

A116-50

STANDARD MANUFACTURING PROCEDURE -COMPASS SWING

1. COMPASS ADJUSTMENTS IS DONE DURING THE GROUND TEST.
2. THE COMPASS ADJUSTMENT SITE WILL BE AN AREA WHICH IS SUFFICIENTLY AWAY FROM BUILDINGS OR ANY OTHER SOURCE OF MAGNETISM.
3. COMPASS READINGS WILL BE MADE WITH ENGINE RUNNING AT IDLE, ALL RADIOS AND ALL NORMAL ELECTRICAL EQUIPMENT ON, CANOPY CLOSED.
4. IT IS IMPORTANT IN THE FOLLOWING 180 DEGREE TURN BE DONE AS PRECISELY AS POSSIBLE. IF A GYRO IS INSTALLED, USE IT TO REFERENCE 180<sup>0</sup> TURN. IF NOT, MARK LEFT AND RIGHT WING SHADOWS WITH STANDARDS PLACED ON THE GROUND.
5. GO NORTH (OR SOUTH) BY THE MAGNETIC COMPASS OR TO A KNOWN CONFIRMED DIRECTION.
6. ZERO THE GYRO (UNSLAVED) OR PLACE STANDARDS ON THE GROUND.
7. DO A 180 DEGREE TURN BY THE GYRO OR SHADOW.
8. HALVE THE COMPASS ERROR USING THE N-S ADJUSTMENT SCREW (NON-MAGNETIC SCREWDRIVER).
9. REPEAT STEP 1 THROUGH 4 UNTIL THERE IS NO ERROR.
10. GO EAST OR WEST (90<sup>0</sup> FROM ORIGINAL DIRECTION ITEM 5) BY THE COMPASS.
11. ZERO THE GYRO - OR USE STANDARDS.
12. DO A 180 DEGREE TURN BY THE GYRO OR STANDARDS.
13. HALVE THE ERROR USING THE E-W ADJUSTMENT SCREW.
14. REPEAT STEPS 6-9 UNTIL THERE IS NO ERROR.

NOW, GO NORTH BY THE COMPASS AND ZERO THE GYRO IF NECESSARY. MAKE TURNS OF 15 DEGREES BY THE GYRO AND NOTE ANY ERRORS ON THE MAGNETIC COMPASS. THESE ERRORS SHOULD BE RECORDED FOR THE COMPASS CORRECTION CARD AND RECORD ADJUSTMENT IN LOGS.

THE COMPASS IS NOW ADJUSTED AS ACCURATELY AS IT CAN BE WITHOUT CHANGING EXTERNAL FACTORS.

WORK DONE BY: \_\_\_\_\_

DATE: \_\_\_\_\_

INSPECTED BY: \_\_\_\_\_

DATE: \_\_\_\_\_