




# Test Monitoring Center

@ Carnegie Mellon University  
6555 Penn Avenue, Pittsburgh, PA 15206, USA

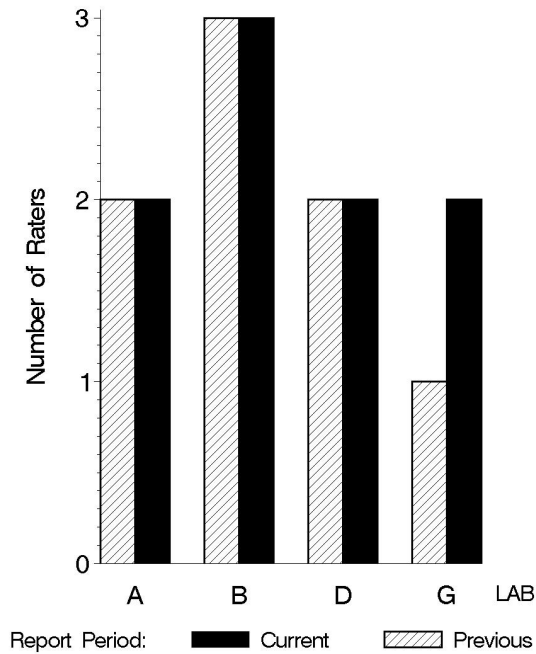
<http://astmtmc.cmu.edu>  
412-365-1000

MEMORANDUM: 13-010  
 DATE: February 26, 2013  
 TO: Chris Prengaman, Chairman, L-37 Surveillance Panel  
 FROM: Scott Parke   
 SUBJECT: L-37 Rater Calibration from April 1, 2012 through September 30, 2012

The following is a summary of L-37 rater calibration activity from April 1, 2012 through September 30, 2012.

	Reporting Data	Calibrated on 9-30-2012
Number of Raters	9	7

BY-LAB RATER  
DISTRIBUTION



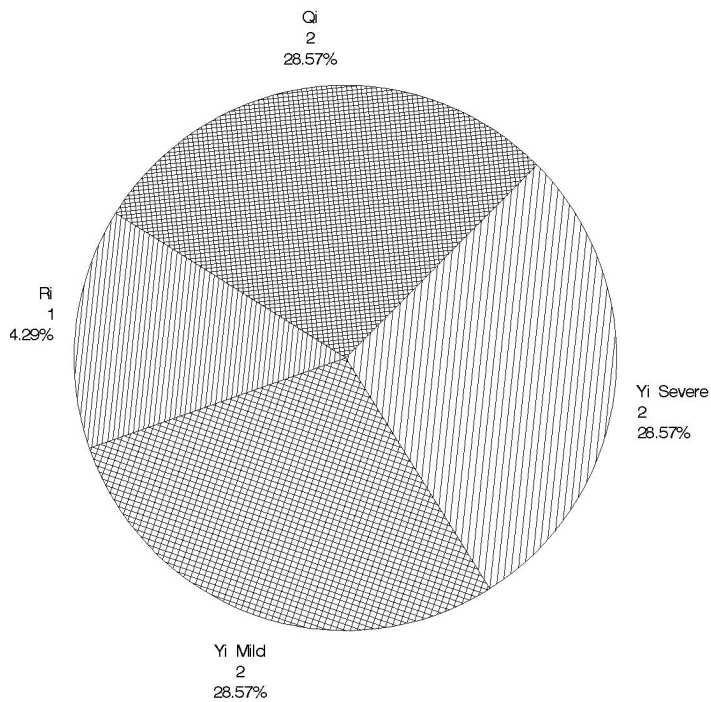
**Test Distribution by Validity**

		Totals	
		Last Period	This Period
Accepted for calibration	AC	10	11
Rejected (mild)	OC	0	2
Rejected (severe)	OC	3	2
Rejected (multiple)	OC	0	0
Rejected (precision)	OC	0	3
Workshop data	AG	24	12
<b>Total</b>		<b>37</b>	<b>30</b>

**CAUSE OF REJECTED TESTS**

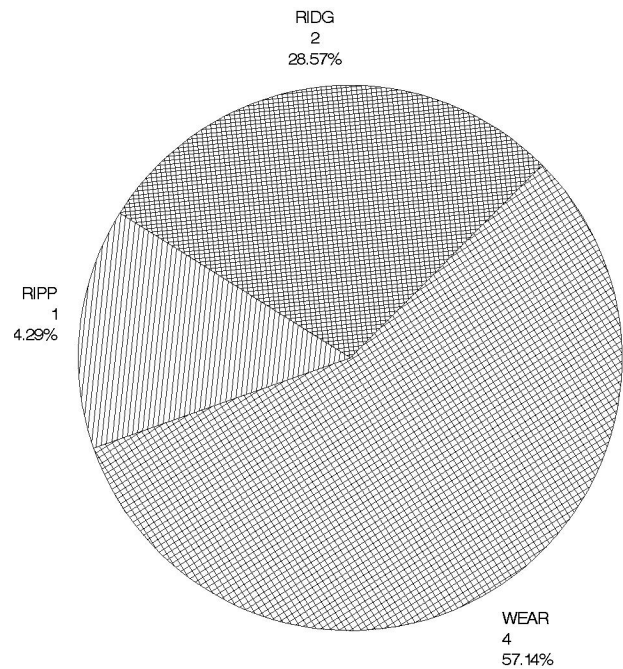
**DISTRIBUTION OF FAILING TESTS**

(By Alarm Type)



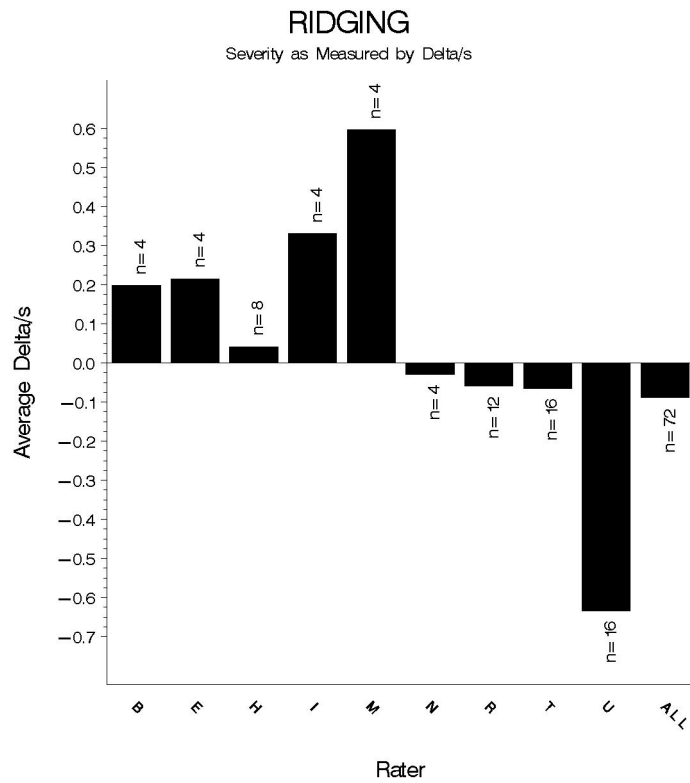
**DISTRIBUTION OF FAILING TESTS**

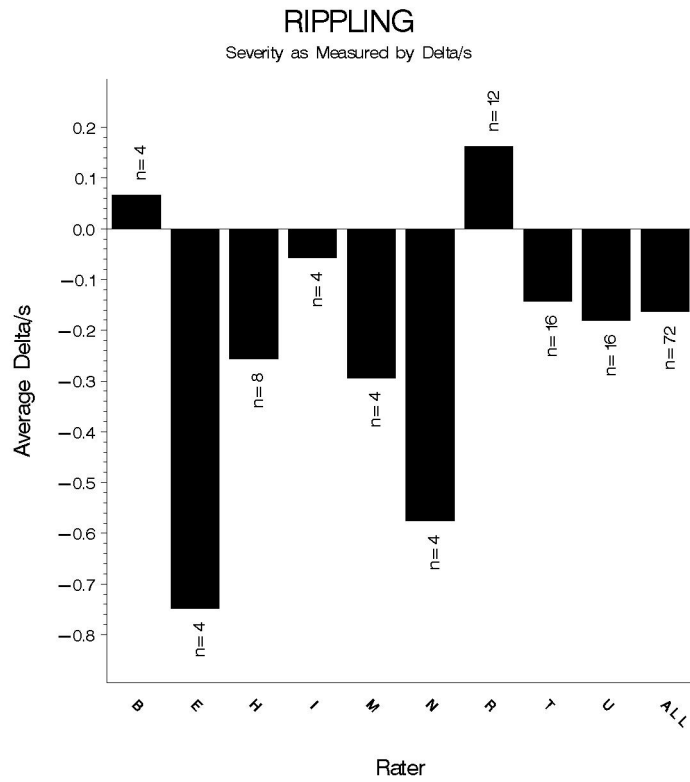
(By Test Parameter)



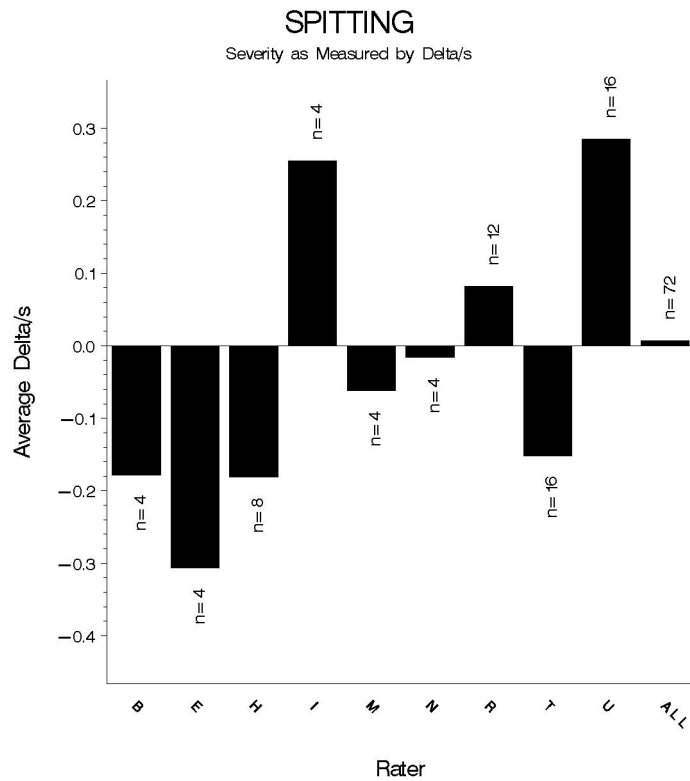
Rater	N	Ridging		Rippling		Spitting		Wear	
		Avg Yi	STD*	Avg Yi	STD*	Avg Yi	STD*	Avg Yi	STD*
B	4	0.196	0.394	0.065	0.219	-0.177	0.220	-0.344	0.635
E	4	0.214	0.586	-0.747	1.312	-0.306	0.818	-0.265	0.917
H	8	0.040	0.719	-0.255	1.138	-0.180	0.315	-0.036	0.708
I	4	0.329	0.939	-0.056	1.030	0.255	0.376	0.079	0.517
M	4	0.595	1.140	-0.293	0.589	-0.061	0.614	0.580	0.230
N	4	-0.027	0.505	-0.574	0.590	-0.015	0.316	-0.778	0.564
R	12	-0.058	1.227	0.161	1.008	0.081	1.146	-0.280	0.641
T	16	-0.064	0.765	-0.142	0.932	-0.151	0.691	0.286	2.566
U	16	-0.633	1.598	-0.180	0.970	0.284	0.573	0.554	1.212
ALL	72	-0.087	1.089	-0.162	0.932	0.006	0.692	0.095	1.431

\* 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.

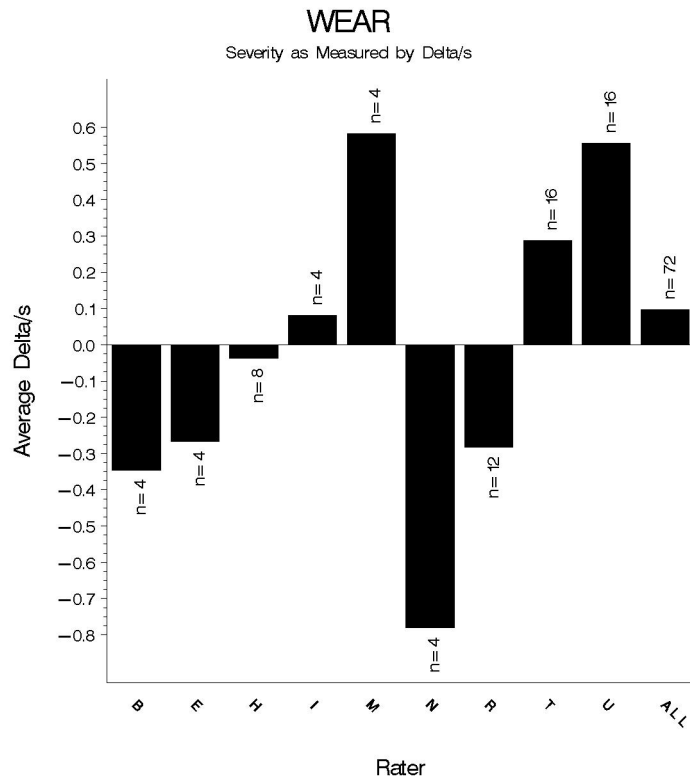




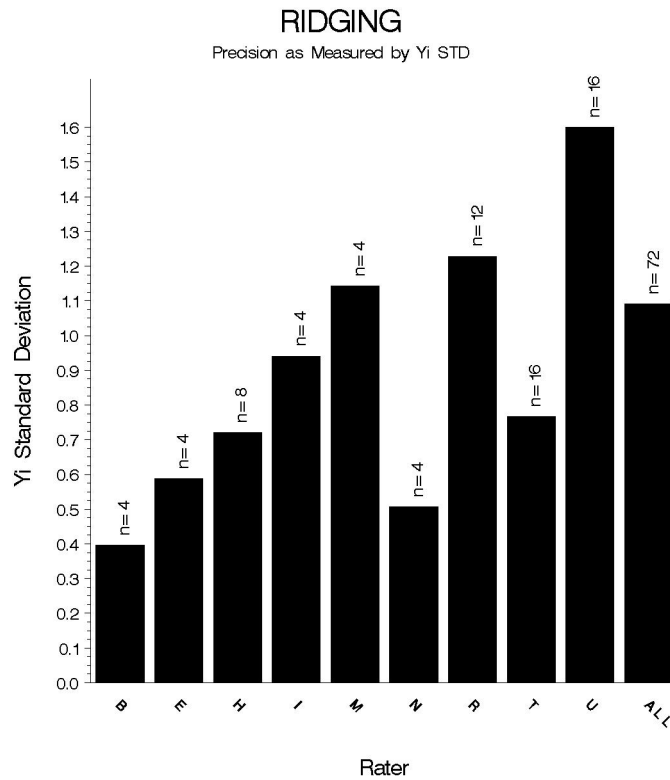
0.61.24 26FEB2013



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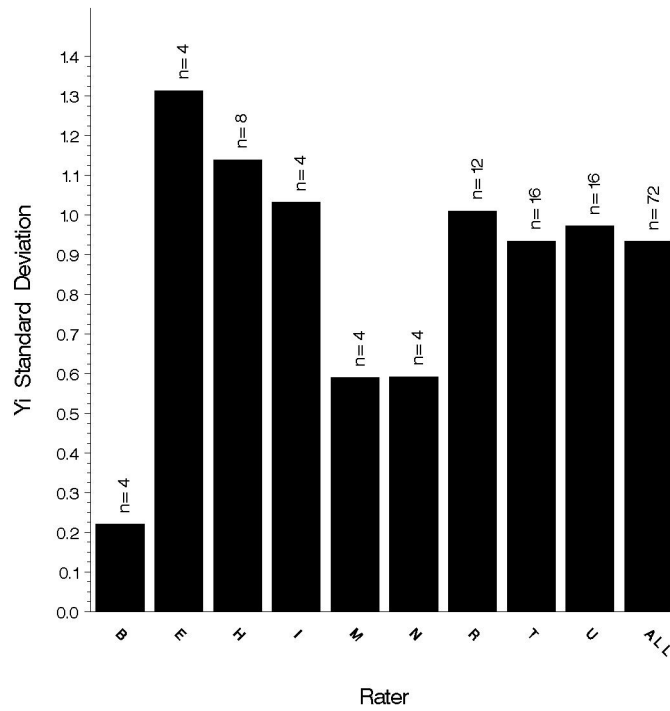
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### RIPPLING

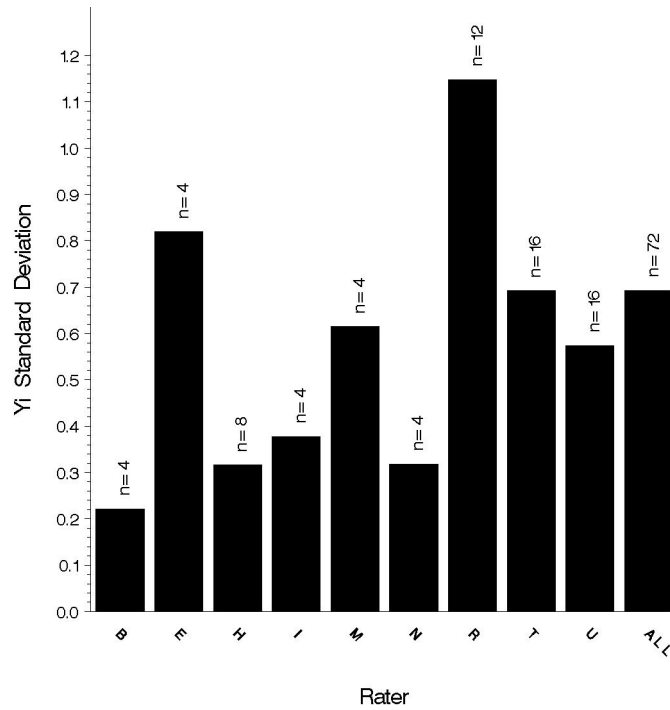
Precision as Measured by Y1 STD



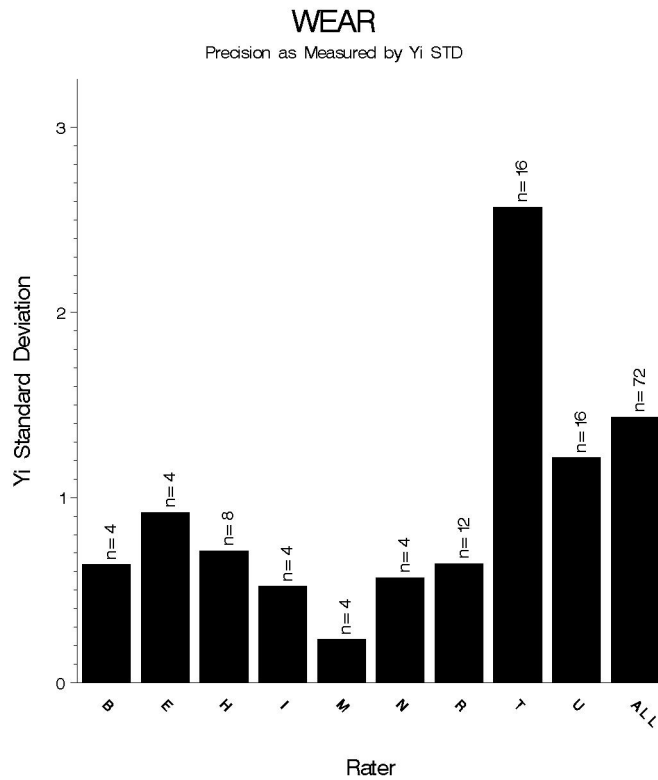
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### SPITTING

Precision as Measured by Y1 STD



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INDUSTRY CONTROL CHARTS:

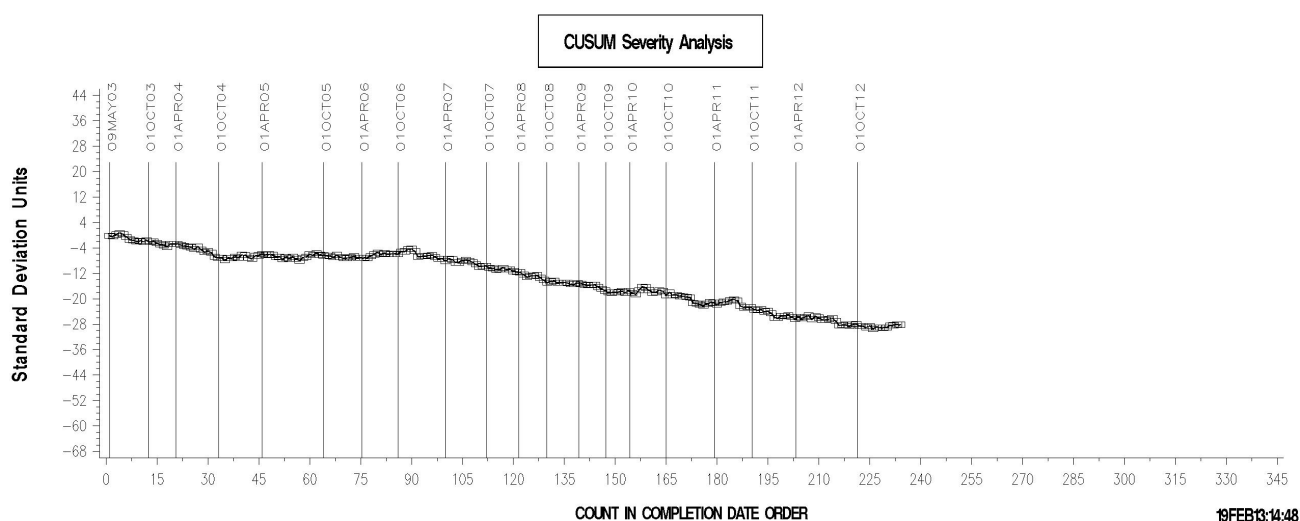
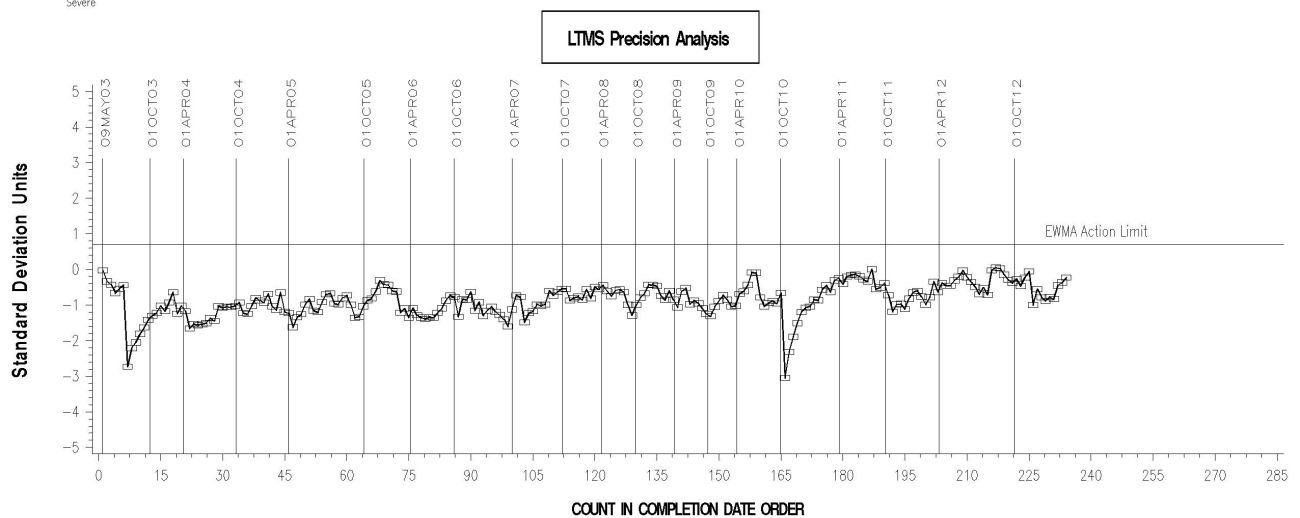
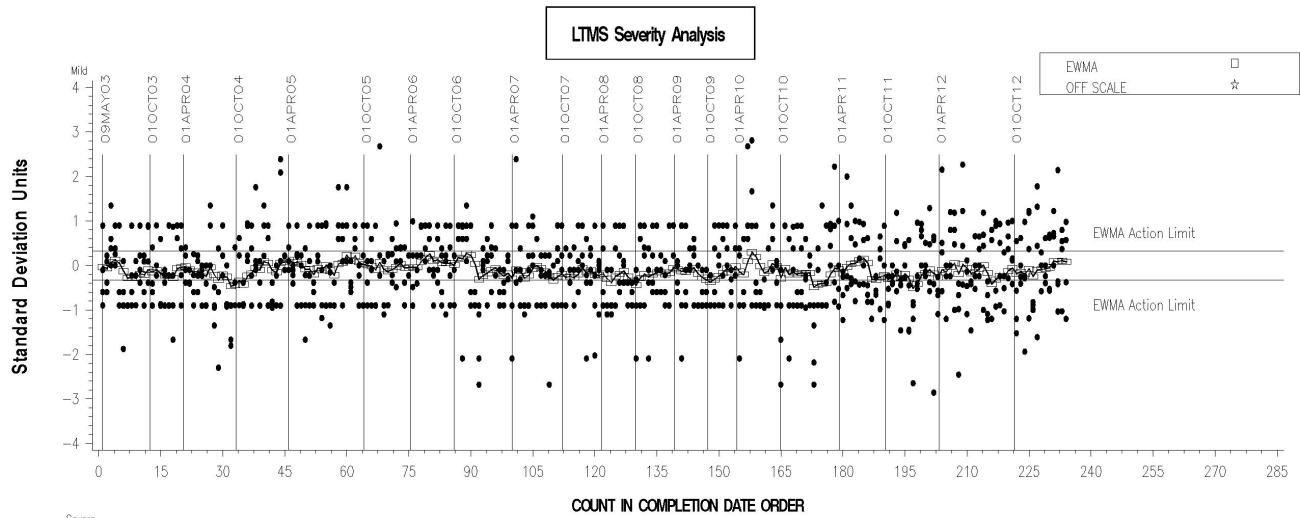
The industry control charts are shown beginning on the following page.

RIDG this period continued its long-standing severe trend (testing after the close of this period appears to be more on target); RIPP, SPIT, and WEAR were generally on target. The March 2011 target update reduced target standard deviations for the most part and thus accounts for the increase in variability shown in testing seen since then. All parameters remained within precision control limits.

L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA



RIDGING

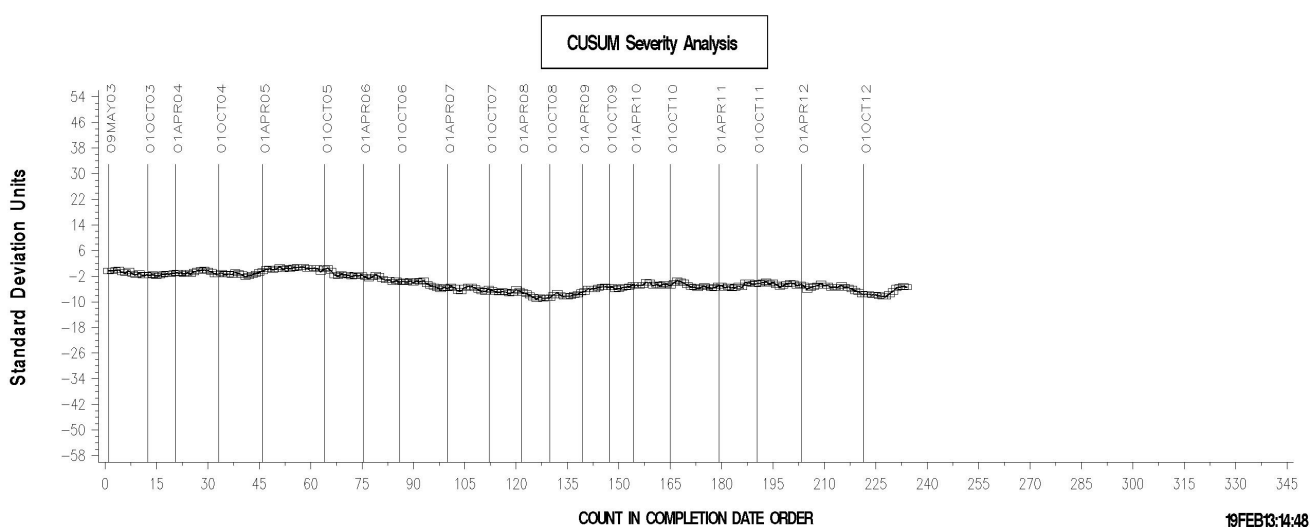
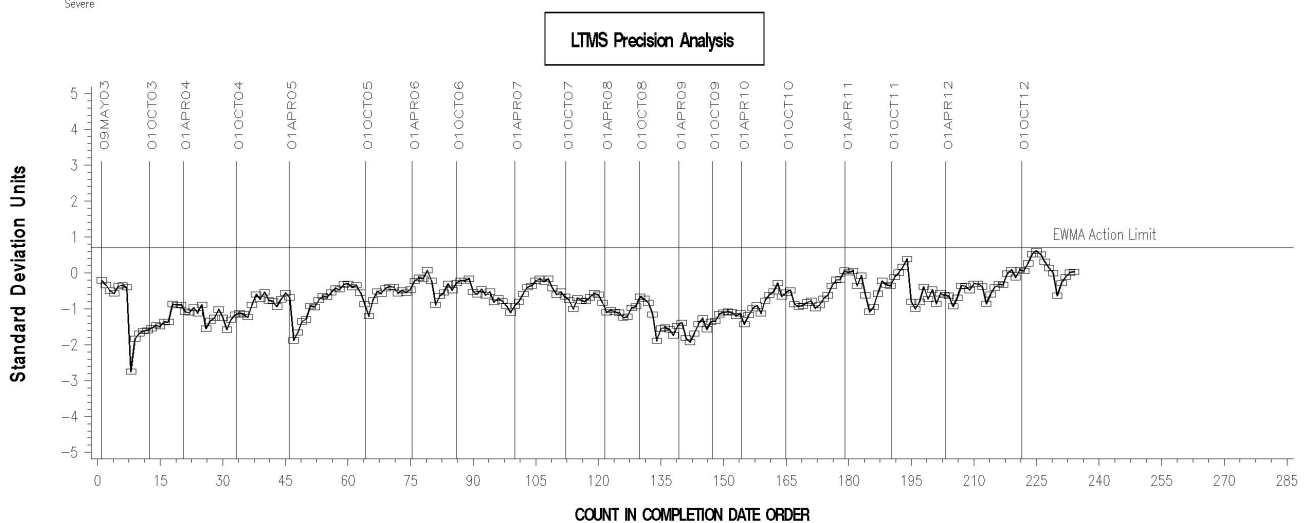
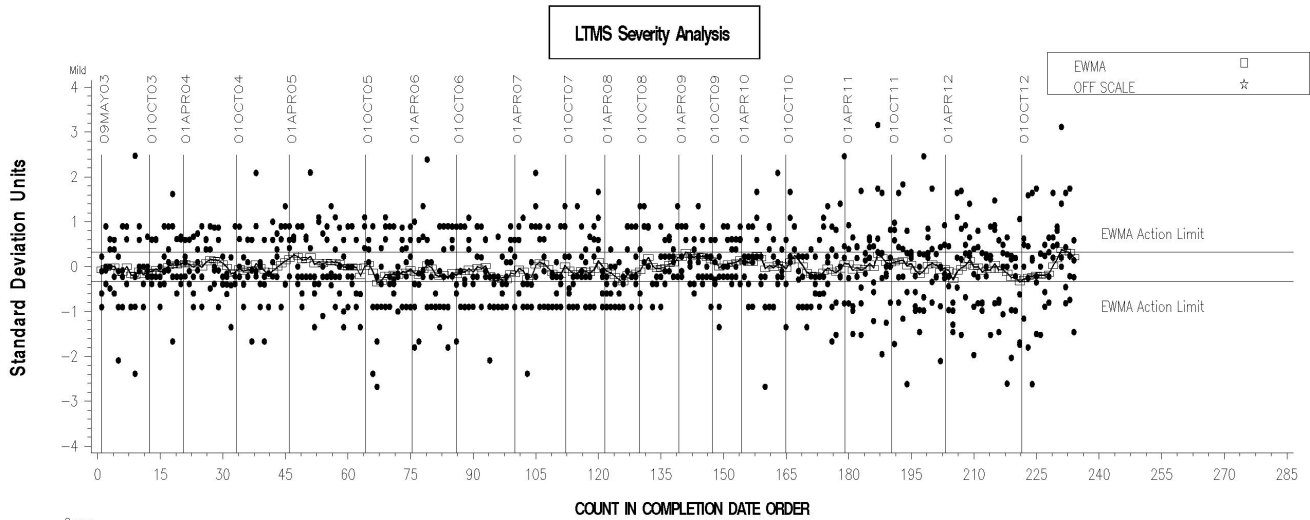




L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA



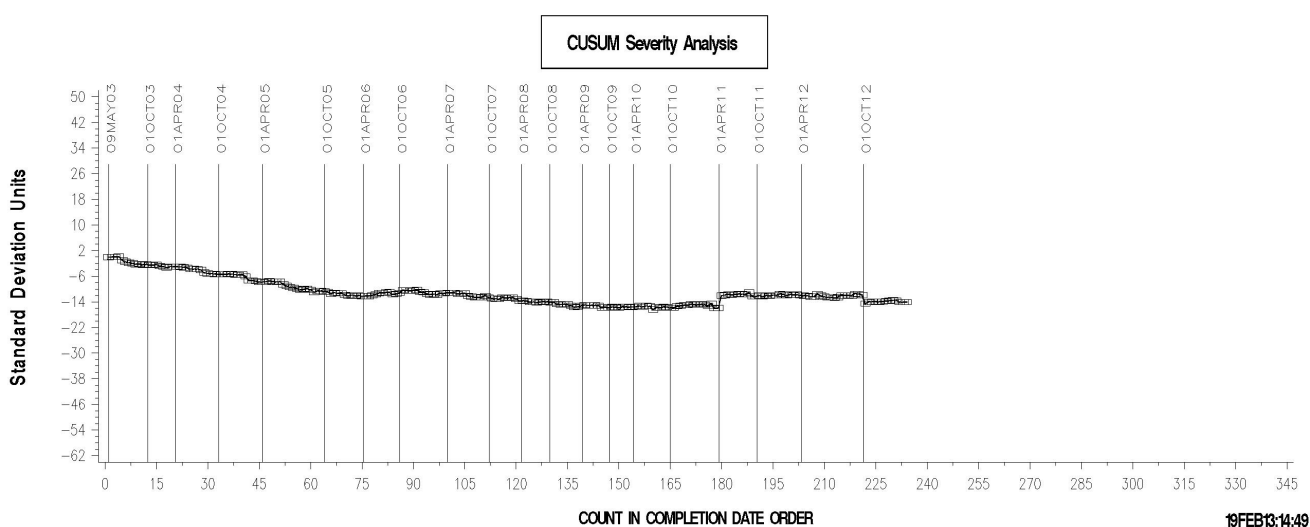
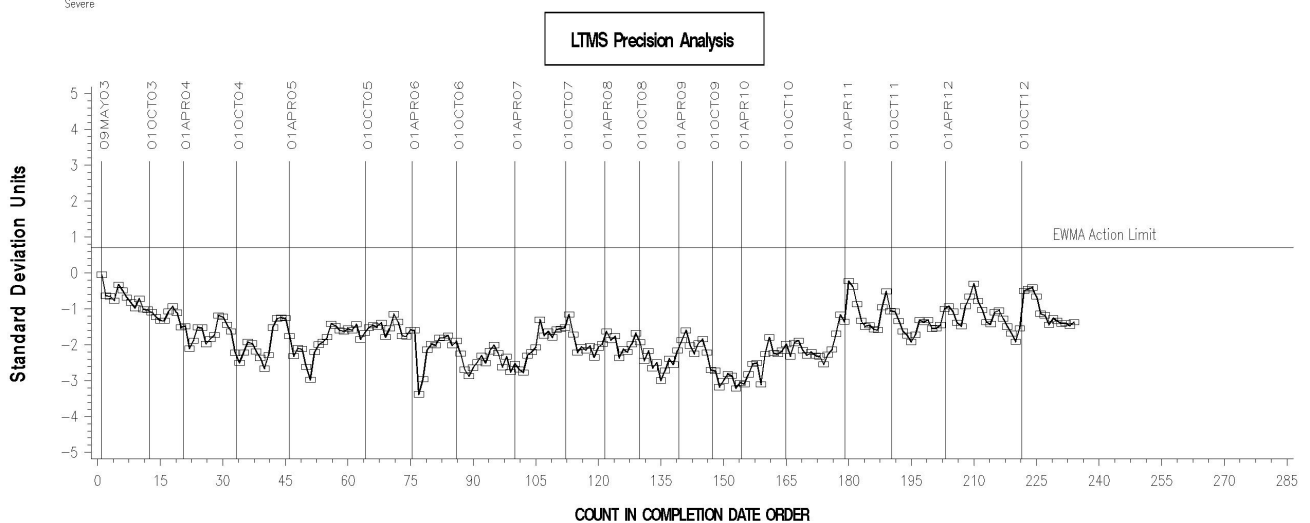
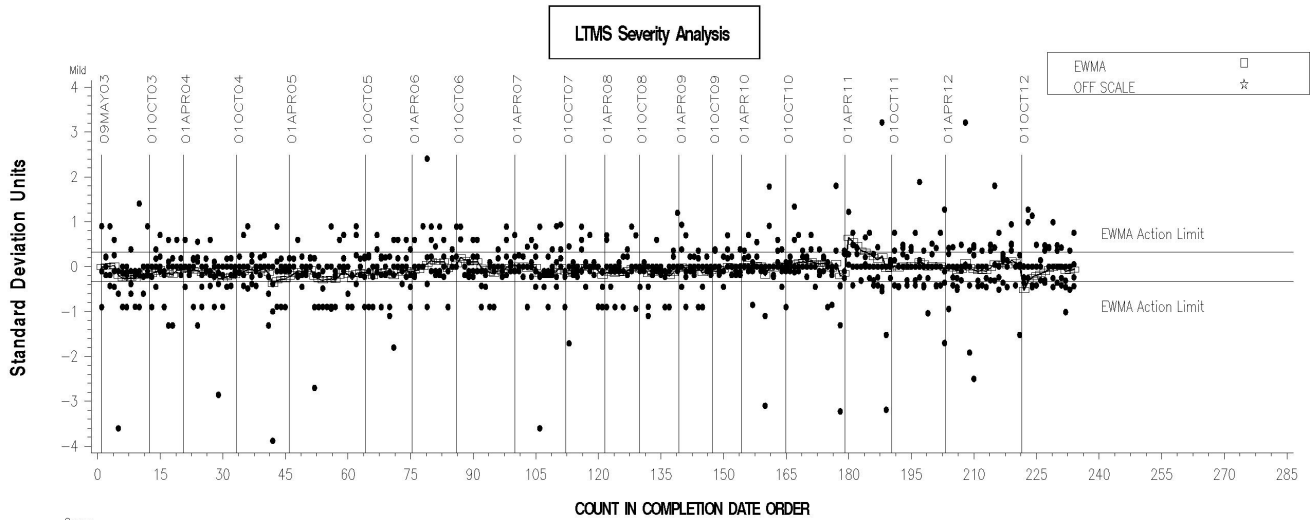
RIPLING



L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA



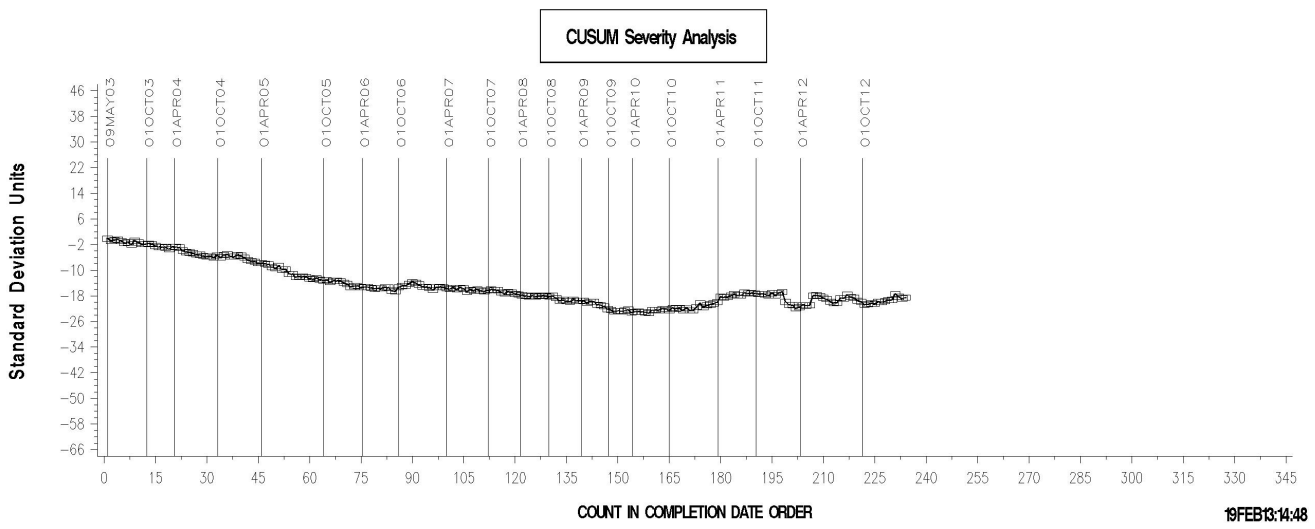
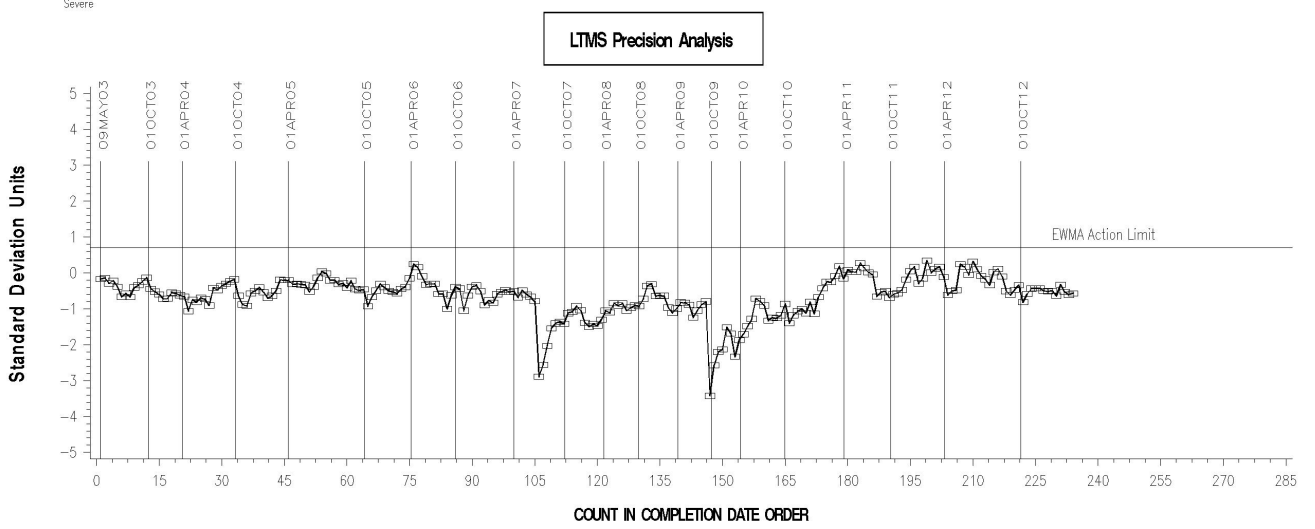
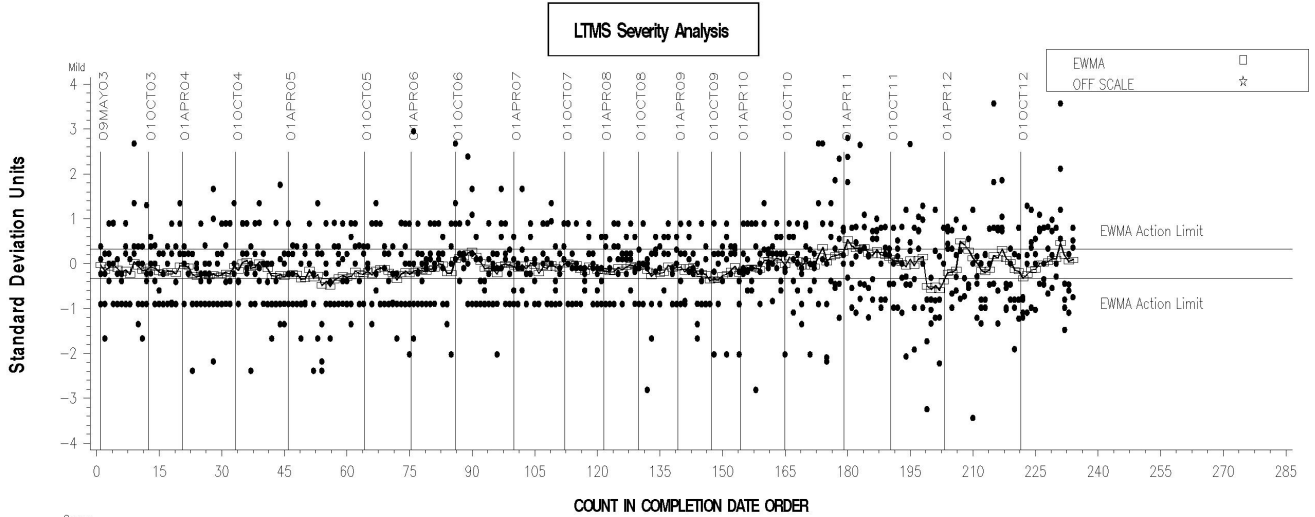
SPITTING



L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA



WEAR



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cc: Frank Farber  
Jeff Clark

<ftp://ftp.astmtmc.cmu.edu/docs/gears/l37rc/semiannualreports/l37rc-10-2012.pdf>

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