From: Jeffery Bartlett <bartlett_j@ligo-wa.caltech.edu>

Subject: Fwd: Re: Viton waiver request
Date: 5 September 2012 9:54:07 AM AEST

To: bram.slagmolen@ligo.org, Bram Slagmolen
bram.slagmolen@anu.edu.au>

Bram,

I should be able to help you with wire. Give me a ring in the morning.

P.S. If I'm not at my desk try ext 325 for the Triples Lab. P.S.S. I sent this to both your E-Mails - just in case

Jeffrey Bartlett LIGO Hanford Observatory aLIGO Lead Suspension Assembly Tech

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----- Original Message ------ Subject:Re: Viton waiver request

Date:Tue, 04 Sep 2012 13:43:06 -0700

From:Calum Torrie cctorrie@ligo.caltech.edu
To:Suresh Doravari caltech.edu

CC:Peter Fritschel <pf@ligo.mit.edu>, Bram Slagmolen <<u>bram.slagmolen@anu.edu.au></u>, Dennis Coyne <<u>coyne@ligo.caltech.edu></u>, Jeffery Bartlett <<u>bratlett j@ligo-wa.caltech.edu></u>

Suresh

Please switch out the wire as you state below. This should be your default plan, unless you can either tell us this is really difficult and a significant impact or if you can tell us your wire is not phosphate coated?

In terms of the LHO person, who has all the non-coated music wire, it would be Jeff Bartlett or Betsy Bland.

Cheers, Calum

On 9/4/2012 8:28 AM, Suresh Doravari wrote:

Hi Faking, please let me know how to access this wire and I will rewire all the tip-tilts.

Suresh

On Sep 4, 2012 9:20 AM, "Calum Torrie" < ctorrie@ligo.caltech.edu> wrote:

At the same review of tip-tilts (when the o-ring question came up) we also noted the wire being used was phosphate coated music wire. At that time and again at LHO a couple of weeks ago Bram and I discussed how the tip-tilt folks should access the LIGO stock of non-coated music wire. Has this happened? Is more information needed on who to talk to at LHO? Or is a waiver needed for this also?

Cheers, Calum

On 9/4/2012 6:41 AM, Peter Fritschel wrote:

Good, thanks. Peter

On Sep 4, 2012, at 12:11 AM, Dennis Coyne wrote:

Waiver granted.

Dennis Coyne
Chief Engineer, Advanced LIGO & LIGO Laboratory
California Institute of Technology
MC 100-36, 1200 E. California Blvd.
Pasadena, CA 91125 USA
Telephone 626.395.2034

On 9/3/2012 6:22 AM, Peter Fritschel wrote:

Dennis, Calum,

Each Tip-Tilt Mirror Mount contains two 3/8" diameter viton o-rings for passive damping of the blade springs. Bram had some time ago procured these o-rings from smallparts.com.au, who source them from Seagull Industries. They have been C&B'd (not sure where), and are at LHO ready to be assembled into mounts. However, it was recently realized that the o-rings did not come with a materials certification, according to our requirements for viton use in vacuum. I am wondering if this requirement can be waived in this case, given the small quantity of viton involved.

The reason I'm bringing this up now is that Suresh has a trip scheduled to go to LHO from 5-14 September to finish assembling the Tip-Tilt Mounts. He didn't know about this issue with the o-rings when he made those plans. Bram and Suresh have looked into getting new o-rings with mat'l certs, and getting these C&B'd at Caltech and sent to LHO in time. Perhaps it can be done (actually, at this point I don't think Bram has found anyone who can supply them from stock w/ the certs), but the timing seems very dicey to me, and is it worth going through this effort for such a small amount of viton? (at most there are 3 TT mounts in HAM6, so 6 o-rings)

I attach the Bram's original o-ring order for info.

Peter

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