

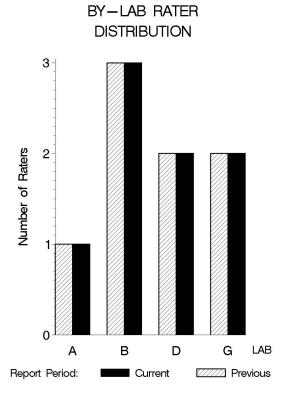
# **Test Monitoring Center**

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

MEMORANDUM:	13-011
DATE:	February 28, 2013
TO:	Thomas D. Gottwald, Chairman, L-42 Surveillance Panel
FROM:	Scott Parke Stall
SUBJECT:	L-42 Rater Calibration from April 1, 2012 through September 30, 2012

The following is a summary of L-42 rater calibration activity from April 1, 2012 through September 30, 2012.

	Reporting Data	Calibrated on 9-30-2012
Number of Raters	8	8



13:58:35 27FEB2013

Memo 13-011 Page 2

## Test Distribution by Oil and Validity

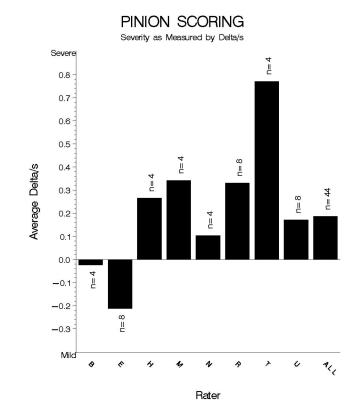
		Totals		
		Last Period	This Period	
Accepted for calibration	AC	12	11	
Rejected (mild)	OC	0	0	
Rejected (severe)	OC	1	0	
Rejected (multiple)	OC	0	0	
Rejected (precision)	OC	1	0	
Workshop data	AG	24	12	
Total		38	23	

# CAUSE OF REJECTED TESTS

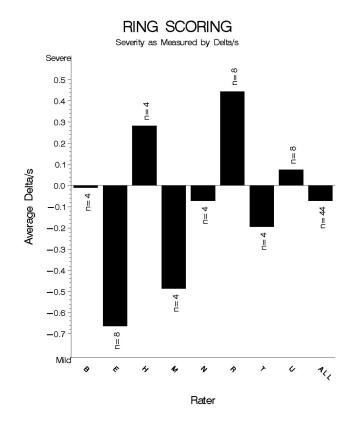
There were no rejected tests this period.

		Pinion Scoring		Ring Scoring	
Rater	Ν	Avg Yi	STD*	Avg Yi	STD*
В	4	-0.022	0.077	-0.009	0.231
Е	8	-0.211	1.199	-0.662	0.635
Н	4	0.264	0.514	0.280	0.752
М	4	0.341	0.461	-0.485	0.230
Ν	4	0.102	1.322	-0.071	0.639
R	8	0.330	0.998	0.442	0.946
Т	4	0.770	1.326	-0.194	1.038
U	8	0.171	0.798	0.073	0.467
ALL	44	0.185	0.922	-0.070	0.738

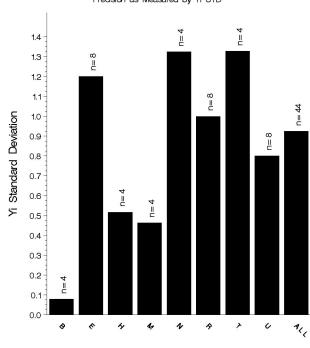
\* Due to the small number of ratings per pinion, the standard deviation of the Yi values is given in place of a pooled standard deviation.



13:58:35 27FEB2013

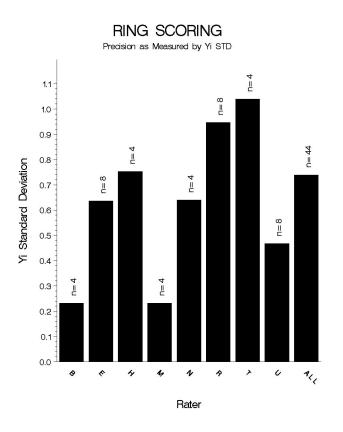


13:58:35 27FEB2013



Rater

PINION SCORING Precision as Measured by Yi STD

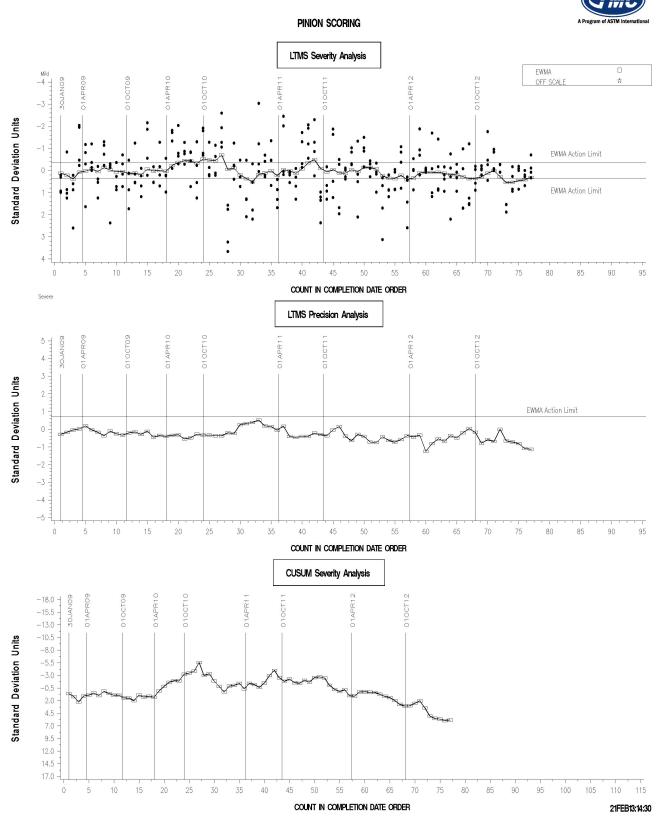


13:58:35 27FEB2013

### **INDUSTRY CONTROL CHARTS:**

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

PSCR was generally slightly severe over this period; RSCR was on-target throughout the period. Precision for both parameters remained within acceptable limits.



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

#### RING SCORING LTMS Severity Analysis EWMA Mild -4 -01APR12 010CT12 OFF SCALE ŵ 30JAN09 -3 Standard Deviation Units -2 -1 EWMA Action Limit 0 -EWMA Action Limit 1 -2 -2 3 -4 35 0 5 10 15 20 25 30 40 45 50 55 60 65 70 75 80 85 90 95 COUNT IN COMPLETION DATE ORDER Severe LTMS Precision Analysis 010CT10 01APR12 010CT12 5 -30JAN09 APR09 010CT09 01APR10 010CT11 01APR1 4 -3 -Standard Deviation Units 2 -EWMA Action Limit 1 -0 --1 -2 --3 --4 -5 -10 15 35 65 5 20 25 30 40 45 50 55 60 70 75 80 85 95 90 0 COUNT IN COMPLETION DATE ORDER CUSUM Severity Analysis 01APR10 010CT10 N 010CT12 -25.0 -30JAN09 01APR09 010CT09 01APR11 OTAPR' -22.5 -20.0 -17.5 Standard Deviation Units -15.0 -12.5 -10.0 -7.5 -5.0 -2.5 0.0 2.5 5.0 7.5 10.0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 COUNT IN COMPLETION DATE ORDER 21FEB13:14:30

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



Memo 13-011 Page 8

SDP/sdp/mem13-011.sdp.docx cc: Frank Farber Jeff Clark L42 Surveillance Panel <u>ftp://ftp.astmtmc.cmu.edu/docs/gears/l42rc/semiannualreports/l42rc-10-2012.pdf</u>

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