# Jefferson Lab Alignment Group <br> DATA TRANSMITTAL 

TO: J. P. Chen, J. LeRose, Kathy McCormick DATE: 16 July 2001
FROM: Jim Dahlberg
Checked: \# : A682
DETAILS:
Below are the results of the Hall A compass and He 3 target ladder alignment performed on July $5^{\text {th }}$ and $6^{\text {th }}$, 2001. The numbers shown for the target ladder represent the amount the survey target would have to move (in mm ) to be in the ideal location. A negative $X$ is a movement to the beam right, positive $Y$ is up, and positive $Z$ is downstream. The compass angle deltas are offsets from the magnet field direction which is based on the incoming beam line. They are listed sequentially as surveyed in the field. CW is a rotation clockwise looking from above.


## COMPASS MEASUREMENTS

FIELD DIR. (DEG.) GRADIENT COILS COMPASS ANGLE DELTA (DEG.)

|  | T | L |  |
| :--- | :--- | :--- | :--- |
| 0 |  |  |  |
| 0 | 0 | 0 | 0.0333 cw |
| 0 | 5 | -2 a | 0.0020 cw |
| 0 | 6 | 0 a | 0.0173 cw |
| 180 | 0 | -7 a | 0.0416 cw |
| 180 | 0 | -7 | 0.4308 cw |
| 180 | 6 | 0 | 0.4503 cw |
| 180 | 6 | 0 | 0.4352 cw |
| 180 | 5 | -2 | 0.4562 cw |
| 180 | 0 | 0 | 0.4315 cw |
| 180 | 0 | 0 | 0.2944 cw |
| 180 | 0 | 0 | 0.2734 cw |
| 180 | 0 | 0 | 0.3061 cw |
| 180 | 0 | 0 | 0.3073 cw |
| 180 | 0 | 0 | 0.3320 cw |
| 180 | 0 | 0 | 0.5141 ccw |
| 180 | 0 | 0 | 0.3469 ccw |
| 270 | 0 | 0 | 0.0283 cw |
| 270 | 0 | 0 | 0.2509 cw |
| 270 | 5 | -2 | 0.2556 cw |
| 270 | 6 | 0 | 0.2598 cw |
| 90 | 0 | -7 | 0.2464 cw |
| 90 | 0 | -7 | 0.2536 cw |
| 90 | 6 | 0 | 0.2583 cw |
| 90 | 5 | -2 | 0.2451 cw |
| 270 | 0 | 0 | 0.2582 cw |
| 270 | 0 | 0 | 0.5675 cw |
| 0 | 0 | 0 | 0.1779 cw |
| 0 | 0 | 0 | 0.3013 cw |
|  | 0 | 0 | 0.2340 cw |

