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| **ECR Title: Change Locating Dimensions of Oplev/Pcal Receiver Installations in all End VEAs** | | | DCC No: E1300249-v2 |
| Date: 25 APR 2013 |
| **Requester: Craig Conley** | **Impacted Subsystem(s):**  **AOS (Pcal & Oplev)** | |  |
| **Description of Proposed Change(s):** Relocate the Oplev/Pcal Receiver Pylon to a position which is revised in the Beam Tube axial direction, and is according to document [G1300437-v1](https://dcc.ligo.org/LIGO-G1300437-v1). This constitutes a shift 2.60” farther from the A-1 Adapter viewport flange face than the current position designated by approved documents ECR [E1200989-v1](https://dcc.ligo.org/LIGO-E1200989-v1) & DCN [E1200996-x0](https://dcc.ligo.org/LIGO-E1200996-x0). Upon approval of this Change Request, all relevant documents will be revised accordingly through a new DCN.  NOTE: Both LLO End Station VEA floors will need to be re-filled & re-drilled for this change. LHO End Station VEA floors have not been drilled to date. | | | |
| **Reason for Change(s):** Due to inconsistencies between CAD models, available vendor (PSI) drawings, and actual installed V.E. hardware (all regarding A-1 Adapters), it was found necessary to measure the locations of vacuum/compression bellows and compression fittings on all End-Station installed A-1 Adapters on the side adjacent to planned Oplev/Pcal receiver pylon installations. These A-1 Adapter features will interfere with the receiver pylons at the currently documented receiver pylon positions. The measured locations of these A-1 Adapter features have been used to propose a viable new common location for all Oplev/Pcal receiver pylons. See [G1300437-v1](https://dcc.ligo.org/LIGO-G1300437-v1).  Also, this change provides added distance requested by the Oplev group to better accommodate the Oplev Receiver rubber bellows interfacing to the A-1 Adapter viewport protector. | | | |
| **Estimated Cost:** $450 estimated work crew (2 person) total job cost to refill and re-drill three slab holes in each of two LLO VEAs. | | | |
| **Schedule Impact Estimate:** None | | | |
| **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 fit**  **Essential for function**  **Essential for safety** | | **Urgency:**  **no urgency**  **desirable by date/event:**  **Essential by date/event:** 01 JUNE 2013  **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.): Approved drawings [G1000701](https://dcc.ligo.org/cgi-bin/private/DocDB/ShowDocument?docid=13512), [G1000702](https://dcc.ligo.org/cgi-bin/private/DocDB/ShowDocument?docid=13515), [G1000719](https://dcc.ligo.org/cgi-bin/private/DocDB/ShowDocument?docid=13626), [G1000739](https://dcc.ligo.org/cgi-bin/private/DocDB/ShowDocument?docid=14159\) & approved RODA [M1200020](https://dcc.ligo.org/LIGO-M1200020-v1) will be revised upon approval of this Change Request. | |
| **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 |  | | | | |