BY ORDER OF THE SECRETARY OF THE AIR FORCE

AFI 11-2C-130V3 CL-11
1 APRIL 2000

Flying Operations

FLIGHT OPERATIONS

NAVIGATOR GRID CHECKLIST

This checklist establishes procedures for the operation of C-130 aircraft employed by Mobility Air Forces (MAF) to accomplish their worldwide missions.

This checklist complements AFI 11-2C-130V3, *C-130 Operations Procedures*, and is printed on standard 8 ½" x 11" bond paper then trimmed to a unique size 4 ½ " x 6 ½" that will fit the standard plastic C-130 aircrew checklist binders. Units may request copies of this checklist printed on a water proof-based media (in the size outlined) from the OPR. This product reduces weight and eliminates the need for plastic inserts. Limit water proof copies to aircrew only for use in-flight and training purposes.

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OPR: HQ AMC/DOV (Maj Swift)
Certified by: HQ USAF/XOO (Maj Gen Michael S. Kudlacz)
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GRID ENTRY CHECKLIST

1. Time /DR Position for Grid Entry - Determined
2. IGH - Computed/Compared with Flight Planned GH
3. MC Form 1400 Entries - Completed As Required
4. Precomp for Heading Shot - Completed
5. Notify pilot of Grid Entry **(Ensure proper crew coordination when slewing compasses)**
6. SCNS IDCU
   A. NAV Menu Key - PRESS
   B INIT Key - PRESS
   C. GRID Key - PRESS
   D. Enter Convergence Factor Under CONV FACT
7. Number 1 & 2 Compass Systems - Set to DG/Latitude Selected/GH Set
8. Heading Check - Obtained

NOTE

On aircraft with reliable INS, if the INS grid heading is within 2 degrees of the initial celestial-derived grid heading, the INS may be used to determine gyro precession.

9. SCNS IDCU - Enter Best Known Grid Heading Under UPDATE HDG Key
10. Number 1 & 2 Compass Systems - Reset GH (As Required)

11. SCNS IDCU - Select Heading Outputs

    A. RCL Key - PRESS. INIT 1-1 Page is Displayed

    B. FLT PRMTR Key - PRESS. FLT PRMTR 1-3 Page

    C. Press Down Arrow Once to get to FLT PRMTR 3-3 Page

    D. Toggle IDCU HDG to G (Grid)

    E. Toggle ISTMT HDG to G (Grid)

12. ACC Form 400 Entries Complete

13. SCNS Compass Heading Updates

    A. NAV Menu Key - PRESS

    B. INIT Key - PRESS

    C. GRID Key - PRESS

    D. UPDATE HDG Key - Enter Grid Heading

NOTE

The time difference between successive heading update entries is used to predict DG drift rates and compute the current false latitude. Mid-lat is computed based on an update interval of 30 minutes.

E. Adjust Applicable Compass System's Synchronizing Knob to the Displayed Grid Heading (UPDATE HDG) **(Ensure proper crew coordination when slewing compasses)**

F. Adjust applicable compass system's latitude knob the appropriate false latitude.

NOTE

Allow false latitude outputs to settle for at least 5-minutes before additional adjustments. Allow 30-minutes before performing the next compass heading update.

GRID EXIT CHECKLIST

1. Determine DR position and time for grid exit
2. Make log entries and compare computed mag heading to flight plan mag heading
3. Precomp for Heading Shot - Completed
4. Pilot notified of grid exit **(Ensure proper crew coordination when slewing compasses)**
5. Number 2 Compass System - Set Mag Heading - Set to MAG local latitude selected

NOTE

Check heading to ensure not 180 degrees out, with flight plan and standby compass. Annunciator needle should be centered.

6. Number 1 Compass System - Set Mag Heading - Set to MAG local latitude selected
7. SCNS IDCU - Select Heading Outputs
   A. NAV Menu key - PRESS
   B. INIT Key - PRESS
   C. FLT PRMTR Key - PRESS. FLT PRMTR 1-3 Page
   D. Press Down Arrow Once to FLT PRMTR 3-3 Page
   E. Toggle IDCU HDG to M (Mag) or T (True), As Desired

NOTE

Ensure pilots select M or T on their IDCU's as desired.

   F. Toggle INSTM HDG to M (Mag)
8. Dev Check - Complete (As Required)

9. SCNS IDCU - Enter Compass Deviations

   A. NAV Menu Key - PRESS

   B. INIT Key - PRESS

   C. FLT PRMTR Key - PRESS. FLT PRMTR 1-3 Page

   D. Press Up Arrow Once to get to FLT PRMTR 2-3 Page

   E. Enter COMPASS 1/2 DEV (As Required)

10. ACC Form 400 Entries - Complete

HEADING REFERENCE CHANGEOVER CHECKLIST

(The Heading Reference Changeover Checklist is used when converting from one convergence factor to another after grid entry. Accomplish steps 1, 3, and 4 when crossing the 180th meridian.)

1. Notify Pilot of Heading Reference Changeover
2. SCNS IDCU

   A. NAV Menu Key - PRESS

   B. INIT Key - PRESS

   C. GRID Key - PRESS

   D. Enter Convergence Factor Under CONV FACT

3. Compare Grid Courses and Apply Difference to the Gyro Readings
4. Number 1 & 2 Compass Systems - Check Lat/Set New GH (As Required) **(Ensure proper crew coordination when slewing compasses)**
5. Heading Check - Completed (As Required)
6. SCNS IDCU - Enter best known Grid Heading under UPDATE HDG Key

POLAR GRID NAVIGATION CHECKLIST

1. Before Takeoff

A. SCNS IDCU

(1) NAV Menu Key - PRESS

(2) INIT Key - PRESS

(3) INS ALIGN Key - PRESS

(4) SCNS IDCU-Enter True Heading under COMMAND HDG

NOTE

Required if aircraft is >85 degrees, SCNS BATH alignment is required.

(5) COMMAND MODE-PRESS. INS Alignment is initiated

NOTE

If aircraft is >85 degrees, INS alignment will not progress beyond DEGRADED NAV.

(6) SCNS IDCU - Select Heading Outputs

(a) RCL Key - PRESS. INIT 1-1 Page is Displayed

(b) FLT PRMTR Key--PRESS. FLT PRMTR 1-3 Page

(c) Press Down Arrow Once to FLT PRMTR 3-3 Page

(d) Toggle IDCU HDG to G (Grid)

(e) Toggle ISTMT HDG to G (Grid)

B. Number 1 & 2 Compass-Set DG/Latitude selected/GH Set

2. Line Up. Compasses - Runway Polar Grid Heading

3. Descent

A. Heading Check - Complete (As Required)

B. Number 1 & 2 Compass Systems - SET (As Required)

(Ensure crew coordination when slewing compasses)

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