

Subject: Re: AO-120 "Mode Cleaner Tube Baffle Assembly" - request

From: Dennis Coyne <coyne@ligo.caltech.edu>

Date: Tue, 12 Jul 2011 11:04:28 -0700

To: Calum Torrie <ctorrie@ligo.caltech.edu>

CC: Dennis Coyne <coyne_d@ligo.caltech.edu>, David Shoemaker <dhs@ligo.mit.edu>, "Lisa C. Austin" <laustin@ligo.caltech.edu>, Mike Smith <smith_m@ligo.caltech.edu>

Calum,

I agree with your proposed approach in resolving/closing the SLC FDR for the Manifold/Cryopump and Mode Cleaner Tube Baffles, and with proceeding with the Mode Cleaner Tube baffle fabrication.

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On 7/12/2011 10:48 AM, Calum Torrie wrote:

Dennis and David

The FDR for the AOS SLC Manifold/Cryopump and Mode Cleaner Tube Baffles has started but is not yet complete. The presentation material is at [LIGO-T1100165-v2](#). There were two issues raised at the presentation style review that we held on the 22nd of June, items #1 and #2 below. As chair I am remiss canvassing the committee further or writing up a report on this.

The two open issues that the SLC team need to address are: -

- 1) Update overall porcelain coating plan and apply to designs, of which they indicate there plan below
and
- 2) Confirmation of the status of the status of the 1st article Manifold Cryopump baffle in terms of welds and porcelain coating.

In the mean time I would like to recommend we allow the SLC team to go ahead with the procurement of the metal components for the mode cleaner baffle's now, the details on this from Lisa can be found below. We will then hear from them separately on an updated porcelain plan AND on the status of the 1st article Manifold Cryopump baffle - thus allowing us to complete the FDR at that point.

In addition I would like to strongly encourage the SLC team to move on item #2 above. (Apologies if I have missed an e-mail on item #2 but I have yet to see details on the weld samples for the Manifold Cryopump baffle or confirmation on a visual of the porcelain coating on the Manifold Cryopump baffle at LHO.)

Cheers, Calum

On 7/10/2011 6:47 PM, Lisa C. Austin wrote:

Calum,

The bidding process for the Mode Cleaner Tube Baffle Assembly 'machined parts' completed on yesterday. We received one bid - Aeroshear Aviation. I would like to move forward with a purchase order for the metal works once the [Bid Evaluation](#) has been received and approved. The first Need Date for these baffles is September 29th at LLO, quantity is four.

Following is the status and process going forward:

Our development continued during the quotation process. Seven drawings have been modified and eight parts have been added. The drawings are currently being updated to reflect the new requirements derived from the Arm Cavity Baffle first article evaluation, eg. fully rounded edges and holes.

The [DCN](#) needs to be approved. All drawings have been reviewed by Mike Smith and Jeff Lewis throughout this process. Once they are all loaded onto the DCC, I will start the formal review process.

There has been no feedback from the committee on the Final Design Review.

A proposal has been presented to Procurement that suggests we handle any changes after the issuance of the purchase order, out of concern for time. I will work with the vendor to start with parts that are ready to work, submit the changes and new parts for quote, and follow up with a Change Order.

Aeroshear is quoting a 6 week delivery for the first article parts upon receipt of order. NOTE: for the Mode Cleaner Tube Baffles, the first article build includes ALL of the baffles needed for the LLO installation. This leaves 5 weeks to incorporate any changes that may be needed, porcelain coat, clean/bake, ship and assemble.

On the porcelain coat process, the second Arm Cavity Baffle is scheduled to complete fabrication on July 13th. A team will go to DFI for inspection and fit check. Porcelain coating is scheduled for Monday, July 18th. We will have results to present and discuss the following day. ***Perhaps this would also be a good day to make a decision on the build start.*** All mating parts will be cleaned, baked and ship to LHO for final assembly there. The need date for the Arm Cavity Baffle is August 24th. The current plan is to ship

to LHO from West Coast Porcelain. [We are evaluating the possibility of having the Arm Cavity Baffle porcelain coated parts brought back to CIT and re-assembled in the cleanroom. This can only be modified if we can have all of the mating pieces cleaned relatively soon.]

Lisa

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