

# F/A-18 MAD/COMPASS CALIBRATION WORKSHEET

VMFA-\_\_\_\_\_ ELECTRIC SHOP

|                  |          |                     |               |
|------------------|----------|---------------------|---------------|
| BUNO -           | MODEX -  | DATE SWUNG - / /    | JULIAN DATE - |
| LOCATION SWUNG - |          | LOCATION CAL DATE - |               |
| MAF MCN -        | REASON - | BY -                |               |

| TASK   | CDI INITIALS |
|--|--------------|
| 1. Record and verify wind value from tower (x-7001), per 730-300. Wind Value: _____ kts.<br>(Reserve Compass Rose at x-7301.)  |              |
| 2. Ensure proper ADC (Air Data Computer) is installed for aircraft effectivity, per 560-300.   |              |
| 3. In addition to regular ATAF's, ATAF just prior to line (Squadron area) departure.   |              |
| 4. In addition to regular ATAF's, ATAF upon immediate arrival at swing area .  |              |
| 5. Record and verify heading 2 (North Line) Compass calculations on below chart, per 730-300.  |              |
| 6. Record and verify MAD and Compass offset (15° increments) on below chart, ensure values are within tolerance for aircraft effectivity, per 730-300.   |              |
| 7. In addition to regular ATAF's, ATAF just prior to swing area departure.   |              |
| 8. In addition to regular ATAF's, ATAF upon immediate arrival at line (Squadron area).   |              |
| 9. Transfer Compass data (to front of cards) and MAD compensation values (to rear of cards) to compass cards (NSN - 6055-00-584-4227) and insert in aircraft (remove all previous cards), per 730-300.   |              |
| 10. Ensure VIDS-MAF sign-off includes: (a) Method of calibration used, (b) Reason for calibration, (c) Date and location performed, (d) MAD compensation values, (e) Types of items calibrated (MAD or STBY). If a full swing (MAD/STBY) was NOT completed, ensure to note it clearly. |              |
| 11. Record Swing date and MAD compensator values on back cover of shop aircraft logbook and below chart.   |              |
| 12. Forward this Worksheet to Maintenance Admin for storage in Aircraft Logbook Vol I (back cover envelope). Ensure all previous Compass Worksheets and Cards are removed from the logbook.  |              |

| HEADING 1 (SOUTH LINE) |  | HEADING 2 (NORTH LINE) |               |
|------------------------|--|------------------------|---------------|
| NOSE OFFSET            |  | NOSE OFFSET            |               |
| TAIL OFFSET            |  | TAIL OFFSET            | -             |
|                        |  | SUBTRACT ABOVE         | =             |
|                        |  | MULTIPLY BY            | x     -0.1293 |
|                        |  | ANGULAR ERROR          | =             |

| HDG | MAD ERROR | FRONT COMP | BACK COMP | HDG | MAD ERROR | FRONT COMP | BACK COMP |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 000 |           |            |           | 180 |           |            |           |
| 015 |           |            |           | 195 |           |            |           |
| 030 |           |            |           | 210 |           |            |           |
| 045 |           |            |           | 225 |           |            |           |
| 060 |           |            |           | 240 |           |            |           |
| 075 |           |            |           | 255 |           |            |           |
| 090 |           |            |           | 270 |           |            |           |
| 105 |           |            |           | 285 |           |            |           |
| 120 |           |            |           | 300 |           |            |           |
| 135 |           |            |           | 315 |           |            |           |
| 150 |           |            |           | 330 |           |            |           |
| 165 |           |            |           | 345 |           |            |           |

| MAD COMPENSATION |
|------------------|
| A =              |
| B =              |
| C =              |
| D =              |
| E =              |