



Jefferson Lab Alignment Group

Data Transmittal

TO: C. Dutta, J.P. Chen, J. LeRose

DATE: 19 Aug 2008

FROM: J. Dahlberg

Checked:

: A1180

DETAILS:

DATA: Inspection\HallA\He3compass\080812a,080813a,080814a,080815c

Below are the results of the Hall A He3 coil field mapping survey performed during the week of Aug 11, 2008. A gravity based coordinate system is centered on the ideal Hall A target position with a +X to the beam left, a +Z downstream, and a +Y up. The horizontal compass coordinates are to the top of the iron compass rod. Values are in millimeters and degrees.

12 Aug: Horizontal compass measurements at 0 degrees during initial field adjustments.

LOCATION	Z	X	Y	YAW
US2	-227.76	-14.34	-0.95	
DS2	228.33	14.32	-0.31	
CL2	0.29	-0.01	-0.63	+3.596
DS3	228.54	10.38	-0.36	
US3	-227.97	-10.39	-0.89	
CL3	0.29	0.00	-0.63	+2.606
US4	-228.15	-4.55	-0.80	
DS4	228.73	4.48	-0.45	
CL4	0.29	-0.04	-0.63	+1.132
DS5	228.77	-2.14	-0.53	
US5	-228.18	2.17	-0.72	
CL5	0.30	0.01	-0.63	-0.540
US6	-228.18	-1.31	-0.74	
DS6	228.78	1.36	-0.50	
CL6	0.30	0.02	-0.62	+0.335

Horizontal compass measurements at 0 degrees with Big Bite field tests.

LOCATION	Z	X	Y	YAW
DS7_BB on	228.24	-15.90	-0.56	
US7_BB on	-227.63	15.93	-0.63	
CL7	0.31	0.02	-0.59	-3.994
US8_BB off	-228.18	-1.25	-0.78	
DS8_BB off	228.78	1.20	-0.45	
CL8	0.30	-0.02	-0.61	+0.307
DS9_BB at 680	228.42	-12.98	-0.53	
US9_BB at 680	-227.81	13.01	-0.66	
CL9	0.31	0.02	-0.60	-3.260

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12 Aug: Horizontal compass measurements at 90 degrees with Big Bite field tests.

LOCATION	Z	X	Y	YAW
BL1	-2.12	228.90	0.38	
BR1	3.31	-227.96	-1.67	
CL1	0.60	0.47	-0.65	+90.681
BR2_BB	6.22	-227.91	-1.80	
BL2_BB	-4.92	228.84	0.52	
CL2	0.65	0.46	-0.64	+91.397
BL3_BB at 680	-2.79	228.87	0.51	
BR3_BB at 680	4.00	-227.96	-1.78	
CL3	0.61	0.46	-0.64	+90.852
BR4	3.40	-227.96	-1.71	
BL4	-2.14	228.88	0.43	
CL4	0.63	0.46	-0.64	+90.695
BL5_FChange	-6.09	228.81	0.45	
BR5_FChange	7.35	-227.88	-1.72	
CL5	0.63	0.47	-0.64	+91.686
BL6_FChange 110	-84.23	212.70	0.05	
BR6_FChange 110	85.29	-211.60	-1.31	
CL6	0.53	0.55	-0.63	+111.778
BR7_FChange 60	-78.60	-213.84	-1.17	
BL7_FChange 60	80.19	214.51	-0.05	
CL7	0.80	0.34	-0.61	+69.660

13 Aug: Vertical compass measurements.

LOCATION	Z	X	Y	PITCH	YAW
LASER1	-251.53	2250.56	20.24	+0.422	+96.363
COMPASS1	-0.61	0.52	3.55		
LASER2	-256.18	2250.57	16.31	+0.321	+96.499
COMPASS2	0.23	-0.22	3.62		

14 Aug: Vertical compass measurements.

LOCATION	Z	X	Y	PITCH	YAW
LASER1	1848.59	2005.97	31.29	+0.574	+47.335
COMPASS1	-0.23	-0.10	3.97		
LASER2	1853.34	1996.58	46.22	+0.871	+44.150
COMPASS2	-203.76	-0.34	2.62		

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15 Aug AM: Vertical compass measurements.

LOCATION	Z	X	Y	PITCH	YAW
LASER1	1967.66	1893.52	-55.29	-1.314	+47.112
COMPASS1	207.09	-1.85	4.02		
LASER2	1732.72	2122.58	-49.78	-1.077	+47.622
COMPASS2	-203.73	0.28	4.22		
LASER3	1849.54	2008.26	-51.55	-1.187	+47.404
COMPASS3	1.98	-1.26	5.00		

15 Aug PM: Vertical compass measurements.

LOCATION	Z	X	Y	PITCH	YAW
LASER4	-94.59	2455.14	-47.49	-1.225	+92.257
COMPASS4	2.20	-0.84	5.07		
LASER5	-309.15	2450.07	-48.77	-1.245	+92.481
COMPASS5	-202.89	-2.19	4.57		