



# Jefferson Lab Alignment Group

## Data Transmittal

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**DATE:** 08/04/2017

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**Checked:** SEH

**# :** C1807r

**DETAILS:**

data: aalign\hms\H20170803

Below are the results from the survey of HMS spectrometer August 3<sup>rd</sup>, 2017. The HMS fiducial points were observed from the beam left side of the spectrometer.

The horizontal pointing value shows how much the central axis of the spectrometer misses the ideal target. This value is perpendicular to the spectrometer axis, not along the beam line. For the vertical pointing, a positive value indicates that the spectrometer is pointing above the target.

===== RESULTS ===== H20170803





The central ray of the spectrometer is at 40.01308 degrees  
The central ray is missing the defined target center by 3.29 [mm] Upstream  
and -0.94 mm lower than the target

9 Par A posteriori value : 0.57 (mm)

Sketch for the HMS survey is shown on the next page.




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H2.0170803

-  Beam-Spec Intercept Point
-  Beam-Spec Perpendicular Point
-  Spectrometer Projected Target Point
-  Straight-Ahead Target Point [ideal]

angles: delta : 40.01308 [degrees]  
beam : -142.48325 [degrees]  
spectrometer: 177.50367 [degrees]

perpendicular distance : 3.291 [mm]  
target - intersect dis : 5.119 [mm]  
found target - intersect dis : 4.654 [mm]  
Spectrometer is -0.94 lower than ideal target [m]

-  Spectrometer Line
-  Straight-Ahead Beam
-  Perpendicular line

