

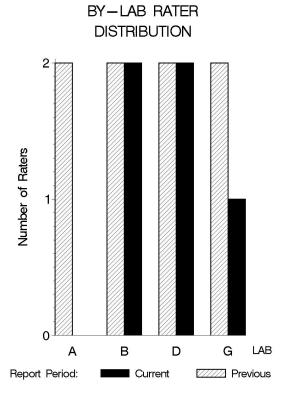
# **Test Monitoring Center**

Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA http://astmtmc.cmu.edu 412-365-1000

MEMORANDUM:	11-067
DATE:	December 14, 2011
TO:	Thomas D. Gottwald, Acting Chairman, L-42 Surveillance Panel
FROM:	Scott Parke Star
SUBJECT:	L-42 Rater Calibration from April 1, 2011 through September 30, 2011

The following is a summary of L-42 rater calibration activity from April 1, 2011 through September 30, 2011.

	Reporting Data	Calibrated on 9-30-2011	
Number of Raters	5	5	



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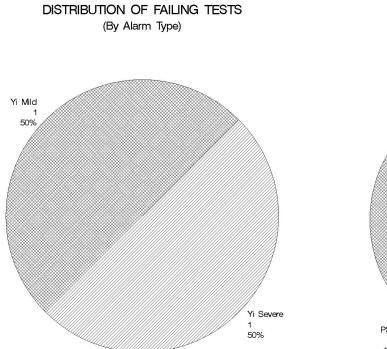
Memo 11-067 Page 2

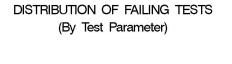
## Test Distribution by Oil and Validity

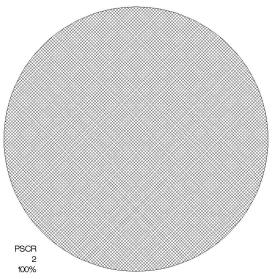
		Tot	Totals	
		Last Period	This Period	
Accepted for calibration	AC	8	5	
Rejected (mild)	OC	2	1	
Rejected (severe)	OC	1	1	
Rejected (multiple)	OC	0	0	
Rejected (precision)	OC	1	0	
Workshop data	AG	21	18	
Total		33	25	

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### CAUSE OF REJECTED TESTS





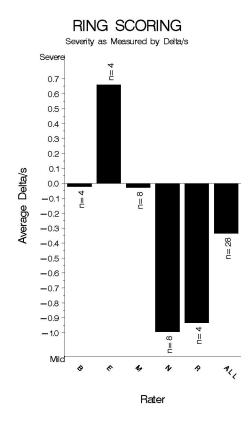


		Pinion Scoring		Ring Scoring	
Rater	Ν	Avg Yi	STD*	Avg Yi	STD*
В	4	0.226	0.222	-0.021	0.311
Е	4	1.472	0.615	0.657	0.435
М	8	-0.247	1.166	-0.027	0.632
Ν	8	-1.150	0.742	-0.992	0.594
R	4	-1.061	1.371	-0.932	1.009
ALL	28	-0.308	1.248	-0.333	0.842

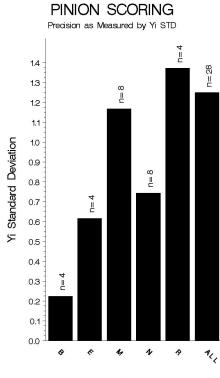
PINION SCORING Severity as Measured by Delta/s Severe 2 4 1 Average Delta/s 1=4 0 n= 8 n= 28 -1 n= 4 n= 8 -2 Mild \$ \* 4 r \$ 411

Rater

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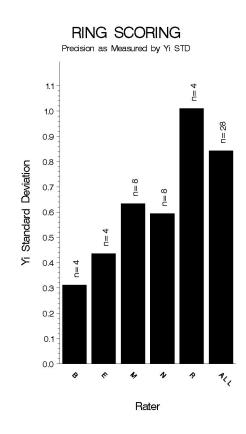


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Rater

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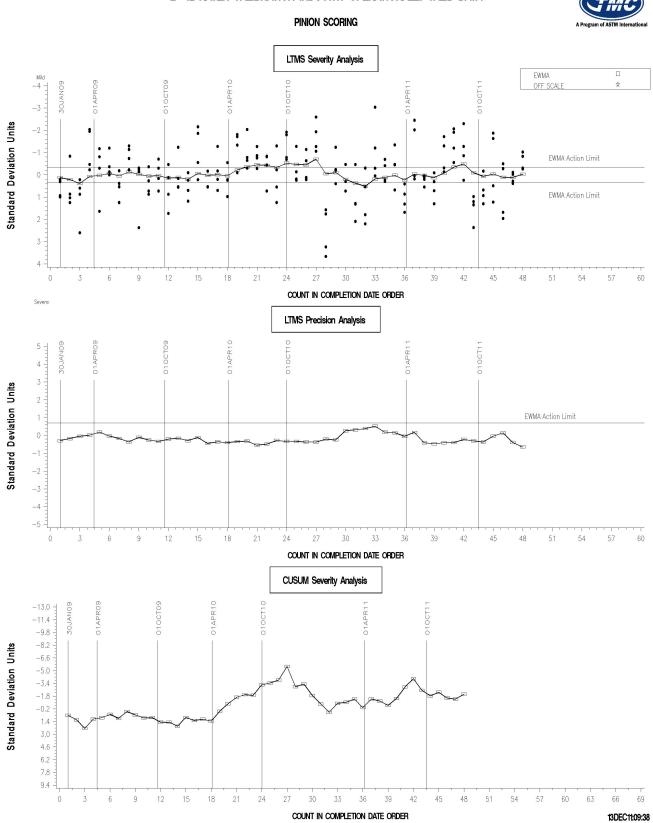
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#### **INDUSTRY CONTROL CHARTS:**

The industry control charts are shown beginning on the following page.

Over this report period, PSCR was slightly mild but exceeded limits for only one test. RSCR was also mild throughout this period. Updated targets have been introduced beginning in the next report period. This can be expected to help restore on-target performance.

Precision performance for both ring and pinion scoring remained within acceptable limits.



#### L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA



#### RING SCORING LTMS Severity Analysis EWMA Mild -4 -OCT10 01APR10 OFF SCALE ¢ 010CT09 30JAN09 010CT11 01APR1 -3 Standard Deviation Units -2 EWMA Action Limit 0 2 EWMA Action Limit 1 2 -3 -4 0 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 COUNT IN COMPLETION DATE ORDER Severe LTMS Precision Analysis 01APR10 010CT10 AN09 010CT09 01APR11 010CT11 5 -Ū ⊲ 4 -3 -Standard Deviation Units 2 -1 -EWMA Action Limit 0 --1 --2 --3 --4 -5 -12 0 3 6 9 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 COUNT IN COMPLETION DATE ORDER CUSUM Severity Analysis 01APR10 -17.0 -0100110 SOUANOS 010CT09 I APR09 10CT11 -15.4 -13.8 -12.2 Standard Deviation Units -10.6 -9.0 -7.4 -5.8 -4.2 -2.6 -1.0 0.6 2.2 3.8 5.4 -0 9 12 15 18 21 24 27 30 33 39 42 45 48 51 54 57 60 63 69 3 6 36 66 COUNT IN COMPLETION DATE ORDER 13DEC11:09:39

#### L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA



Memo 11-067 Page 8

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cc: Frank Farber Jeff Clark L42 Surveillance Panel <u>ftp://ftp.astmtmc.cmu.edu/docs/gears/l42rc/semiannualreports/l42rc-10-2011.pdf</u>

Distribution: email