



# Jefferson Lab Alignment Group

## Data Transmittal

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**Checked:**

**# :** C1046

**DETAILS:**

data: m:\align\data\step2b\bsy\bsy9c\060306a & 060307a

Below are the results for the final survey of the line C elements downstream of the shield wall, prior to running the GZero Backwards Angle experiment. The surveys were carried out March 6<sup>th</sup> and 7<sup>th</sup>, 2006.

The coordinates z, x, and y are based on the machine center and are in meters. The deltas (e.g. bfs dz) refer to the amount the found positions differ from the ideal coordinates in a beam following coordinate system (bfs). The bfs units are in millimeters with +z being too far downstream, +x to the beam left and +y being higher than ideal. Where shown, the difference in yaw pitch and roll versus ideal was calculated. A positive delta yaw indicates the component is more clockwise than ideal about the bfs +y axis, positive pitch is counter clockwise about the bfs +x axis and a positive roll is clockwise about the bfs z axis.

component	z (m)	x (m)	y (m)	delta bfs dz	delta bfs dx	delta bfs dy	delta yaw	delta pitch	delta roll
IHA3C17	-353.8768	-98.1973	99.9782		-0.13	0.16			
IPM3C17	-354.3823	-98.5852	99.9785		-0.08	0.54			
MQA3C17	-354.6799	-98.8134	99.9787	0.23	-0.17	0.70			
IHA3C17A	-355.3659	-99.3394	99.9788		-0.54	0.77			
IPM3C17A	-355.8234	-99.6904	99.9785		-0.62	0.48			
MOLLER	-356.7668	-100.4149	99.9783	0.28	-0.49	0.25	-0.01	0.00	0.07
MQF3M01	-357.2691	-100.8014	99.9785	6.22	0.15	0.50	0.02	0.08	0.01
QE3M02	-359.2453	-102.3187	99.9782	0.25	0.08	0.24	0.01	0.00	-0.01
IPM3C18	-366.5134	-107.8993	99.9779		0.26	-0.14			
MQA3C18	-366.7905	-108.1117	99.9782	0.00	-0.03	0.22			
MQA3C18A	-367.1434	-108.3824	99.9782	0.10	-0.19	0.23			
IPM3C19	-367.8401	-108.9172	99.9776		-0.30	-0.38			
MQA3C19	-368.1185	-109.1313	99.9782	0.36	-0.05	0.23	pitch		
MQA3C20	-369.2519	-110.0015	99.9787	-0.12	-0.08	0.17	pitch		
IBC3C20	-369.6784	-110.3290	99.9794		-0.04	0.18	pitch		
IUN3C20	-369.8984	-110.4972	99.9804		-0.58	0.88	pitch		
IBC3C20A	-370.1693	-110.7051	99.9798		-0.67	-0.17	pitch		
IPM3C20	-370.3291	-110.8283	99.9802		-0.23	0.05	pitch		
MQA3C20A	-370.6331	-111.0622	99.9808	0.10	0.07	0.16	pitch		
BPMBOX	-372.5025	-112.4968	99.9830		-0.41	-0.41	0.11	0.00	0.00
IPM3C20A	-374.3004	-113.8770	99.9858		-0.59	-0.37	pitch		

The polarimeter collimator was surveyed prior to the equipment installation for this experiment with the intention of surveying it after the new equipment was installed to check for movements. The differences between epochs is shown in dz,dx,dy. C03M01 (1) is the 1<sup>st</sup> survey with the (2) being the 2<sup>nd</sup> survey.

component	z (m)	x (m)	y (m)	dz (mm)	dx (mm)	dy (mm)
CO3M01 (1)	-358.52316	-101.76359	99.97795			
CO3M01 (2)	-358.52314	-101.76352	99.97804	0.06	0.04	-0.09