#  <br> Jefferson Lab Alignment Group Data Transmittal 

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DETAILS:
Data: Step2B\HALLD\COMPCAL\181211A
Below are the results from the Hall D COMPCAL survey carried out on December 10, 2018. The location of COMPCAL was taken when the hall opened up (as-found); when the COMPCAL was placed into position (as-set); a final position survey (final); and the COMPCAL was moved/repositioned and surveyed (repeat).

The ideal and found coordinates are shown in meters relative to the CEBAF coordinate system. The beam following coordinates (bfs - millimeters) are also shown and are described as follows: Positive x is to the beam left from ideal beam looking downstream; negative $y$ is the amount lower than beamline; negative $z$ is amount upstream from ideal target. Positive yaw is the counter clockwise rotation about the Y axis; negative pitch is the clockwise rotation about the X axis (physics standard); positive roll is the clockwise rotation about the Z axis.

|  | Cebaf Coordinate Location [meters] |  |  | Beam Following [millimeters] |  |  | Angular Position [ degrees ] |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position | X [m] | Y [m] | Z [m] | dX [mm] | dY [mm] | dZ [mm] | Yaw ${ }^{0}$ | Pitch ${ }^{\text {O }}$ | Roll ${ }^{\text {a }}$ |
| Ideal | 80.60000 | 104.70000 | 410.93959 | - | - | - | 0.00000 | 0.00000 | 0.00000 |
| As-Found | 80.59967 | 104.69975 | 410.93475 | -0.33 | -0.25 | -4.84 | 0.05586 | -0.01690 | -0.07305 |
| As-Set | 80.59891 | 104.69957 | 410.93413 | -1.09 | -0.43 | -5.46 | 0.02951 | 0.02435 | 0.00315 |
| Final | 80.60001 | 104.70002 | 410.93455 | 0.01 | 0.02 | -5.04 | 0.03982 | 0.00888 | -0.02235 |
| Repeat | 80.60000 | 104.70003 | 410.93459 | 0.00 | 0.03 | -5.00 | 0.03839 | 0.01031 | -0.02120 |

