L-37 Surveillance Panel Teleconference Minutes Tuesday 08/28/2008

Attendees:

Dana - Miller, Horvath, Basset, Fett, Ottley

SwRI – Koehler

Lubrizol – Bartlett, Gropp, Graziano, Greene

Afton - Koglin, Hyguchi

Park - Smith TMC - Lind

L-37 Surveillance Panel teleconference call was directed to convene at this time by the Panel at its August 13 meeting to review testing options and progress to date.

Agenda:

- Approve August 13, 2008 SP meeting minutes.
- Review pending action items.
- o Afton's 1st result on TMC 153-1, modified build.
- Confirm status of SwRI direction on TMC 153-1 and the proposal of lengthening the test at a lower stress.
- Any closing discussions on the Intertek-Parc 18 and 20 hour tests conducted on TMC 153-1.

Approval of Minutes

Mr. Smith motioned/Second Mr. Koglin – that the August 13, 2008 meeting minutes be approved as written. Motion passed unanimously with a vote count of 6-0-0.

Retrofit Lubrited Hardware – Review and Discussion

Prior Action Item Review & Update:

- → Ramsey/Sullivan –Mr. Ramsey to work with chairman to address a Dana refund to the industry labs since the hardware has already been paid for. We are short 32 units. Open
- → **Miller** Discussions with Mr. Brazeau, director of engineering from Dana, is evaluating the option of contracting with Mr. Okamuro to be brought on as a consultant. He will pursue internal discussions and report back in the next couple of weeks. **Open.**
- → **Dana Maumee/Miller** to perform some mag particle inspection on test gears to determine if stress fractures are occurring. **Open.**
- → Dana, Maumee 6 Afton axles with the new build patterns (L2F+xxx) The first test is currently running, 3 hours left. (Chairman Note: Attachment # 1 represents the End-of-Test photos from the first test. Test went full length but exhibited broken teeth). Afton to conduct two runs on TMC 153-1 (see SP meeting minutes August 13, Action item # 2) and hold. Open.

→ Dana, Maumee – 10 SwRI axles with standard build - SwRI to conduct two runs on TMC 153-1(see SP meeting minutes August 13, Action item # 3). Stand procedure modifications have been made. Open.

With respect to the SwRI tests, consensus was:

- Run Miners calculation of equivalent damage w/ 9% stress reduction (Line 3 of attachment # 2).
- Conduct one run on TMC 153-1 and post the data.
- Actual test conditions are:
 - 1. **Gear Conditioning Phase** will be conducted per the Standard, no change.
 - 2. **Gear Test Phase -** Test conditions will be:
 - o 80 wheel rpm and 1441 lbf-ft torque per wheel.
 - o Axle oil temperature will be the same as a standard test.
 - Test length will be 70 hours of on-test time.
 - o Axle will not be modified and no mid test inspections will be performed.
 - o Results to report the results prior to continuing to a second test.

Below is the link to the TMC website for the Retrofit lubrited data for everyone's viewing pleasure. It will be expanded to not only include the initial testing results, but all other associated test results as we move forward in our matrix work. The Intertek-Parc reduced test length results have been added. The Afton and SwRI information will follow as tests complete.

ftp://ftp.astmtmc.cmu.edu/refdata/gear/I37/data/V1L500 P4L870A Lubrited Retrofit/

New Lubrited Hardware - Discussion

Continued testing was put on hold until further direction by the panel. Panel direction is that we focus the attention on the retrofit hardware first.

Non- Lubrited Hardware - Discussion

Continued testing was put on hold until further direction by the panel. Panel direction is that we focus the attention on the retrofit hardware first.

Next Meetings will be for the Surveillance Panel

- <u>L-37 Surveillance Panel Teleconference Meeting</u> Thursday, September 4th, at 10:00 a.m. EDT.
- Call in info is 608-250-0194, code 324160.

Meeting adjourned at 10:15 p.m.

Donald T. Bartlett, L-37 SP Chairman

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