

Advanced LIGO Engineering Change Request (ECR)

ECR Title: Pcal Periscope Mirror Alignment Pin

DCC No: E1300038-v1

Date: 11 JAN 2013

Requester: Craig Conley

Impacted Subsystem(s): AOS

Description of Proposed Change(s): Creation of P/N [D1300022](#).

Reason for Change(s): The [D1200172](#) & [D1200173](#) Mirror Mount Bases (used on the Pcal Periscope Structure) were intended to be fitted (press fit) with 3/16" diameter commercial dowel pins to slip-fit the respective Siskiyou mirror mounts for which the Bases are designed. This gives repeatable precision alignment to the mirror mounts in removal and replacement from and to the Periscope Structure. The bases were mistakenly designed and manufactured with press fit holes for 1/4" diameter dowel pins. [D1300022](#) is a two diameter pin to be used in the Bases to correct this discrepancy.

Estimated Cost: \$3,500

Schedule Impact Estimate: 5 man hours

Nature of Change (check all that apply):

- Safety
- Correct Hardware
- Correct Documentation

- Improve Hardware
- Improve/Clarify Documentation
- Change Interface
- Change Requirement

Importance:

- Desirable for ease of use, maintenance, safety
- Desirable for improved performance, reliability
- Essential for performance, reliability
- Essential for function
- Essential for safety

Urgency:

- No urgency
- Desirable by date/event: _____
- Essential by date/event: _____
- Immediately (ASAP)

Impacted Hardware (select all that apply):

- Repair/Modify. List part & SNs: _____
- Scrap & Replace. List part & SNs: _____
- Installed units? List IFO, part & SNs: _____
- Future units to be built

Impacted Documentation (list all dwgs, design reports, test reports, specifications, etc.):

D1200172, D1200173

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Disposition (to be completed by Systems Engineering):

- TRB**
- CCB**
- Approved**
- Additional information required. Define:**

[Requester re-submits with new information with the same DCC E-number for the ECR but the next version number.]

Concurrence by Project Management: (Acknowledged Electronically in DCC)

Project Systems Engineer: Dennis Coyne

Project Systems Scientist: Peter Fritschel