# - 3e, Jefferson Lab Alignment Group Data Transmittal 

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DATE: 11/30/2018
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\# : B1895

## DETAILS:

The Hall B target was surveyed November $26^{\text {th }}$ and $27^{\text {th }}, 2018$. The first day's survey ( $26^{\text {th }}$ ) was to establish where the target was currently and the second day ( $\left.27^{\text {th }}\right)$ was to put the target back in the same position. The rail stops were moved in-between surveys. The target center location for both days and also from memo B1882 (Aug/2018) is shown below.

| Survey Date | As-Found BFS [mm] |  |  | As-Found Angular [degrees] |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Target | $\mathbf{x [ m m}]$ | $\mathbf{y [ m m}$ | $\mathbf{z}[\mathrm{mm}]$ | yaw[deg] | pitch[deg] | roll[deg] |
| $11 / 27 / 2018$ | -2.00 | 0.06 | -29.76 | -0.0642 | -0.0034 | 0.0321 |
| $11 / 26 / 2018$ | -0.97 | -0.12 | -29.81 | -0.0481 | -0.0049 | 0.0278 |
| $08 / 10 / 2018$ | 1.20 | 1.07 | -29.96 | -0.0086 | 0.0066 | 0.0169 |

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; positive roll is the clockwise rotation about the Z axis.

The ideal CEBAF coordinate for the target is shown below for reference.

| Component | Cebaf Ideal [meters] |  |  |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{x [ m ]}$ | $\mathbf{y}[\mathrm{m}]$ | $\mathbf{z}[\mathrm{m}]$ |
| Target | -80.60000 | 103.35526 | -398.82153 |

