| Jefferson Lab Alignment Group Data Transmittal |  |  |  |  |  |  |
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| TO: D. Higinbotham, J. LeRose |  |  |  |  | DATE: 17 Feb 2011 |  |
| FROM: J. Dahlber |  |  |  | Checked: ${ }^{\text {\# : A1378 }}$ |  |  |
| Below are the results from the SRC Big Bite magnet and detector survey carried out on Feb 04, 2011. A right handed coordinate system was established based on the ideal target center and rotated 64.4 degrees clockwise from straight ahead beam. $A+X$ is to the beam left, $a+Z$ is downstream, and $a+Y$ is up. A +yaw angle is counter clockwise looking from above and a +pitch angle is ccw looking from the beam right side. Values are in millimeters and degrees. The detector location is to the upstream set of detectors. The $Z$ coordinate is to a bisected plane from the upstream and downstream faces, the $Y$ is to the vertical center, and the $X$ is to the center of the support frame. Also included are the fiducial points surveyed for the magnet and detector stack based on the ideal target center and straight ahead beam. |  |  |  |  |  |  |
| LOCATION | Z | X | Y | YAW | PITCH | ROLL |
| MAGNET CL | 1448.50 | 2.34 | -1.01 | -0.241 | -0.346 | 0.095 |
| DETECTOR | 2458.7 | 0.9 | 419.9 | 0.429 | 25.506 | -0.059 |
| FIDUCIALS | Z | X | Y |  |  |  |
| BBMAG1 | -123.98 | -1696.35 | 919. |  |  |  |
| BBMAG3 | 185.36 | -2039.97 | 311. |  |  |  |
| BBMAG4 | 97.53 | -2107.03 | -291. |  |  |  |
| BBMAG5 | -126.20 | -1684.38 | -892. |  |  |  |
| BBMAG6 | 108.81 | -2180.16 | -896. |  |  |  |
| BBDETA | 1243.72 | -3903.28 | -178. |  |  |  |
| BBDETB | 2280.38 | -3400.21 | -181. |  |  |  |
| BBDETC | 1802.89 | -3048.74 | 921. |  |  |  |
| BBDETD | 1262.53 | -3313.61 | 917. |  |  |  |
| BBDETE | 840.87 | -3072.04 | 1759. |  |  |  |
| BBDETF | 1876.06 | -2568.49 | 1757. |  |  |  |
| BBDETG | 1308.84 | -1954.63 | 1261. |  |  |  |
| BBDETH | 1612.23 | -2570.99 | -178. |  |  |  |
| BBDETJ | 1006.06 | -2869.22 | -184. |  |  |  |
| BBDETK | 703.67 | -2248.80 | 1263. |  |  |  |

