Advanced LIGO Engineering Change Request (ECR)

ECR Title: Reposition the Vibration Absorbers Attached to the Output Faraday Isolator (OFI) Assembly

DCC No: E1300471-v1

Date: 21 May 2013

Requester: Matt Heintze

Impacted Subsystem(s): AOS/SLC

Description of Proposed Change(s): Move the vibration absorbers attached to the Output Faraday Isolator (OFI) Assembly so that they are not close to the septum plate. The two vibration dampers should be mounted on orthogonal faces and should be placed as far apart as practical (opposite corners, or at least opposite ends).

Reason for Change(s): There is limited access for attachment/detachment of the vibration absorber sub-assemblies when placed on the face of the OFI Assy which is adjacent to the septum plate.

Estimated Cost: no cost

Schedule Impact Estimate: no schedule impact

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)** LLO is installing now and LHO will do so very soon.

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~~/**assembled

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

Revise sheet 2 of D0900456-v12 (LHAM5 Assy)
Revise sheet 2 of D0901129-v5 (WHAM5 Assy)
Revise D0900527-v2 (OFI Assy for L1)
Revise D0901134-v2 (OFI Assy for H1)

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Disposition of the proposed change(s):

The disposition of this proposed engineering change request is to be completed by Systems Engineering and indicated in the "Notes and Changes" metadata field in the DCC entry for this ECR. The typical dispositions are as follows:

- **Additional Information Required**: in which case the additional information requested is defined. The ECR requester then re-submits the ECR with the new information using the same DCC number for the ECR but with the next version number.
- **Rejected**: in which case the reason(s) for the rejection are to be given
- **Approved**
- **Approved with Caveat(s)**: in which case the caveat(s) are listed
- **TRB**: the ECR is referred to an ad-hoc Technical Review Board for further evaluation and recommendation. It is the System Engineer's (or designee's) responsibility to organize the TRB. The System Engineer (or designee) then makes a technical decision based on the TRB's recommendation. Links to the TRB's documentation (charge, memos, final report, etc.) are to be added to the "Related Documents" field for this ECR.
- **CCB**: a change request for approval of additional funds or schedule impact is to be submitted to the Configuration Control Board. Links to the CCB's documentation (CR, etc.) are to be added to the "Related Documents" field for this ECR.

Concurrence by Project Management:

Acknowledgement/acceptance/approval of the disposition is to be indicated by the electronic "signature" feature in the DCC entry for this ECR, by one the following personnel:

- Systems Scientist
- Systems Engineer
- Deputy Systems Engineer