

# ASTM Chain Wear Task Force Conference Call

## Thursday 21<sup>th</sup> July, 2016

**Written By: Al Lopez**

### Attendees:

- See attached attendance list:



Attendance 072116  
Telecon.pdf

### Action Items:

- LTMS data review by Statistician Group – scheduled after Sequence VI analysis
- Hardware Order Solicitation – Engines, pistons and critical hardware
- Cam phasor activity experiments – on going
- Engine Build Round Robin – cam installation SWRI / IAR

### Review Cam Phasor Experiment Test Data:

- See attached TMC presentation for the plot of PM data and additional test data.



CW Task Force  
Report 071216.pptx

- SWRI ran a test with speed and load control changes to allow for more cam phasor movements.
- The test results were more severe than previous tests.
- Cam phasor data amplitude increased as shown below.

Exhaust Cam Phasor Oscillation

	PM Tests	Control Change
SWRI	$\pm 1^\circ$	$\pm 1.5 - 1.8^\circ$
IAR	$\pm 2^\circ$	

- The development team plans to review the operational data form the SWRI experimental test in detail.
- Statistician review of the data will incorporate the experimental test data from SWRI.

### Hardware Update

- 2014 new engine batch availability:
  - IAR – 0
  - Afton – 2
  - LZ – 2 (LSPI)

- Ashland - 2
  - SwRI – 7 left for redistribution , 4 will go to IAR
- 2014 used engines at the labs still have many runs left available. This hardware and the few remaining new engines will sustain the testing until the new piston batch arrives.
- 2016 batch engines at the labs – see attachment appendix.
- Path forward plan
  - Consume the remaining 2014 hardware at the labs. This batch that is being used (2014) will be considered acceptable as the MOA required hardware. The time after the last PM test is the first calibration period even though there is no LTMS yet.
  - Ford will issue a piston solicitation. This order will be a standalone purchase that will be expedited to have pistons in the labs as soon as possible.
  - The new batch pistons will be used to retrofit the 2016 long blocks. This engine build will be introduced with reference tests at all labs.
- An additional purchase of engines and critical hardware is being planned. A master spreadsheet will be made for the industry order. This will start as soon as we receive the solicitation and revised pricing/min order information from Ron.
- Dealer engines are available for purchase. Intertek has purchased 3 dealer engines. These engines have the 2014 batch pistons. These engines may be used at the labs discretion for noncertified testing.

**Next Conference Call:**

- A development team meeting is scheduled for the week of the 25<sup>th</sup>, July.
- Task Force meeting data and time TBD.