



Jefferson Lab Alignment Group

Data Transmittal

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Checked:

: A1935

DETAILS:

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Below are the results of the Hall A Moller as-found as well as the positions of the super harps and BPM's located on the super harp girder. Ideal locations are reported in the CEBAF Mechanical system. As-Found positions are reported in the Beam Following System. For the BFS, values are relative to the ideal location relative to beam center line. A +X is to the left, a +Y is up, and a +Z is downstream. A + yaw angle is counter clockwise looking from above, a + pitch is ccw looking from the beam right side, and a + Roll is clockwise looking downstream. Please note a location correction has been made for MQO1H03 reported in DT1548. These new values were recalculated using the previous survey data from 1/14/2014.

IDEAL CEBAF Mechanical (Meters and degrees)						
	Z	X	Y	Yaw	Pitch	Roll
MQO1H02	-379.74242	-43.15519	100.02200	142.5000	0.0000	-45.0000
MQM1H02A	-380.25810	-42.75950	100.02200	142.5000	0.0000	-45.0000
MQO1H03	-380.80155	-42.34250	100.02200	142.5000	0.0000	-45.0000
MQO1H03A	-381.32516	-41.94071	100.02200	142.5000	0.0000	-45.0000

Beam Following System (mm and degrees)						
	Z	X	Y	Yaw	Pitch	Roll
MQO1H02	-1.21	0.07	-0.14	0.0185	-0.0092	-45.0027
MQM1H02A	1.54	0.13	-0.12	0.0345	-0.0138	-44.9747
MQO1H03	2.33	0.17	-0.09	-0.0074	0.0135	-44.9594
MQO1H03A	-2.59	0.12	-0.06	-0.0704	0.0183	-44.9873

Correction to Transmittal A1548 (mm and degrees)						
	Z	X	Y	Yaw	Pitch	Roll
MQO1H03	2.45	0.03	0.12	0.0165	0.0172	-45.0031

Super Harp Girder BFS (mm)		
	X	Y
IHA1H01 (Historical Name)	-0.09	0.04
IHA1H02 (Historical Name)	-0.12	0.25
US_IPM1H04	0.41	0.52
DS_IPM1H04	0.45	0.50
US_IPM1H04A	-0.18	-1.60
DS_IPM1H04A	0.29	-0.76
US_IPM1H04E	0.24	-1.55
DS_IPM1H04E	0.50	-0.39