Jefferson Lab Alignment Group

Data Transmittal

TO: B. Sawatzky, D. Gaskell		**DATE:** 30 Nov 2017
FROM: Chris Gould	**Checked:**	**# :** C1832

DETAILS:

M:\align\DATA\Step2B\HALLC\HMS_HUT\171129A

Below are the results of the HMS Wire Chamber survey carried out on 11/29/17. The ideal location for the centerline of the detectors according to drawing # 67172-00001 is 0.875" (22.23mm) above the beamline. The ideal distance between the Wire Chambers is 32.03 inches (813.56mm). Also included is the location of the downstream Exit Window flange and the upstream Cerenkov flange. Coordinates are given both in a beam following system and relative to the target. A +X is to the beam left, a +Y is above beam and a +Z is downstream. Angles are in degrees.

	RELATIVE TO THE TARGET						
	IDEAL(M)				FOUND(M)		
	X	Y	Z		X	Y	Z
WIRE 1	0.00000	3.57094	21.82807		-0.00012	3.57092	21.82788
WIRE 2	0.00000	3.91476	22.56540		0.00007	3.91490	22.56531
	BFS (MM)				ROTATIONS °		
	X	Y	Z		PITCH	YAW	ROLL
WIRE 1	-0.10	22.27	-0.13		-0.0004	0.0046	-0.0034
WIRE 2	0.09	22.32	0.00		-0.0069	-0.0079	0.0026
Exit Window Flange	9.4	-32.4					
Cerenkov Flange	11.6	28.8					
DISTANCE BETWEEN CHAMBERS			813.70mm	32.035in			