	ACME BRONZE ROUND NUT 1/4 DIA - 5TPI RIGHT-HAND TRD "McMASTER-CARR" NO. 95072A118			BRONZE	X
	ER60-11	4	ACME MOUNTING FLANGE 1/4 DIA "McMASTER-CARR" NO. 95082A645			CARB STL	X
*	ER60-E		HELIUM MASS SPECTROMETER ULTRATEST UL400 HELIUM LEAK DETECTOR "LEYBOLD" CAT. NO. 89635-100 WITH OPTIONAL HIGH SENSITIVITY 2 X 10 ⁻¹² atm cc/sec OR EQUAL				330

* BILLING FOR 1; 3 REQUIRED.

NOTES:

1. WORK THIS DWG WITH DWG ER-61.
2. BALL TRANSVER UNIT DETAIL SEE DWG ER-63.

Supplier's/Purchaser's No. _____

CBI

**LIGO PROJECT
LEAK TEST ARRANGEMENT
VACUUM PUMP END SEAL**

Customer's No. _____ Contract No. **930212ER**

By **BSA** Chkd **RDS** Date **3-9-94** Dwg. **ER-60** Rev. _____
J. L. RIGELSTETTER Engineering Supervisor Sheet **1**

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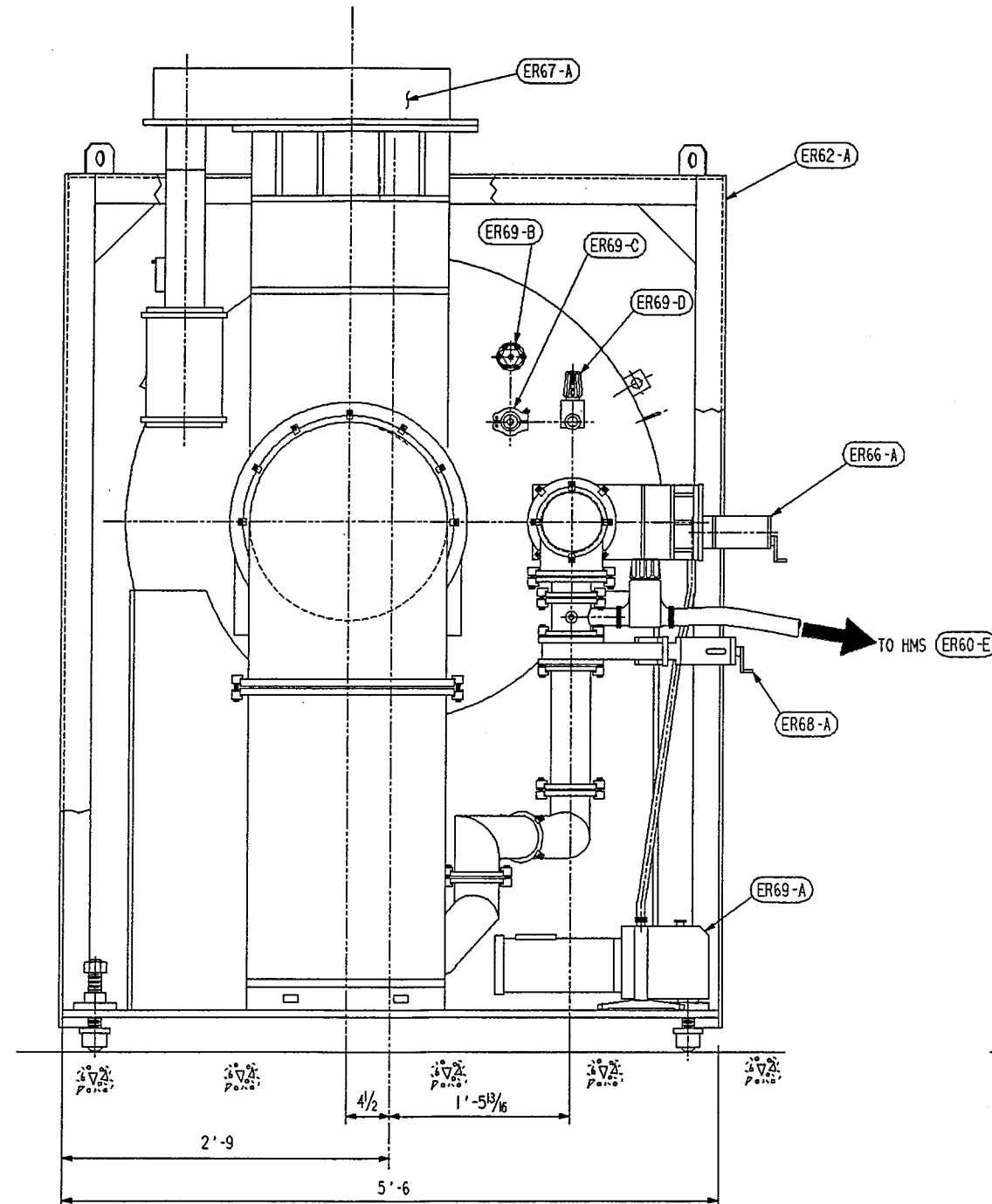
By	Chkd	Date	By	Chkd	Date	By	Chkd	Date	By	Chkd	Date

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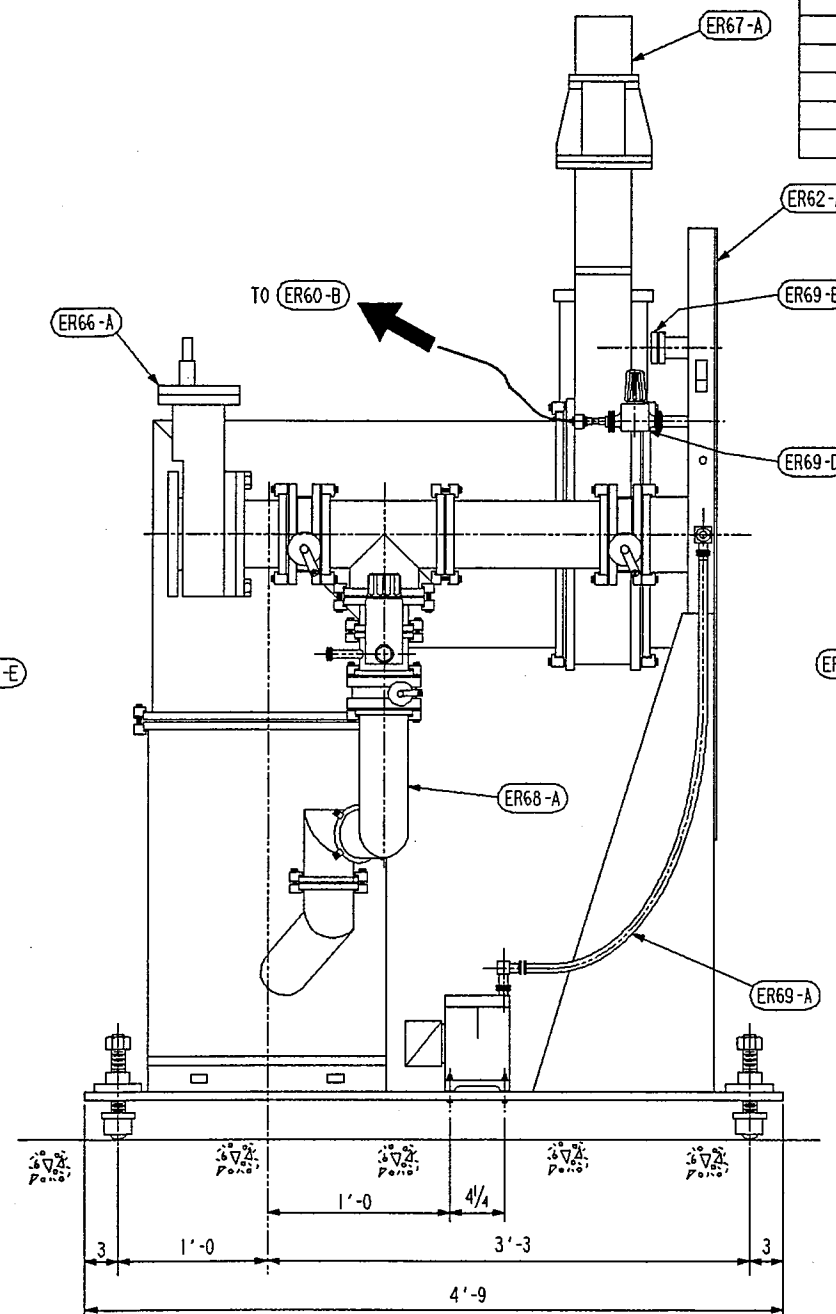
CAD FILE 30212060.DGN

SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
* 1	ER61-A		VACUUM END SEAL ASSEMBLY				X
	ER62-A		CARRIAGE SUBASSEMBLY				X
	ER66-A		MECHANICAL VACUUM LINE SUBASSEMBLY				X
	ER67-A		DIFFUSION PUMP LINE SUBASSEMBLY				X
	ER68-A		CROSSOVER LINE SUBASSEMBLY				X
	ER69-A		INTERSPACE VACUUM PUMP LINE SUBASSY				X
	ER69-B		RGA LINE SUBASSEMBLY				X
	ER69-C		IONIZATION GAUGE TUBE SUBASSEMBLY				X
	ER69-D		THERMAL CONDUCTIVITY GAUGE TUBE SUBASSEMBLY				X

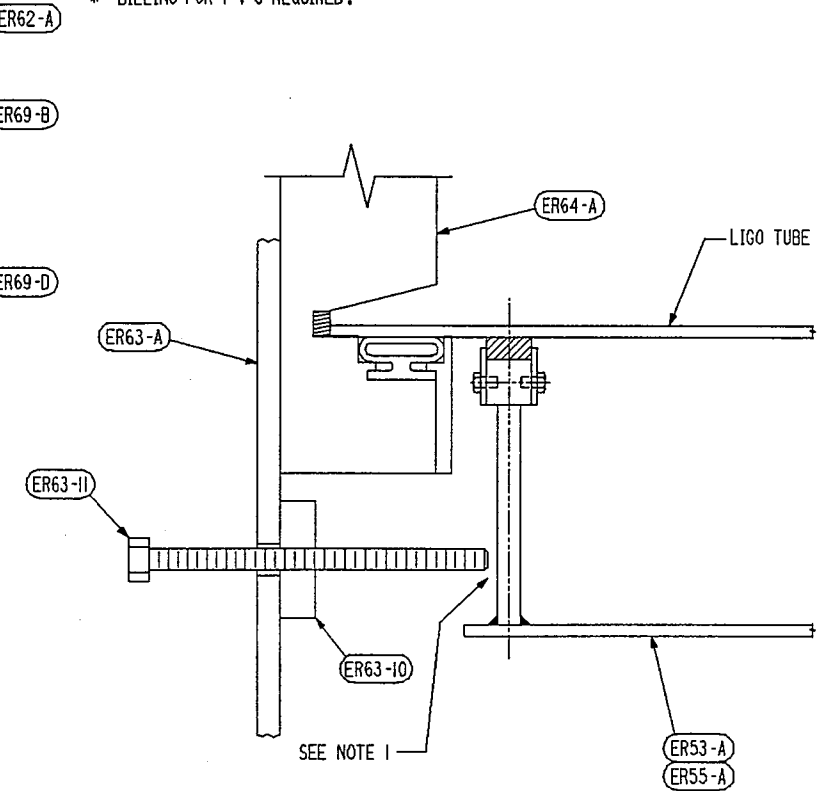
* BILLING FOR 1 + 3 REQUIRED.



ELEVATION VIEW



LEFT SIDE VIEW
LIFTING FRAME OMITTED FOR CLARITY



TYP DETAIL B
SEE NOTE 2

NOTES:

- 1/4 GAP BEFORE VACUUM IN LIGO TUBE. BOLT (ER63-11) BEARS AGAINST HELIUM HOOD DURING VACUUM.
- TYP DETAIL AT 180° (BOTTOM). DETAIL SIMILAR AT 60° AND 300° EXCEPT PC (ER63-10) IS WELDED TO (ER64-A).

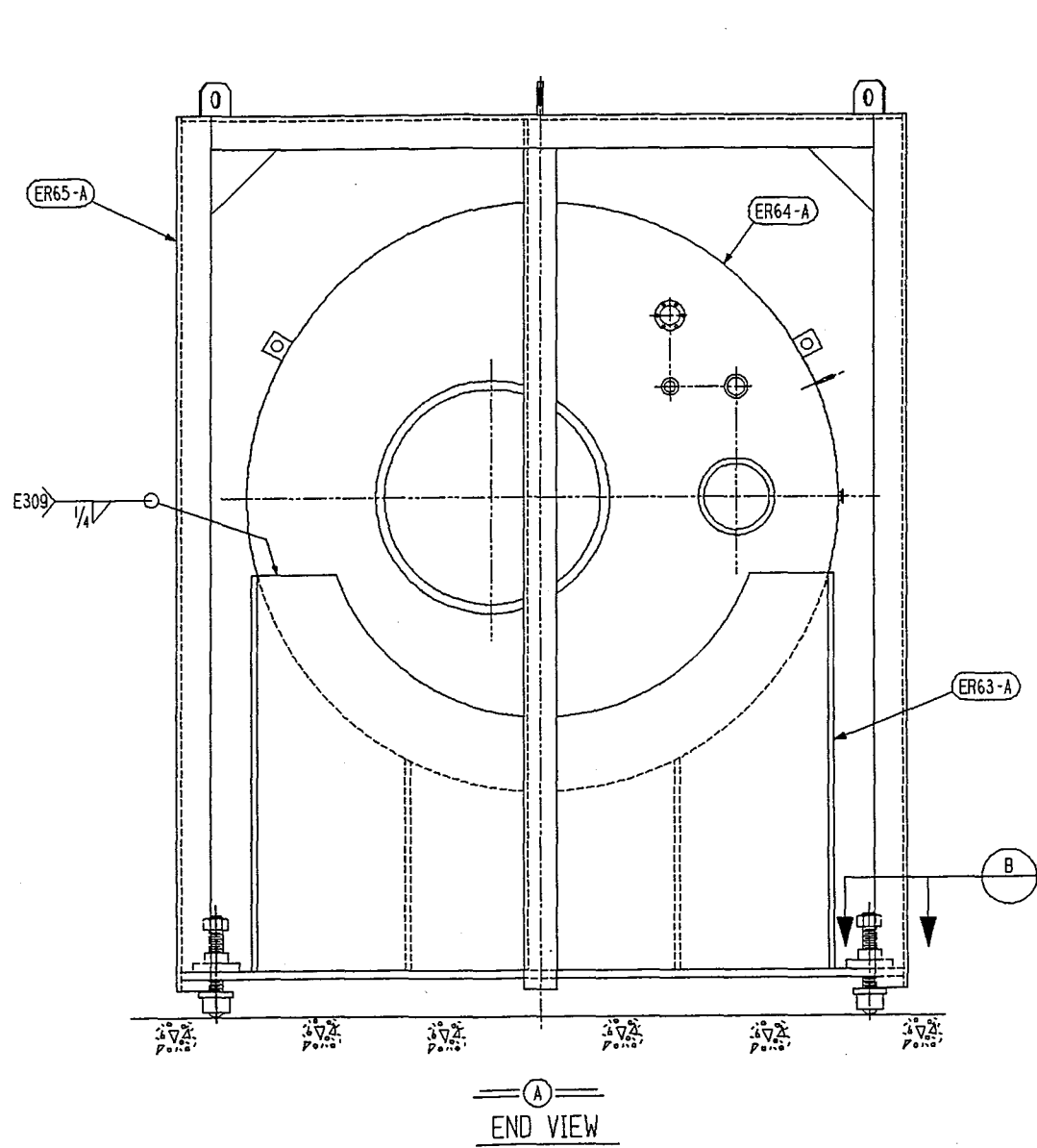
CAD FILE 30212061.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT VACUUM PUMP END SEAL ASSEMBLY	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-10-94	Dwg. ER-61 Rev. _____
J. L. RIMMELSTETTER Engineering Supervisor	Sheet - 1
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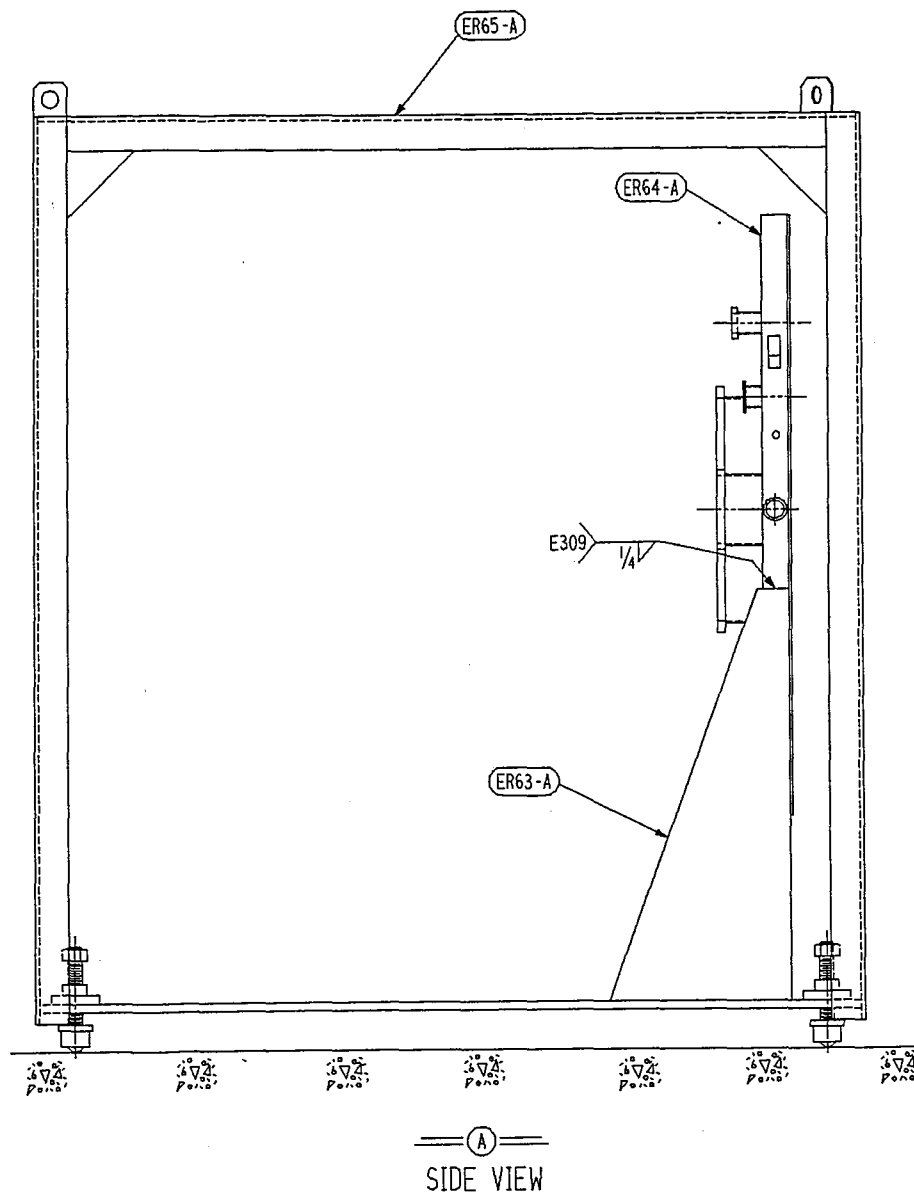
INDICATES CHANGE FROM PREVIOUS ISSUE

SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
* 1	ER62-A		CARRIAGE SUBASSEMBLY				X
	ER63-A	1	ROLLING BASE SUBASSEMBLY				X
	ER64-A	1	CAP SUBASSEMBLY				X
	ER65-A	1	LIFTING FRAME SUBASSEMBLY				X

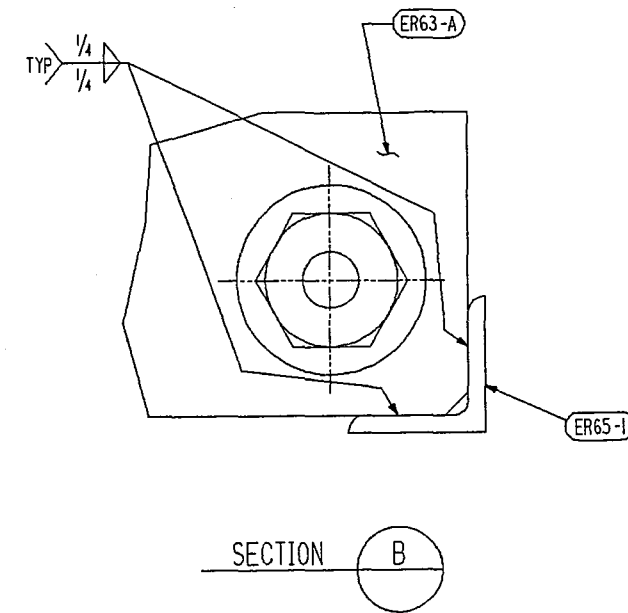
* BILLING FOR 1 ; 3 REQUIRED.



END VIEW



SIDE VIEW



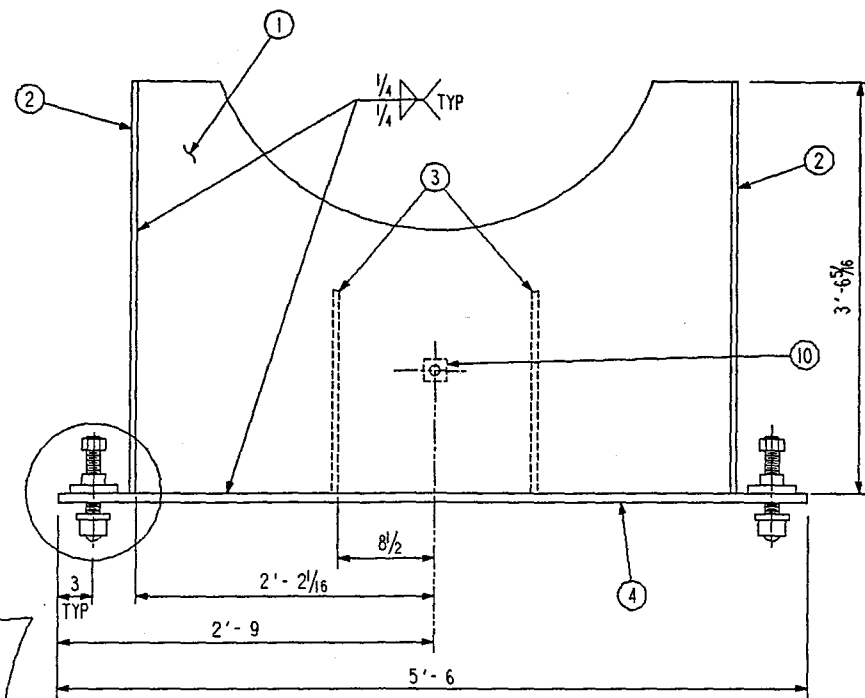
NOTES :

1. WORK THIS DWG WITH DWG ER-63, ER-64 AND ER-65.

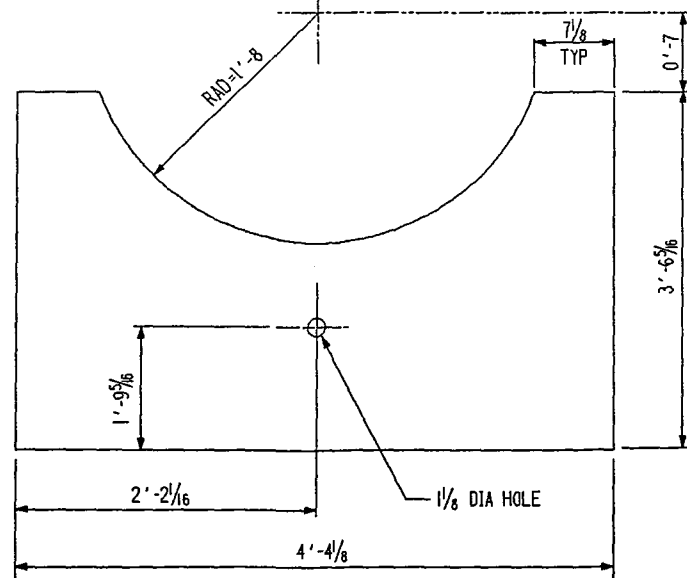
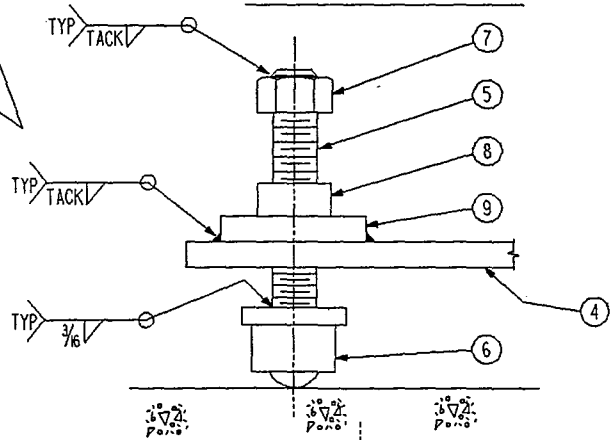
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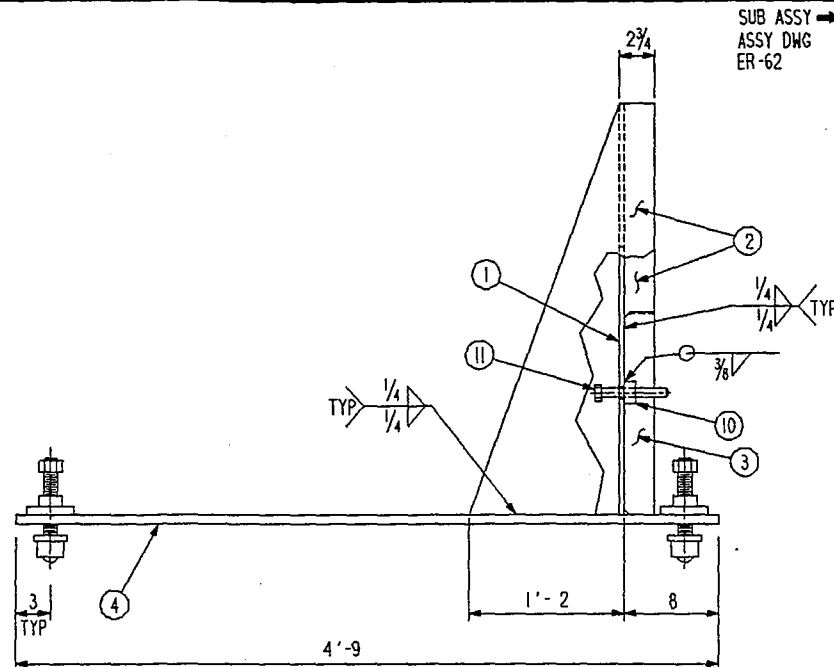
Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
VACUUM PUMP END SEAL CARRIAGE SUBASSEMBLY	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-10-94	Dwg. ER-62 Rev. 1
J. L. RINGELSTETTER Engineering Supervisor	Sheet * 1
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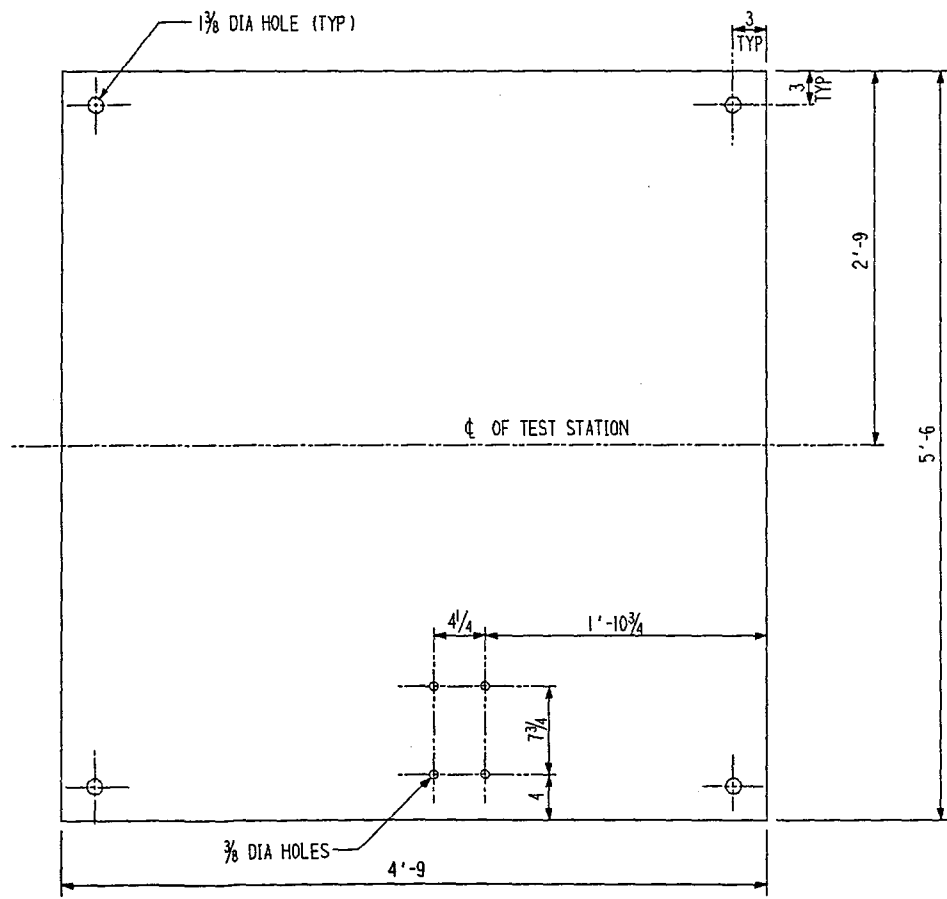
ELEVATION VIEW



SECTION 1



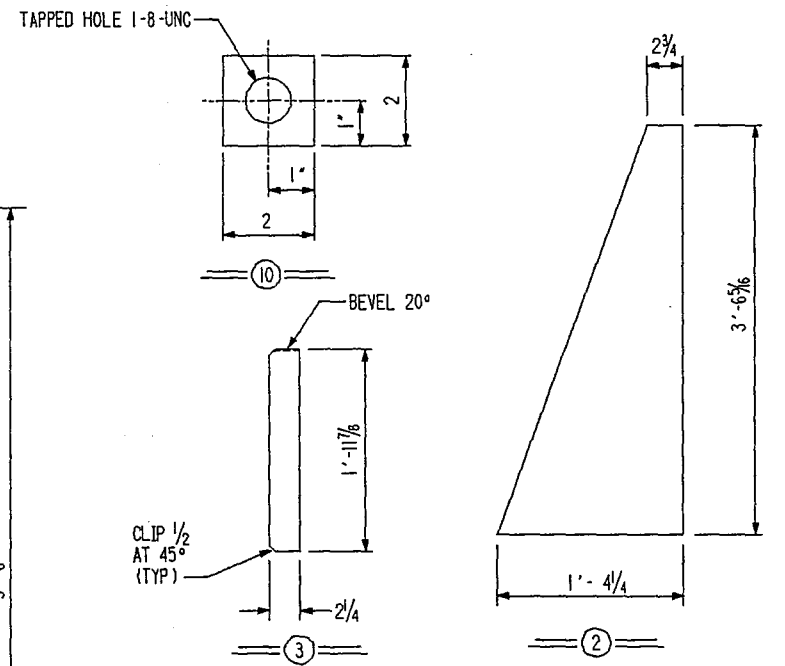
SECTION A
SIDE VIEW



SECTION 4

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1	ER63-A	ROLLING BASE SUBASSEMBLY				X
	ER63-1	1 PLATE SK X 1/2 (CF 43" X 4'-4 1/8")			A36	X
	ER63-2	2 PLATE SK X 1/2 (CF 19" X 3'-7 C2)			A36	X
	ER63-3	2 PLATE 1/2 X SK (CF 3/4 X 2'-0")	1	11 1/8	A36	X
	ER63-4	1 PLATE 57 X 1/2 X SK	5	6	A36	X
	ER63-5	4 ACME ROD 1/4 DIA - 5TPI RIGHT-HAND THD "McMASTER-CARR" NO. 98935A131	0	6	CARB STL	X
	ER63-6	4 FLANGE MOUNTED UNIT - 1/2 DIA BALL TRANSFER HIGH CAP. "McMASTER-CARR" NO. 2415T64 ZINC PLATED			CARB STL	X
	ER63-7	4 ACME NUT 1/4 DIA - 5TPI RIGHT-HAND THD "McMASTER-CARR" NO. 94815A116			CARB STL	X
	ER63-8	4 ACME BRONZE ROUND NUT 1/4 DIA - 5TPI RIGHT-HAND TRD "McMASTER-CARR" NO. 95072A118			BRONZE	X
	ER63-9	4 ACME MOUNTING FLANGE 1/4 DIA "McMASTER-CARR" NO. 95082A645			CARB STL	X
	ER63-10	1 PLATE SK X 1" (CF 3 X 0'-3 C1)	0	2	A36	X
	ER63-11	1 BOLT 1" DIA REG FIN HEX HEAD THREAD FULL LENGTH	0	6	A307B	X

* BILLING FOR 1 + 3 REQUIRED.



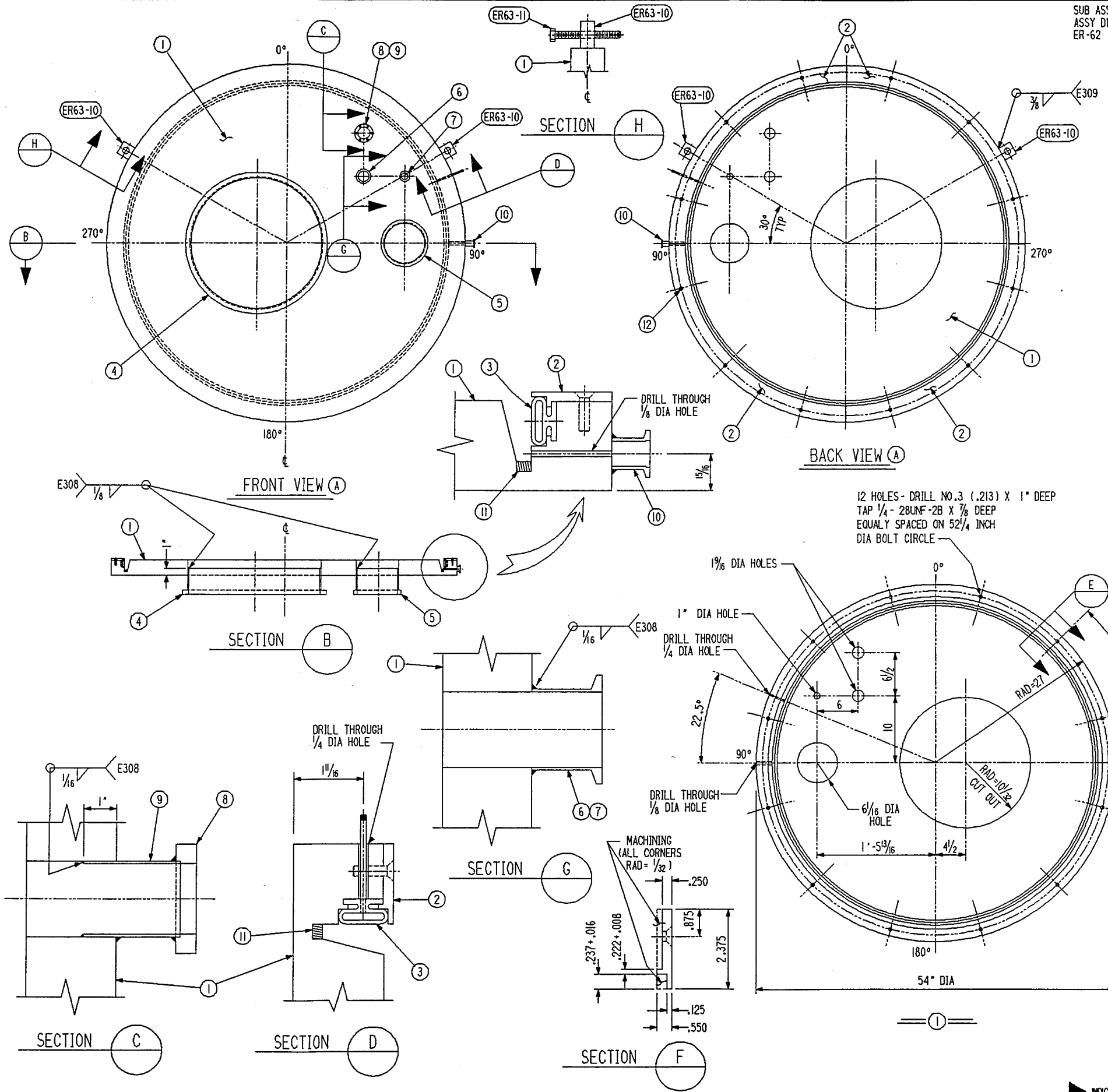
NOTES:

1. WORK THIS DNG WITH DNG ER-62.

CAD FILE 130212063.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

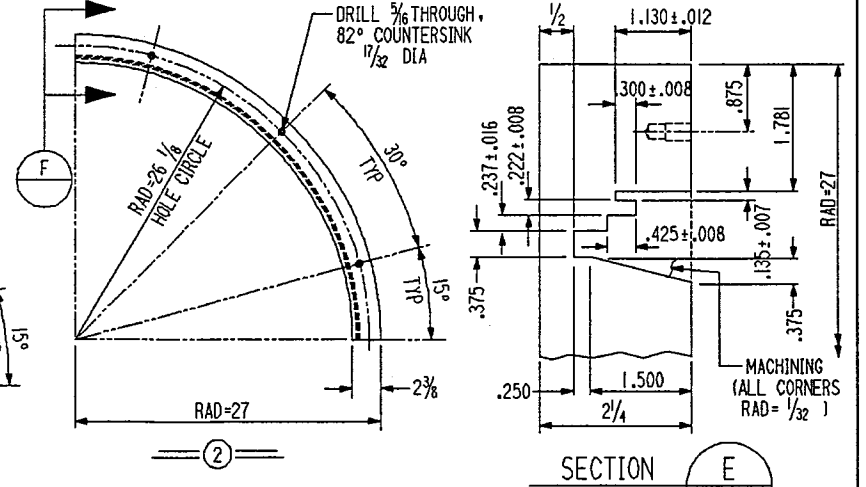
Supplier's/Purchaser's No.		CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT			
VACUUM PUMP END SEAL ROLLING BASE SUBASSEMBLY			
Customer's No.		Contract No.	
By BSA Chkd_RDS Date 1-12-94		930212ER	
J. L. RINGSTETTER Engineering Supervisor		Dwg. ER-63	Rev. 1
Sheet - 1			
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SUB ASSY
ASSY DWG
ER-62

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1	ER64-A	END CAP SUBASSY				X
	ER64-1	PLATE 54 OD X 2 1/4 X SK (CF 54" X 4" -61) (MACHINING, DRILLING AND TAPPING)			SS-304 L	1168
	ER64-2	4 PLATE SK X 3/8 (MACHINING AND DRILLING)			SS-304 L	X
	ER64-3	1 INFLATABLE ROUND PNEUMA-SEAL 50 1/2 OD "PRESRAY" TYPE - PRS 537 W/ 1A STANDARD AIR CONNECTOR			EPDM	-
	ER64-4	1 PORT FITTING DN 500 ISO-K "BALZERS" NO. BP 217 922-X (100 MM-LENGTH) OR EQUAL	0	3 5/8	STN STL	X
	ER64-5	1 PORT FITTING DN 160 ISO-K "BALZERS" NO. BP 213 259-X (100 MM-LENGTH) OR EQUAL	0	3 5/8	STN STL	X
	ER64-6	1 FLANGE, LONG WELD STUB DN 40 ISO-KF "LEYBOLD" CAT. NO. 899624 (40 MM-LENGTH) OR EQUAL	0	1 5/8	STN STL	X
	ER64-7	1 FLANGE, LONG WELD STUB DN 25 ISO-KF "LEYBOLD" CAT. NO. 899622 (40 MM-LENGTH) OR EQUAL	0	1 5/8	STN STL	X
	ER63-8	1 WELDING FLANGE DN 40 CF-F "BALZERS" NO. BP 414 306 (13 MM-LENGTH) OR EQUAL	0	1/2	STN STL	X
	ER64-9	1 TUBE 1/2 OD X .065	0	3 5/8	STN STL	I
	ER64-10	1 FLANGE, SHORT WELD STUB DN 16 ISO-KF "LEYBOLD" CAT. NO. 899611 (19 MM-LENGTH) OR EQUAL	0	1 5/8	STN STL	X
	ER64-11	1 55 DUROMETER BUTYL RUBBER RING 49 1/4 OD 1/4 X 3/8 CROSS SECTION (VULCANIZED JOINT)			BUTYL	I
	ER64-12	12 1/4 -28 X 1" SLOTTED FLAT COUNTERSUNK MACHINE SCREW	0	1	CARB STL	I
	ER63-10	2 PLATE SK X 1" (CF 3 X 0'-3 CI)	0	2	A36	X
	ER63-11	2 BOLT 1" DIA REG FIN HEX HEAD THREAD FULL LENGTH	0	6	A307B	X

* BILLING FOR 1 + 3 REQUIRED.



NOTES:
 1. TOLERANCES ON MACHINING DIMENSIONS X.XXX ± .015 UNLESS NOTED.
 2. WORK THIS DWG WITH DWG ER-62.

CAD FILE: 30212064.DGN

Supplier's/Purchaser's No. _____

CBI

**LIGO PROJECT
LEAK TEST ARRANGEMENT**

VACUUM PUMP END SEAL
END CAP SUBASSEMBLY

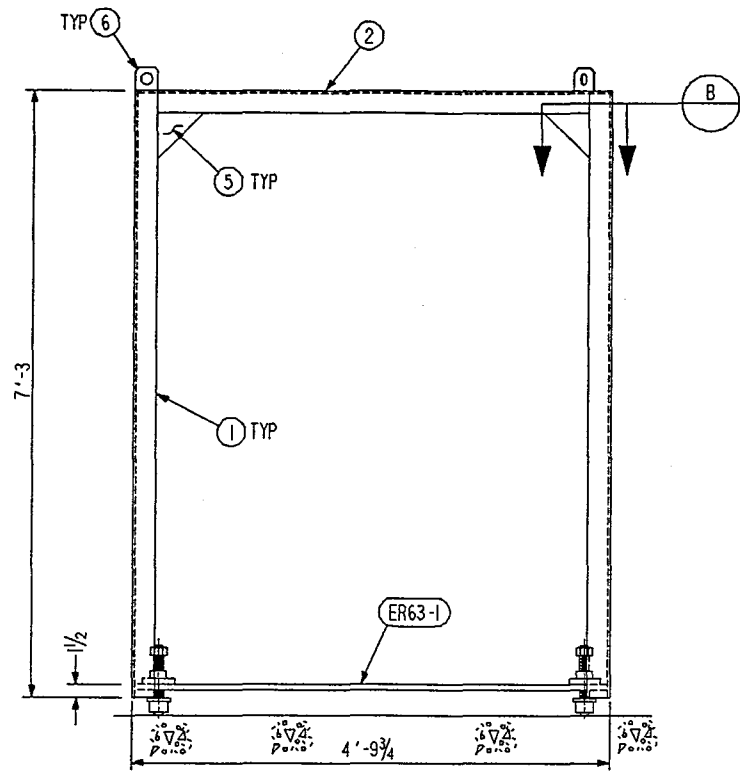
Customer's No. _____ Contract No. 930212ER

By BSA Chkd RJS Date 3-10-94 Dwg. ER-64 Rev. _____
 J. L. RINGELSTETTER Engineering Supervisor Sheet - 1

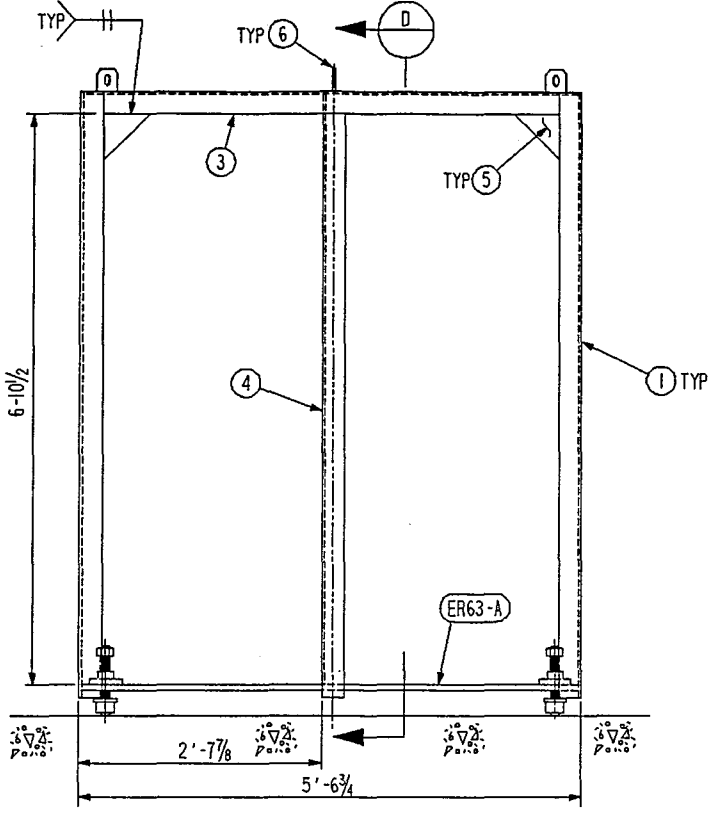
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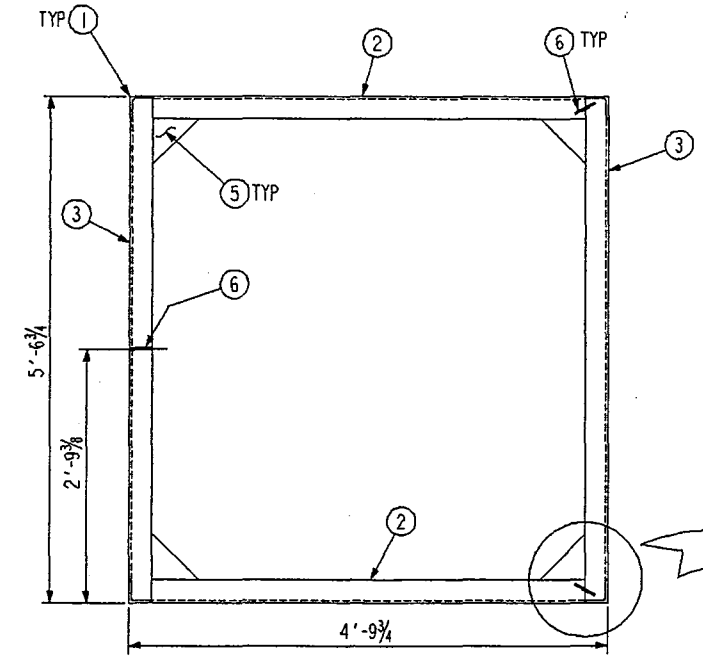
INDICATES CHANGE FROM PREVIOUS ISSUE



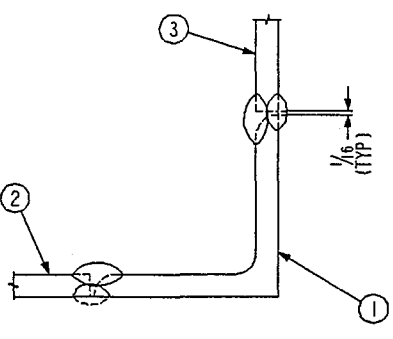
ELEVATION VIEW



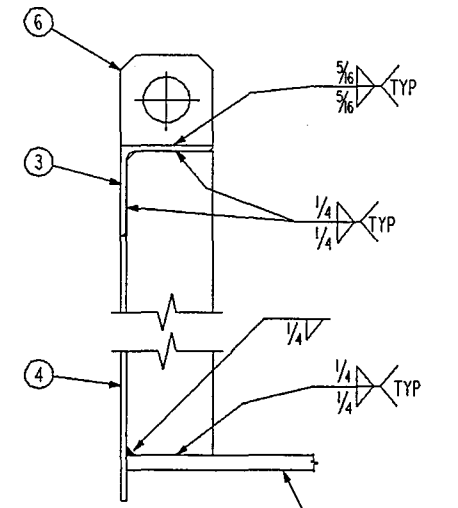
LEFT SIDE VIEW



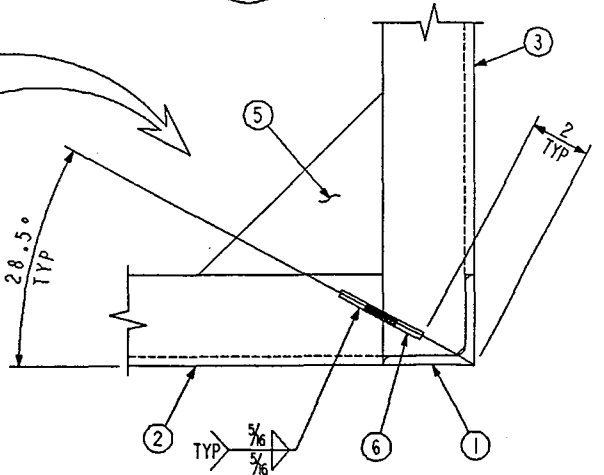
TOP VIEW



SECTION C



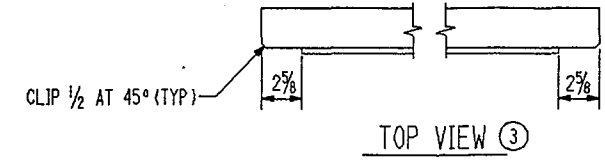
SECTION D



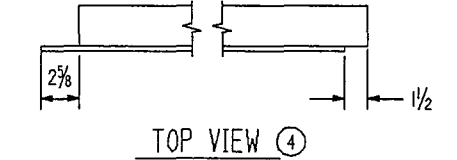
SUB ASSY
ASSY DWG
ER-62

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1	ER65-A	LIFTING FRAME ASSEMBLY				422
	ER65-1	4 L3 X 3 X 3/8	7	3	A36	208
	ER65-2	2 L3 X 3 X 3/8	4	3 3/4	A36	62
	ER65-3	2 L3 X 3 X 3/8 X SK	5	6	A36	79
	ER65-4	1 L3 X 3 X 3/8 X SK	7	2 3/8	A36	52
	ER65-5	12 PLATE 3/8 X SK (CF 6 X 0'-6 C2)			A36	23
	ER65-6	3 PLATE 1/2 X SK			A36	3

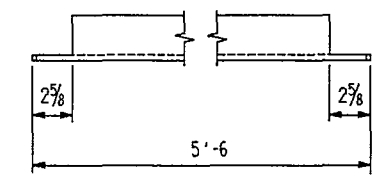
*BILLING FOR 1 + 3 REQUIRED.



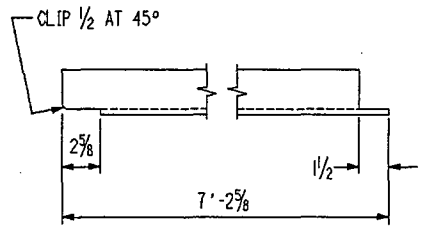
TOP VIEW 3



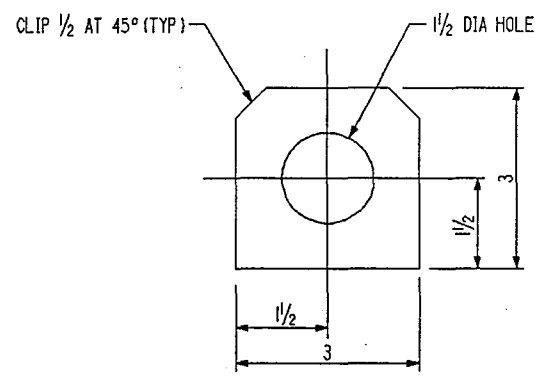
TOP VIEW 4



3



4



6

NOTES:

1. WORK THIS DWG WITH DWG ER-62 AND ER-63.

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____

CBI

**LIGO PROJECT
LEAK TEST ARRANGEMENT**
VACUUM PUMP END SEAL
LIFTING FRAME
SUBASSEMBLY

Customer's No. _____ Contract No. **930212ER**

By **BSA** Chkd **RDS** Date **3-10-94**
J. L. RINGELSTETTER
Engineering Supervisor

Dwg. **ER-65** Rev. **1**
Sheet - **1**

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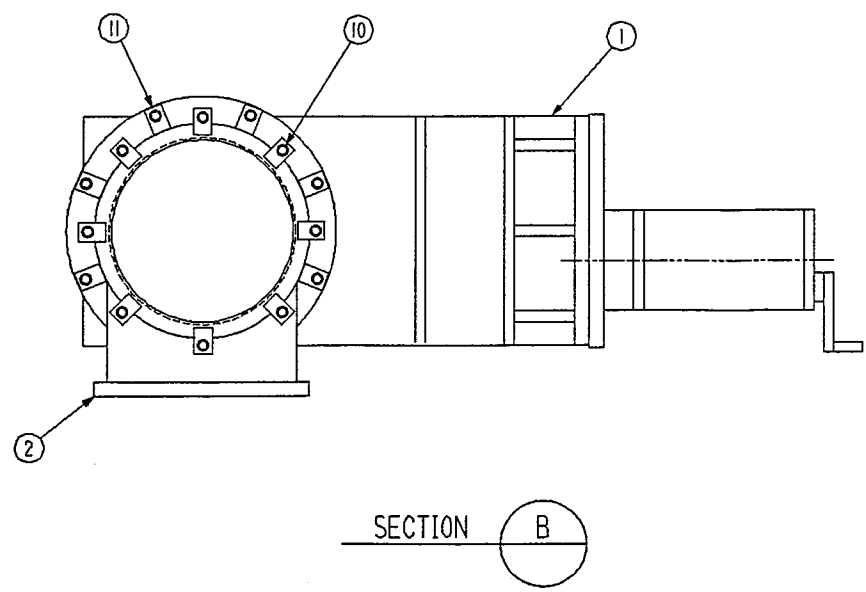
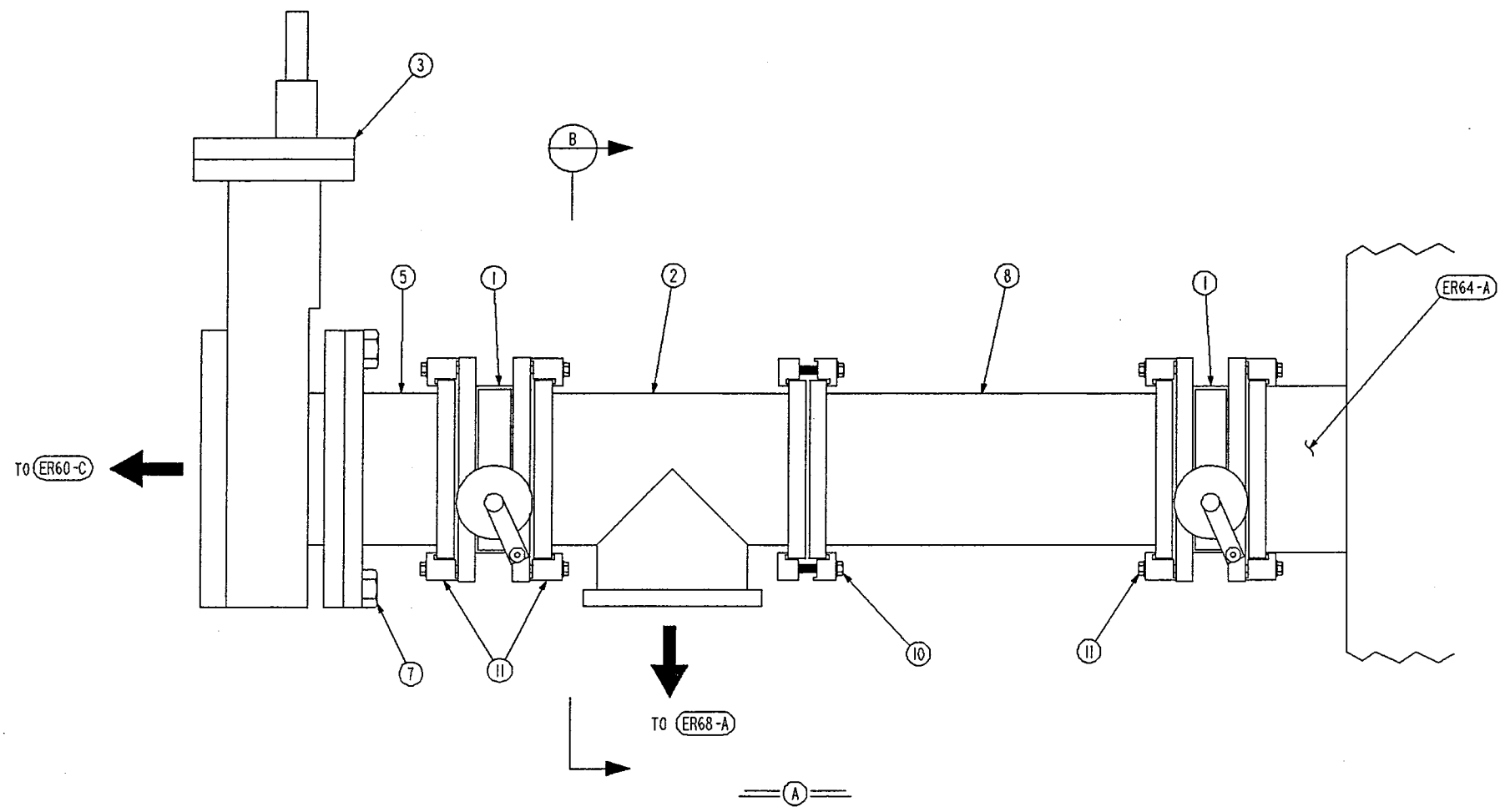
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CAD FILE 30212065.DGN

SUB ASSY →
 ASSY DWG
 ER-62

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1 ER66-A		MECHANICAL VACUUM PUMP LINE SUBASSY				X
ER66-1	2	UHV GATE VALVE DN 160 ISO-F (6 INCH) W/MANUAL ACTUATOR - "VAT" SERIES 10 ORDERING NO. 10844-PE01 OR EQUAL	0	2 3/4	STN STL	X
ER66-2	1	T-PIECE DN 160 ISO-K (6 INCH) "BALZERS" ORDER NO. BP 217 093-X OR EQUAL	0	10 7/8	STN STL	X
ER66-3	1	LIQUID NITROGEN TRAP W/ASA FLANGE "GNB" MODEL NO. LNT6, PART NO. 31714 OR EQUAL	0	6	STN STL	X
ER66-4	1	VITON O-RING - 1/4" NOM. SECTION 8.475 ID "LESKER" PART NO. 0-V446 OR EQUAL			VITON	-
ER66-5	1	"K" ISO 160 TO ASA 11 OD ADAPTER "LESKER" PART NO. OF160-ASAL OR EQUAL	0	4 7/8	STN STL	X
ER66-7	8	BOLT 3/4 DIA REG FIN HEX HEAD	0	2	A307B	X
ER66-8	1	FULL NIPPLE "K"-ISO 160 TUBE 6 OD "LESKER" PART NO. OF160-600-NL OR EQUAL	0	10 7/8	STN STL	X
ER66-9	5	STAINLESS/AL CENTERING RING (BUNA-N) FOR ISO FLANGE SIZE 160 (6 INCH) "LESKER" PART NO. OF160-SABR OR EQUAL	0	5 3/2	STN/AL	X
ER66-10	8	AL DOUBLE CLAMP "K"-STYLE FOR ISO FLANGE SIZE 160 (6 INCH) "LESKER" PART NO. OF-SDC-AL2 OR EQUAL			ALUM	X
ER66-11	32	AL SINGLE CLAMP (METRIC) "F"-STYLE FOR ISO FLANGE SIZE 160 (6 INCH) THREAD M10 "LESKER" PART NO. OF-MSC-ALM			ALUM	X
		OR EQUAL				

* BILLING FOR 1 + 3 REQUIRED.



NOTES:

- 1. WORK THIS DWG WITH DWG ER-62 AND ER-64.

CAD FILE 30212066.DGN

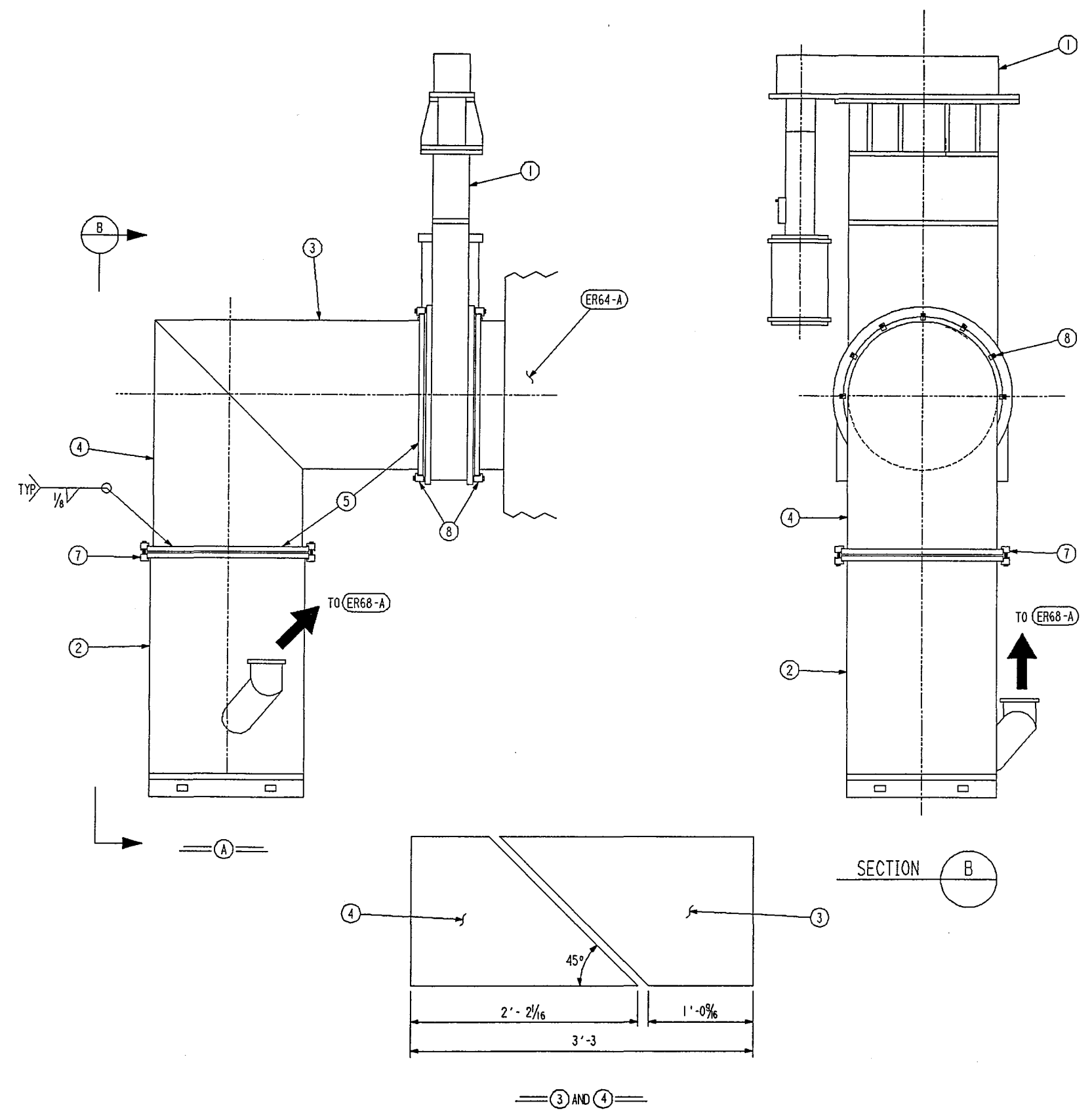
Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT MECHANICAL VACUUM PUMP LINE SUBASSEMBLY	
Customer's No.	Contract No.
By BSA Chkd RDS Date 3-11-94	930212ER
J. L. RINGELSTETTER Engineering Supervisor	Dwg. ER-66 Rev. 1 Sheet - 1
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE

SUB ASSY
ASSY DWG
ER-62

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1 ER67-A		DIFFUSION PUMP LINE SUBASSEMBLY				X
ER67-1	1	UHV GATE VALVE DN 500 ISO-F (20 INCH) W/PNEUMATIC ACTUATOR (115V/60 Hz) "VAT" SERIES 10 ORDERING NO. 10054-PE44 OR EQUAL	0	6 11/16	STN STL	X
ER67-2	1	DIFFUSION PUMP DIF 500A W/CONNECTIONS DN1- DN 500 ISO-K AND DN2-DN 100 ISO-K PUMPING SPEED 11 500 L/S "BALZERS" ORDERING DATA - BP D10 005 OR EQUAL	2	8 11/16	STN STL	122
ER67-3	1	PIPE 20 SCH 10 X SK (CF PIPE 39" LONG)			STN STL	X
ER67-4	1	PIPE 20 SCH 10 X SK (CUT WITH PC 3)			STN STL	X
ER67-5	2	FLANGE "K" WELD DN 500 ISO-K (20 INCH) TUBE 20 OD "LESKER" PART NO. 0F500-SWK OR EQUAL	0	1 1/16	STN STL	X
ER67-6	3	STAINLESS/AL CENTERING RING (BUNA-N) FOR ISO FLANGE SIZE 500 (20 INCH) "LESKER" PART NO. 0F500-SABR OR EQUAL	0	7/32	STN/AL	X
ER67-7	16	AL DOUBLE CLAMP "K"-STYLE FOR ISO FLANGE SIZE 500 (20 INCH) "LESKER" PART NO. 0F-SDC-AL3 OR EQUAL			ALUM	X
ER67-8	32	AL SINGLE CLAMP (METRIC) "F"-STYLE FOR ISO FLANGE SIZE 500 (20 INCH) THREAD M12 "LESKER" PART NO. 0F-LSC-ALM OR EQUAL			ALUM	X

* BILLING FOR 1 + 3 REQUIRED.



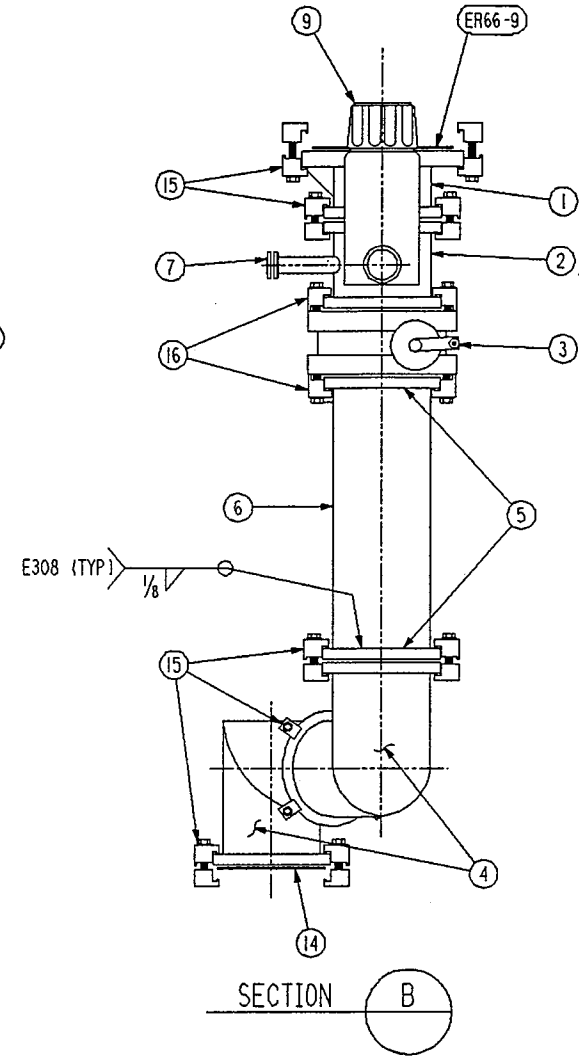
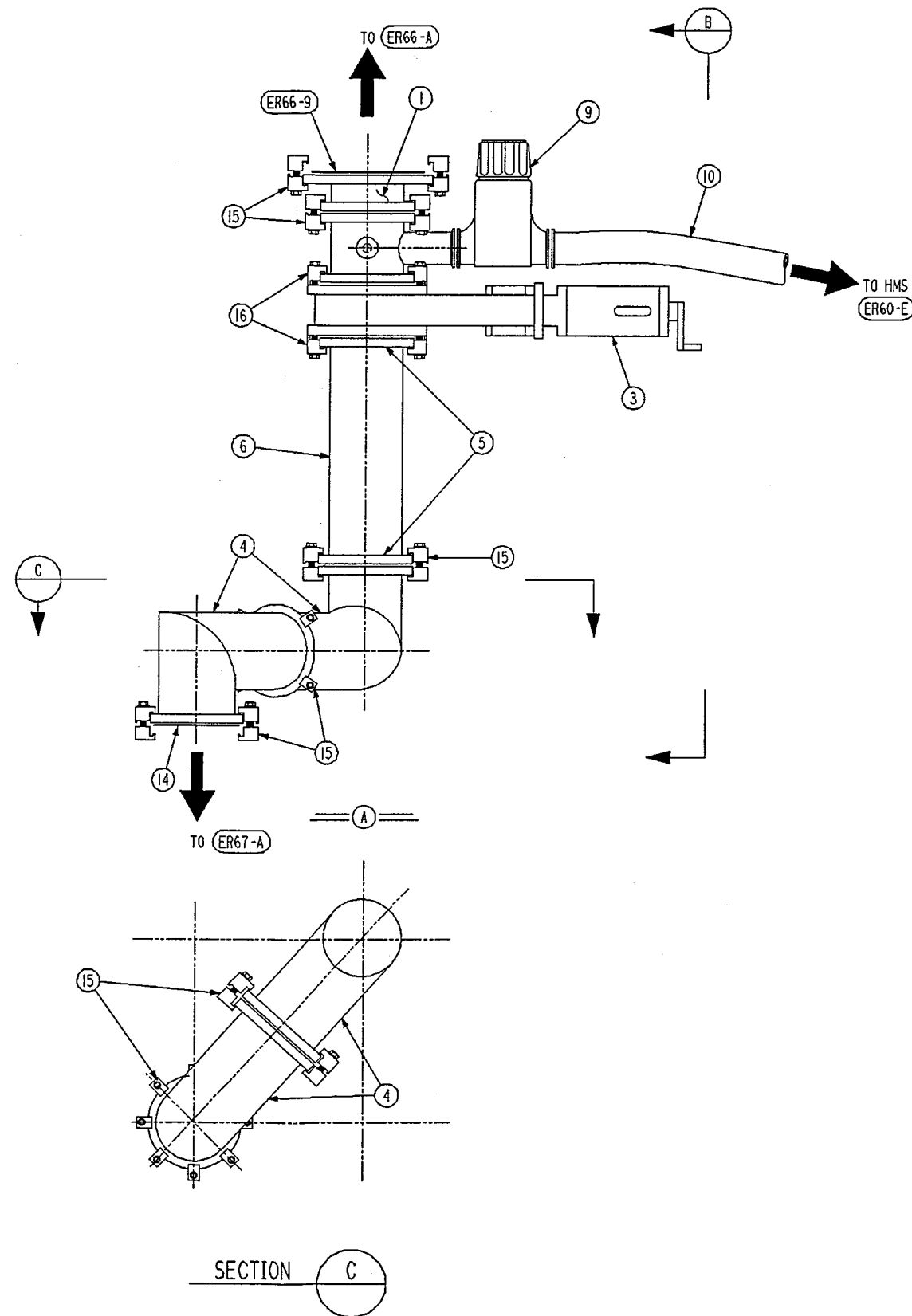
NOTES:

1. WORK THIS DWG WITH DWG ER-61 AND ER-64.

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
VACUUM PUMP END SEAL DIFFUSION PUMP LINE SUBASSEMBLY	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-11-94	Dwg. ER-67 Rev. 1
J. L. RINGELSTETTER Engineering Supervisor	
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CAD FILE 30212067.DGN

SUB ASSY →
ASSY DWG
ER-61




MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1	ER68-A	CROSS-OVER LINE SUBASSEMBLY				X
	ER68-1	1 "K" ISO 160 TO ISO 100 REDUCER "LESKER" PART NO. QF100X160 OR EQUAL	0	2 ⁵ / ₁₆	STN STL	X
	ER68-2	1 MEASURING PIECE DN 100 ISO-K (4 INCH) "BALZERS" ORDER NO. BP 217 566-X OR EQUAL	0	4/4	STN STL	X
	ER68-3	1 UHV GATE VALVE DN 100 ISO-F (4 INCH) W/MANUAL ACTUATOR - "VAT" SERIES 10 ORDERING NO. 10840-PE01 OR EQUAL	0	2 ³ / ₄	STN STL	X
	ER68-4	2 90° MITERED ELBOW "K"-ISO 100 (4 INCH) "LESKER" PART NO. QF100-E90K OR EQUAL	0	4/4	STN STL	X
	ER68-5	2 FLANGE "K" WELD DN 100 ISO-K (4 INCH) "LESKER" PART NO. QF100-SMK OR EQUAL	0	1 ⁵ / ₃₂	STN STL	X
	ER68-6	1 TUBE 4 OD X 1/16 PBE	0	5 ¹ / ₁₆	STN STL	X
	ER68-7	1 BLANKING FLANGE DN 10 ISO-KF "BALZERS" ORDER NO. BP 212 015 OR EQUAL	0	1/4	STN STL	X
	ER68-8	1 CLAMPING RING DN 10 ISO-KF "BALZERS" ORDER NO. BP 217 426-T OR EQUAL			ALUM	X
	ER68-9	1 KF BELLOWS-SEALED STRAIT-THROUGH VALVE W/QUICK-ACTING KNOB - MANUALLY OPERATED DN 40 KF "LEYBOLD" CAT. NO. 289 13 OR EQUAL	0	5/8	STN STL	X
	ER68-10	1 FLEXIBLE METAL HOSE DN 40 ISO-KF 1000 MM -LENGTH NOM. "BALZERS" ORDER NO. BP 217 498-X OR EQUAL	3	4	STN STL	X
	ER68-11	2 CLAMPING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 217 428-T OR EQUAL			ALUM	X
	ER68-12	2 CENTERING RING DN 40 ISO-KF "BALZERS" ORDER NO. BP 213 143-T OR EQUAL			STN/VITON	X
	ER68-13	1 CENTERING RING DN 10 ISO-KF "BALZERS" ORDER NO. BP 213 265-T OR EQUAL			STN/VITON	X
	ER68-14	6 STAINLESS/AL CENTERING RING (BUNA-N) FOR ISO FLANGE SIZE 100 (4 INCH) "LESKER" PART NO. QF100-SABR OR EQUAL			STN/AL	X
	ER68-15	40 AL DOUBLE CLAMP "K"-STYLE FOR ISO FLANGE SIZE 100 (4 INCH) "LESKER" PART NO. QF-SDC-AL1 OR EQUAL				X
	ER68-16	16 AL SINGLE CLAMP (METRIC) "F"-STYLE FOR ISO FLANGE SIZE 100 (4 INCH) THREAD M8 "LESKER" PART NO. QF-SSC-ALM PART NO. QF-SSC-ALM OR EQUAL				X
	ER66-9	1 STAINLESS/AL CENTERING RING (BUNA-N) FOR ISO FLANGE SIZE 160 (6 INCH) "LESKER" PART NO. QF160-SABR OR EQUAL	0	5/32	STN/AL	X

* BILLING FOR 1 ; 3 REQUIRED.

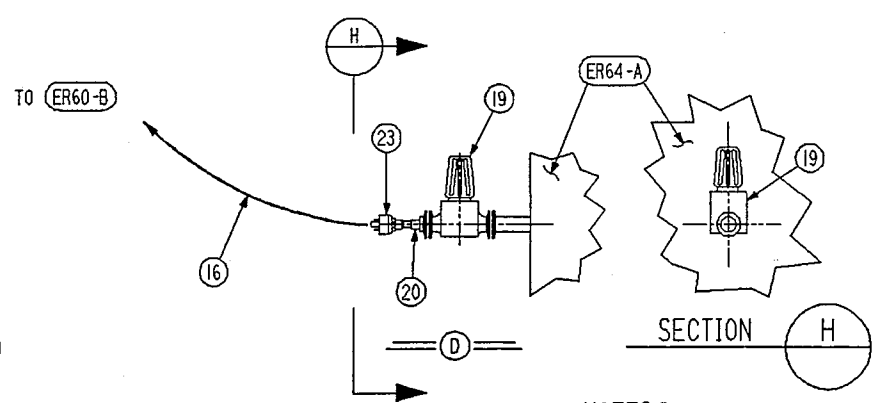
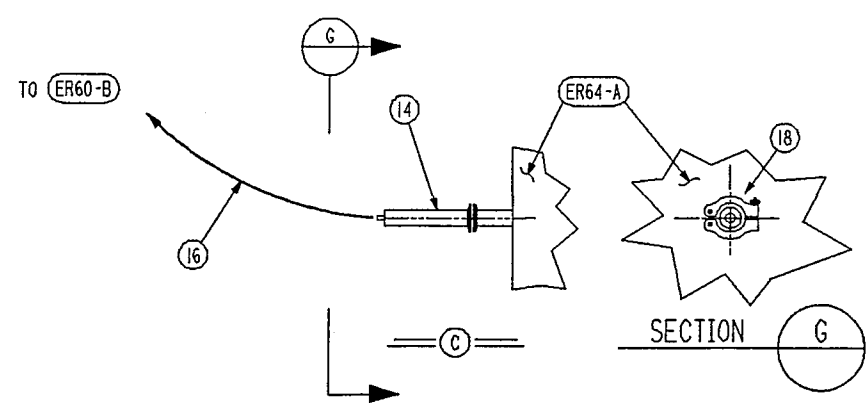
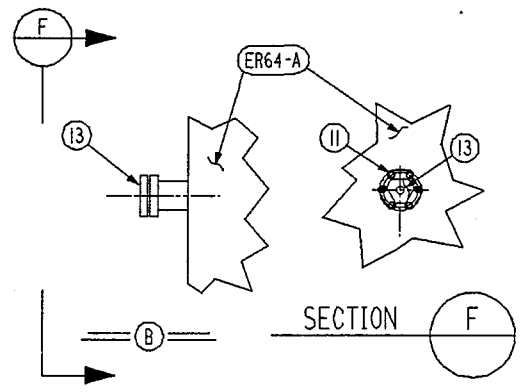
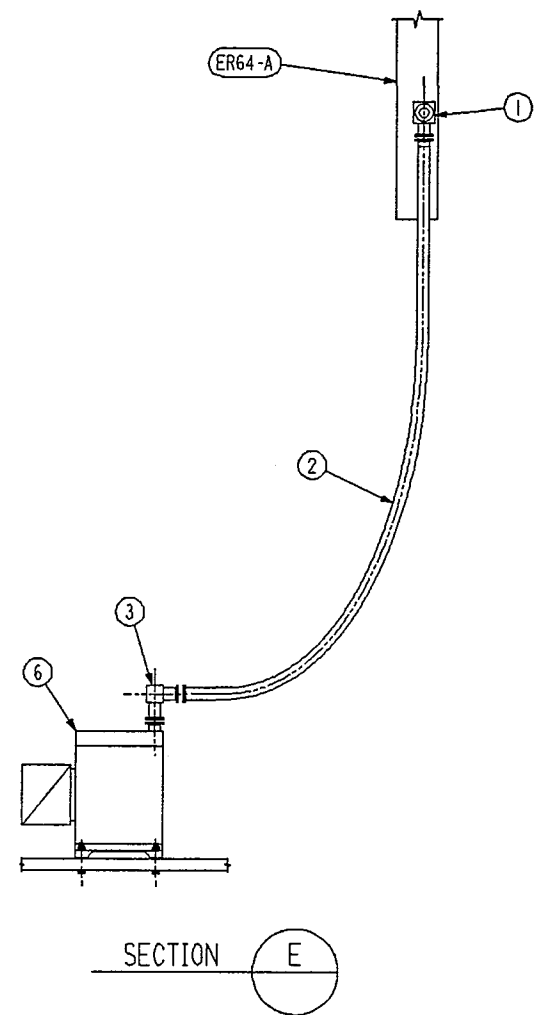
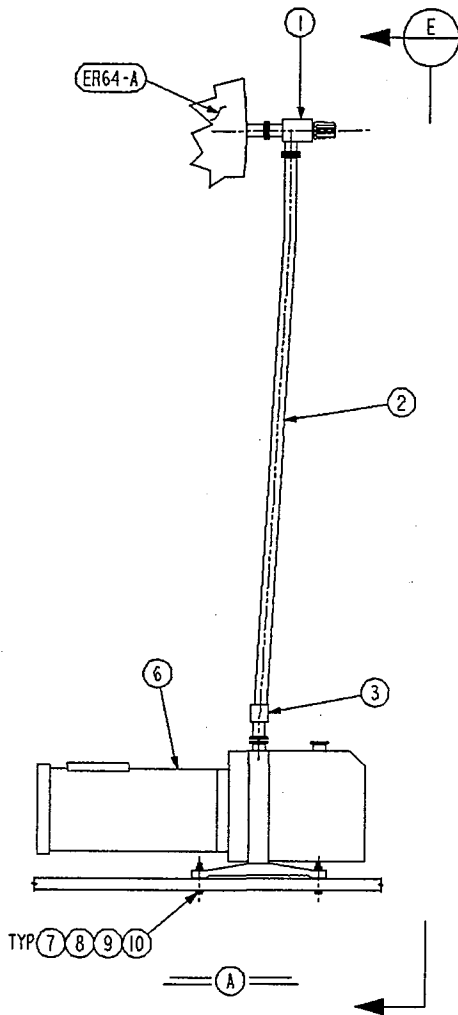
NOTES:

1. WORK THIS DWG WITH DWG ER-61.

Supplier's/Purchaser's No. _____	
 LIGO PROJECT LEAK TEST ARRANGEMENT VACUUM PUMP END SEAL CROSS-OVER LINE SUBASSEMBLY	
Customer's No. _____	Contract No. 930212ER
By <u>BSA</u> Chkd <u>RDS</u> Date <u>3-11-94</u>	Dwg. <u>ER-68</u> Rev. _____
J. L. RINGELSTETTER Engineering Supervisor	
Sheet - <u>1</u>	
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE

CAD FILE 30212068.DGN



NOTES:

1. WORK THIS DWG WITH DWG ER-61 AND ER-64.

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

SUB ASSY →
ASSY DWG
ER-61

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1 ER69-A		INTERSPACE VACUUM PUMP LINE ASSEMBLY				X
ER69-1		KF BELLOWS-SEALED RIGHT-ANGLE VALVE W/QUICK-ACTING KNOB MANUALLY OPERATED	0	1 3/8	STN STL	X
		DN 16 KF "LEYBOLD" CAT. NO. 288 11 OR EQUAL				
ER69-2		PVC HOSE COMPLETE DN 16 ISO-KF 1000 MM -LENGTH NOM. "BALZERS" ORDER NO. BP 226 415-T OR EQUAL	3	4	PVC	X
ER69-3		ELBOW 90° DN 16 KF "LEYBOLD" CAT. NO. 88461 OR EQUAL	0	9/16	STN STL	X
ER69-4		CENTERING RING DN 16 ISO-KF "BALZERS" ORDER NO. BP 213 144-T OR EQUAL			STN/VITON	X
ER69-5		CLAMPING RING DN 16 ISO-KF "BALZERS" ORDER NO. BP 217 426-T OR EQUAL			ALUM	X
ER69-6		TRIVAC B ROTARY VANE PUMP MODEL D4B 3.4 CFM (96 LTR/MIN), POWER 1/3 HP, VOLTAGE 115/200-230 V(AC), FREQ. 50/60 HZ PHASE 1, WIRED FOR 115 V, W/HYDROCARBON OIL, "LEYBOLD" CAT. NO. 91245-1 OR EQUAL				51
ER69-7		BOLT 1/4 DIA REG FIN HEX HEAD	0	3	A307B	1
ER69-8		NUT 1/4 DIA HEAVY HEX			A563A	-
ER69-9		PLAIN WASHER 1/4 DIA WIDE			CARB STL	-
ER69-10		LOCK WASHER 1/4 DIA STD SPLIT TYPE			CARB STL	-
* 1 ER69-B		RGA SENSOR ASSEMBLY				X
ER69-11		SET OF HEX BOLTS W/DOU NUTS DN 40 CF "BALZERS" ORDER NO. BN 845 184-T OR EQUAL			STN STL	X
ER69-12		VITON SEAL RING DN 40 CF "BALZERS" ORDER NO. BN 845 324-T OR EQUAL			VITON	X
ER69-13		BLANKING FLANGE DN 40 CF-F "BALZERS" ORDER NO. BP 414 296 OR EQUAL			STN STL	X
* 1 ER69-C		IONIZATION GAUGE OUTLET ASSEMBLY				X
ER69-14		UHV-24 NUDE TUBE ON NW 40 KF FLANGE "VARIAN" ORDER NO. 0500-MSP-A2399				4
ER69-16		CABLE "VARIAN" PART NO. L6440310	10	0	X	X
ER69-17		CENTERING RING ASSY DN 40 KF "LEYBOLD" CAT. NO. 88348 OR EQUAL			X	X
ER69-18		CLAMP DN 40 KF "LEYBOLD" CAT. NO. 18343			ALUM	X
* 1 ER69-D		THERMAL CONDUCTIVITY GAUGE ASSY				X
ER69-19		KF BELLOWS-SEALED STRAIGHT-THROUGH VALVE - MANUALLY OPERATED DN 25 KF W/QUICK-ACTING KNOB "LEYBOLD" CAT. NO. 289 12 OR EQUAL	0	3 5/8	STN STL	X
ER69-20		KF/NPT FEMALE ADAPTER 1/8" DN 25 KF "LEYBOLD" CAT. NO. 899605 OR EQUAL	0	1	STN STL	X
ER69-21		CENTERING RING ASSY DN 25 KF "LEYBOLD" CAT. NO. 88347 OR EQUAL			STN/VITON	X
ER69-22		CLAMP DN 25 KF "LEYBOLD" CAT. NO. 18342			ALUM	X
ER69-23		531 THERMOCOUPLE GAUGE TUBE "VARIAN" PART NO. 0531-F0472-303			X	X
ER69-16		CABLE "VARIAN" PART NO. L6475312	10	0	X	X

* BILLING FOR 1 + 3 REQUIRED.

CAD FILE 30212069.DGN

Supplier's/Purchaser's No. _____

CBI

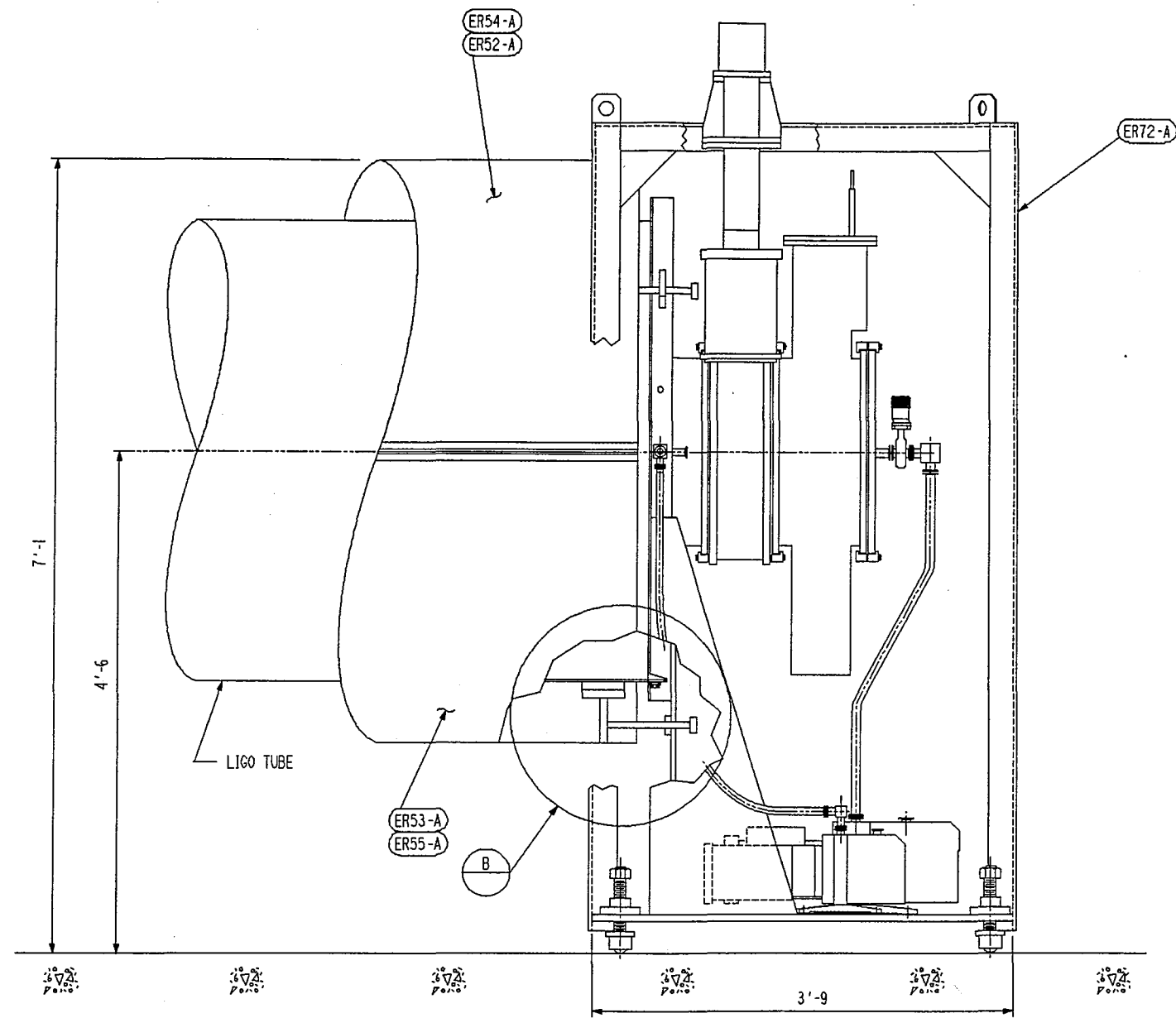
LIGO PROJECT
LEAK TEST ARRANGEMENT
VACUUM PUMP END SEAL
INTERSPACE VACUUM PUMP LINE SUBASSY
SENSORS CONNECTION SUBASSY

Customer's No. _____ Contract No. **930212ER**
By **BSA** Chkd **RDS** Date **3-14-94** Dwg. **ER-69** Rev. _____
J.J. RINGELSTETTER Engineering Supervisor Sheet **1**

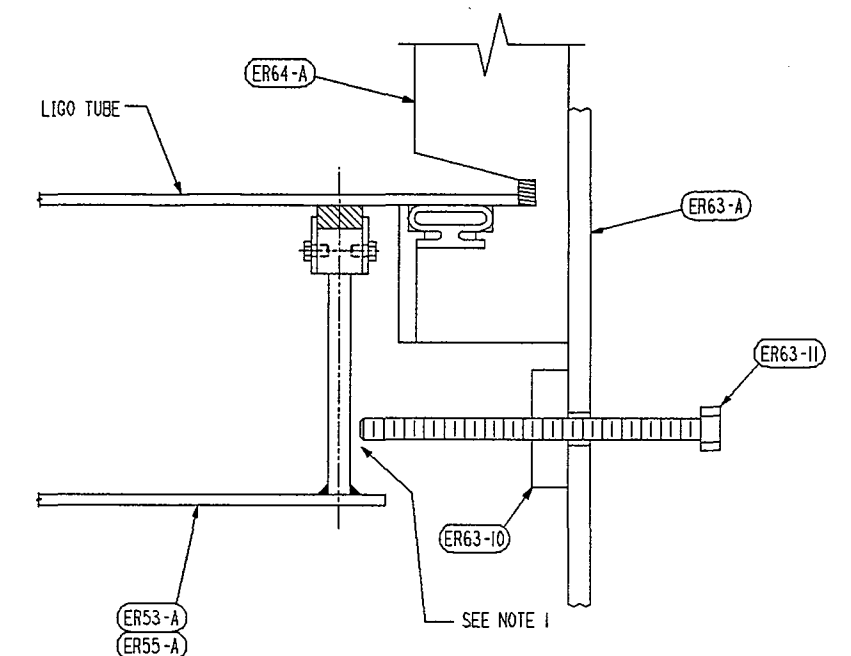
Revisions: _____

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ELEVATION VIEW



TYP DETAIL B
SEE NOTE 2

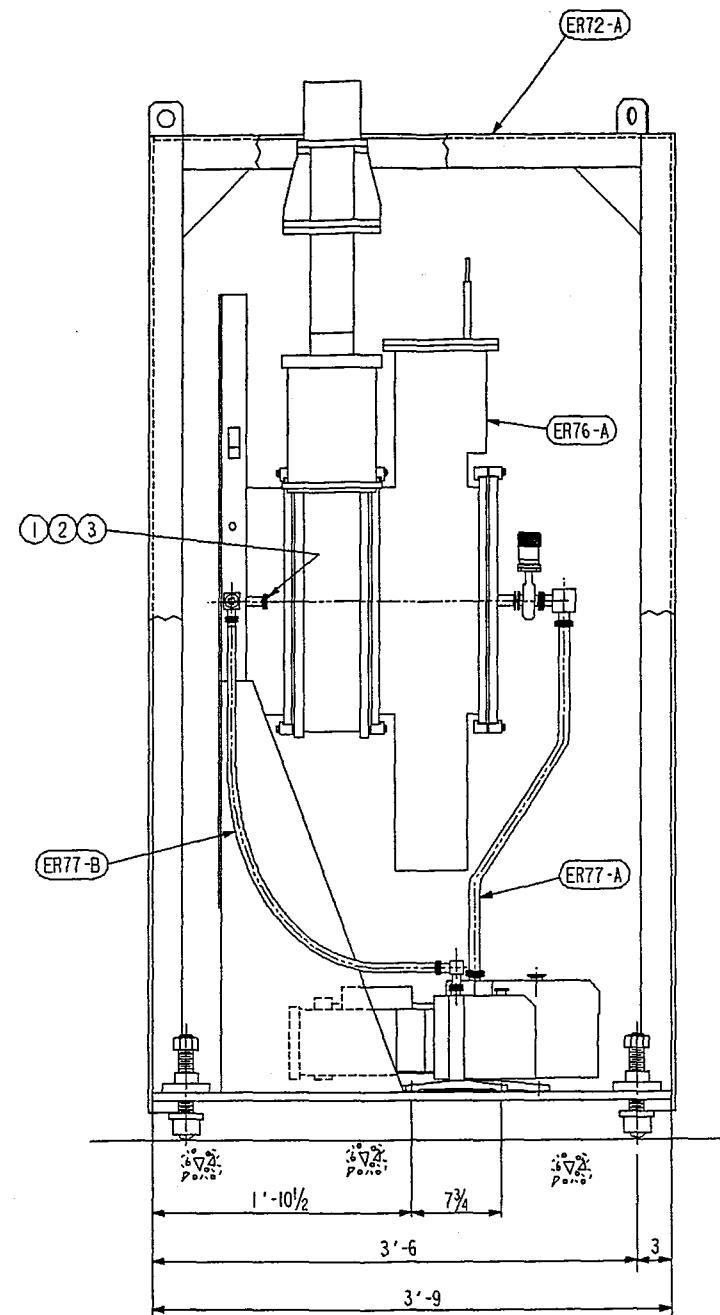
NOTES:

1. 1/4 GAP BEFORE VACUUM IN LIGO TUBE.
BOLT (ER63-11) BEARS AGAINST HELIUM HOOD DURING VACUUM.
2. TYP DETAIL AT 180° (BOTTOM). DETAIL SIMILAR AT 60° AND 300° EXCEPT PC (ER63-10) IS WELDED TO (ER64-A).
3. WORK THIS DWG WITH DWG ER-60 AND ER-61.

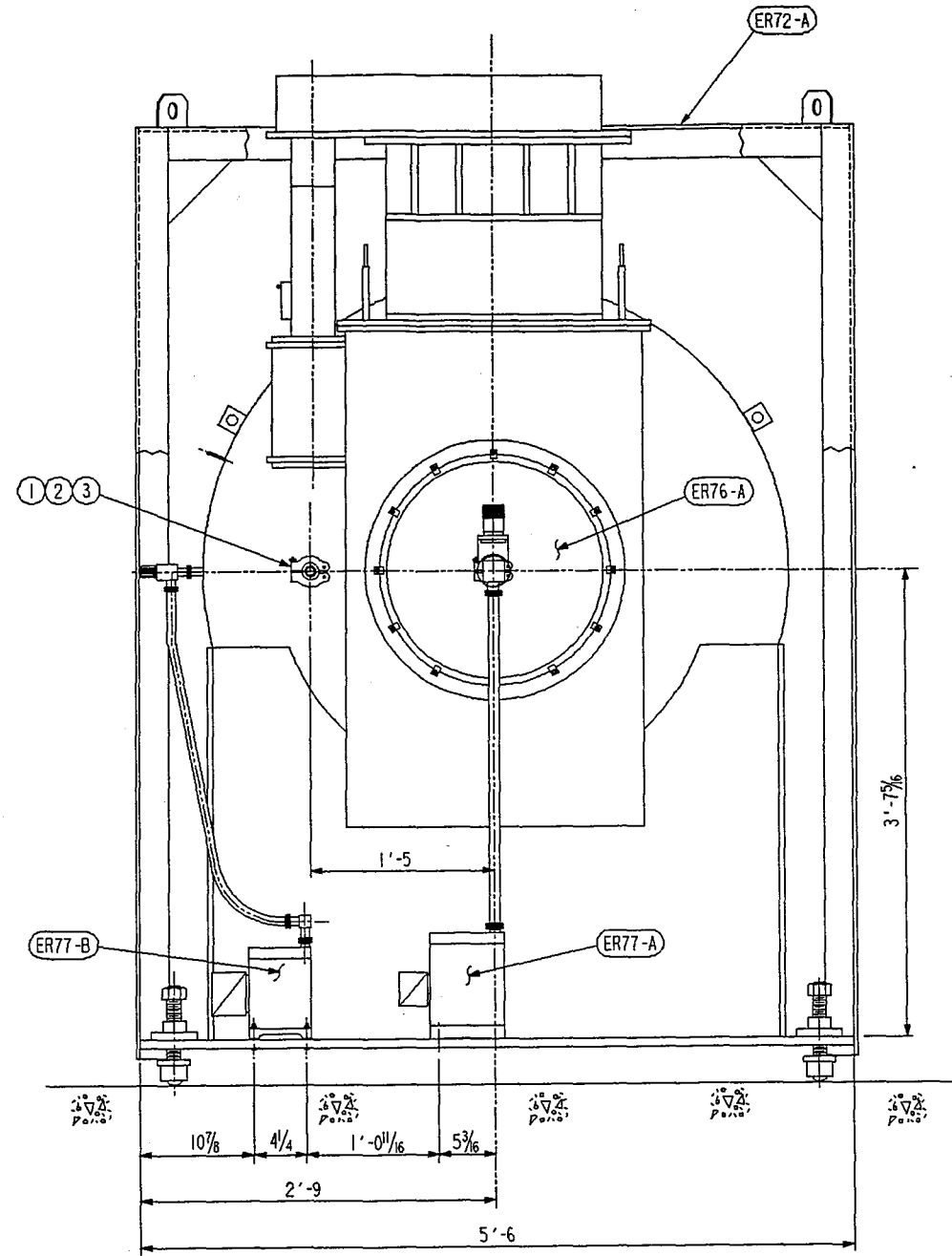
CAD FILE: 30212070.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT COLD TRAP END SEAL	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-15-94	Dwg. ER-70 Rev. 1
J.J. RINGELSTETTER Engineering Supervisor	Sheet -
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE



RIGHT SIDE VIEW



⊖ A ⊕

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
* 1	ER71-A		COLD TRAP END SEAL ASSEMBLY				X
	ER72-A		CARRIAGE SUBASSEMBLY				X
	ER76-A		COLD TRAP LINE SUBASSEMBLY				X
	ER77-A		COLD TRAP EVACUATION LINE SUBASSY				X
	ER77-B		INTERSPACE VACUUM PUMP LINE				X
			PERMEATION HELIUM STANDARD LEAK CONNECTION				
	ER71-1		CENTERING RING DN 16 KF "LEYBOLD" CAT.NO. 88346 OR EQUAL			STN/VITON	X
	ER71-2		BLANK FLANGE DN 16 KF "LEYBOLD" CAT.NO. 88436 OR EQUAL			STN STL	X
	ER71-3		CLAMP DN 16 KF "LEYBOLD" CAT.NO.18341 OR EQUAL			ALUM	X

* BILLING FOR 1 + 3 REQUIRED.

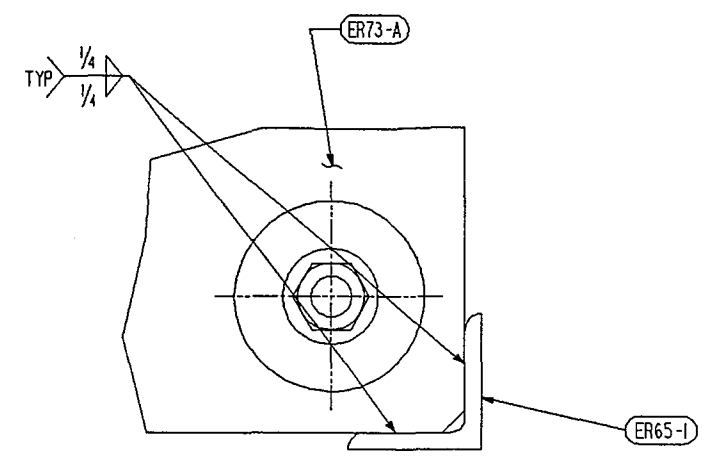
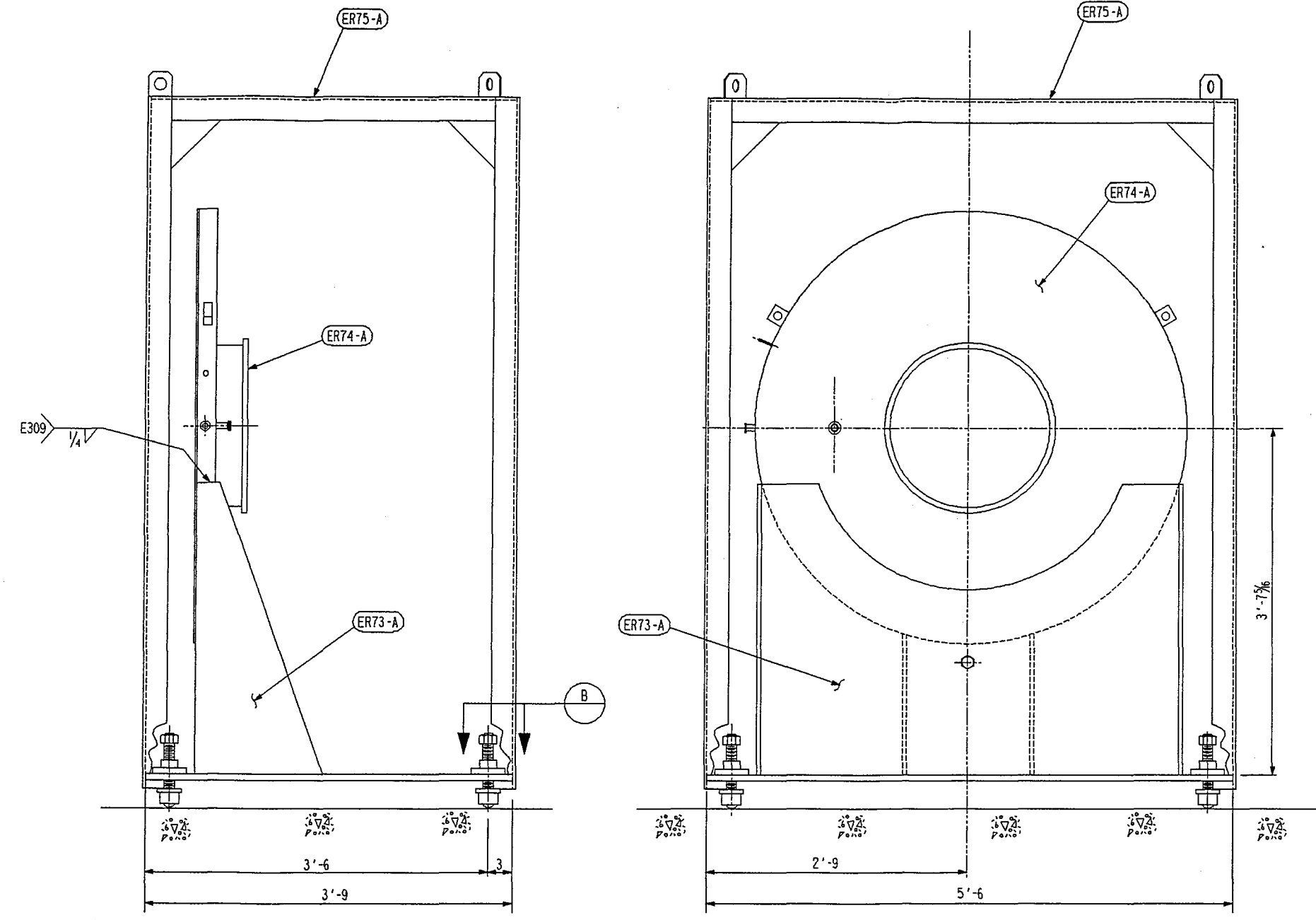
CAD FILE 30212071.DGN

Supplier's/Purchaser's No.	
LIGO PROJECT LEAK TEST ARRANGEMENT COLD TRAP END SEAL ASSEMBLY	
Customer's No.	Contract No.
By BSA Chkd RDS Date 3-15-94	930212ER
J. L. RINGELSTETTER Engineering Supervisor	Dwg. ER-71 Sheet - 1
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
* 1	ER72-A		CARRIAGE SUBASSEMBLY				X
	ER73-A		ROLLING BASE SUBASSY				X
	ER74-A		END CAP SUBASSEMBLY				X
	ER75-A		LUFTING FRAME SUBASSEMBLY				X

* BILLING FOR 1 + 3 REQUIRED.



SECTION B

NOTES:

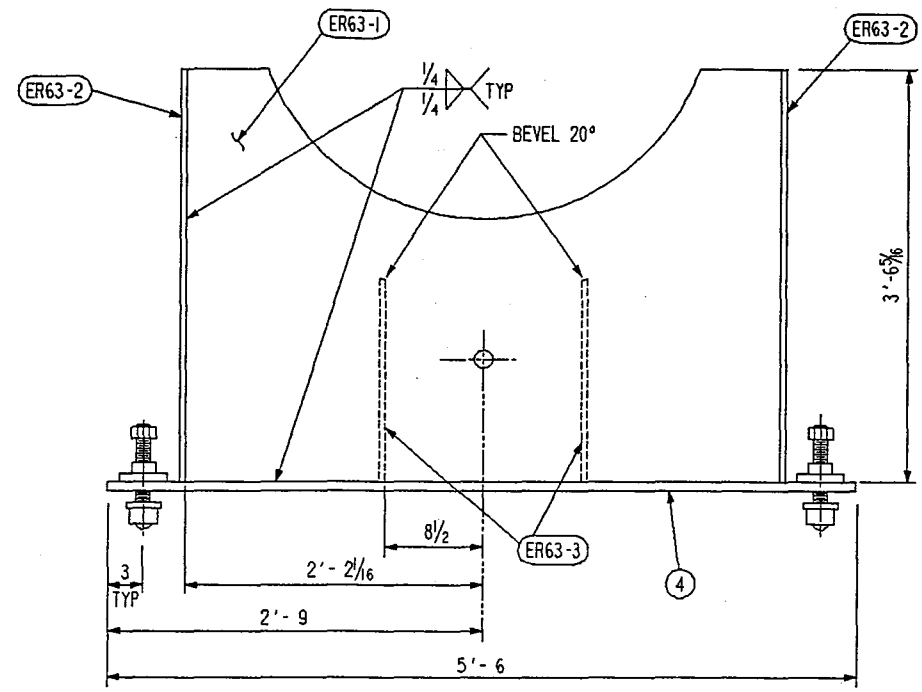
1. WORK THIS DWG WITH DWG ER-73, ER-74 AND ER-75.

RIGHT SIDE VIEW

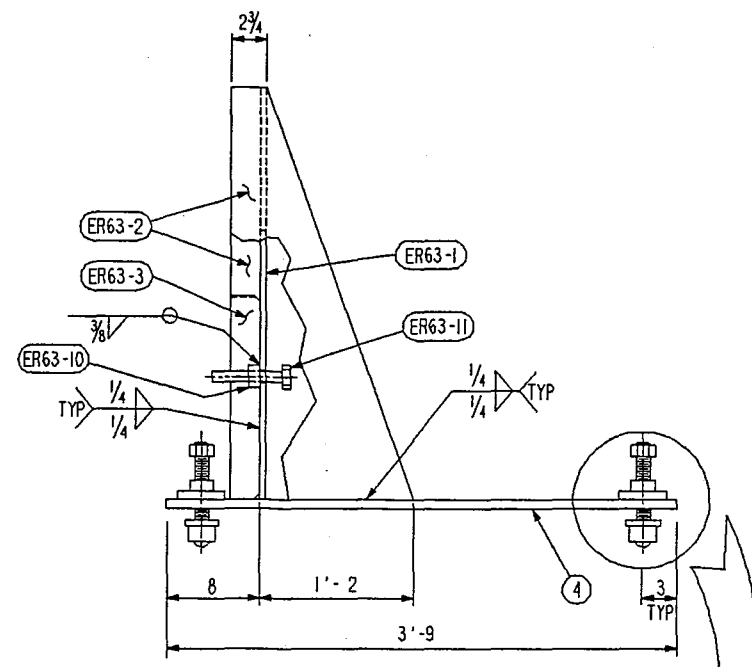
CAD FILE: 30212072.DGN

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

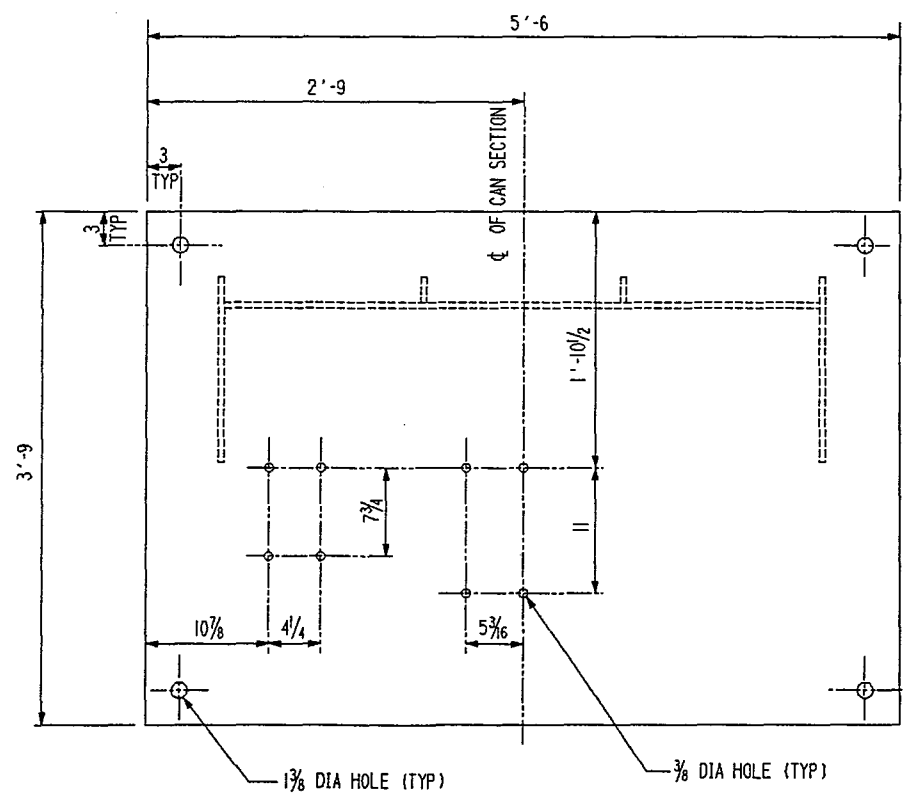
Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
COLD TRAP SEAL END CARRIAGE SUBASSEMBLY	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-15-94	Dwg. ER-72 Rev. 1
J.J. RINGELSTETTER Engineering Supervisor	
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<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHC 30 A REV SEP 83</small>	



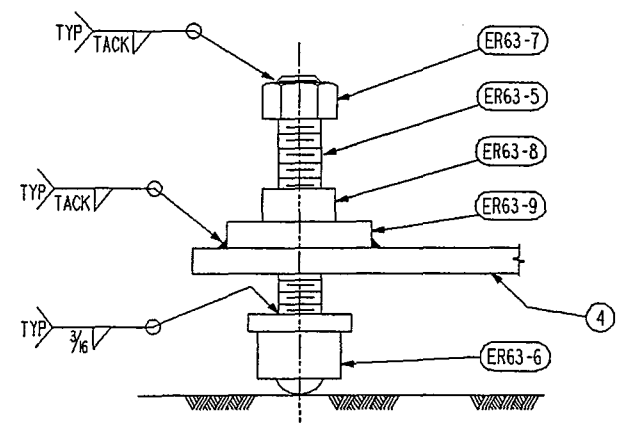
ELEVATION VIEW (A)



SIDE VIEW (A)



(A)



SUB ASSY →
ASSY DWG
ER-72

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1	ER73-A	ROLLING BASE SUBASSEMBLY				X
	ER63-1	1 PLATE SK X 1/2 (CF 43" X 4'-4 1/8")			A36	X
	ER63-2	2 PLATE SK X 1/2 (CF 19" X 3'-7" C2)			A36	X
	ER63-3	2 PLATE 2 1/4 X 1/2 BOE 20°	1	11 7/8	A36	X
	ER72-4	1 PLATE 45 X 1/2 X SK	5	6	A36	X
	ER63-5	4 ACME ROD 1/4 DIA - 5TPI RIGHT-HAND THD	0	6	CARB STL	X
		"McMASTER-CARR" NO. 98935A131				
	ER63-6	4 FLANGE MOUNTED UNIT - 1/2 DIA BALL			CARB STL	X
		TRANSFER HIGH CAP. "McMASTER-CARR" NO. 2415T64 ZINC PLATED				
	ER63-7	4 ACME NUT 1/4 DIA - 5TPI RIGHT-HAND THD			CARB STL	X
		"McMASTER-CARR" NO. 94815A116				
	ER63-8	4 ACME BRONZE ROUND NUT 1/4 DIA - 5TPI			BRONZE	X
		RIGHT-HAND TRD "McMASTER-CARR" NO. 95072A118				
	ER63-9	4 ACME MOUNTING FLANGE 1/4 DIA			CARB STL	X
		"McMASTER-CARR" NO. 95082A645				
	ER63-10	1 PLATE SK X 1" (CF 3 X 0'-3" C1)			A36	X
	ER63-11	1 BOLT 1" DIA REG FIN HEX HEAD	0	6	A307B	X
		THREAD FULL LENGTH				

* BILLING FOR 1 + 3 REQUIRED.

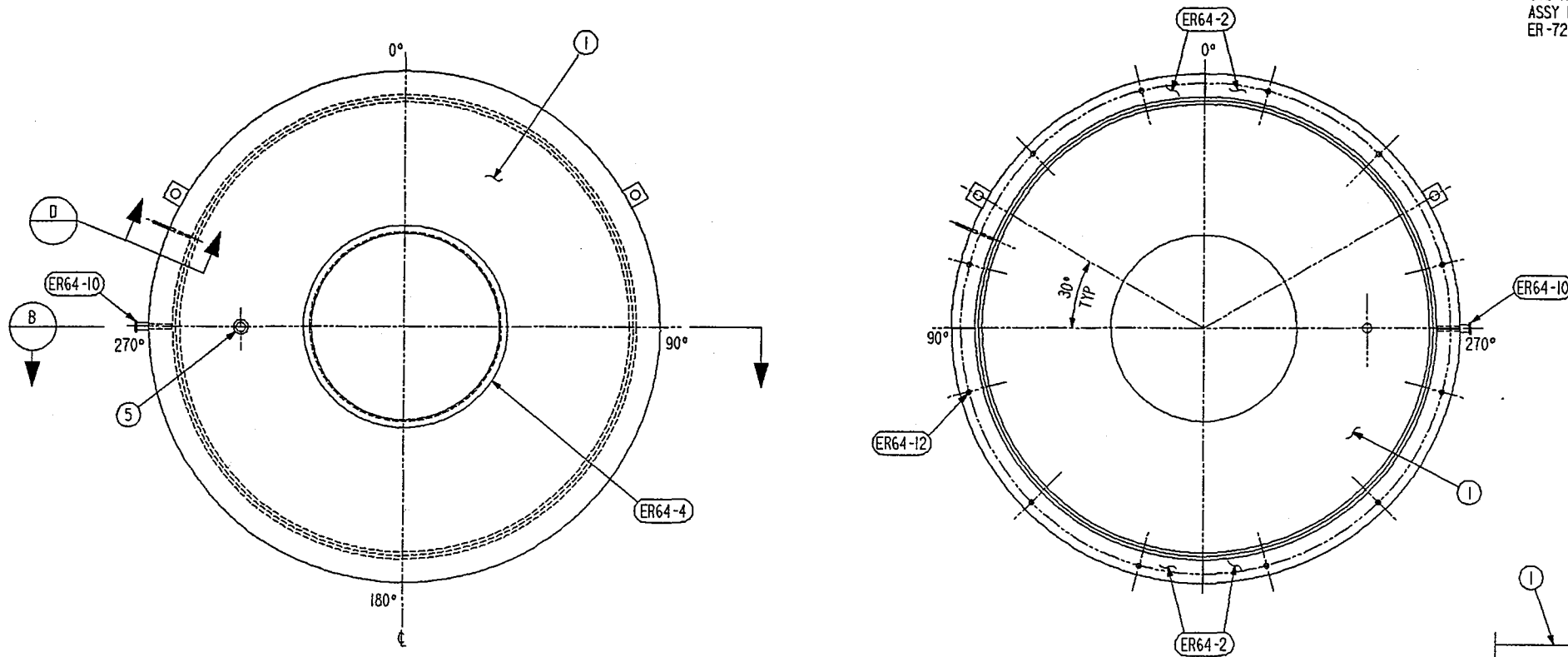
NOTES:

1. WORK THIS DWG WITH DWG ER-63 AND ER-72.

CAD FILE 30212073.DGN

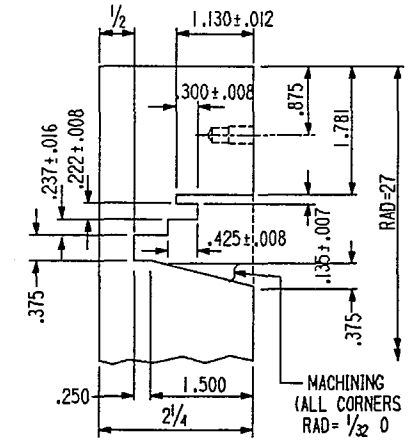
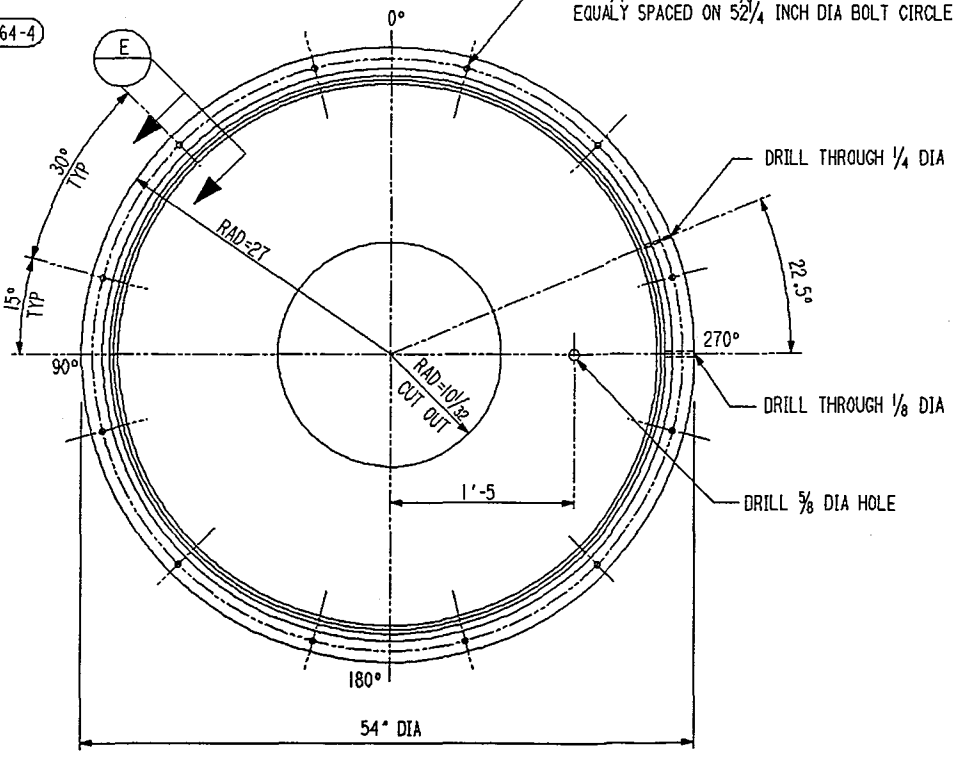
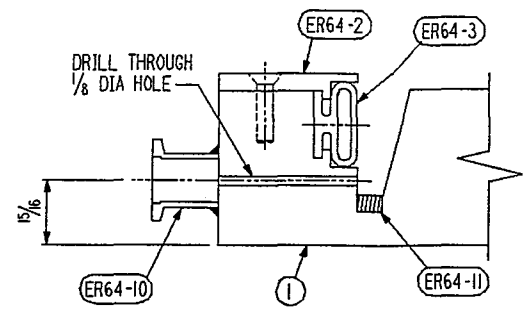
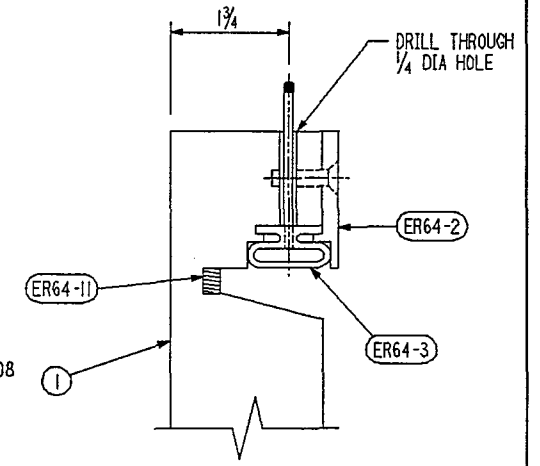
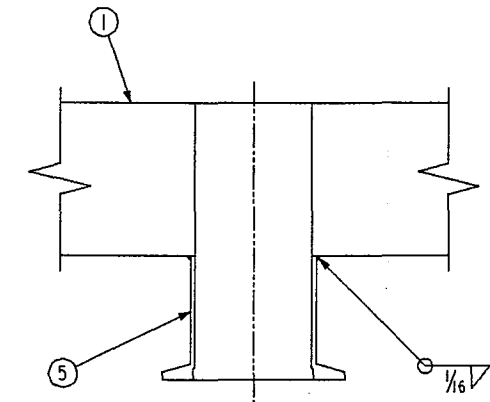
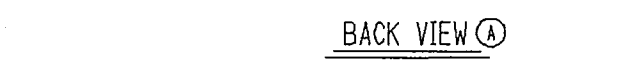
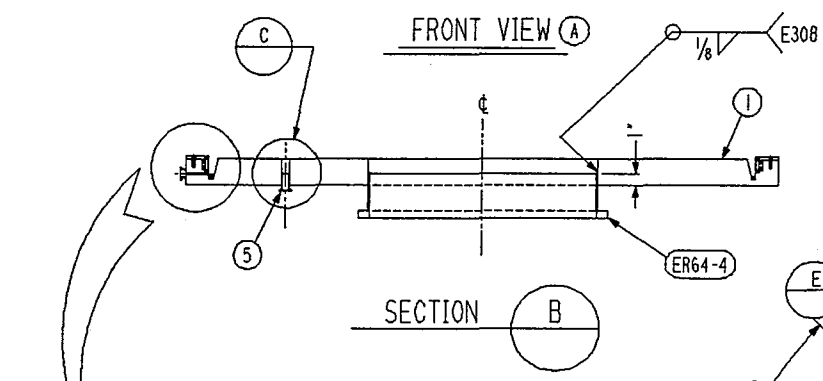
INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No.		Contract No. 930212ER	
Customer's No.		By BSA Chkd RDS Date 3-15-94	
J. L. RINGESTETTER Engineering Supervisor		Dwg. ER-73 Sheet - 1	
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MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
ER74-A		END CAP SUBASSY				X
ER74-1	1	PLATE 54 OD X 2/4 X SK (CF 54° X 4'-6") (MACHINING, DRILLING AND TAPPING)			SS-304 L	1190
ER64-2	4	PLATE SK X 3/8 (MACHINING AND DRILLING)			SS-304 L	X
ER64-3	1	INFLATABLE ROUND PNEUMA-SEAL 50/4 OD "PRESRAY" TYPE- PRS 537 W/ 1A STANDARD AIR CONNECTOR			EPDM	-
ER64-4	1	PORT FITTING DN 500 ISO-K "BALZERS" NO. BP 217 922-X (100 MM-LENGTH) OR EQUAL	0	3 5/16	STN STL	X
ER74-5	1	FLANGE, LONG WELD STUB DN 16 ISO-KF "LEYBOLD" CAT. NO. 899621 (40 MM-LENGTH) OR EQUAL	0	1 1/8	STN STL	X
ER64-10	1	FLANGE, SHORT WELD STUB DN 16 ISO-KF "LEYBOLD" CAT. NO. 899611 (19 MM-LENGTH) OR EQUAL	0	1 3/8	STN STL	X
ER64-11	1	55 DUROMETER BUTYL RUBBER RING 49/4 OD 1/4 X 3/8 CROSS SECTION (VULCANIZED JOINT)			BUTYL RUBBER	1
ER64-12	12	1/4-28 X 1" SLOTTED FLAT COUNTERSUNK MACHINE SCREW	0	1	CARB STL	1
ER63-10	2	PLATE SK X 1" (CF 3 X 0'-3 CI)			A36	X
ER63-11	2	BOLT 1" DIA REG FIN-HEX HEAD THREAD FULL LENGTH	0	6	A307B	X

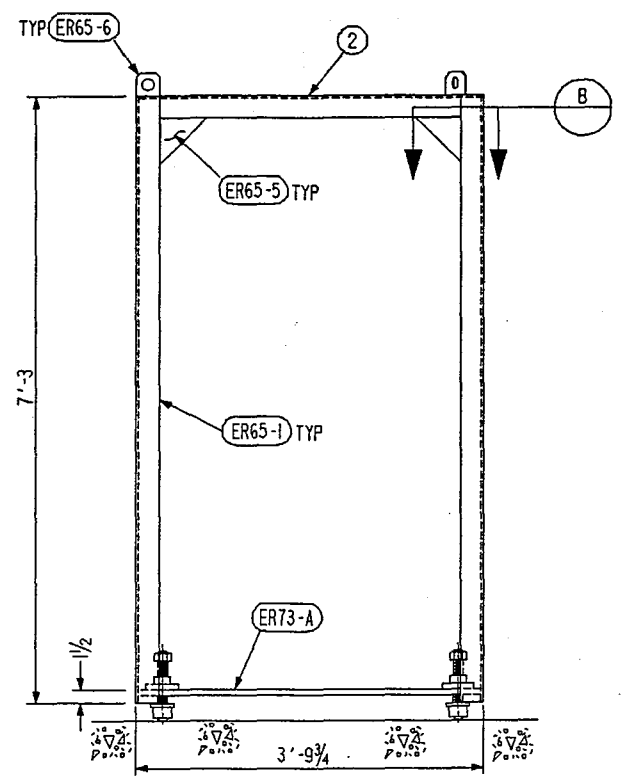
* BILLING FOR 1 + 3 REQUIRED.



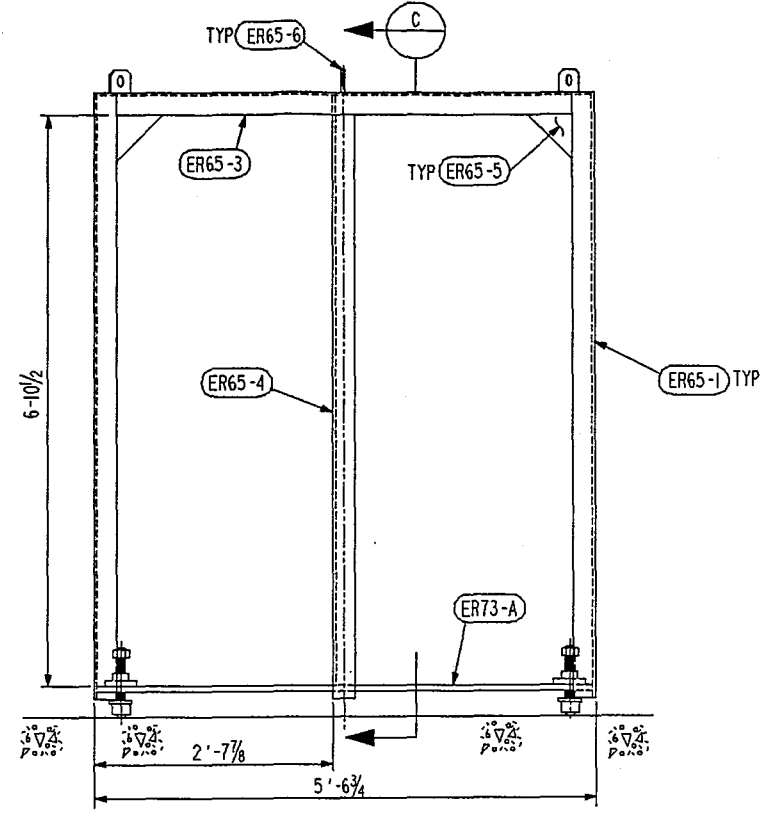
NOTES:
1. TOLERANCES ON MACHINING DIMENSIONS X.XXX ± .015 UNLESS NOTED.

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
COLD TRAP SEAL END END CAP SUBASSEMBLY	
Customer's No. By BSA Chkd_RDS Date 3-15-94	Contract No. 930212ER
J. L. RINGELSTETTER Engineering Supervisor	Dwg. ER-74 Rev. 1 Sheet - 1
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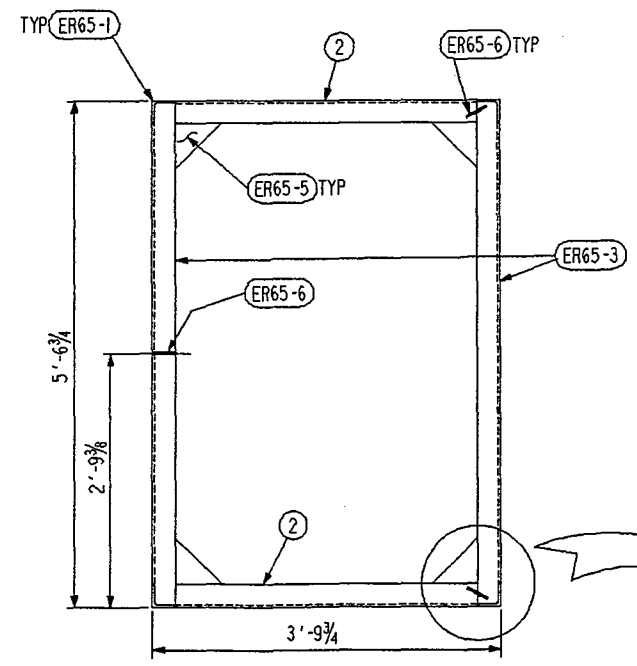
CAD FILE 30212074.DGN



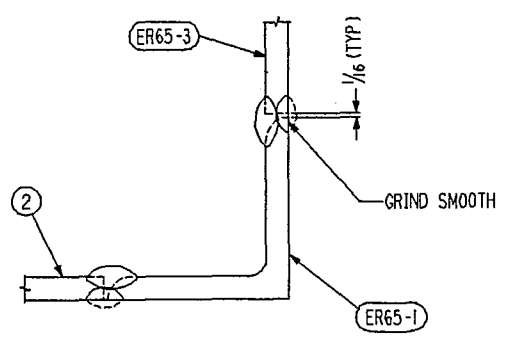
ELEVATION VIEW



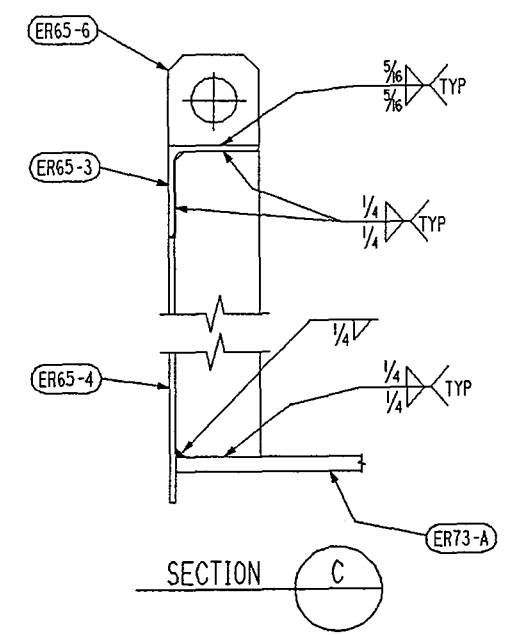
LEFT SIDE VIEW



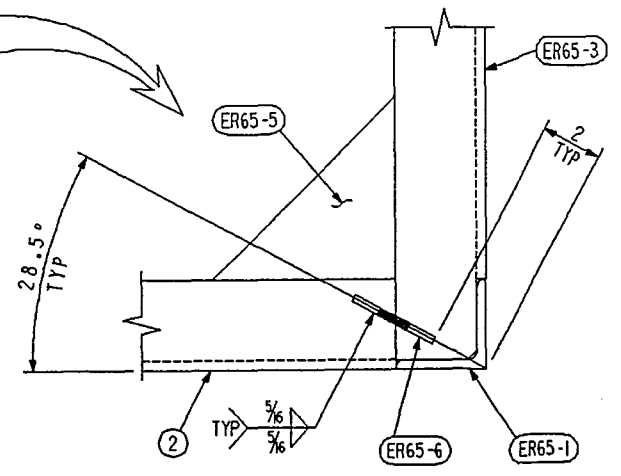
TOP VIEW



SECTION B



SECTION C



SUB ASSY →
ASSY DWG →
ER-72

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1	ER75-A	LIFTING FRAME SUBASSEMBLY				413
	ER65-1	4 L3 X 3 X 3/8	7	3	A36	208
	ER75-2	2 L3 X 3 X 3/8	3	3 3/4	A36	48
	ER65-3	2 L3 X 3 X 3/8 X SK	5	6	A36	79
	ER65-4	1 L3 X 3 X 3/8 X SK	7	2 5/8	A36	52
	ER65-5	12 PLATE 3/8 X SK (CF 6 X 0'-6 C2)			A36	23
	ER65-6	3 PLATE 1/2 X SK			A36	3

* BILLING FOR 1 : 3 REQUIRED.

NOTES:

1. WORK THIS DWG WITH DWG ER-65, ER-72, AND ER-73.

CAD FILE: 30212075.DGN

Supplier's/Purchaser's No. _____

CBI

LIGO PROJECT
LEAK TEST ARRANGEMENT
COLD TRAP END SEAL
LIFTING FRAME
SUBASSEMBLY

Customer's No. _____ Contract No. **930212ER**

By **BSA** Chkd **RDS** Date **3-15-94**
J. L. RINGELSTETTER
Engineering Supervisor

Dwg. **ER-75** Rev. **1**
Sheet **-**

Revisions: **GENERAL REV.**

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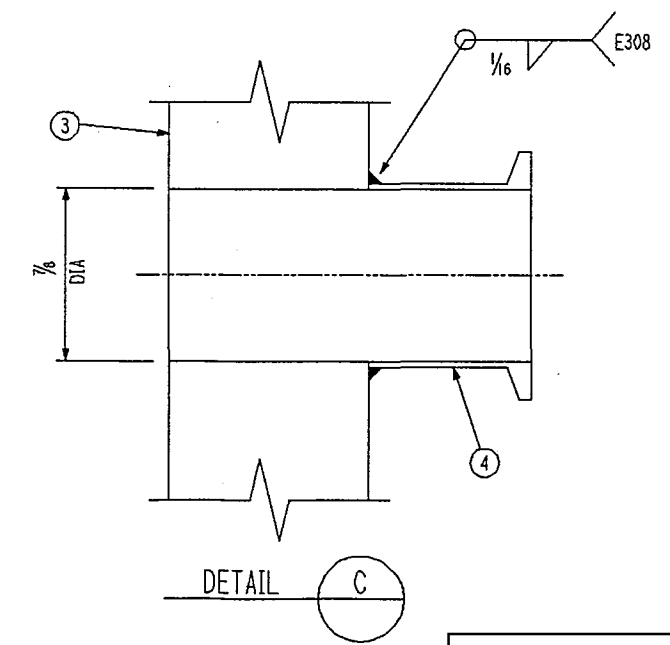
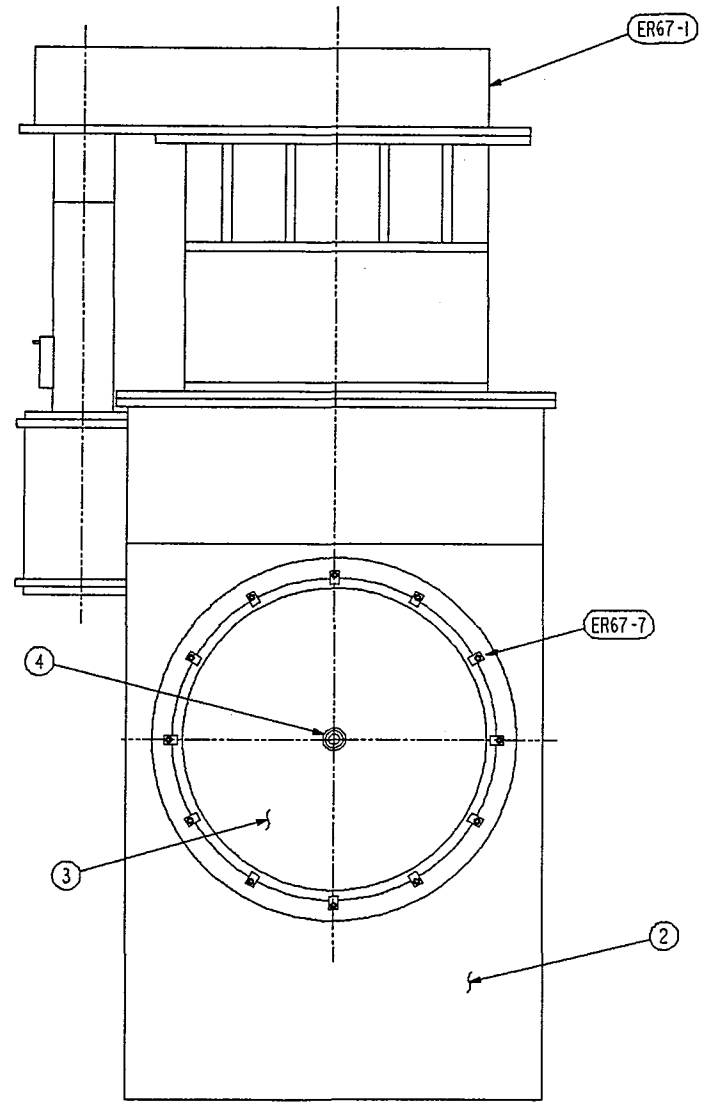
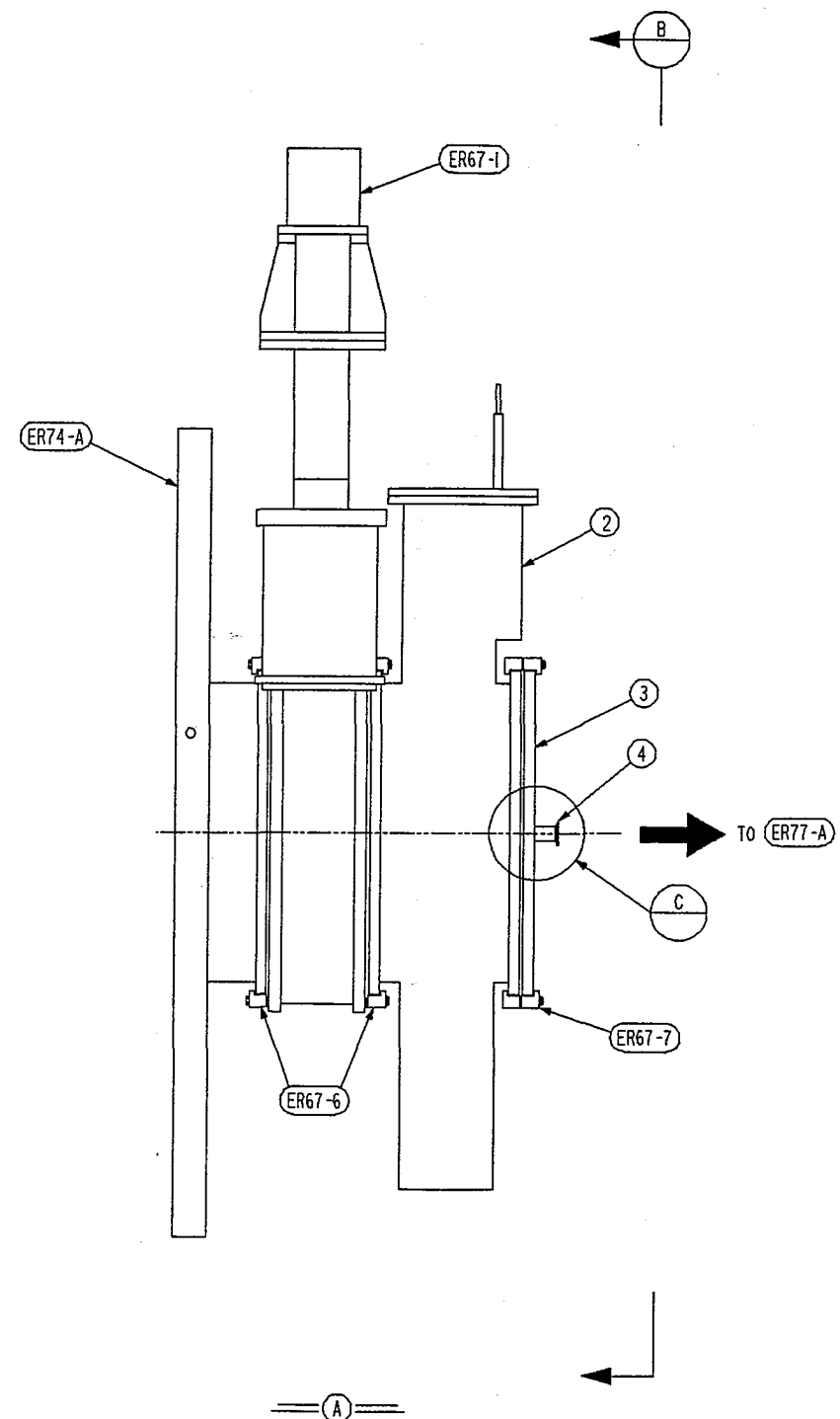
THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHG 30 A REV SEP 83

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

SUB ASSY
ASSY DWG
ER-71

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1 ER76-A		COLD TRAP LINE SUBASSEMBLY				X
ER67-1	1	UHV GATE VALVE DN 500 ISO-F (20 INCH) W/ELECTROPNEUMATIC ACTUATOR (115V/60 HZ) "VAT" SERIES 10, ORDER NO. 10054-PE44 OR EQUAL			STN STL	X
ER67-6	3	STAINLESS/AL CENTERING RING (BUNA-N) FOR ISO FLANGE SIZE 500 (20 INCH) "LESKER" PART NO. QF500-SABR OR EQUAL			STN/AL	X
ER67-7	8	AL DOUBLE CLAMP "K"-STYLE FOR ISO FLANGE SIZE 500 (20 INCH) "LESKER" PART NO. QF-SDC-AL3 OR EQUAL			ALUM	X
ER67-8	16	AL SINGLE CLAMP (METRIC) "F"-STYLE FOR ISO FLANGE SIZE 500 (20 INCH) THREAD M12 "LESKER" PART NO. QF-LSC-ALM OR EQUAL			ALUM	X
ER76-2	1	LIQUID NITROGEN TRAP "GNB CORP" MODEL LNT-20 W/ISO-K FLANGES PART NO. 35607 OR EQUAL			STN STL	X
ER76-3	1	BLANK FLANGE ISO 500-K W/HOLE 1/2 DIA "LESKER" PART NO. QF500-BK OR EQUAL			STN STL	X
ER76-4	1	SMALL LONG FLANGE DN 25 ISO-KF "BALZERS" ORDER NO. BP 217 220 OR EQUAL			STN STL	X

* BILLING FOR 1 : 3 REQUIRED.



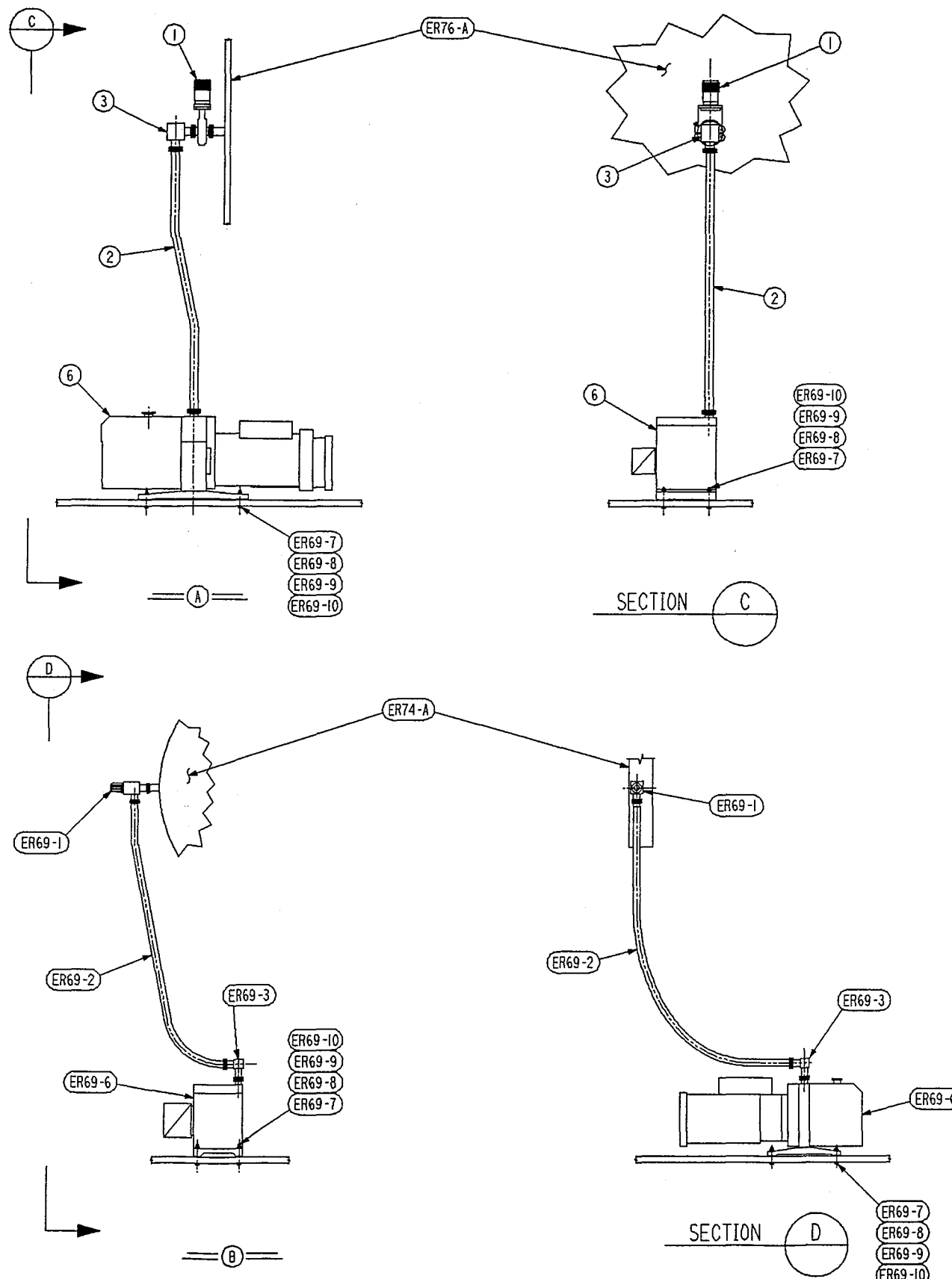
NOTES:

1. WORK THIS DWG WITH DWG ER-67 AND ER-71.

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
COLD TRAP END SEAL COLD TRAP LINE SUBASSEMBLY	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd RDS Date 3-16-94	Dwg. ER-76 Rev. 1
J.J. RINGELSTETTER Engineering Supervisor	Sheet - 1
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CAD FILE 30212076.DGN



SUB ASSY →
 ASSY DWG
 ER-71

MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
			FT	INCHES		
* 1 ER77-A		COLD TRAP EVACUATION LINE				X
ER77-1	1	KF BELLOWS-SEALED STRAIGHT-THROUGH VALVE W/QUICK-ACTING KNOB MANUALLY OPERATED, DN 25 KF "LEYBOLD" CAT. NO. 289 12 OR EQUAL			STN STL	X
ER77-2	1	METAL HOSE DN 25 KF "LEYBOLD" CAT. NO. 86803 OR EQUAL	3	4	STN STL	X
ER77-3	1	ELBOW, 90° DN 25 KF "LEYBOLD" CAT. NO. 88462			STN STL	X
ER77-4	4	CENTERING RING DN 25 KF "LEYBOLD" CAT. NO. 88347 OR EQUAL			STN/VITON	X
ER77-5	4	CLAMP DN 25 KF "LEYBOLD" CAT. NO. 18342 OR EQUAL			ALUM	X
ER77-6	1	TRIVAC B ROTARY VANE PUMP MODEL D25E 20.9 CFM (590 LTR/MIN), POWER 1/2 HP VOLTAGE 208-230/460 VAC, FREQ. 60 HZ CAT. NO. 91276-2 OR EQUAL				85
ER69-7	4	BOLT 1/4 DIA REG FIN HEX HEAD	0	3	A307B	1
ER69-8	4	NUT 1/4 DIA HEAVY HEX			A563A	-
ER69-9	8	PLAIN WASHER 1/4 DIA WIDE			CARB STL	-
ER69-10	4	LOCK WASHER 1/4 DIA STD SPLIT TYPE			CARB STL	-
* 1 ER77-B		INTERSPACE VACUUM PUMP LINE ASSEMBLY				X
ER69-1	1	KF BELLOWS-SEALED RIGHT-ANGLE VALVE W/QUICK-ACTING KNOB MANUALLY OPERATED DN 16 KF "LEYBOLD" CAT. NO. 288 11 OR EQUAL	0	1 3/8	STN STL	X
ER69-2	1	PVC HOSE COMPLETE DN 16 ISO-KF 1000 MM -LENGTH NOM. "BALZERS" ORDER NO. BP 226 415-T OR EQUAL	3	4	PVC	X
ER69-3	1	ELBOW 90° DN 16 KF "LEYBOLD" CAT. NO. 88461 OR EQUAL	0	9/16	STN STL	X
ER69-4	4	CENTERING RING DN 16 ISO-KF "BALZERS" ORDER NO. BP 213 144-T OR EQUAL			STN/VITON	X
ER69-5	4	CLAMPING RING DN 16 ISO-KF "BALZERS" ORDER NO. BP 217 426-T OR EQUAL			ALUM	X
ER69-6	1	TRIVAC B ROTARY VANE PUMP MODEL D4B 3.4 CFM (96 LTR/MIN), POWER 1/3 HP, VOLTAGE 115/200-230 V(AC), FREQ. 50/60 HZ PHASE 1, WIRED FOR 115 V, W/HYDROCARBON OIL, "LEYBOLD" CAT. NO. 91245-1 OR EQUAL				51
ER69-7	4	BOLT 1/4 DIA REG FIN HEX HEAD	0	3	A307B	1
ER69-8	4	NUT 1/4 DIA HEAVY HEX			A563A	-
ER69-9	8	PLAIN WASHER 1/4 DIA WIDE			CARB STL	-
ER69-10	4	LOCK WASHER 1/4 DIA STD SPLIT TYPE			CARB STL	-

* BILLING FOR 1 + 3 REQUIRED.

NOTES:

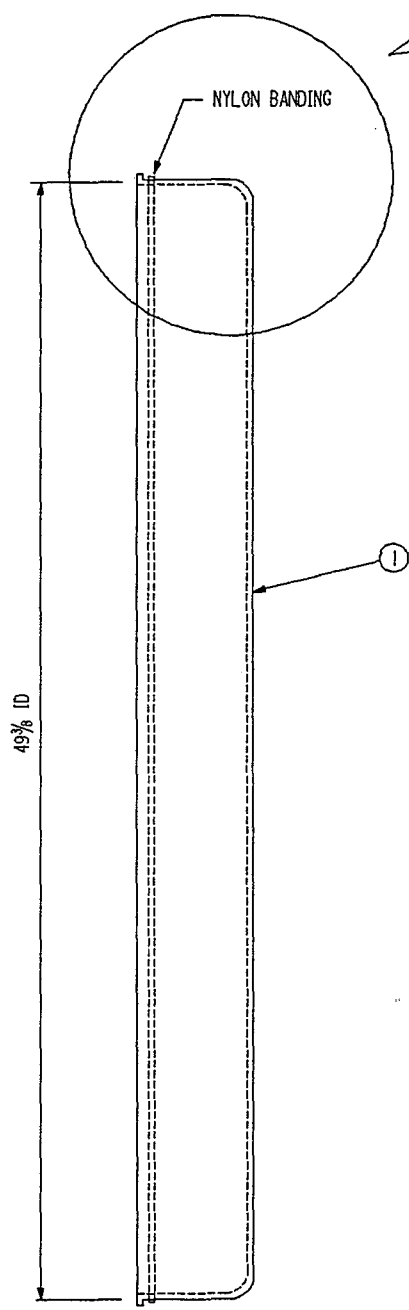
1. WORK THIS DWG WITH DWG ER-69, ER-71, AND ER-76.

CAD FILE 30212077.DGN

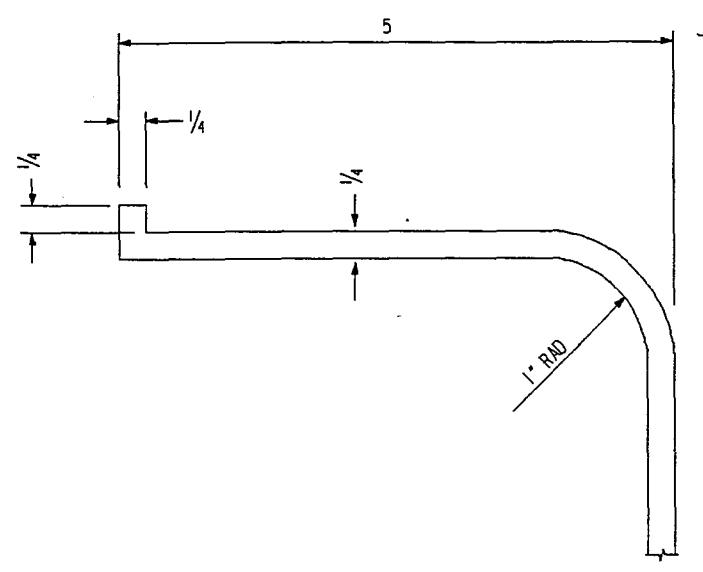
▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT LEAK TEST ARRANGEMENT	
COLD TRAP END SEAL COLD TRAP EVACUATION LINE SUBASSY INTERSPACE VACUUM PUMP LINE SUBASSY	
Customer's No.	Contract No.
By BSA Chkd RDS Date 3-16-94	930212ER
J.J. RINGELSTETTER Engineering Supervisor	Dwg. ER-77 Rev. 1 Sheet - 1
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<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHC 30 A REV SEP 83</small>	

SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
1	ER96-1		PROTECTIVE COVER			POLYETHYLENE	



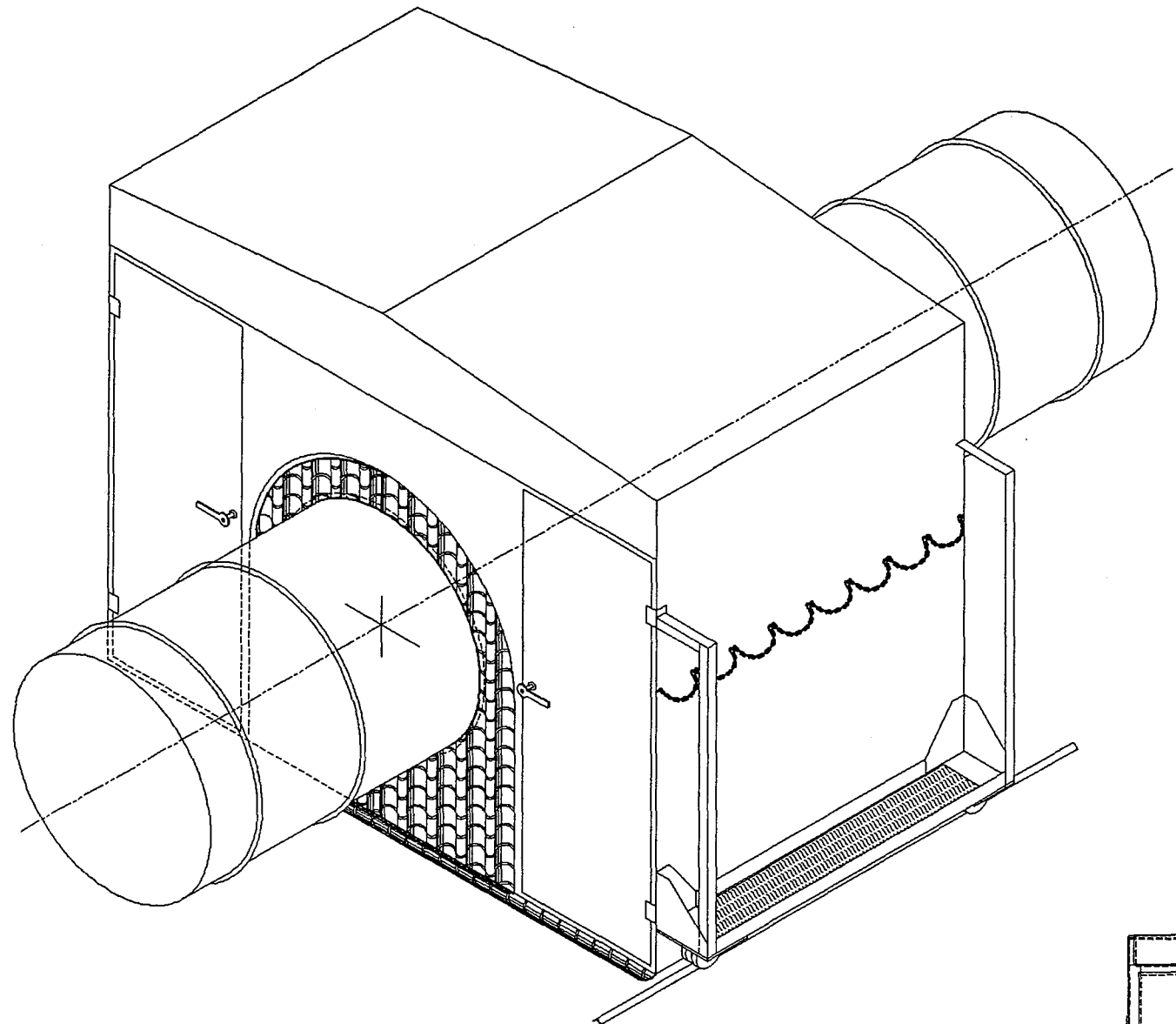
SIDE VIEW



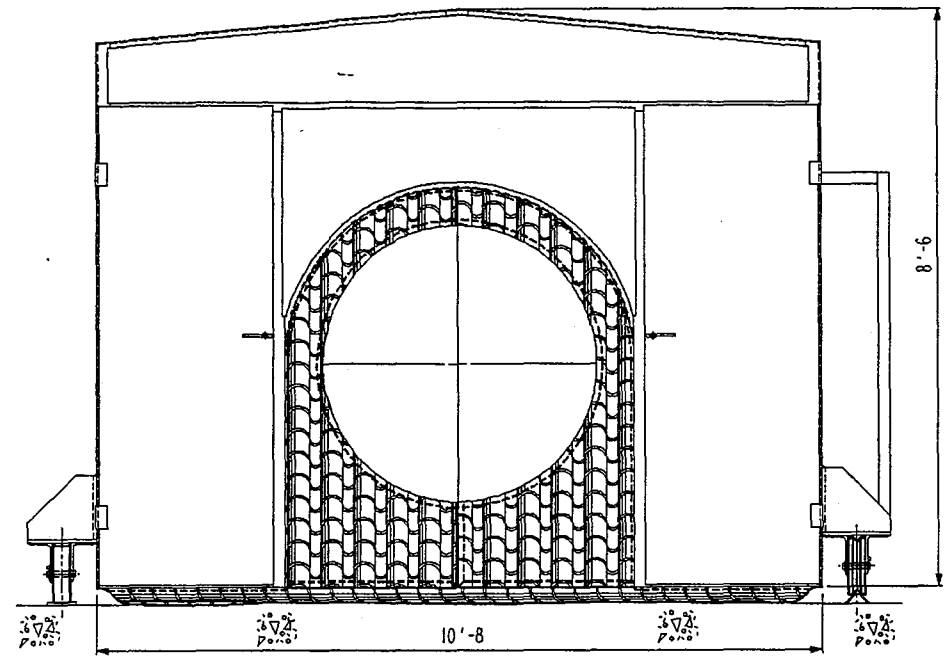
CAD FILE 30212096.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT PROTECTIVE END CAP	
Customer's No. _____	Contract No. 930212ER
By <u>DKL</u> Chkd _____ Date <u>3-23-94</u>	Dwg. <u>ER-96</u> Rev. <u>0</u>
J.J. RINGELSTETTER Engineering Supervisor	
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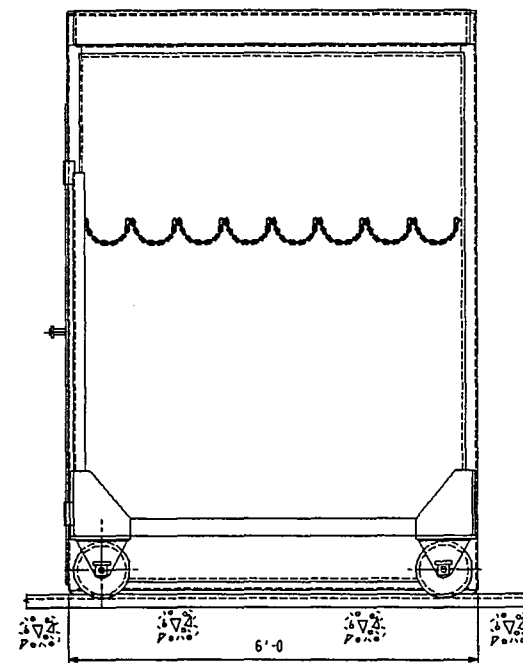
▶ INDICATES CHANGE FROM PREVIOUS ISSUE



ISOMETRIC VIEW



ELEVATION VIEW

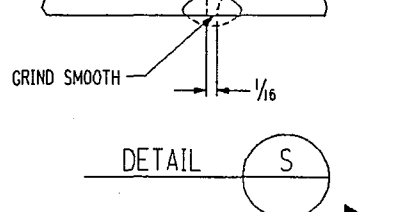
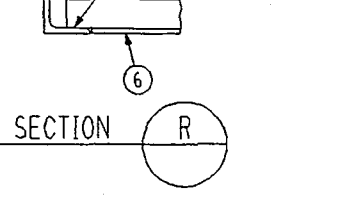
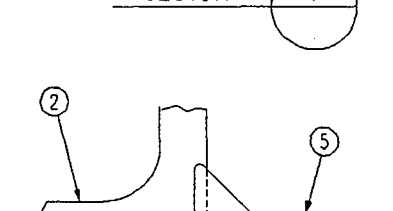
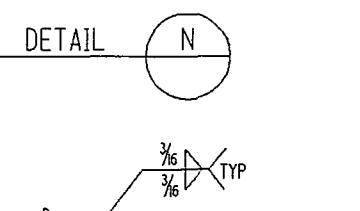
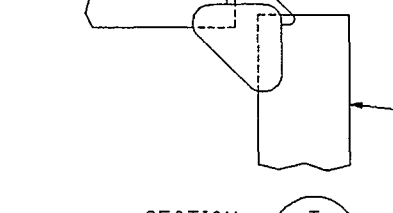
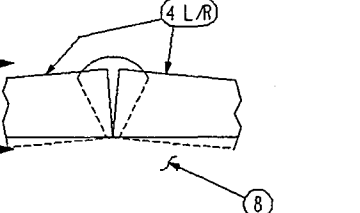
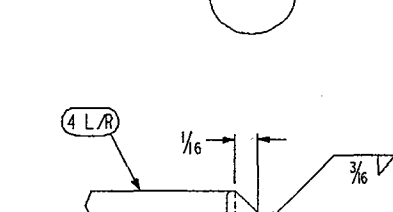
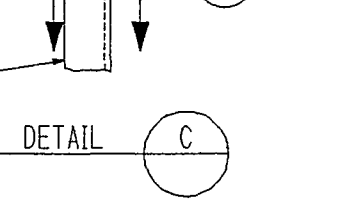
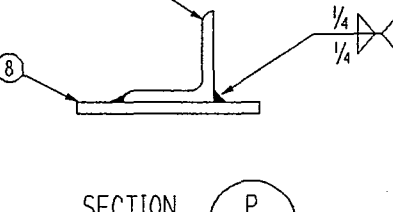
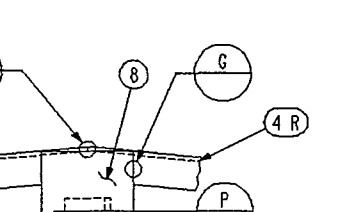
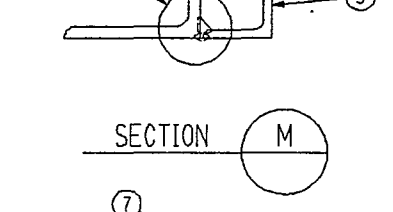
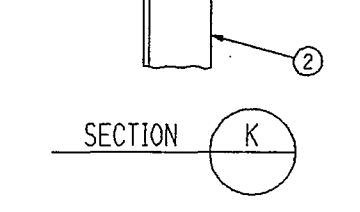
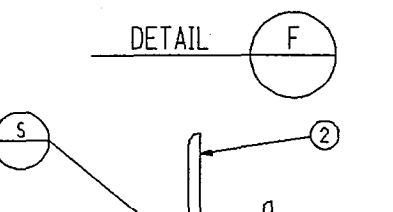
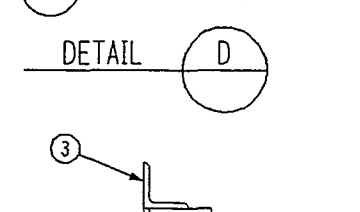
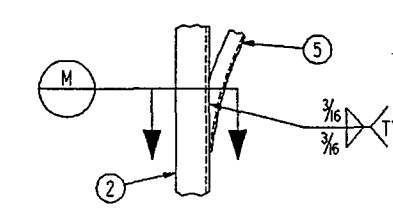
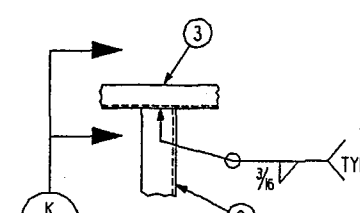
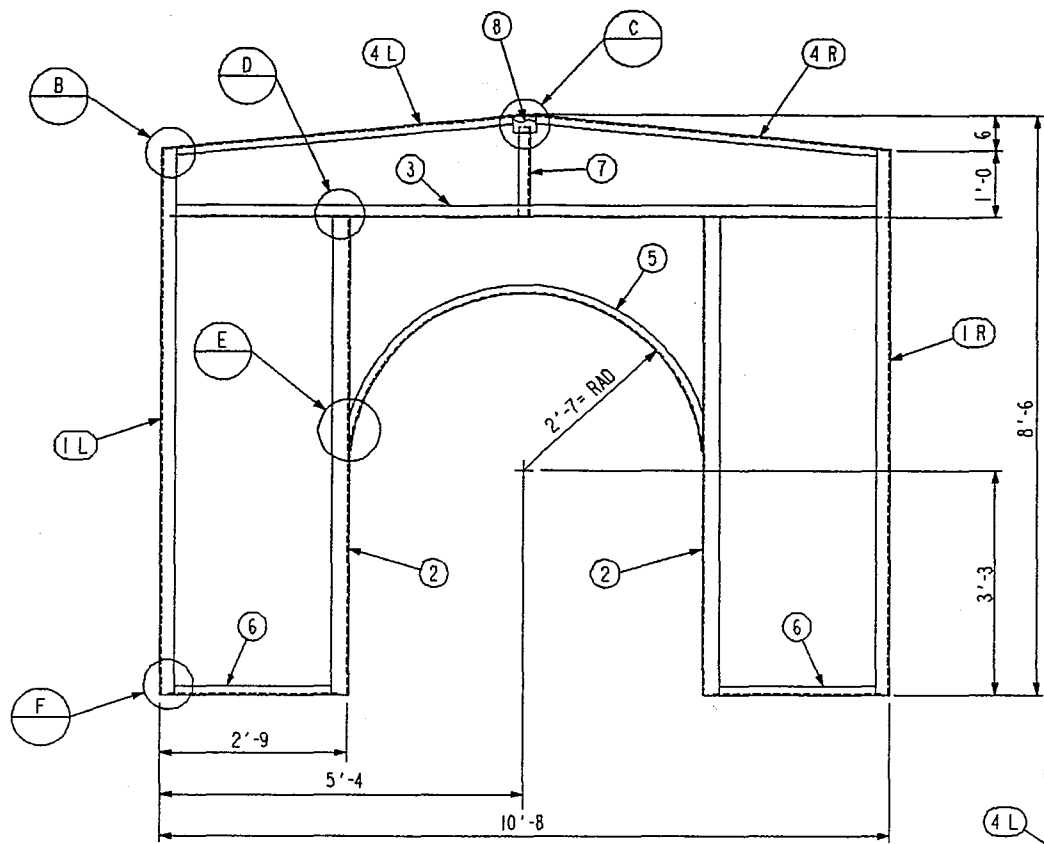


RIGHT SIDE VIEW

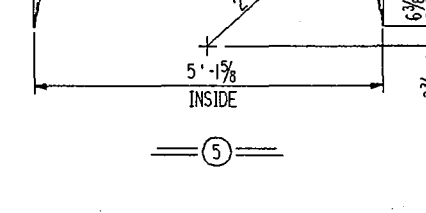
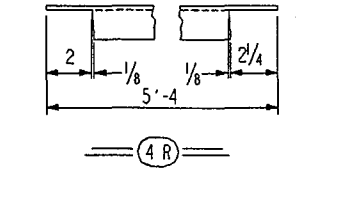
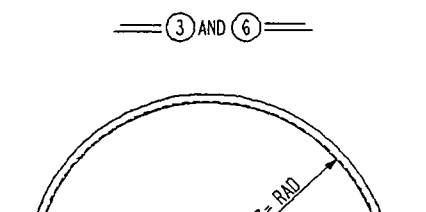
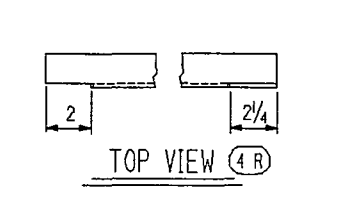
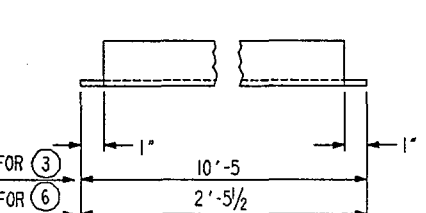
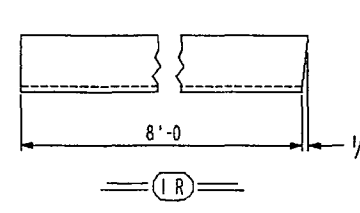
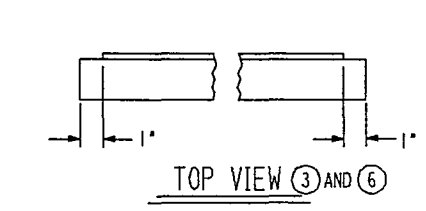
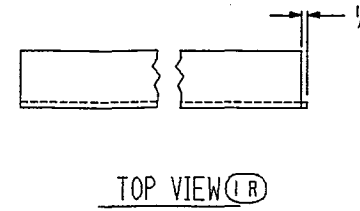
CAD FILE 3021210.DGN

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT WELD STATION SHELTER ISOMETRIC VIEW	
Customer's No.	Contract No.
By BSA Chkd XXX Date 22-12-93	930212ER
J.J. RINGELSTETTER Engineering Supervisor	Dwg. ER-110 Rev. 1 Sheet - 1
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INDICATES CHANGE FROM PREVIOUS ISSUE



SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
2	ERIII-A		FRAME ASSY				427
	ERIII-1	L/R	4 L2 1/2 X 2 1/2 X 1/4 X SK	8	0 1/4	A36	132
	ERIII-2		4 L3 X 3 X 1/4	7	0	A36	137
	ERIII-3		2 L2 X 2 X 1/4 X SK	10	5	A36	66
	ERIII-4	L/R	4 L1 1/2 X 1 1/2 X 3/8 X SK	5	4	A36	39
	ERIII-5		2 L1 1/2 X 1 1/2 X 3/8 X SK (ROLL TO 2'-7" RAD)	7	6 5/8	A36	27
	ERIII-6		4 L1 1/2 X 1 1/2 X 3/8 X SK	2	5 1/2	A36	16
	ERIII-7		2 L2 X 2 X 1/4	1	4	A36	9
	ERIII-8		2 PLATE 3 X 3/8	0	4	A283C	1



NOTES:
1. USE 70XX ELECTRODE

Supplier's/Purchaser's No. _____

CBI

**LIGO PROJECT
WELD STATION SHELTER
FRAME "A" ASSEMBLY**

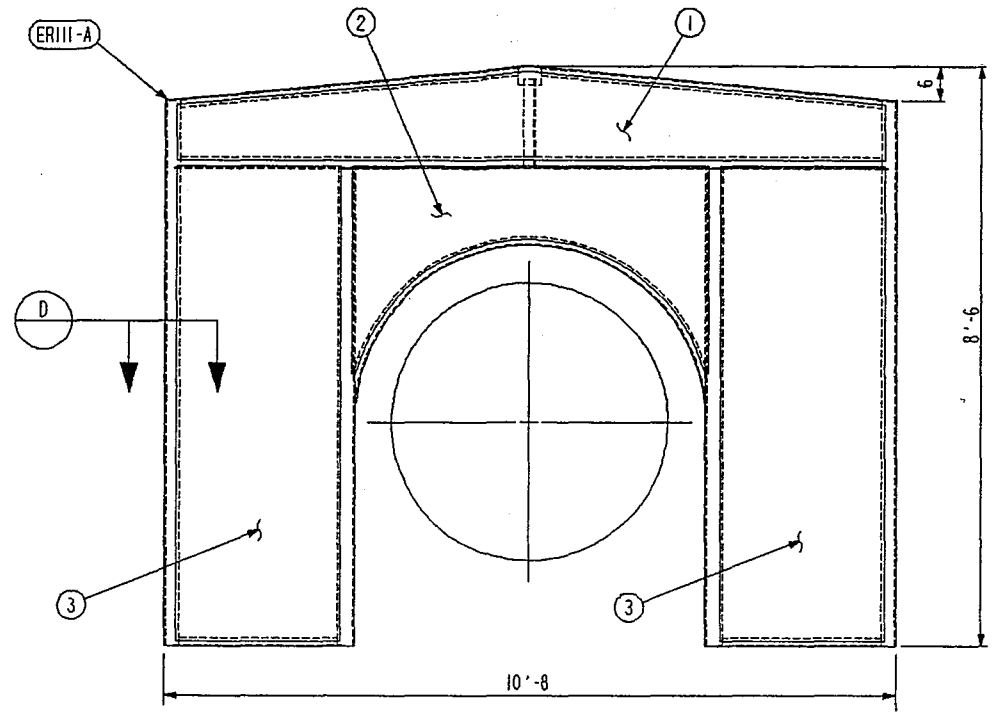
Customer's No. _____ Contract No. 930212ER
By BSA Chkd XXX Date 11-24-93 Dwg. ER-III Rev. 0
J.L. RINGELSTETTER Engineering Supervisor Sheet - 0

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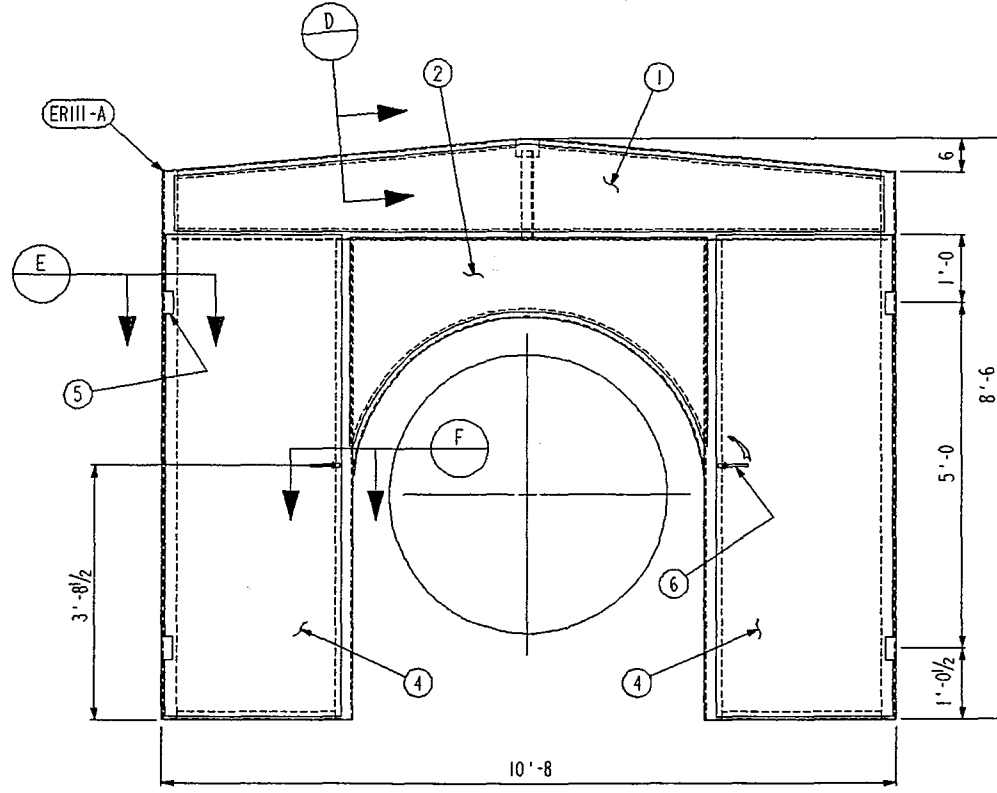
THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHG 30 A REV SEP 93

CAD FILE 3021211.DGN

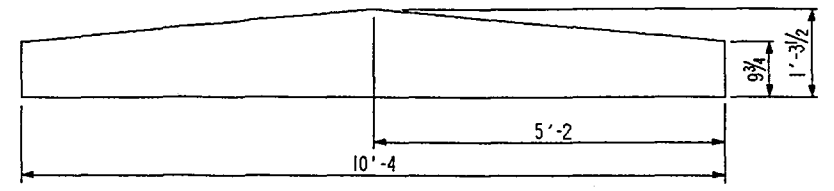
INDICATES CHANGE FROM PREVIOUS ISSUE



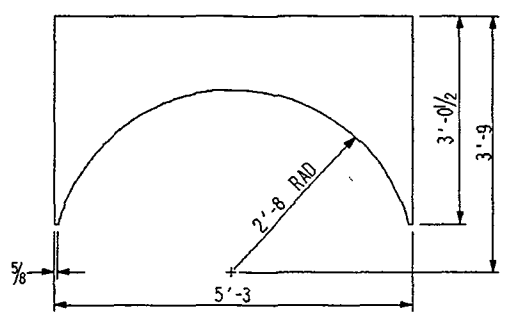
ELEVATION VIEW
BLIND END



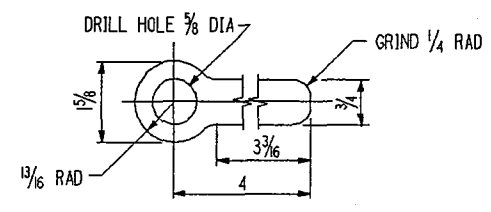
ELEVATION VIEW
DOOR END



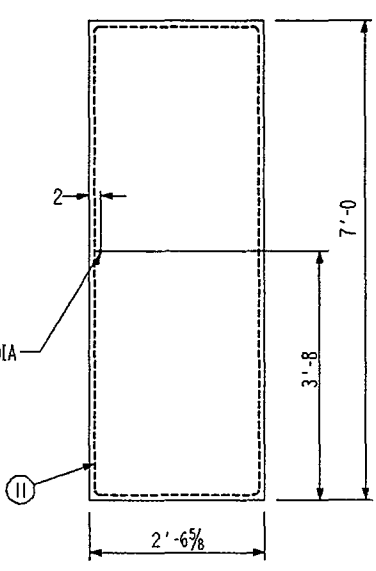
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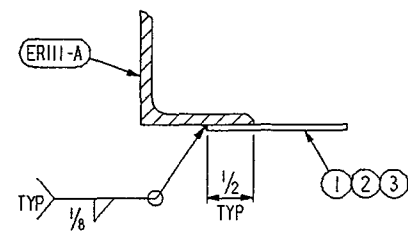
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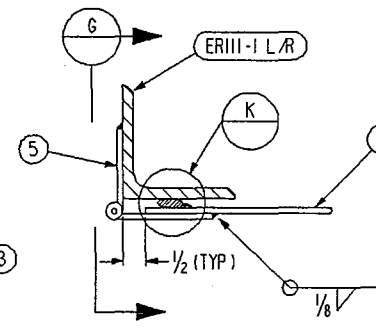
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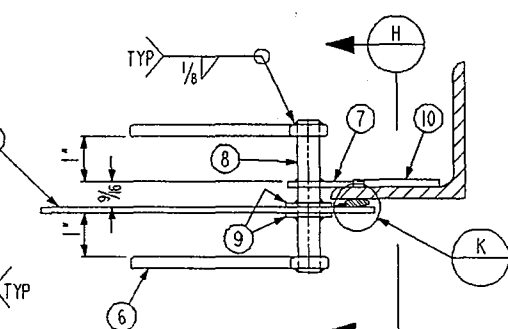
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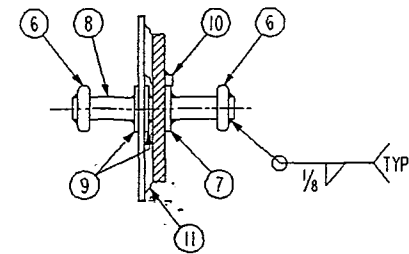
SECTION D



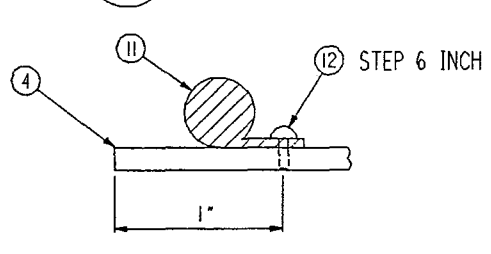
SECTION E



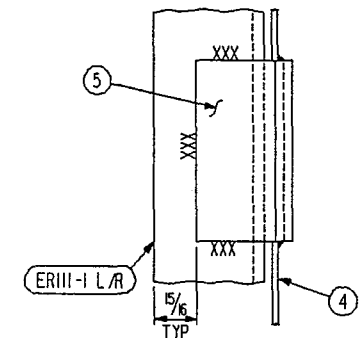
SECTION F



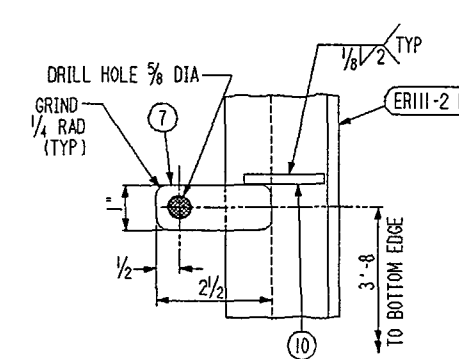
SECTION H



DETAIL K



SECTION G



SECTION M

SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
I	ERI12-B		BLIND END ASSEMBLY				258
	ERI12-1	1	PLATE SK X 1/8 (CF 16 X 10'-4)			A283C	44
	ERI12-2	1	PLATE SK X 1/8 (CF 37 X 5'-3)			A283C	44
	ERI12-3	2	PLATE 28 3/8 X 1/8	6	11 1/2	A283C	170
I	ERI12-C		DOOR END ASSEMBLY				278
	ERI12-1	1	PLATE SK X 1/8 (CF 16 X 10'-4)			A283C	44
	ERI12-2	1	PLATE SK X 1/8 (CF 37 X 5'-3)			A283C	44
	ERI12-4	2	PLATE 30 3/8 X 1/8 W/HOLE	7	0	A283C	183
	ERI12-5	4	METAL CABINET BUTT HINGE 4 X 4 X .125			CARB STL	2
			GUDEN NH845 TIGHT PIN OR EQUAL				
	ERI12-6	2	PLATE SK X 1/4 (CF 3 X 5 C2) HANDLE			A283C	2
	ERI12-7	2	PLATE SK X 1/4 (CF 2 X 2 1/2 C2)			A283C	1
	ERI12-8	2	ROD 1/2 DIA	0	3 1/6	A36	1
	ERI12-9	4	PLAIN WASHER 1/2 DIA NARROW			CARB STL	-
	ERI12-10	2	BAR 1/2 SQUARE	0	2	A36	-
	ERI12-11	2	VINYL COVERED POLYURETHANE GASKET 3/8 DIA McMASTER-CARR NO. 1146A1 OR EQUAL	19	0		-
	ERI12-12	80	SELF-THREADING SCREW NO. 3 DIA TYPE B	0	3/8	SAE GR 2	1

Supplier's/Purchaser's No. _____

CBI

**LIGO PROJECT
WELD STATION SHELTER
BLIND AND DOOR END ASSEMBLY**

Customer's No. _____ Contract No. 930212ER

By BSA Chkd XXX Date 12-2-93 Dwg. ER-112 Rev. 0

J.L. RINGELSTETTER Engineering Supervisor Sheet - 0

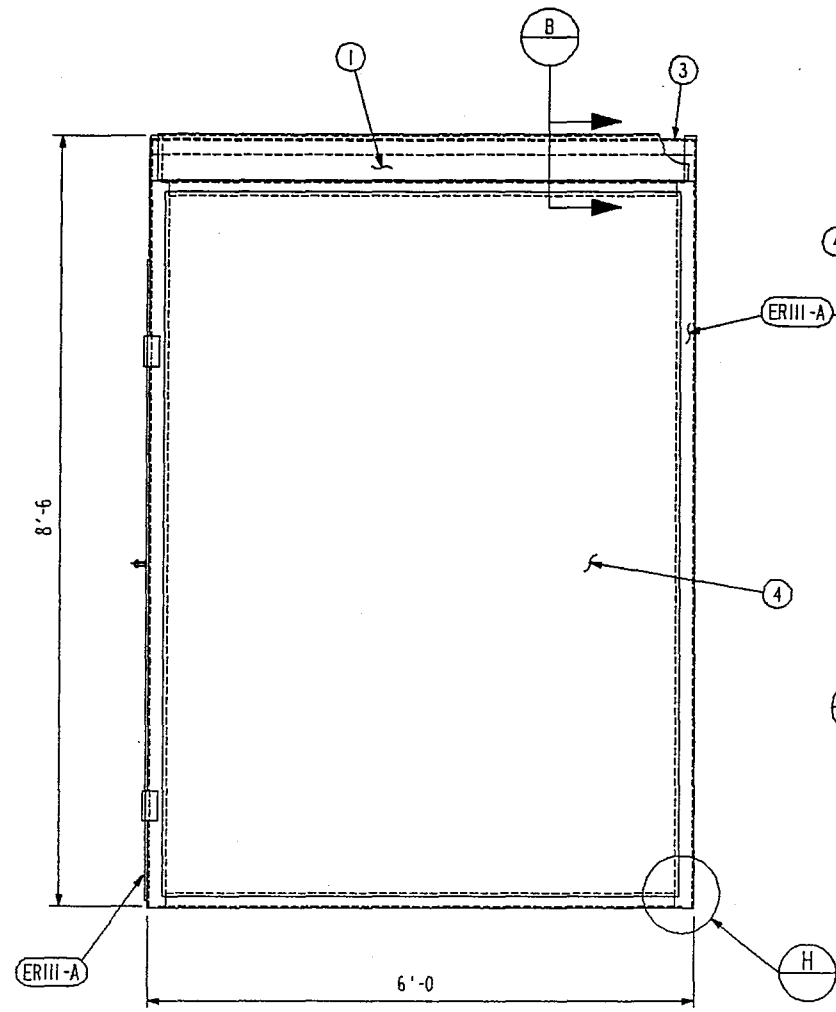
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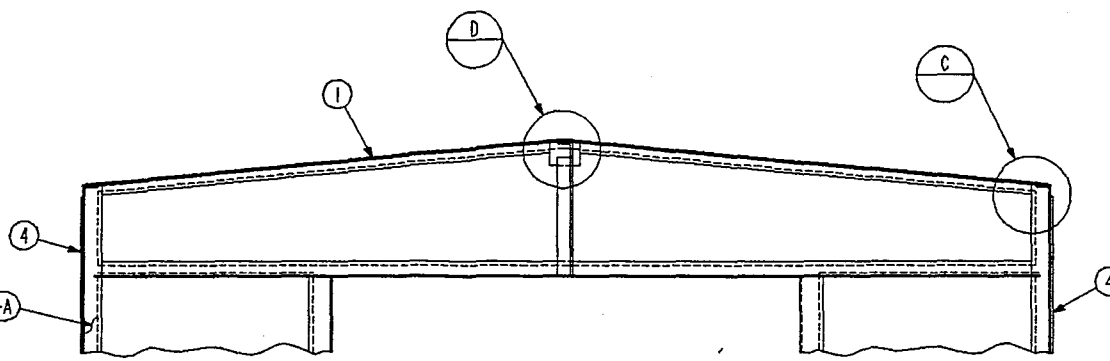
CAD FILE 3021212.DGN

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

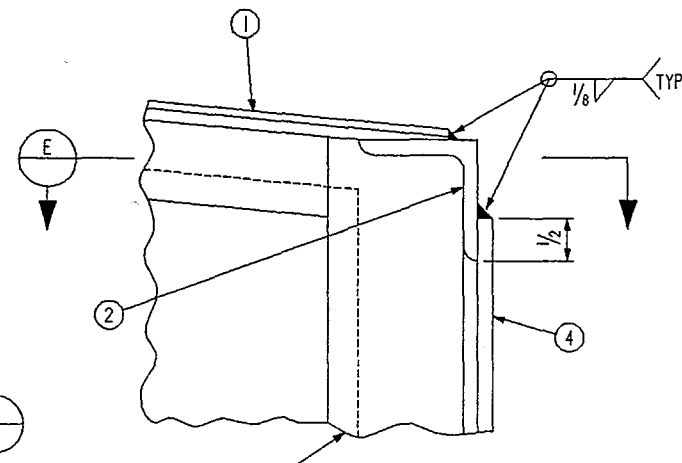
SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
1	ER113-1		PLATE 70 X 1/8 X SK	10	7 3/4	A283C	318
4	ER113-2		L2 X 2 X 1/4 X SK	5	11 5/8	A36	76
1	ER113-3		L2 X 2 X 1/4	5	9	A36	18
2	ER113-4		PLATE 68 X 1/8	7	9	A283C	449



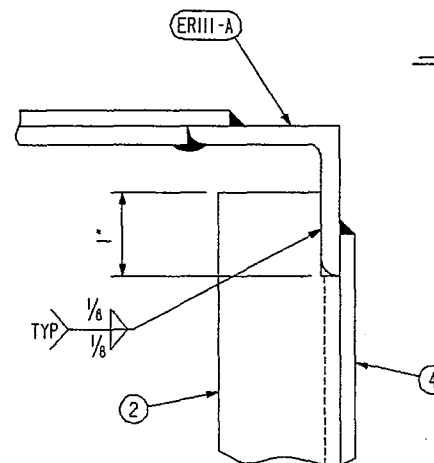
ELEVATION VIEW



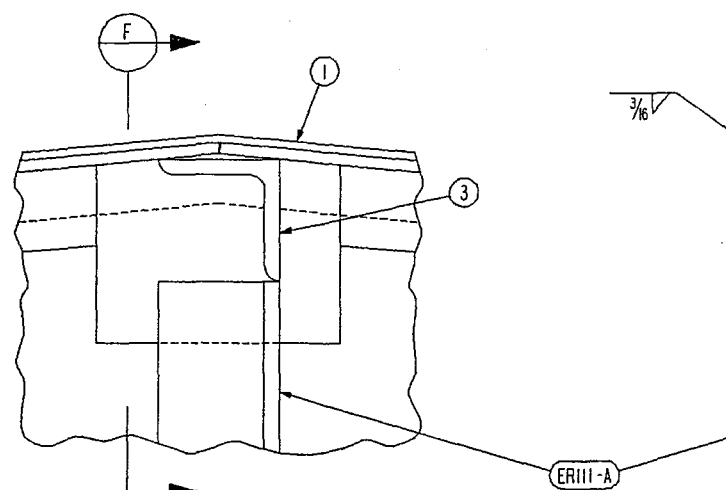
SECTION B



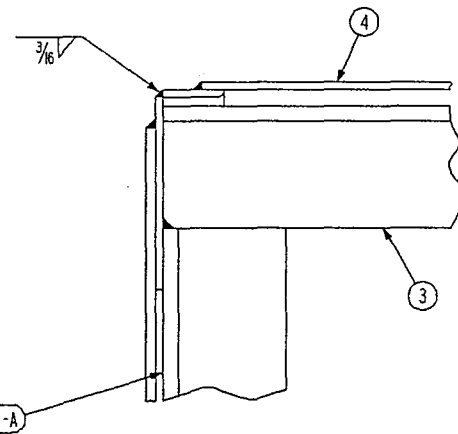
DETAIL C



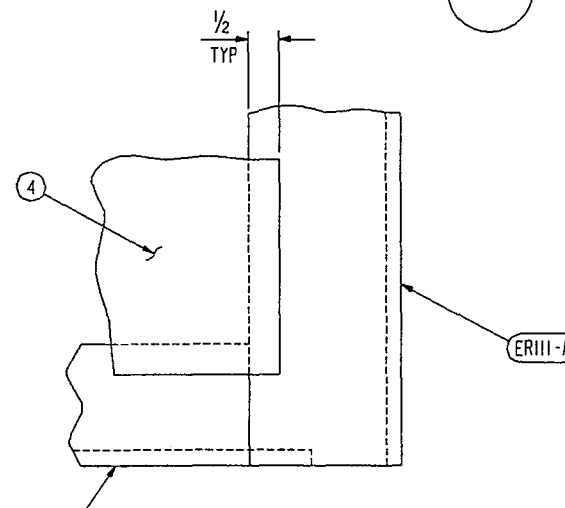
SECTION E



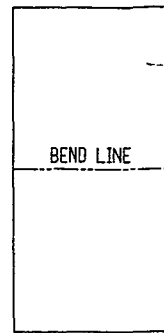
DETAIL E



SECTION F



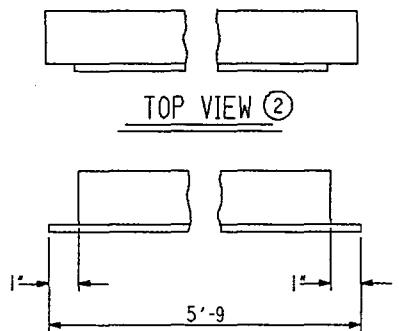
SECTION H



BEND LINE



SIDE VIEW 1

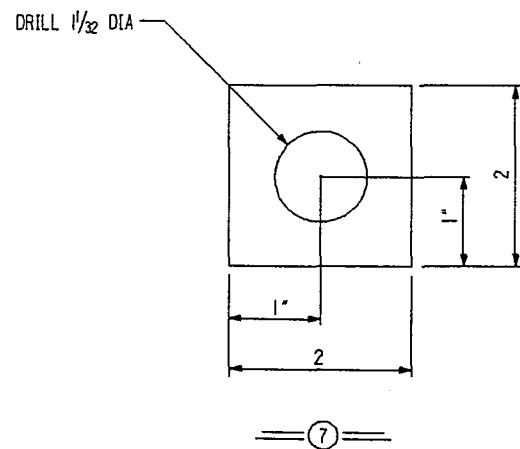
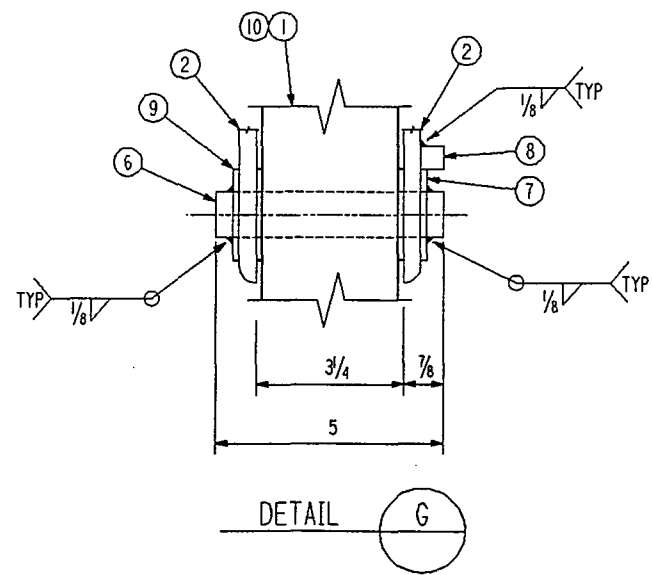
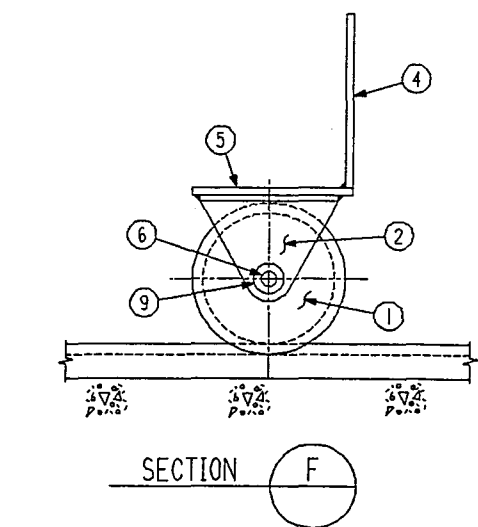
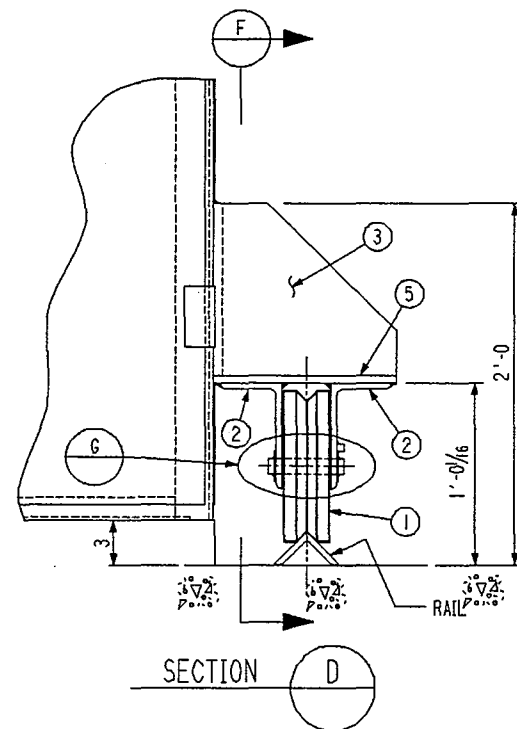
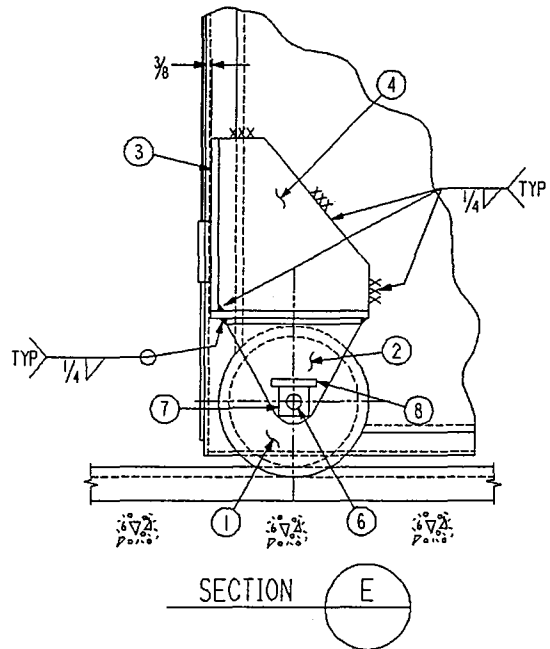
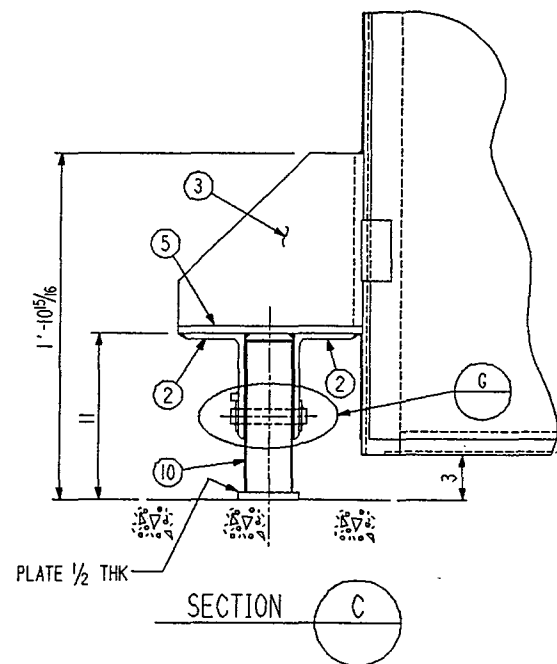
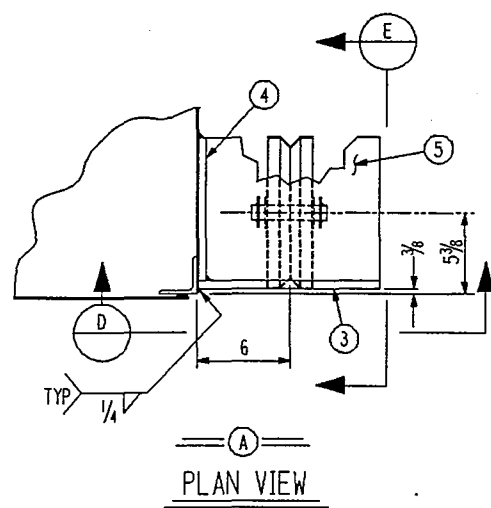
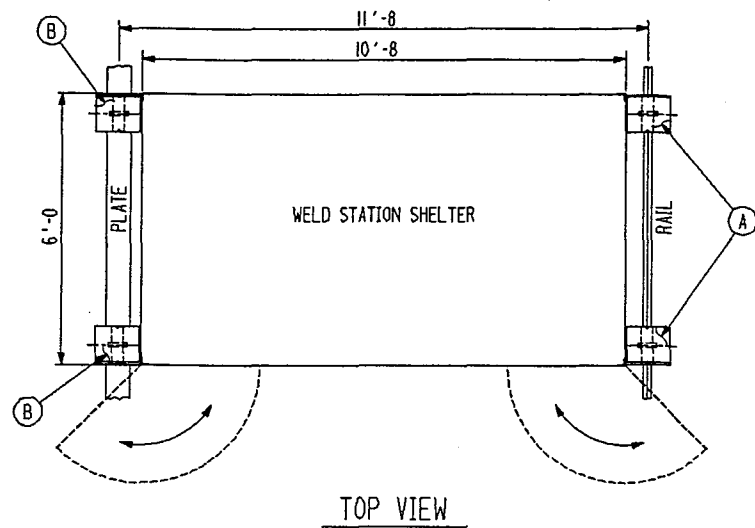
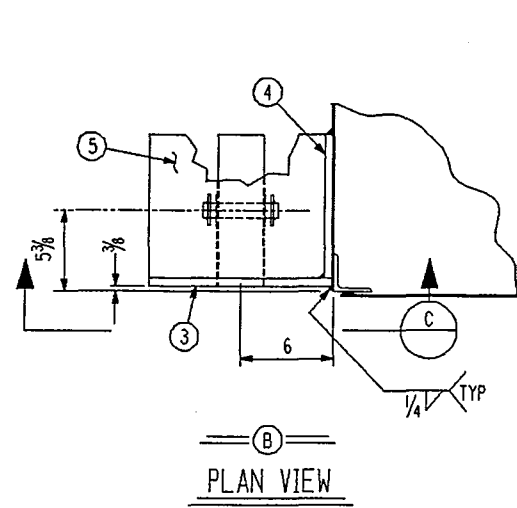


TOP VIEW 2

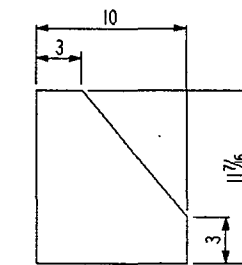
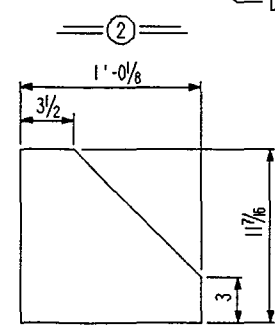
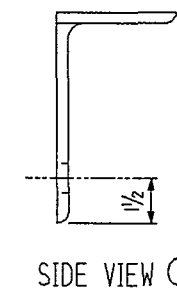
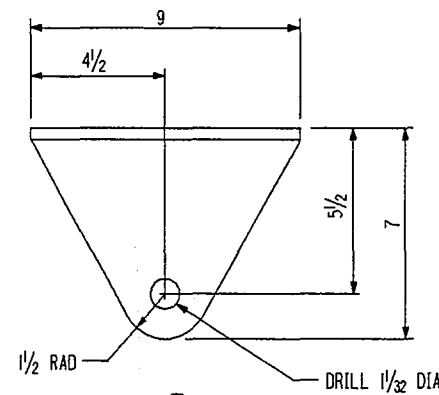
CAD FILE 3021213.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT WELD STATION SHELTER ROOF AND SIDE WALLS	
Customer's No. _____	Contract No. 930212ER
By BSA Chkd XXX Date 12-6-93	Dwg. ER-113 Rev. 0
J. L. RINGELSTETTER Engineering Supervisor	Sheet - 0
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<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHG 30 A REV SEP 93</small>	



SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
2	ER114-A		V-GROOVED WHEEL ATTACHMENT ASSY				183
	ER114-1	2	"ALBION" V-GROOVED WHEEL NO. VG-10501 10 DIA X 3 FOR 1" DIA AXLE, CAPACITY - 3000 LBS OR EQUAL			FORGED STL	62
	ER114-2	4	L7 X 4 X 3/8 X SK			A36	30
	ER114-3	2	PLATE SK X 1/2 (CF 12 X 1'-6 C2)			A283C	29
	ER114-4	2	PLATE SK X 1/2 (CF 10 X 1'-7 C2)			A283C	24
	ER114-5	2	PLATE 10 X 1/2	1	0	A283C	34
	ER114-6	2	ROD 1" DIA	0	5	A36	2
	ER114-7	2	PLATE 2 X 1/4 X SK	0	2	A283C	1
	ER114-8	2	BAR 1/2 SQUARE	0	2	A36	1
	ER114-9	2	PLAIN WASHER 1" DIA NARROW			CARB STL	-
2	ER114-B		FORGED STEEL WHEEL ATTACHMENT ASSY				175
	ER114-10	2	FORGED STEEL WHEEL "ALBION" NO. FS-10501 10 DIA X 3 FOR 1" DIA AXLE CAPACITY - 5000 LBS OR EQUAL			FORGED STL	54
	ER114-2	4	L7 X 4 X 3/8 X SK			A36	30
	ER114-3	2	PLATE SK X 1/2 (CF 12 X 1'-6 C2)			A283C	29
	ER114-4	2	PLATE SK X 1/2 (CF 10 X 1'-7 C2)			A283C	24
	ER114-5	2	PLATE 10 X 1/2	1	0	A283C	34
	ER114-6	2	ROD 1" DIA	0	5	A36	2
	ER114-7	2	PLATE 2 X 1/4 X SK	0	2	A283C	1
	ER114-8	2	BAR 1/2 SQUARE	0	2	A36	1
	ER114-9	2	PLAIN WASHER 1" DIA NARROW			CARB STL	-



CAD FILE 3021214.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____

CBI

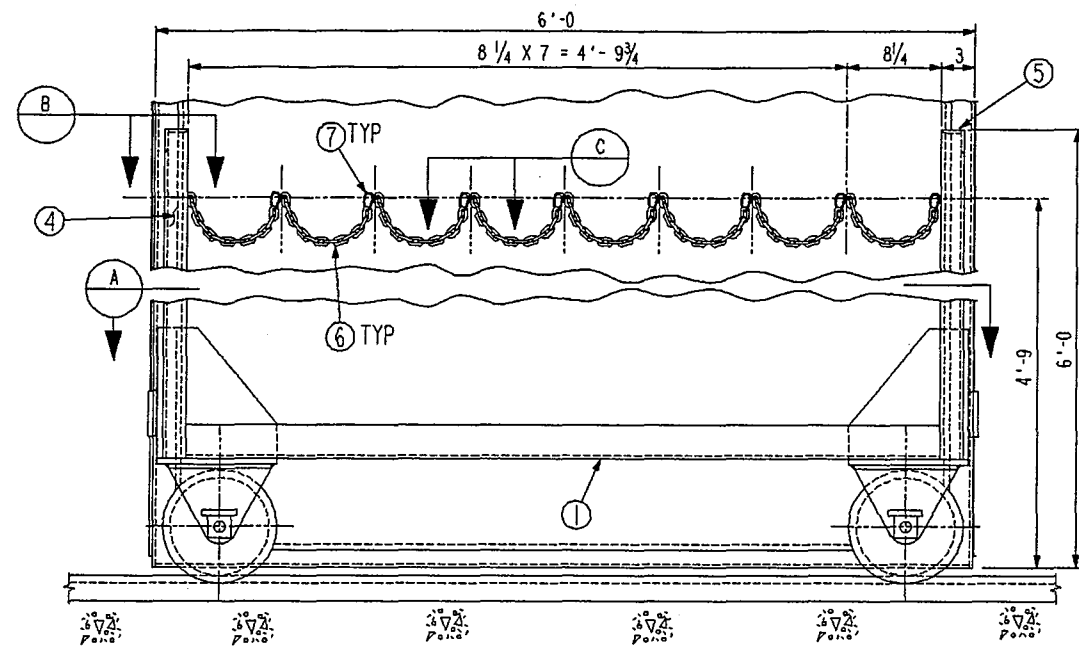
LIGO PROJECT
WELD STATION SHELTER
WHEEL ATTACHMENT

Customer's No. _____ Contract No. 930212ER
By BSA Chkd_XXX Date XX-XX-XX
J. L. RINGELSTETTER Dwg. ER-114 Rev. 1
Engineering Supervisor Sheet - 1

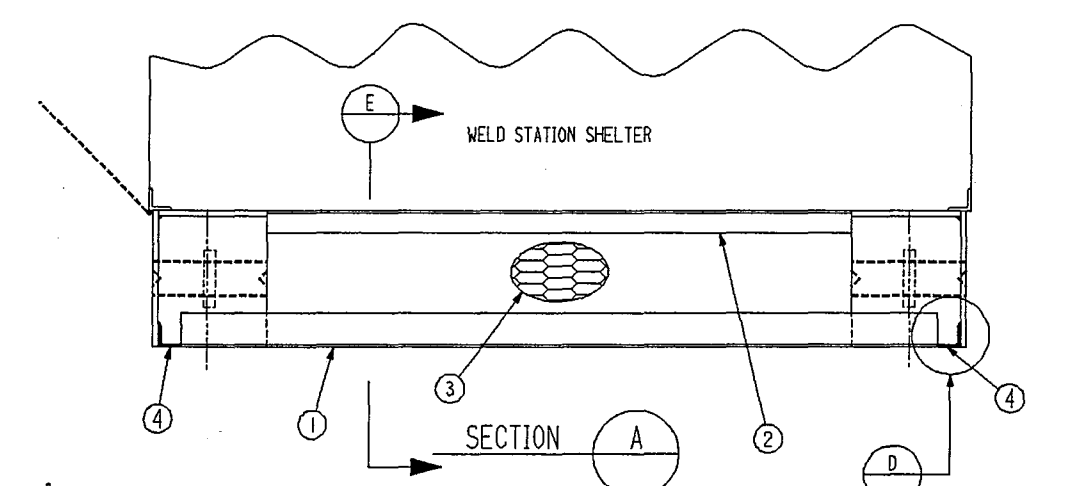
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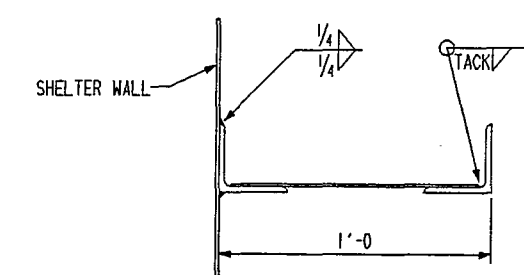
SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
1	ERI15-1		L3 X 3 X 1/4	5	6	A36	27
1	ERI15-2		L3 X 3 X 1/4	4	3	A36	22
1	ERI15-3		STD EXPANDED METAL 11 X 3/4 NO. 10	5	5	CARB STL	6
2	ERI15-4		L2 X 2 X 1/4	5	2	A36	33
2	ERI15-5 L/R		L2 X 2 X 1/4 X SK			A36	6
8	ERI15-6		WELDED CHAIN 1/4 SIZE "MCMASTER-CARR" STOK NO. 8949T18 OR EQUAL	1	8	GALV STL	8
8	ERI15-7		CONNECTING LINK SNAP "COVERT" NO. 422			MAL IRON	1
9	ERI15-8		ROD 1/4 DIA X SK	0	8 3/4	A36	1



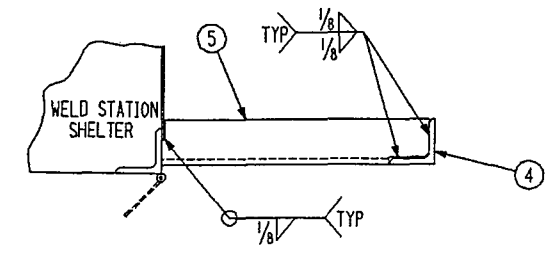
ELEVATION VIEW



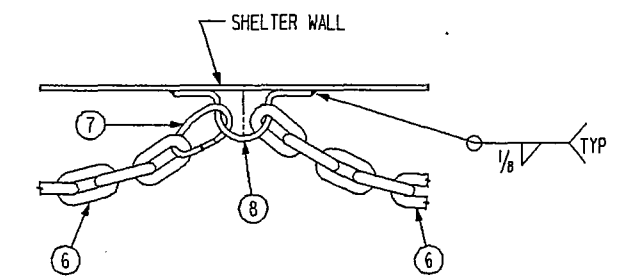
SECTION A



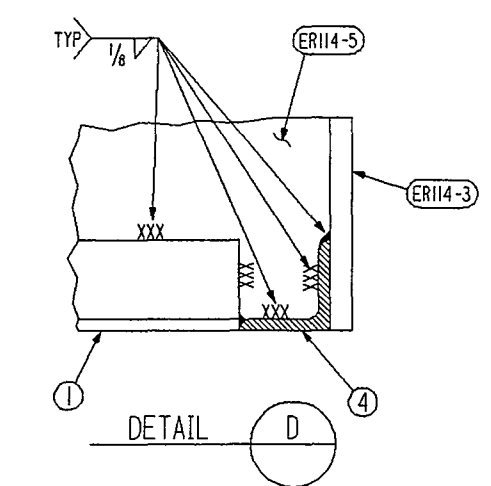
SECTION E



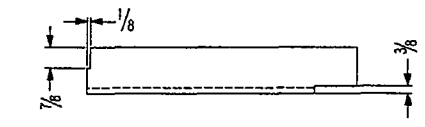
SECTION B



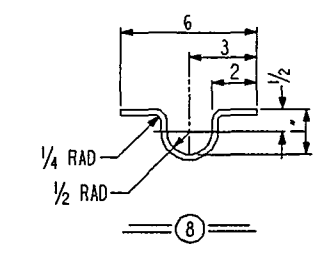
SECTION C



DETAIL D



TOP VIEW (5 R)



8

(5 R)

INDICATES CHANGE FROM PREVIOUS ISSUE

CAD FILE 302115.DGN

Supplier's/Purchaser's No. _____

CBI

LIGO PROJECT
WELD STATION SHELTER
GAS CYLINDER BASKET

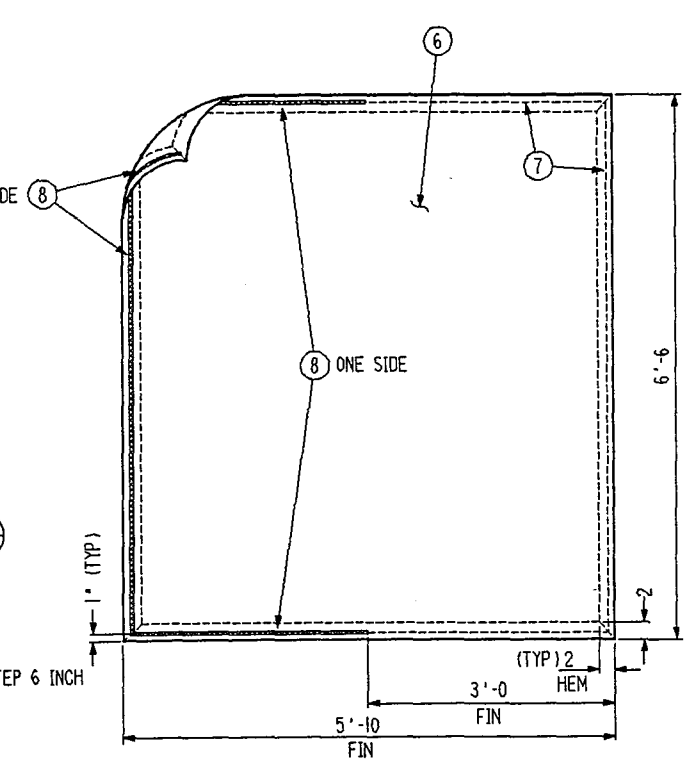
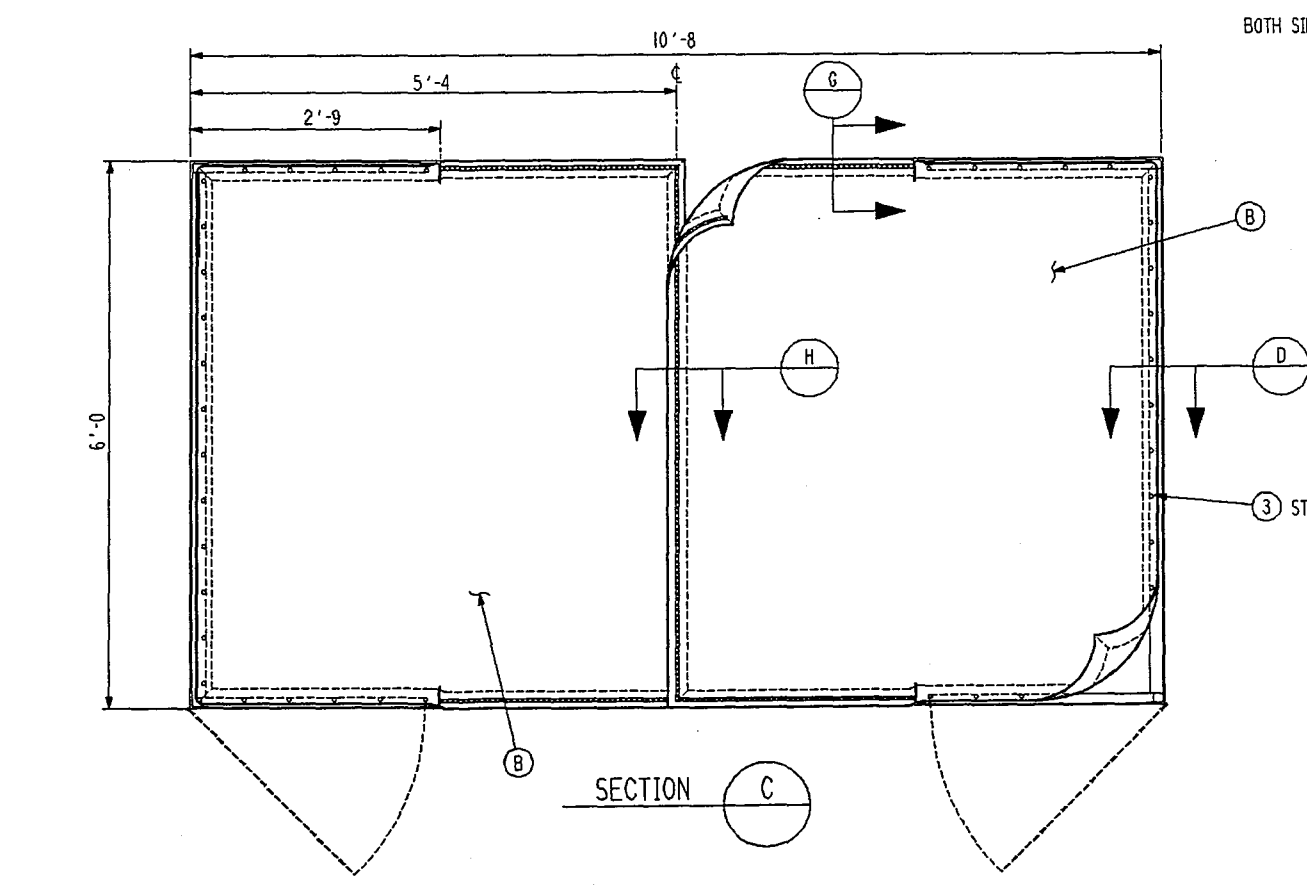
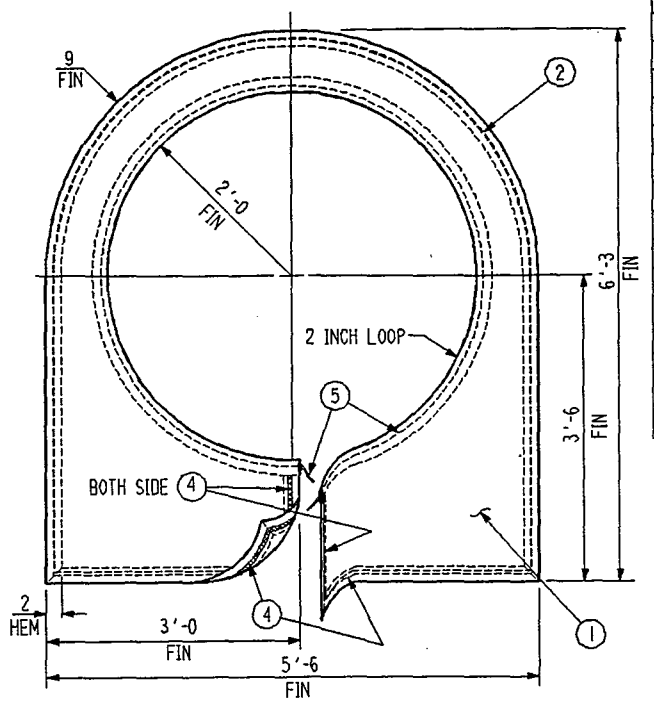
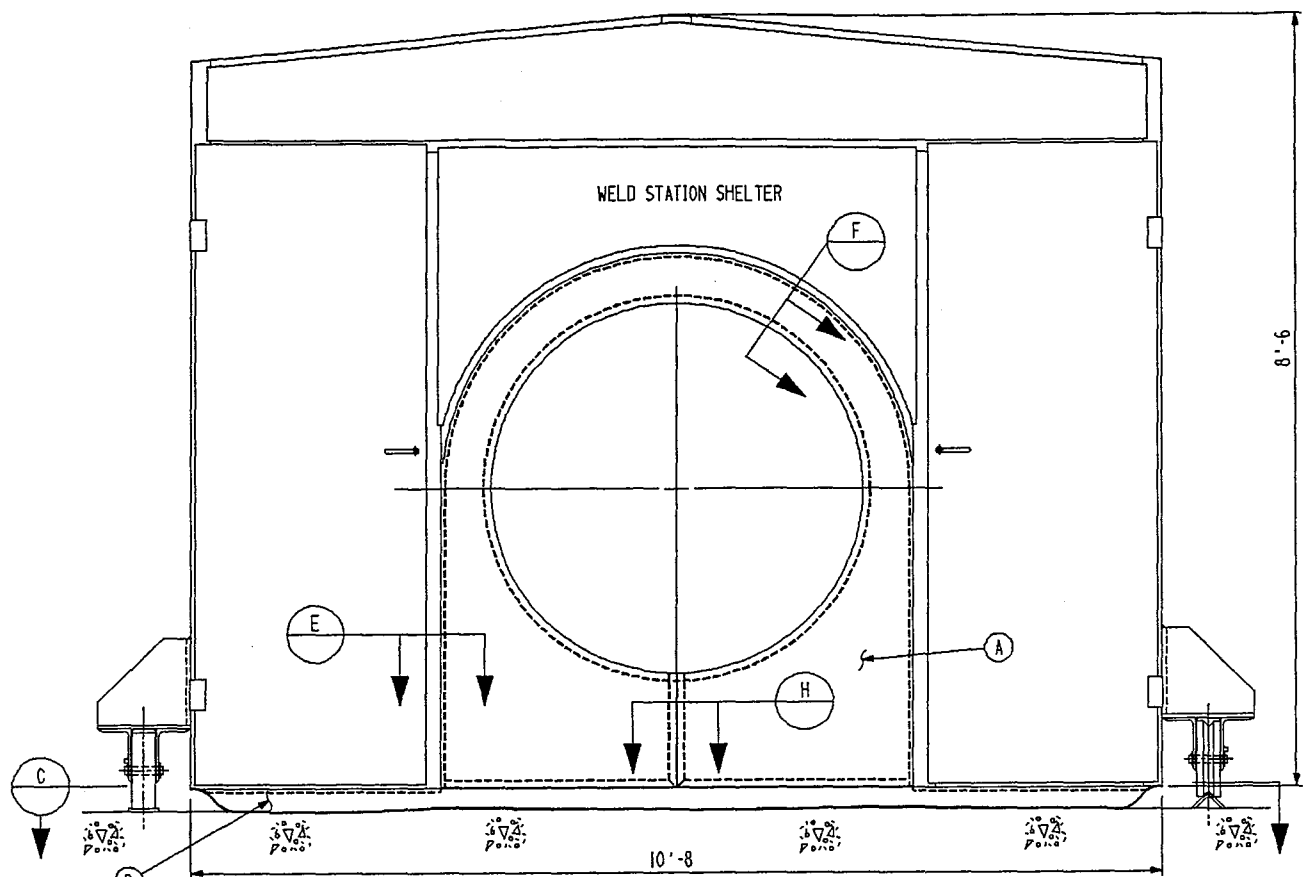
Customer's No. _____ Contract No. **930212ER**

By BSA Chkd XXX Date 12-14-93
J. L. RINGELSTETTER
Engineering Supervisor

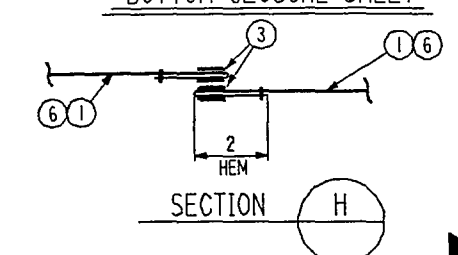
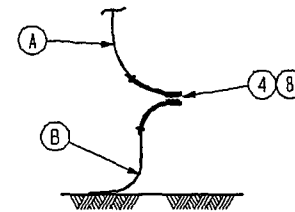
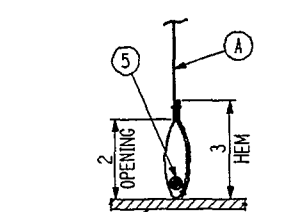
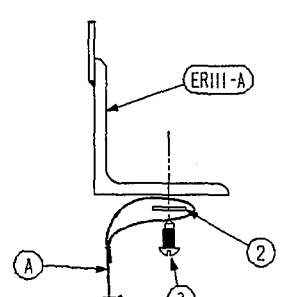
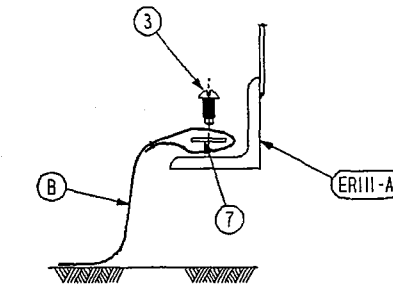
Dwg. ER-115 Rev. _____
Sheet - 1

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SHIP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	IN		
2	ERI16-A		SIDE CLOSURE SHEET				-
	ERI16-1	2	VINYL COVERED FIBERGLASS- SK X 12 OZ "McMASTER-CARR" NO. 8812K11 OR EQUAL				-
	ERI16-2	2	3/4 X 20 GA. STD HANGER STRAP ZINC COATED "McMASTER-CARR" NO. 3051T53	15	4	CARB STL	-
	ERI16-3	90	SELF-THREADING SCREW NO. 3 TYPE B	0	3/8	SAE GR 2	1
	ERI16-4	2	"VELKRO"-STRIP 1" WIDE	10	0		-
	ERI16-5	2	1/4 DIA NYLON ROPE	15	0		-
2	ERI16-B		BOTTOM CLOSURE SHEET	6	6 (FIN)		-
	ERI16-6	2	VINYL COVERED FIBERGLASS- 70 (FIN) X 12 OZ "McMASTER-CARR" NO. 8812K11 OR EQUAL				-
	ERI16-7	2	3/4 X 20 GA. STD HANGER STRAP ZINC COATED "McMASTER-CARR" NO. 3051T53	12	6	CARB STL	-
	ERI16-3	44	SELF-THREADING SCREW NO. 3 TYPE B	0	3/8	SAE GR 2	1
	ERI16-8	2	"VELKRO"-STRIP 1" WIDE	18	8		-

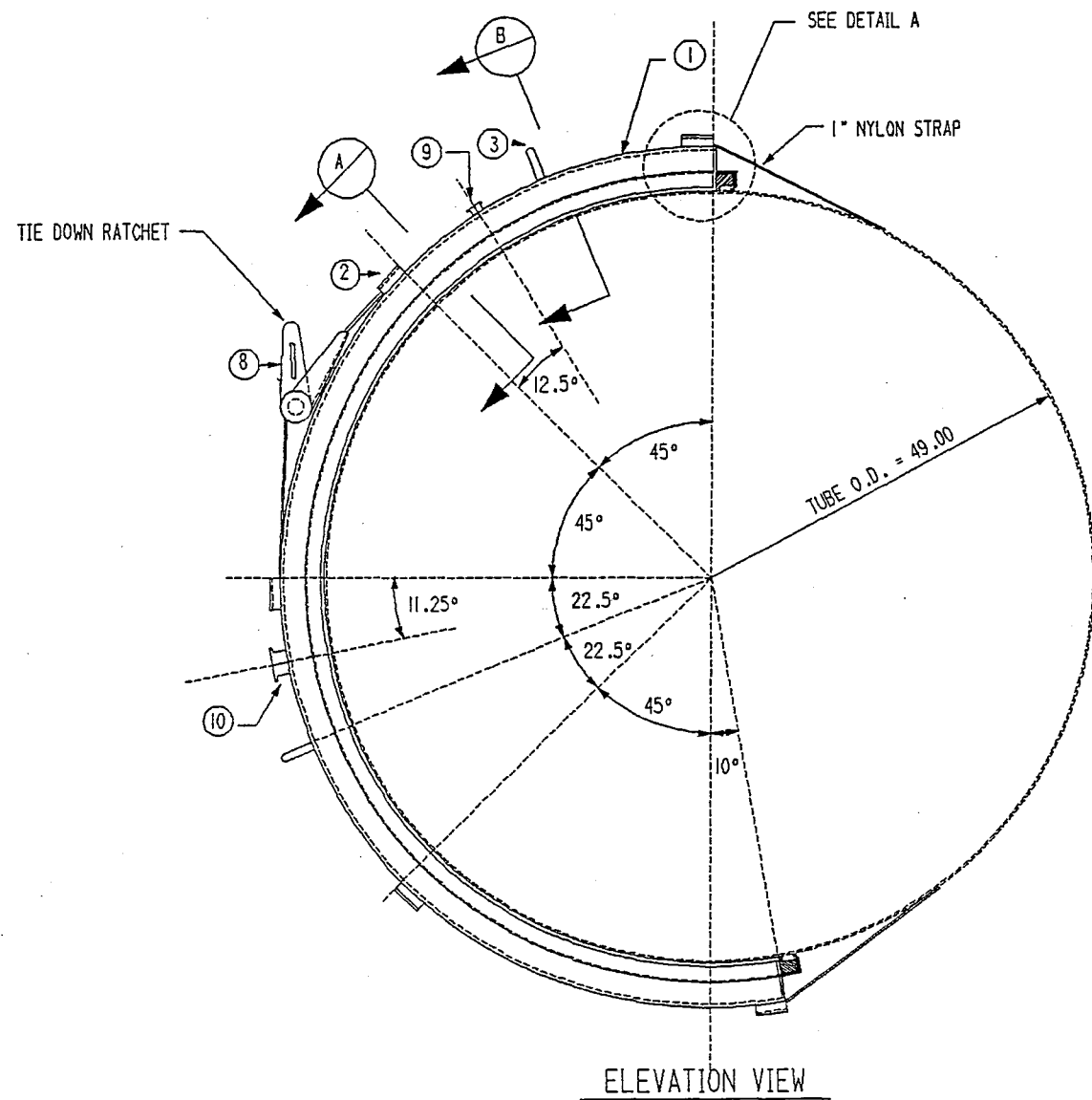


PIPE WALL

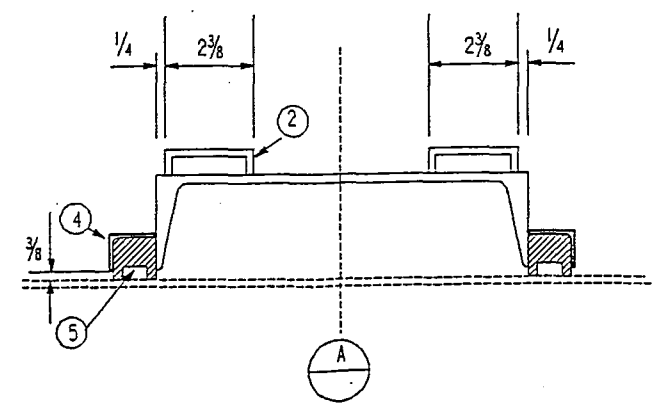
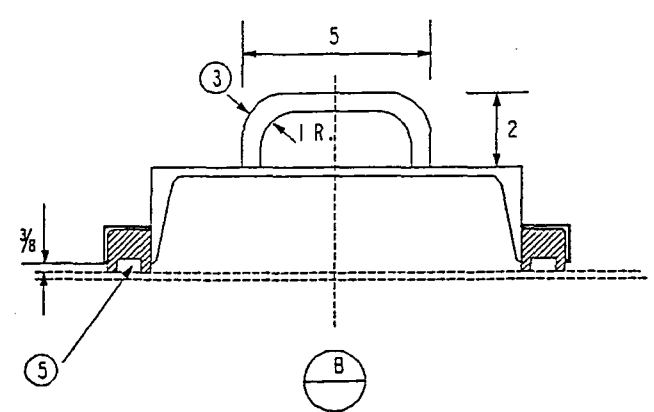
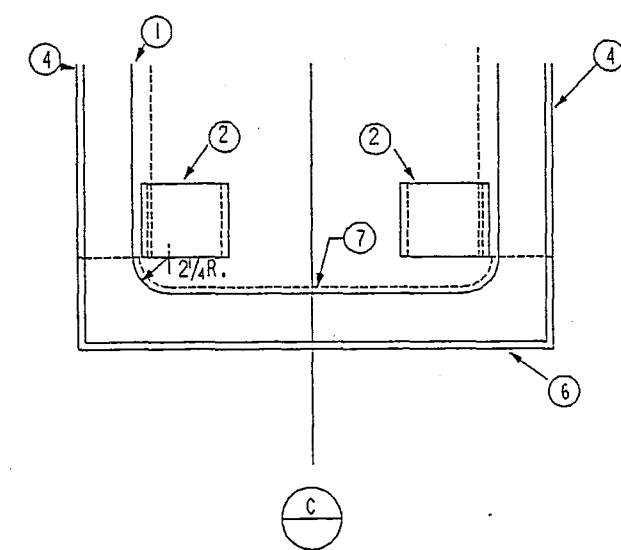
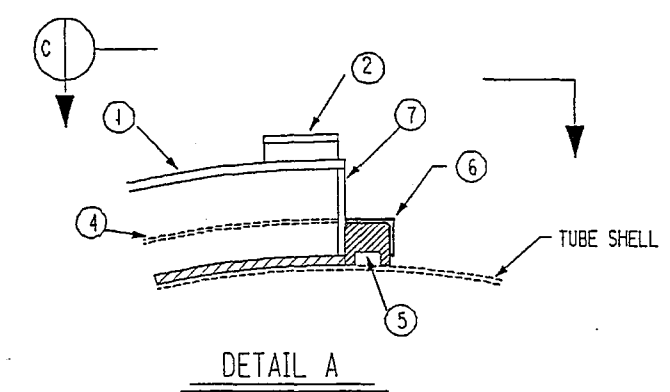
INDICATES CHANGE FROM PREVIOUS ISSUE

CAD FILE 3021216.DGN

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT WELD STATION SHELTER SIDE AND BOTTOM CLOSURE	
Customer's No.	Contract No.
By BSA Chkd XXX Date 12-17-93	930212ER
J.L. RINGELSTETTER Engineering Supervisor	Dwg. ER-116 Rev. 1 Sheet - 1
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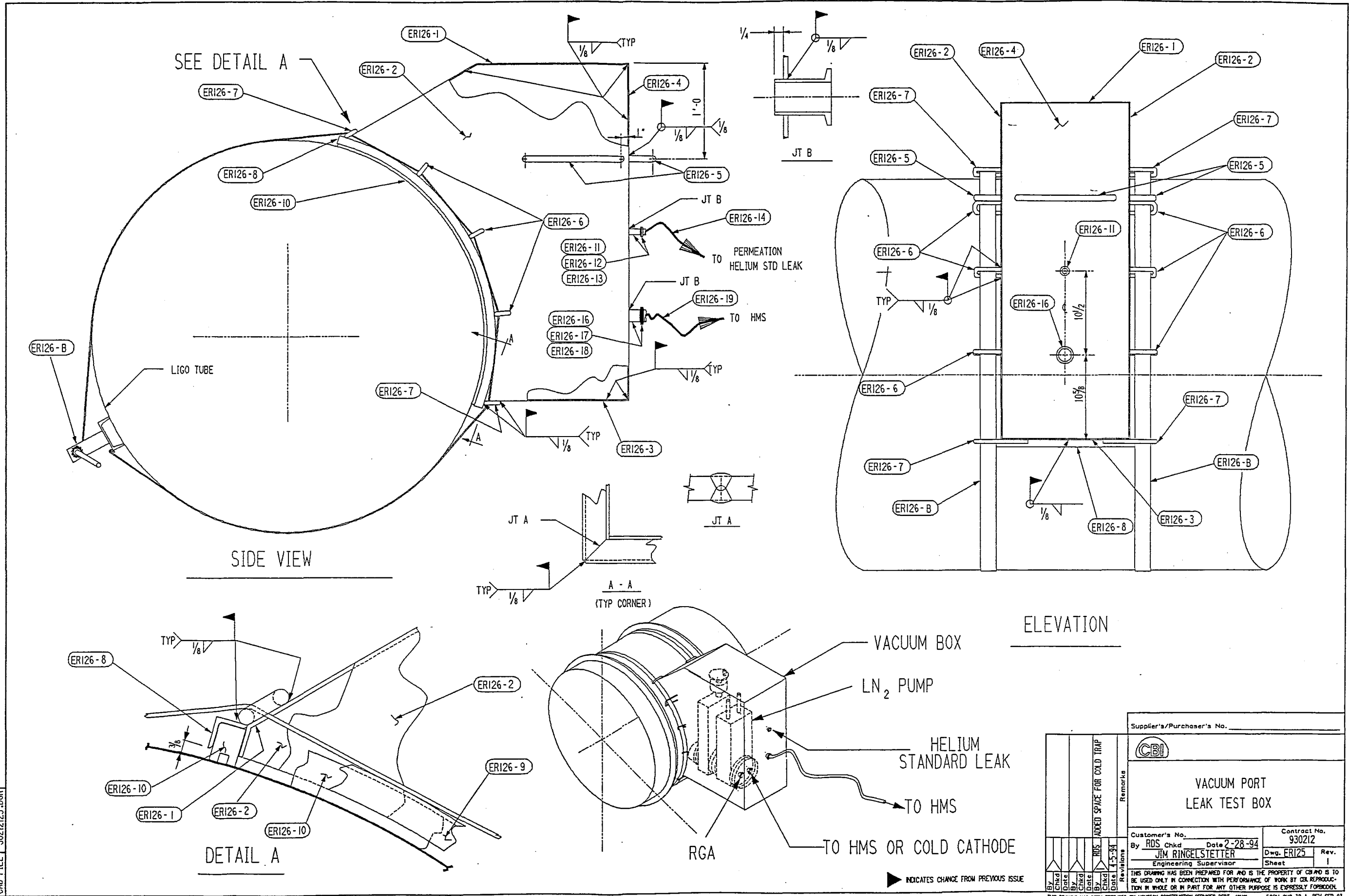


SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
			HELIUM LEAK TEST BOX				
	124-1	1	C 10 X 5.28 (ROLLED)			6061-T6	40
	124-2	8	PL. 3/16 X 2 (BENT)			6061-T6	-
	124-3	2	1/2 DIA. BAR (BENT)			6061-T6	-
	124-4	2	1 1/2 X 1 ANGLE (ROLLED)			6061-T6	-
	124-5	1	MOULDED RUBBER SEAL				
	124-6	2	2 1/2 X 1 ANGLE (BENT)			6061-T6	
	124-7	2	PL. 3/16 X 2 (BENT)			6061-T6	
	124-8	2	TIE DOWN RATCHET AND SLINGS				
	124-9	1	FLANGE - QF16-075-UA				KURT J LESTKER
	124-10	1	FLANGE - QF40-150-UA				KURT J LESTKER



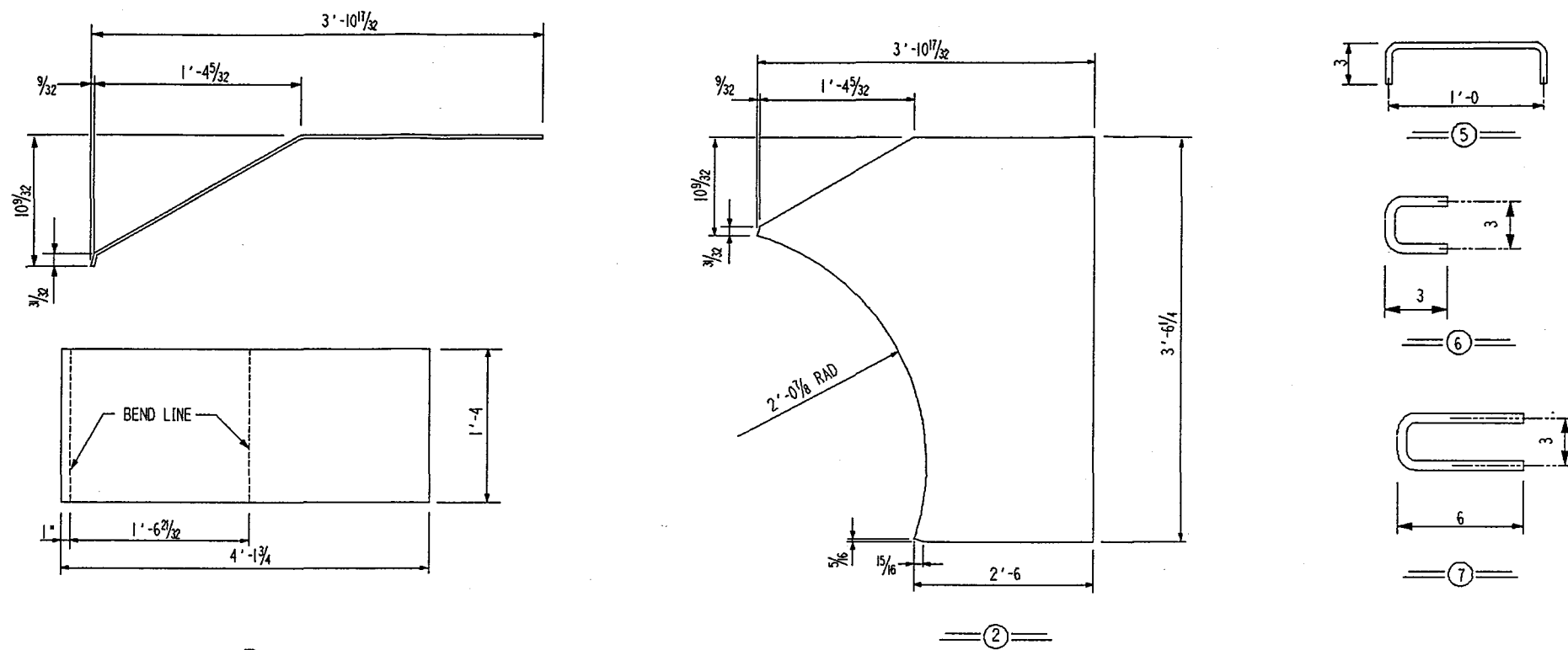
▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No.	
CBI	
LIGO PROJECT CIRCUMFERENTIAL JOINT LEAK TEST BOX	
Customer's No.	Contract No.
By <u>DKL</u> Chkd <u>ERI24</u> Date <u>2-7-94</u>	930212
<u>J. I. RINGELSTETTER</u> Engineering Supervisor	Dwg. <u>ERI24</u> Rev. <u>0</u> Sheet <u>-</u>
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<small>THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHC 30 A REV SEP 83</small>	

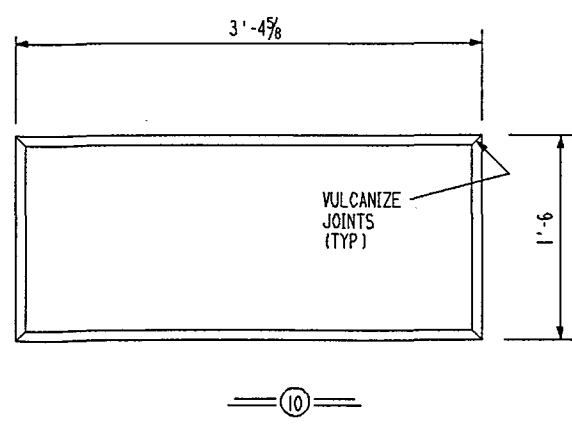
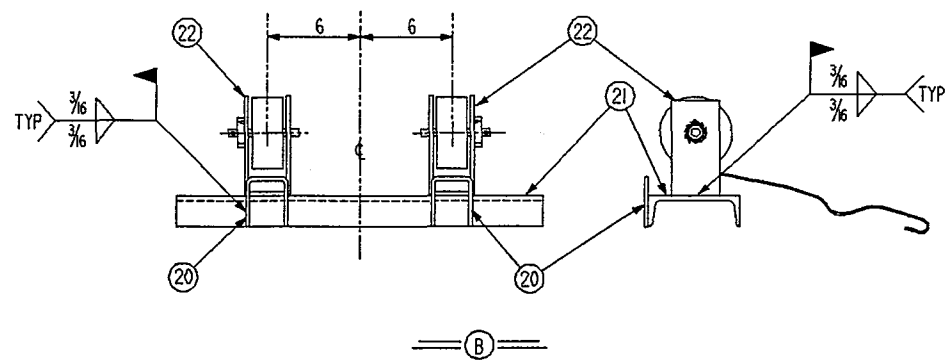
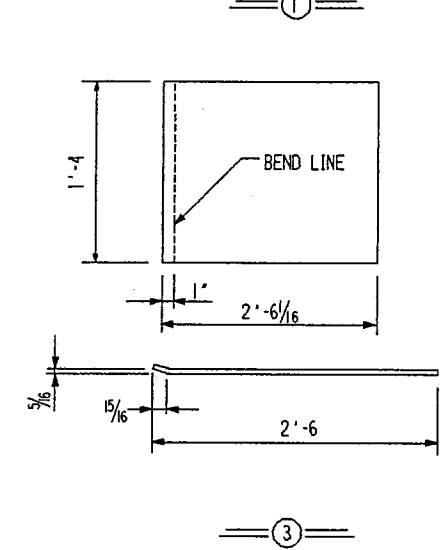
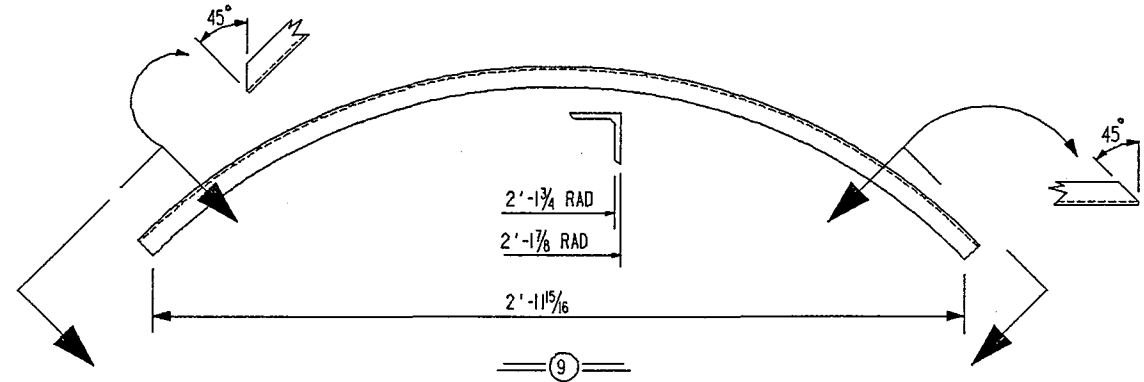


CAD FILE 302125.DGN

Supplier's/Purchaser's No.		Contract No. 930212	
Customer's No.		Date 2-28-94	
By RDS Chkd		Dwg. ERI25	
JIM RINGELSTETTER		Rev. 1	
Engineering Supervisor		Sheet	
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THIS DRAWING HAS BEEN PREPARED BY HOUSTON CONSTRUCTION SERVICES DEPT. (CHC) FORM CHC 30 A REV SEP 93			



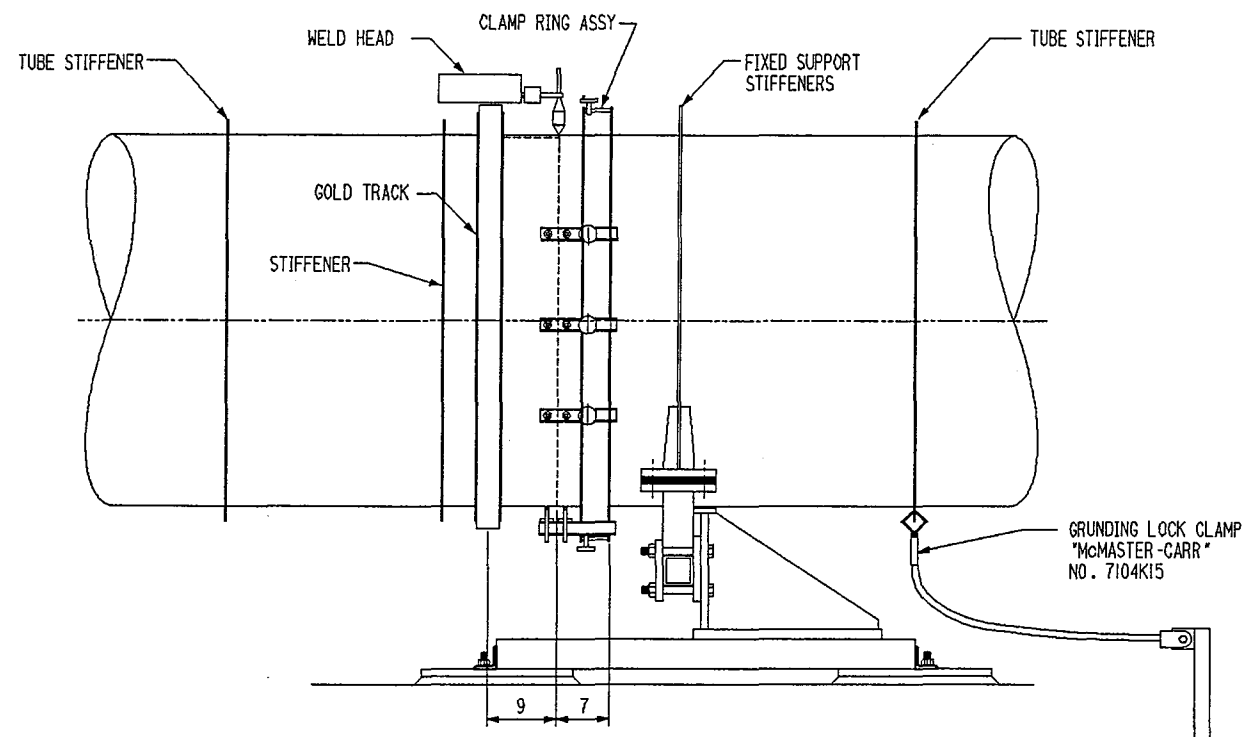
SHP PC	MARK	ASSY PC	DESCRIPTION	LENGTH		SPEC	EST WEIGHT
				FT	INCHES		
1	ERI26-A		VACUUM BOX ASSEMBLY				(92)
	ERI26-1	1	PLATE 16 X 1/8 X SK BENT	4	1 3/4	6061-T6	10
	ERI26-2	2	PLATE 46 17/32 X 1/8 X SK	3	6 1/4	6061-T6	43
	ERI26-3	1	PLATE 16 X 1/8 X SK BENT	2	6 1/16	6061-T6	7
	ERI26-4	1	PLATE 16 X 1/8	3	6	6061-T6	8
	ERI26-5	3	ROD 1/2 DIA BENT	1	6	6061-T6	1
	ERI26-6	6	ROD 1/2 DIA BENT	0	9	6061-T6	1
	ERI26-7	4	ROD 1/2 DIA BENT	1	3	6061-T6	1
	ERI26-8	2	LI X I X 1/8 MBE 45°	1	6	6061-T6	1
	ERI26-9	2	LI X I X 1/8 ROLL MBE 45°	3	4 7/8	6061-T6	2
			SHR	6	4 7/8		
	ERI26-10	1	MOLDED RUBBER SEAL				1
	ERI26-11	1	16 KF HALF NIPPLE		1.575	ALUM	1
	ERI26-12	1	16 KF CLAMP			ALUM	-
	ERI26-13	1	16 KF CENTERING RING			ALUM	-
	ERI26-14	1	16 KF BRAIDED HOSE	4	0	STN STL	8
	ERI26-16	1	40 KF HALF NIPPLE		1.575	ALUM	2
	ERI26-17	1	40 KF CLAMP			ALUM	-
	ERI26-18	1	40 KF CENTERING RING			ALUM	-
	ERI26-19	1	40 KF BRAIDED HOSE	3	0	STN STL	6
1	ERI26-8		TIE DOWN ASSEMBLY				(38)
	ERI26-20	2	ROD 1/4 DIA	0	9	A36	1
	ERI26-21	1	C6 X 8.2	2	0	A36	17
	ERI26-22	2	SPOOL WELD ON TIE DOWN WINCH W/ 2" STRAP WITH FLAT HOOK AND WINCH BAR				20



CAD FILE 30212126.DGN

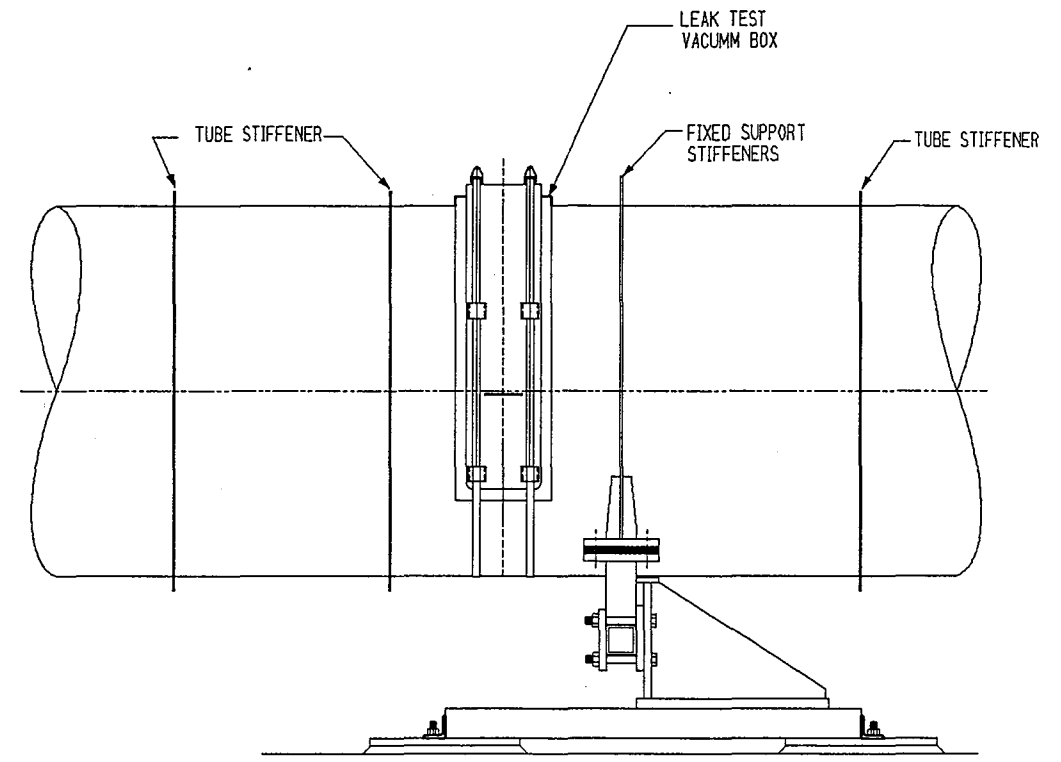
INDICATES CHANGE FROM PREVIOUS ISSUE

Supplier's/Purchaser's No. _____	
CBI	
PIECES VACUUM PORT LEAK TEST BOX	
Customer's No. _____	Contract No. 93021ZER
By RDS Chkd Date 3-1-94	Dwg. ERI26 Rev. 0
JIM RINGELSTETTER Engineering Supervisor	Sheet
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FIT-UP & WELDING ARRANGEMENT

STD GROUND ROD
2B12B (SEE NOTE 1)



LEAK TEST ARRANGEMENT

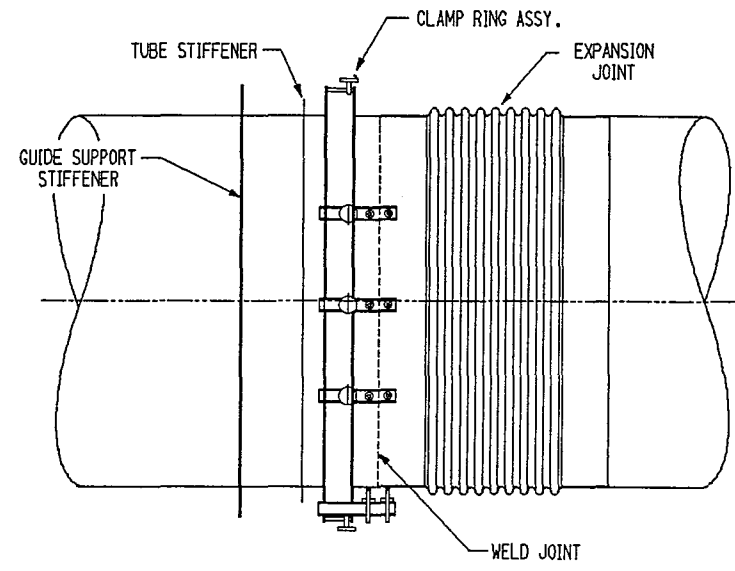
NOTES:

1. INSTALL GROUND ROD EVERY 250'-0.

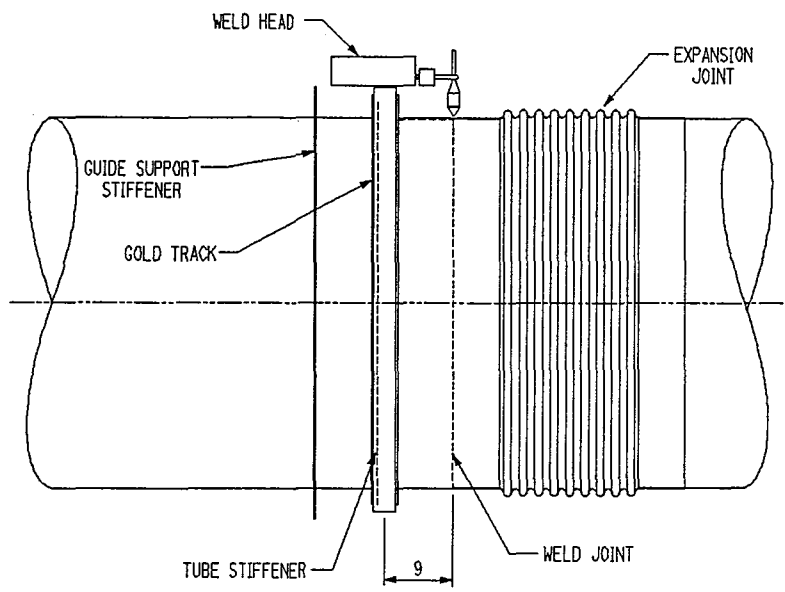
CAD FILE 30212133.DGN

Supplier's/Purchaser's No.		Contract No.	
		LIGO PROJECT FIT-UP WELDING AND LEAK TESTING CONFIGURATIONS AT FIXED SUPPORTS	
By DKL	Chkd	Date 2-10-94	Dwg. ERI33
J.J. RINGELSTETTER		Engineering Supervisor	Rev. 1
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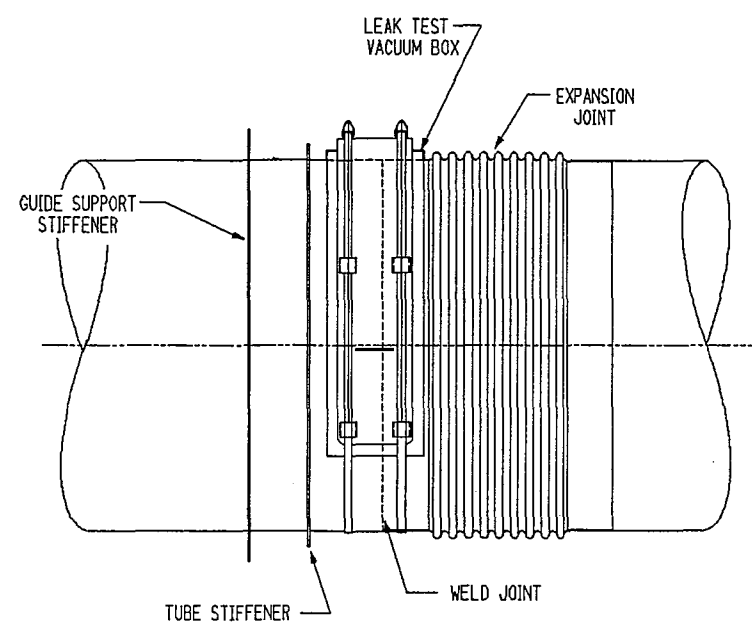
▶ INDICATES CHANGE FROM PREVIOUS ISSUE



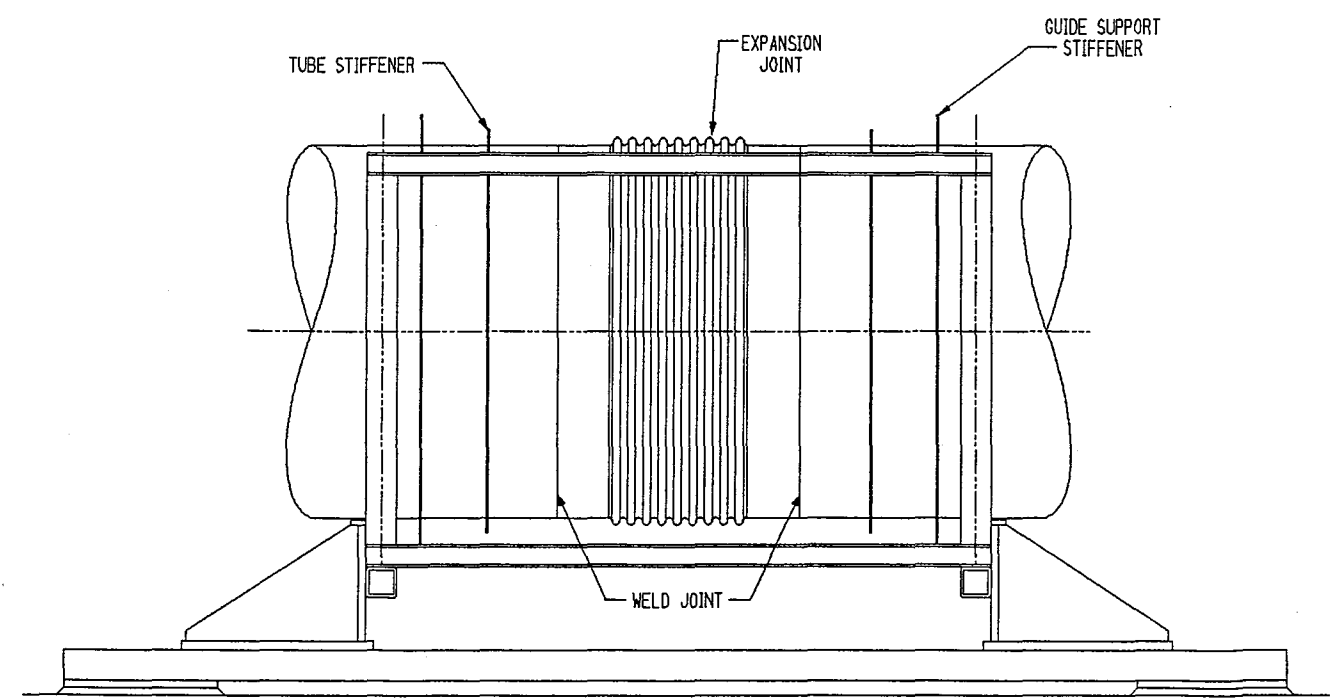
FIT-UP ARRANGEMENT



WELDING ARRANGEMENT



LEAK TEST ARRANGEMENT



FINAL POSITION GUIDED SUPPORT

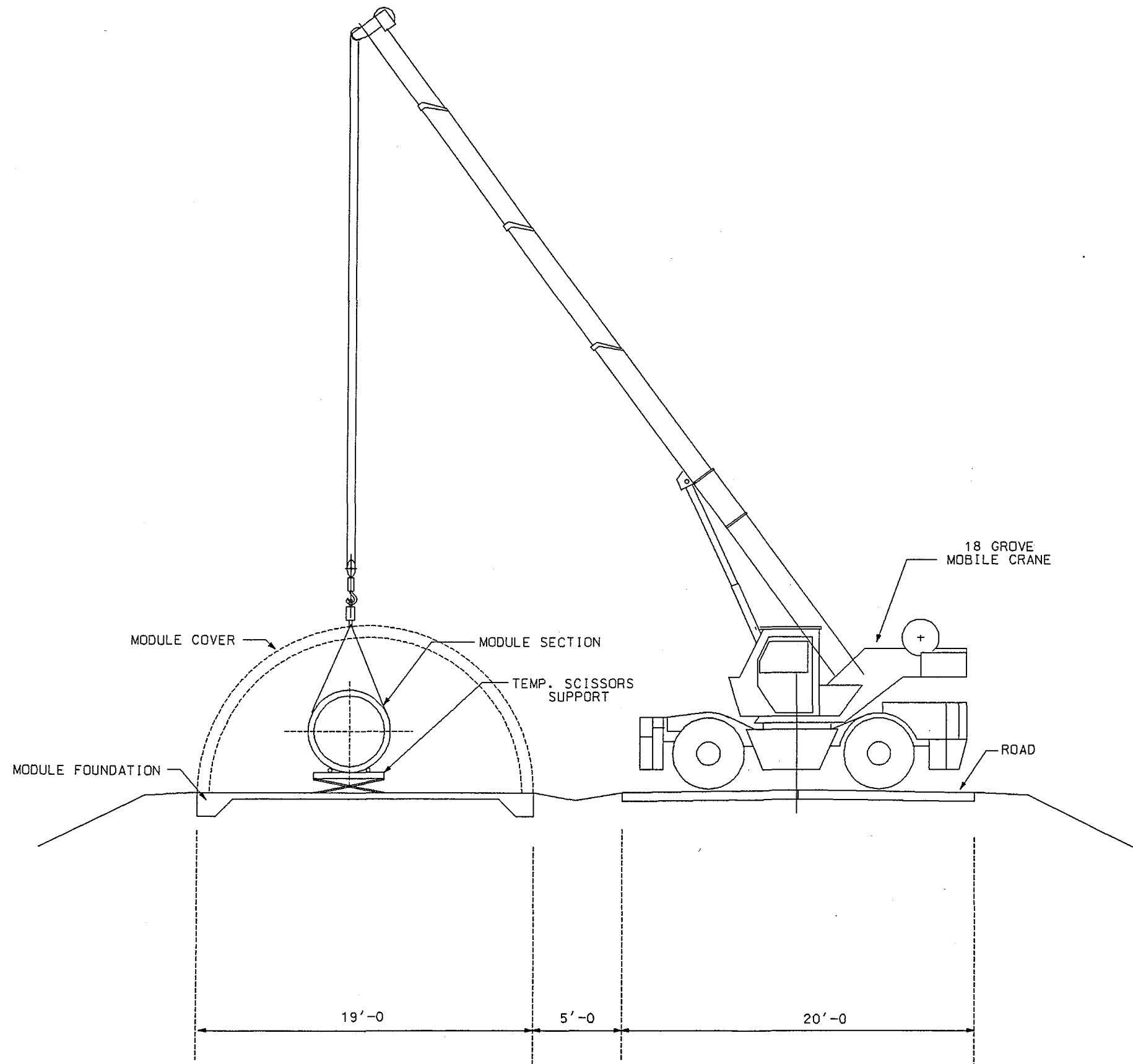
NOTES :

- 1. GUIDE SUPPORTS ARE INSTALLED AFTER WELDING AND LEAK TESTING ARE COMPLETE

CAD FILE 30212134.DGN

Supplier's/Purchaser's No. _____	
CBI	
LIGO PROJECT	
FIT-UP WELDING AND LEAK TESTING CONFIGURATIONS AT GUIDE SUPPORTS	
Customer's No. _____	Contract No. 930212
By <u>DL</u> Chkd _____ Date <u>2-11-94</u>	Dwg. <u>ERI34</u> Rev. _____
Engineering Supervisor	
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE



NOTES:

1. CROSS SECTION OF ROAD/ TUBE & COVER IS SIMILAR FOR BOTH SITES

CAD FILE: 30212140.DGN

Supplier's/Purchaser's No. _____	
 LIGO PROJECT ELEVATION VIEW OF TUBE INSTALLATION	
Customer's No. _____	Contract No. 930212ER
By <u>DKL</u> Chkd _____ Date <u>2-4-94</u>	Dwg. <u>ERI40</u> Rev. <u>0</u>
J.J. RINGELSTETTER Engineering Supervisor	
Sheet - _____	
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE

MODULE COVER
(INSTALLATION FOLLOWS BEHIND
TUBE INSTALLATION)

MODULE FOUNDATION

RAILS FOR CLEAN ROOM
AND SHELTERS

MODULE SECTION

SPREADER BAR

WELD
SHELTER

LEAK
TEST
SHELTER

TEMP. SCISSORS
SUPPORT

TEMP. SCISSORS
SUPPORT

PORTABLE
CLEAN ROOM

DRAINAGE DITCH


ROAD

TRAILER

TRACTOR

18 GROVE
MOBILE CRANE

CAD FILE 30212141.DGN

Supplier's/Purchaser's No. _____	
 LIGO PROJECT PLAN VIEW OF TUBE INSTALLATION	
Customer's No. _____	Contract No. 930212ER
By <u>DKL</u> Chkd _____ Date <u>2-4-94</u>	Dwg. <u>ERI41</u> Rev. <u>1</u>
<u>J.L. RINGELSTETTER</u> Engineering Supervisor Sheet - <u>1</u>	
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▶ INDICATES CHANGE FROM PREVIOUS ISSUE