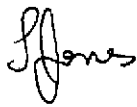


CALIFORNIA INSTITUTE OF TECHNOLOGY
Laser Interferometer Gravitational Wave Observatory (LIGO) Project

To: F. Asiri
From: L. Jones 
Phone: 2970
Refer to: LIGO-E950103-00-B
Date: December 14, 1995

Subject: Hanford--Beam Tube Enclosure Construction Bid Package, November 21, 1995

I would like to confirm the intent of one of the tolerances in the subject document.

The specification for the Beam Tube Enclosure Segments, Section 03400-2, 1.3 Quality Control, E. Segment Tolerances, calls for "Variation of joint surfaces from plane (Horizontal and vertical respectively)" to be "Plus or minus 1/8 inch".

I believe that the intent of this statement is to include the requirement that all points of the (nominally) vertical ends of the segments are to be within plus or minus 1/8 inch of a plane perpendicular to the horizontal plane of the segment base, as well as for all points of the ends and base to be within 1/8 inch of being in planes. Is that correct?

Will the contractors understand the requirement as intended? This is a critical requirement, and could easily fall between the cracks due to the fact that the segments are installed by a (likely) different contractor, after nearly all of the segments have been cast.

In addition, I recommend that a requirement be added to qualify each segment mold by demonstrating that its product meets all dimensional requirements.

I suggest that this issue be clarified while the contractors are still in the process of working up their bids.

LJ

cc: Mark Coles
Ed Jasnow
Otto Matherny
Gerry Stapfer
Chronological File
Document Control Center