L-42 Hardware Task Force Meeting Minutes

Teleconference

April 28, 2014

Attendees:

B. Koehler (SwRI)	A. Trader (Intertek	D. Smith (Intertek)
S. Parke (TMC)	J. Gropp (LZ)	M. Umerly (LZ)
T. Gottwald	L. Hamilton (LZ)	C. Prengaman (LZ)
(Afton/C)		

Purpose of Call

To continue discussions from our call with Dana on 4/25 and to record possible expectations for this next Model 44 build.

Call Discussion

The labs have all gotten authorization to participate in purchasing Dana's production plan regarding ASTM specified model 44 axles. The Chair was directed to follow up with Gary to get quotes/invoices to each of the labs (¼ of the \$25,000 each).

Comments on the 4/25 call:

- We need to find a way to work in to the normal assembly process and avoid the temporary line.
 New personnel will cause build issues; we've seen this in the past. To do this, we'll need to build 200-250 axles at a time. → All gears should be built as one batch with multiple assembly builds?
- Overall quality control is the biggest issue with our past builds. Whatever expectations we set forward should help to guide this. Overall, Dana must take responsibility for their quality problems.

Expectations for build and items to focus on:

- Ensure that Lugoff is working with the latest version of the prints
 - Sent to Gary Schmalbach via email on 1/27/14 and to Grabiel Waxemberg on 2/7/14
 - Sent to labs on 5/1/14
- Single heat of steel for gears
 - $\circ \quad \text{Not tempered} \quad$
 - o Not lubrited
 - Can Dana specify a max heat size?
- Timken bearings
- Proper carrier alignment
- All patterns must be checked
 - Section 8 in L-42 procedure

- 8.2.1 (Annex A6) Pattern: "A6.1 Record coast side pattern as received from manufacturer. Contact patterns shall be L2F+1, L2F0, L2F-1, L3F+1, L3F0, and L3F-1 for gear batch B6L544/P4L806. These contact patterns are only recommended for all other gear batches."
- **8.2.3 Backlash:** "Record the backlash reported from the manufacturer. The readings shall be between 0.004 and 0.012 in. (0.102 to 0.305 mm)"

Communication:

- Include Ft. Wayne on all calls
- Keep Joe Guzikowski and Greg Fett in the loop
- We need a liaison that will follow the order the way through

Other Issues:

- Labs would like to visit all plants involved with this build
- Labs agreed that we can't take delivery of the order unless we know it's right.
- Still need to determine if a pilot batch is necessary and/or how it is to be handled.
- Order size:
 - Labs determined that we should make this order last 3 years
 - SwRI will not order less than 260 or more than 300
 - Lubrizol will order ~500
 - Intertek will order ~200 to 250
 - Afton will order ~350

Meeting adjourned.