



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** T. Maruta, N. Nakamura

**DATE:** 10 Nov 2009

**FROM:** J. Dahlberg

**Checked:** sh

**# :** C1248

**DETAILS:**

Data: Step2b\HallC\HES\_HKS\091102b, 091104a

Below are the results of the HKS/HES target survey carried out on Nov 04, 2009. For the first set of data, the coordinate system (in millimeters), is centered on the ideal target location 10 millimeters downstream from the ideal face of the splitter magnet and rotated 17.5 degrees counter clockwise from incoming beam about the vertical axis. A +X is to the left, a +Z is downstream, and a +Y is up. Note that this survey is based on the ideal target position relative to the beam line. The second set of data is based on the splitter magnet shifted 10 millimeters downstream from the upstream face and rotated 17.5°. This set of data is consistent with the target calibration data prior to running beam. For comparison, the splitter as-found coordinates are shown relative to incoming beam (not shifted 10mm or rotated 17.5°).

LOCATION	Z	X	Y	YAW	PITCH	ROLL
H20 frame	-0.08	0.02	-1.23	-2.20	0.31	
1 frame	-0.44			0.73	-0.51	
1 target foil	0.94	-0.8(approx)	-1.3(approx)			
2 frame	-0.72			0.97	-0.57	
2 target foil	0.91	-0.5(approx)	-1.4(approx)			
3 frame	-4.06			0.49	-0.52	
4 frame	-4.22			0.71	-0.20	
5 frame	-4.46			0.64	-0.44	
6C frame	-1.45			0.22	-0.59	
6C target foil	0.01	-0.9(approx)	-1.8(approx)			
Splitter	0.87	0.22	-0.97	-0.034	-0.040	0.012

LOCATION	Z	X	Y	YAW	PITCH
H20 frame	-1.25	-0.04	-0.26	-2.17	0.34
1 frame	-1.25			0.76	-0.48
1 target foil	0.13	-0.9(approx)	-0.3(approx)		
2 frame	-1.54			1.00	-0.54
2 target foil	0.10	-0.6(approx)	-0.4(approx)		
3 frame	-4.88			0.52	-0.49
4 frame	-5.02			0.75	-0.17
5 frame	-5.27			0.68	-0.41
6C frame	-2.26			0.26	-0.56
6C target foil	-0.80	-1.0(approx)	-0.8(approx)		