*TM 55-1510-219-CL

TECHNICAL MANUAL

Operator's and Crewmember's Checklist

ARMY MODEL

RC-12D

AIRCRAFT

NSN 1510-01-087-9129 (EIC: SRC)

Pilot's Checklist

This copy is a reprint which includes current pages from Change 4.

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***TM 55-1510-219-CL, dated 31 May 1991 supersedes TM 55-1510-219-CL, dated 25 May 1985, including all changes.**

HEADQUARTERS,
DEPARTMENT OF THE ARMY

31 May 1991

CHANGE 5

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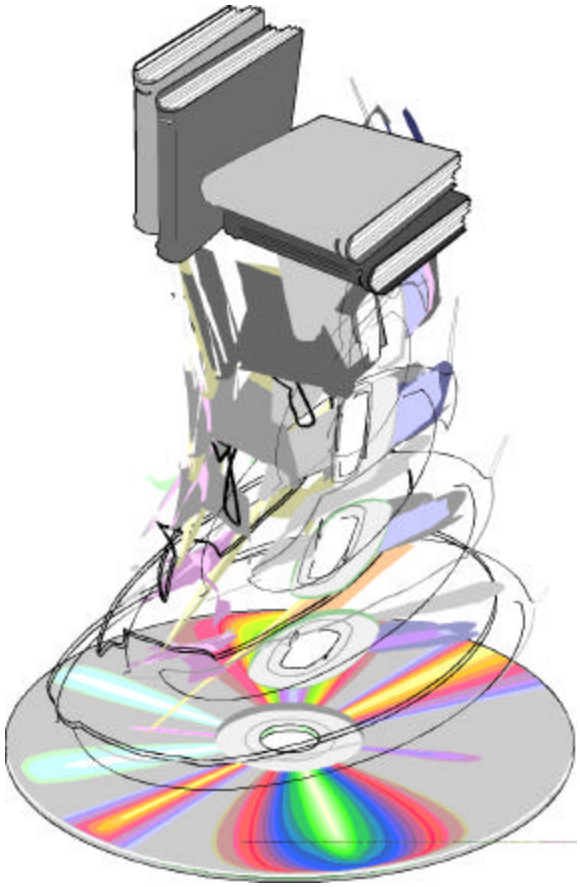

URGENT

TM 55–1510–219–CL
C 4

CHANGE NO. 4

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 29 February 2000

TECHNICAL MANUAL
Operator's and Crewmember's Checklist
ARMY MODEL
RC–12D
AIRCRAFT

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TM 55–1510–219–CL
C 3

CHANGE NO. 3

HEADQUARTERS
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TECHNICAL MANUAL
Operator's and Crewmember's Checklist
ARMY MODEL
RC–12D
AIRCRAFT

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TM 55-1510-219-CL
C 2

CHANGE NO. 2

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DEPARTMENT OF THE ARMY
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TECHNICAL MANUAL

Operator's and Crewmember's Checklist

ARMY MODEL RC-12D AIRCRAFT

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TM 55-1510-219-CL
C 1

CHANGE
NO. 1

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DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 7 August 1992

TECHNICAL MANUAL

Operator's and Crewmember's Checklist

ARMY MODEL
RC-12D AIRCRAFT
NSN 1510-01-087-9129 (EIC: SRC)

Pilot's Checklist

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GENERAL INFORMATION AND SCOPE

SCOPE. This checklist contains the operator' s and crewmembers checks to be accomplished during normal and emergency operations.

GENERAL INFORMATION. The checklist consists of three parts: normal procedures, emergency procedures, and performance data. Normal procedures consist of the procedures required for normal flight and those required for " Before Landing" . The normal procedures portion will be subdivided to include the before landing checks of Chapter 8 of the Operator' s manual. Emergency procedures are subdivided into 7 classifications as follows: engine, propeller. (PROP.), fire, fuel, electrical (ELECT.), landing and ditching (LDG/DTCH) and flight controls (FLT CONT.). Performance data consists of performance checks.

NOTE

This checklist does not replace the amplified version of the procedures in the operator' s manual (TM 55-1510-219-10), but is a condensed version of each procedure.

NORMAL PROCEDURES PAGES. The contents of the normal procedures of this manual are a condensation of the amplified checklist appearing in the normal procedures or crew duties portion of the operator' s manual.

EMERGENCY PROCEDURES PAGES. The requirements in this section of the condensed checklist (CL) are identical to those for the normal procedures, except that the information is drawn from the amplified procedures in the emergency procedures portion of the operator' s manual. Immediate action items are underlined for your reference and shall be committed to memory.

Symbols Preceding Numbered Steps

* - Indicates the performance of these steps is mandatory for all " Thru Flights"

N - Indicates performance of step is mandatory for " Night Flights"

***** - Indicates a detailed procedure for this step is included in the Performance Checks section, located at the back of the checklist

I - Indicates mandatory check for " Instrument Flight"

0 - Indicates if installed

Immediate action emergency items are underlined

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2, located in the back of the applicable Aircraft Operator' s Manual, directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898-5230. You may also send in your comments electronically to our e-mail address at <Is-lp@redstone.army.mil> or by fax at (205) 842-6546 or DSN 788-6546. Instructions for sending in an electronic 2028 may be found at the back of the appropriate Aircraft Operator' s Manual. A reply will be furnished directly to you.

NORMAL PROCEDURES

BEFORE EXTERIOR CHECK

1. Publications - Check DA Forms 2408-12,-13,-14, -18, DD Form 365-4, locally required forms and publications, and availability of operator's manual (-10) and checklist (-CL).

*2. Oxygen system - Check as required.

3. Flight controls - Unlock and check.

4. Parking brake - Set.

5. Manual trim - Zero.

6. Gear- DN.

7. Ice vanes - IN.

8. Overhead panel switches and circuit breakers -Set.

9. AC and DC GPU's - As required.

10. External power advisory lights - As required.

11. Keylock switch -ON.

*12. Fuel pumps and crossfeed operation - Check.

13. DC power - Check (24 VDC minimum for battery, 28 maximum for GPU starts).

14. Lighting systems - Check.

*15. Anti-ice systems - Check.

*16. Annunciator panels - Test as required.

*17. Fire protection system - Check.

*18. INS alignment - As required.

*19. Electric elevator trim and autopilot/flight director operation - Check.

*20. Avionics - Check.
21. Flaps - Check.
22. Battery switch - As required.
23. Toilet - Check.
24. Emergency equipment - Check.
25. Mission equipment and circuit breakers - Check and set.
26. Parachutes - Check (as required).

FUEL SAMPLE

*1. Check collective fuel sample.

LEFT WING, AREA 1

1. General condition - Check.
2. Flaps - Check.
3. Fuel sump drains (3) - Check.
4. Controls and trim tab - Check.
5. Static wicks - Check.
6. Wing pod, navigation lights and antennas (2) -Check.
7. Recognition light - Check.
8. Outboard antenna set - Check.
*9. Main tank fuel and cap - Check.
10. Outboard wing fuel vent - Check.
11. Outboard deice boot - Check.
12. Stall warning vane - Check.
*13. Tiedown - Released.
14. Inboard dipole antenna set - Check.
15. Wing ice light - Check.

16. AC GPU access door - Secure.
17. Recessed and heated fuel vents Check.
18. Inverter inlet and exhaust louvers - Check.

LEFT MAIN LANDING GEAR

*1. Tires - Check.
2. Brake assembly - Check.
*3. Shock strut - Check.
4. Torque knee - Check.
5. Safety switch - Check.
6. Fire extinguisher pressure - Check.
7. Wheel well, doors, and linkage - Check.
8. Fuel sump drains (forward) - Check.

LEFT ENGINE AND PROPELLER

*1. Engine oil - Check.
2. Engine compartment - left side - Check.
*3. Left cowl locks - Locked.
4. Left exhaust stack - Check.
*5. Propeller blades and spinner - Check.
"6. Engine air Inlets and ice vane - Check.
7. Bypass door - Check.
*8. Right cowl locks - Locked.
9. Right exhaust stack - Check.
10. Engine compartment, right side - Check.

CENTER SECTION, LEFT SIDE

1. Heat exchanger inlet and outlet - Check.
2. Auxiliary tank fuel sump drain - Check.

3. Deice boot - Check.
*4. Auxiliary tank fuel gage and cap - Check.
5. Monopole antenna - Check.

FUSELAGE UNDERSIDE

*1. General condition - Check.
2. Antennas - Check.

NOSE SECTION, AREA 2

1. Free air temperature probe - Check.
2. Avionics door, left side - Check.
3. Air conditioner exhaust - Check.
4. Wide band data link antenna pod - Check.
5. Wheel well - Check.
6. Doors and linkage - Check.
7. Nose gear turning stop - Check.
*8. Tire - Check.
*9. Shock strut - Check.
10. Torque knee - Check.
11. Shimmy damper and linkage - Check.
12. Landing and taxi lights - Check.
13. Pitot tubes - Check.
14. Radome - Check.
15. Windshields and wipers - Check.
16. Air conditioner inlet - Check.
17. Avionics door, right side - Check.

RIGHT WING CENTER SECTION

1. Deice boot - Check.

2. Battery access panel - Secure.
3. Battery vents - Check.
*4. Auxiliary tank fuel and cap - Check.
5. Battery compartment drain - Check.
6. Battery ram air intake - Check.
7. INS temperature probe - Check.
8. Auxiliary tank fuel sump drain - Check.
9. Heat exchanger outlet and inlet - Check.
10. Monopole antenna - Check.

RIGHT ENGINE AND PROPELLER

*1. Engine oil - Check.
2. Engine compartment, left side - Check.
*3. Left cowl locks - Locked.
4. Left exhaust stack - Check.
*5. Propeller blades and spinner - Check.
*6. Engine air inlets and ice vane - Check.
7. Bypass door - Check.
*8. Right cowl locks - Locked.
9. Right exhaust stack - Check.
10. Engine compartment, right side - Check.

RIGHT MAIN LANDING GEAR

1. Fuel sump drains (forward) - Check.
*2. Tires - Check.
3. Brake assembly - Check.
*4. Shock strut - Check.
5. Torque knee - Check.
6. Safety switch - Check.

7. Fire extinguisher pressure - Check.
8. Wheel well, doors, and linkage - Check.

RIGHT WING, AREA 3

1. Recessed and heated fuel vents - Check.
2. Inverter inlet and exhaust louvers - Check.
3. GPU access door - Secured.
4. Inboard dipole antenna set - Check.
5. Wing ice light - Check.
6. Outboard deice boot - Check.

*7. Tiedown - Released.

*8. Main tank fuel and cap - Check.

9. Outboard wing fuel vent - Check.
10. Outboard antenna set - Check.
11. Recognition light - Check.
12. Wing pod, navigation lights and antennas (2) -Check.
13. Static wicks - Check.
14. Controls - Check.
15. Fuel sump drains (3) - Check.
16. Flaps - Check.
17. Chaff dispenser - Check.

*18. General condition - Check.

FUSELAGE, RIGHT SIDE, AREA 4

*1. General condition - Check.

2. Flare/Chaff dispenser - Check.
3. Emergency light - Check.
4. Beacon - Check.

5. Aft access door - Check.
6. Oxygen filler door - Check.
7. Static ports - Check.
8. ASE antennas (2) - Check.
9. Emergency locator transmitter - ARMED.
10. Emergency locator transmitter antenna - Check.

EMPENNAGE, AREA 5

1. Vertical stabilizer, rudder, and trim tab - Check.
2. Antennas - Check.
3. Deice boots - Check.
4. Horizontal stabilizer, and elevator - Check.
5. Elevator trim tab - Verify "0' (neutral) position.
6. Static wicks (16) - Check.
7. Position and beacon lights - Check.
8. Rotating boom dipole antenna - Check.
9. Wide band data link antenna pod - Check.

FUSELAGE, LEFT SIDE, AREA 6

*1. General condition - Check.
2. Static ports - Check.
3. ASE antennas (2) - Check.
4. Emergency light - Check.
5. Cabin door - Check.
6. Fuselage top side - Check.

***INTERIOR CHECK**

1. Cargo/loose equipment - Check.
2. Cabin door - Locked and checked.

3. Cargo door - Locked and checked.
4. Emergency exit - Check.
5. Mission cooling ducts - Check.
6. Flare/Chaff dispenser preflight test - Completed.
7. Crew briefing - As required.

BEFORE STARTING ENGINES

*1. Parking brake - Set.
2. Magnetic compass - Check.
*3. Pedestal controls - Set.
4. Lower console switches - Set.
5. Gear alternate engage and ratchet handles -Stowed.
6. Free air temperature gage - Check.
7. Instrument panel - Check.
8. Prop sync switch - OFF.
9. Mission panel switches and circuit breakers -Set.
10. Subpanels - Check.
11. AC and DC GPU's - As required.
12. External power advisory lights - As required.
*13. Battery - ON.
14. DC power - Check.

***FIRST ENGINE START (BATTERY START)**

1. Avionics master switch - OFF.
2. Exterior light switches - As required.

3. Ignition and engine start switch - ON.
4. Condition lever (after N1 RPM stabilizes, 12% minimum) - LOW IDLE.
5. TGT and N1 - Monitor (TGT 1000°C maximum, N_1 52% minimum).
6. 0il pressure - Check (60 PSI minimum).
7. Ignition and engine start switch - OFF after TGT stabilized.
8. Condition lever- HIGH IDLE.
9. Generator switch - RESET, then ON.

SECOND ENGINE START (BATTERY START)

1. First engine generator load - 50% or less.
2. Ignition and engine start switch - ON.
3. Condition lever (after N1 RPM passes 12% minimum) - LOW IDLE.
4. TGT and N1 - Monitor (TGT 1000°C maximum, N_1 52% minimum).
5. Oil pressure - Check (60 PSI minimum).
6. Ignition and engine start switch - OFF.
7. Battery charge light - ON.
8. Second engine generator - RESET, then ON.
9. Inverter switches - ON.
10. Condition levers - As required.

ABORT START

1. Condition lever - FUEL CUTOFF.
2. Ignition and engine start switch - STARTER ONLY.

3. TGT- Monitor.
4. Ignition and engine start switch - OFF after TGT stabilized.

ENGINE CLEARING

1. Condition lever - FUEL CUTOFF.
2. Ignition and engine start switch - OFF.
3. Ignition and engine start switch - STARTER ONLY.
4. Ignition and engine start switch - OFF.

FIRST ENGINE START (GPU START)

1. INS - As required.
2. Avionics master switch - As required.
3. Exterior light switches - As required.
4. Ignition and engine start switch - ON.
5. Condition lever (after N1, RPM stabilizes, 12% minimum) - LOW IDLE.
6. TGT and N1 - Monitor (TGT 1000°C maximum, N1 52% minimum).
7. Oil pressure - Check (60 PSI minimum).
8. Ignition and engine start switch - OFF after TGT stabilized.
9. Condition lever - As required.
10. DC GPU disconnect - As required.
11. Generator switch (GPU disconnected) - RESET, then ON.
12. Condition lever - HIGH IDLE.

SECOND ENGINE START (GPU START)

1. Ignition and engine start switch - ON.
2. Condition lever (after N_1 RPM passes, 12% minimum) - LOW IDLE.
3. TGT and N_1 - Monitor (TGT 1000°C maximum, N_1 52% minimum).
4. Oil pressure - Check (60 PSI minimum).
5. Ignition and engine start switch - OFF after TGT stabilized.
6. Propeller levers - FEATHER.
7. GPU - Disconnect.
8. Propellers levers - HIGH RPM.
9. Generator switches - RESET, then ON.
10. Aircraft inverter switches - ON, check INVERTER lights off.
11. Condition levers - As required.

BEFORE TAXIING

1. Brake deice - As required.
*2. Cabin temperature and mode - Set.
3. AC/DC power - Check.
4. Avionics master power switch - ON as required.
5. Mission panel - Set.
6. Electric elevator trim and autopilot/flight director operation - Check.
7. Avionics - Check.
8. Flaps - Check.
9. Altimeters - Check and set.

***TAXIING**

1. Brakes - Check.
2. Flight instruments - Check.
3. Mission control panel - Set as required.

ENGINE RUNUP

1. Propeller manual feathering - Check.
★2. Autofeather - Check.
★3. Overspeed Governors - Check.
★4. Primary governors - Check.
★5. Ice vanes - Check.
★6. Anti-ice and deice systems - Check.
7. Beacon - As required.
★8. Pneumatic pressure - Check.
★9. Pressurization system - Check.
10. Windshield anti-ice - As required.

***BEFORE TAKEOFF**

1. Autofeather switch - ARM.
2. Bleed air valves - As required.
3. Ice and rain switches - As required.
4. Fuel panel - Check.
5. Flight and engine instruments - Check.
6. Cabin controller - Set
7. Annunciator panels - Check.
8. Propeller levers - HIGH RPM.
9. Friction locks - Set
10. Flaps - As required.
11. Trim-Set.

12. Avionics - Set
13. Flight controls - Check.
14. Departure briefing - Complete.

***LINE UP**

1. Transponder- As required.
2. Engine auto ignition switch - ARM.
3. Power stabilized - Check.
4. Condition levers - LOW IDLE.
5. Lights - As required.
6. Mission control panel - Set.

AFTER TAKEOFF

1. Gear- UP.
2. Flaps - UP.
3. Landing lights - OFF.

④ Windshield anti-ice- As required.

CLIMB - MAXIMUM RATE

1. Climb power - Set.
2. Propeller sync - As required.
3. Autofeather- As required.
4. Yaw damp - As required.
5. Cabin pressurization - Check.
6. Wings and nacelles - Check.
7. ASE-As required.

CRUISE

1. Power- Set.

2. Wings and nacelles - Check.
3. Ice and rain switches - As required.
4. Auxiliary fuel gages - Monitor.
5. Altimeters - Check.
6. Engine instrument indications - Noted.
7. Recognition lights - As required.

DESCENT - MAX RATE (CLEAN)

1. Power levers - IDLE.
2. Propeller levers - HIGH RPM.
3. Flaps - UP.
4. Gear - UP.
5. Airspeed - V_{mo}.
6. Cabin pressurization - Set.
7. Ice and rain switches - As required.
8. Recognition lights - As required.

DESCENT - MAX RATE (LANDING CONFIGURATION)

1. Power levers - IDLE.
2. Propeller levers - HIGH RPM.
3. Flap switch - APPROACH.
4. Gear switch - DN.
5. Airspeed - 184 KIAS.
6. Cabin pressurization - Set.
7. Ice and rain switches - As required.
8. Recognition lights - As required.

DESCENT-ARRIVAL

1. Cabin pressurization - Set.
2. Ice and rain switches - As required.

③. Windshield anti-ice- As required.

4. Lights- ON.
5. Altimeters - Set.
6. ASE - As required.

BEFORE LANDING

1. Prop sync switch- OFF.
2. Autofeather switch - ARM.
3. Propeller levers - As required.
4. Flap switch (below 202 KIAS) - APPROACH.
5. Gear switch (below 184 KIAS) - DN.
6. Rotating boom dipole antenna - Check stowed.
7. Landing lights - As required.
8. Brake deice - As required.

LANDING

1. Autopilot and yaw damp - Disengaged.
2. Gear down lights - Check
3. Propeller levers - HIGH RPM.

GO-AROUND

1. Power- Maximum allowable.
2. Gear - UP.
3. Flaps - UP.
4. Landing lights - OFF.
5. Climb power - Set.

6. Yaw damp - As required.

AFTER LANDING

1. Condition levers - As required.
2. Engine auto ignition switch - OFF.
3. Ice and rain switches - OFF.
4. Flaps - UP.
5. Avionics - As required.
6. Lights - As required.
7. Mission control panel - Set.

ENGINE SHUTDOWN

1. Brake deice - OFF.
2. Parking brake - Set.
3. Landing/taxi lights - OFF.
4. Overhead floodlight - As required.
5. Cabin temperature mode switch - OFF.
6. Autofeather switch - OFF.
7. Vent and aft vent blower switches - AUTO.
8. INS - OFF.
9. Mission equipment - OFF, as required.
10. Inverter switches - OFF.
11. Battery condition - Check as required.
12. Avionics master switch - OFF.
13. TGT - Check.
14. Propeller levers - FEATHER.
15. Condition levers - FUEL CUTOFF.
16. Exterior lights - OFF.

17. Master panel lights - OFF.
18. Master switch - OFF.
19. Keylock switch - OFF.
20. Oxygen system - As required.

SEFORE LEAVING AIRCRAFT

1. Wheels - Chocked
2. Parking brake - As required
3. Flight controls - Locked.
4. Fuel pumps - Set.
5. Emergency exit lock - As required.
6. Mode 4 - As required.
7. Aft cabin light - OFF.
8. Door light - OFF.
9. Walk-around Inspection - Complete.
10. Aircraft forms - Complete.
11. Aircraft secured - Check.

EMERGENCY PROCEDURES

NOTE

The urgency of certain emergencies requires immediate and instinctive action by the pilot. The single most important consideration is aircraft control. All procedures are subordinate to this requirement.

ENGINE MALFUNCTION

ENGINE MALFUNCTION BEFORE LIFTOFF (ABORT)

1. Power levers – IDLE.
2. Braking – As Required.
3. Condition levers – FUEL CUTOFF.
4. Fire pull handles – PULL.
5. Master switch – OFF.

ENGINE MALFUNCTION AFTER LIFTOFF (ABORT)

1. Power levers – REDUCE.
2. Gear – DOWN.
3. Condition levers – FUEL CUTOFF.
4. Fire pull handles – PULL.
5. Master switch – OFF.

ENGINE MALFUNCTION AFTER LIFTOFF (FLIGHT CONTINUED)

1. Power – MAXIMUM CONTROLLABLE.
2. Gear – UP.
3. Flaps – UP.
4. Landing lights – OFF.
5. Brake deice – OFF.
6. Engine cleanup – PERFORM.
7. Generator load – 100% MAXIMUM.

ENGINE MALFUNCTION AFTER LIFTOFF (FLIGHT CONTINUED WITHOUT AUTO-FEATHER)

1. Power – Maximum controllable.
2. Dead engine – Identify.
3. POWER lever (dead engine) – IDLE.
4. PROP lever (dead engine) – FEATHER.
5. GEAR – UP.
6. FLAPS – UP.
7. LANDING LIGHTS – OFF.
8. BRAKE DEICE – OFF.
9. Engine cleanup – Perform.
10. Generator load – 100% maximum.

ENGINE MALFUNCTION DURING FLIGHT

1. Auopilot/yaw damp – DISENGAGE.
2. Power – AS REQUIRED.
3. Dead engine – IDENTIFY
4. Power lever (affected engine) – IDLE.
5. Propeller lever (affected engine) – FEATHER.
6. Gear – AS REQUIRED.
7. Flaps – AS REQUIRED.
8. Power – SET.
9. Engine cleanup – PERFORM.
10. Generator Load – 100% MAXIMUM.

ENGINE MALFUNCTION DURING FINAL APPROACH)

1. Power- AS REQUIRED.
2. Gear - DN.

ENGINE MALFUNCTION (SECOND ENGINE)

1. Airspeed - 140 KIAS.
2. Power lever - IDLE.
3. Propeller lever - DO NOT FEATHER.
4. Conduct engine restart procedure.

ENGINE SHUTDOWN IN FLIGHT

1. Power lever - IDLE.
2. Propeller lever - FEATHER.
3. Condition lever - FUEL CUTOFF.
4. Engine cleanup - PERFORM.

ENGINE CLEANUP

1. Condition lever - FUEL CUTOFF.
2. Engine auto ignition switch - OFF.
3. Autofeather switch - OFF.
4. Generator switch - OFF.
5. Prop sync switch - OFF.
6. Radome heat - OFF.

ENGINE RESTART DURING FLIGHT USING STARTER

1. Cabin temperature mode switch - OFF.
2. Electrical load - REDUCE TO MINIMUM.
3. Fire pull handle - IN.
4. Power lever - IDLE.
5. Propeller lever - FEATHER.
6. Condition lever - FUEL CUTOFF.
7. TGT (operative engine) - 700° C OR LESS.
8. Ignition and engine start switch - ON
9. Condition lever - LOW IDLE.
10. TGT - 1000° C 5 SECONDS MAXIMUM.
11. Oil pressure - CHECK.
12. Ignition and engine start switch - OFF.
13. Generator switch - RESET, THEN ON.
14. Engine cleanup - PERFORM IF ENGINE RESTART UNSUCCESSFUL.
15. Cabin temperature mode switch - AS REQUIRED.
16. Electrical equipment - AS REQUIRED.
17. Auto ignition switch - ARMED.
18. Propellers - SYNCHRONIZED
19. Power - AS REQUIRED.

ENGINE RESTART DURING FLIGHT (NOT USING STARTER)

1. Cabin temperature mode switch - OFF.
2. Electrical load - REDUCE TO MINIMUM.
3. Generator switch (affected engine) - OFF.
4. Fire pull handle - CHECK IN.
5. Power lever - IDLE.
6. Propeller lever - HIGH RPM.
7. Condition lever- FUEL CUTOFF.
8. Airspeed 140 KIAS minimum - CHECK.
9. Altitude below 20,000 feet - CHECK.
10. Engine auto ignition switch - ARM.
11. Condition lever - LOW IDLE.
12. TGT - 1000°C 5 SECONDS MAXIMUM.
13. Oil pressure - CHECK.
14. Generator switch - RESET THEN ON.
15. Engine Cleanup - PERFORM IF ENGINE RESTART UNSUCCESSFUL.
16. Cabin temperature mode switch - AS REQUIRED.
17. Electrical equipment - AS REQUIRED.
18. Auto ignition switch - ARMED.
19. Propellers - SYNCHRONIZED.
20. Power - AS REQUIRED.

LOW OIL PRESSURE

1. Oil pressure below 105 PSI below 21,000 feet or 85 PSI 21,000 feet and above, torque - 49% MAXIMUM.
2. Oil pressure below 60 PSI - PERFORM ENGINE SHUTDOWN, OR LAND AS SOON AS PRACTICABLE USING MINIMUM POWER TO INSURE SAFE ARRIVAL.

DUCT OVERTEMP CAUTION LIGHT ILLUMINATED

1. Cabin air control - IN.
2. Cabin temperature mode switch - AUTO.
3. Cabin temperature rheostat - FULL DECREASE.
4. Vent blower switch - HI.
5. Cabin temperature mode switch - MAN HEAT
6. Manual temperature switch - DECREASE (HOLD).
7. Left bleed air valve switch - ENVIRO OFF.
8. Light still illuminated (30 seconds) - LEFT BLEED AIR VALVE SWITCH - OPEN.
9. Right bleed air valve switch - ENVIRO OFF.
10. Light still illuminated (30 seconds) - RIGHT BLEED AIR VALVE OPEN.

ICE VANE FAILURE

1. Airspeed - 160 KIAS OR BELOW.
2. Ice vane control circuit breaker - PULL.
3. Ice vane - OPERATE MANUALLY.
4. Airspeed - RESUME NORMAL AIRSPEED.

BLEED AIR FAILURE LIGHT ILLUMINATED

1. Brake deice switch - OFF.
2. TGT and torque - MONITOR (NOTE READINGS).
3. Bleed air valve switch - PNEU & ENVIRO OFF.
4. Cabin pressurization - CHECK.

EXCESSIVE DIRRERENTIAL PRESSURE

1. Cabin controller - SELECT HIGHER SETTING.
2. If condition persists: LEFT BLEED AIR VALVE SWITCH - ENVIRO OFF.
3. If condition still persists: RIGHT BLEED AIR VALVE SWITCH - ENVIRO OFF.
4. If condition still persists: DESCEND IMMEDIATELY.
5. If unable to descend: CREW OXYGEN masks - 100% AND ON.
6. If unable to descend: CABIN PRESS switch - DUMP.
7. Bleed air valve switches - OPEN.

LOSS OF PRESSURIZATION (ABOVE 10,000 FEET)

1. Crew oxygen masks - 100% AND ON.

CABIN DOOR CAUTION LIGHT ILLUMINATED.

1. Bleed air valve switches - ENVIRO OFF.
2. Descend below 14,000 feet as soon as practicable.
3. Oxygen - AS REQUIRED.

SINGLE-ENGINE DESCENT/ARRIVAL

1. Cabin controller - SET.
2. Seat belts and harnesses - SECURE.
3. Ice and rain switches - AS REQUIRED.
4. Altimeters - SET.
5. Recognition lights - ON.
6. Arrival briefing - COMPLETE.

SINGLE-ENGINE BEFORE LANDING

1. Propeller lever - AS REQUIRED.
2. Flaps - APPROACH.
3. Gear - DN.
4. Landing lights - AS REQUIRED.
5. Yaw damp - OFF.
6. Brake deice - OFF.

SINGLE-ENGINE LANDING CHECK

1. Autopilot/yaw damp - DISENGAGED.
2. Gear lights - CHECK.
3. Propeller lever (operative engine) - HIGH RPM.

SINGLE-ENGINE GO-AROUND

1. Power - MAXIMUM CONTROLLABLE.
2. Gear - UP.
3. Flaps - AS REQUIRED.
4. Landing light - OFF.
5. Power - AS REQUIRED.
6. Yaw damp - AS REQUIRED.

PROPELLER FAILURE (OVER 2080 RPM)

1. Power lever [affected engine - IDLE.
2. Propeller lever - FEATHER.
3 Condition lever - AS REQUIRED.
4. Engine cleanup - AS REQUIRED.

FIRE

ENGINE / NACELLE FIRE DURING START OR GROUND OPERATIONS

1. Propeller levers - FEATHER.
2. Condition levers - FUEL CUTOFF.
3. Fire pull handle - PULL.
4. Push to extinquish switch - PUSH.
5. Master switch - OFF.

ENGINE FIRE IN FLIGHT (FIRE PULL HANDLE LIGHT ILLUMINATED)

1. Power lever - IDLE.
2. Fire pull handle light out - ADVANCE POWER.

   Fire pull handle light still illuminated - PERFORM ENGINE FIRE IN FLIGHT PROCEDURES IDENTIFIED).

ENGINE FIRE IN FLIGHT (IDENTIFIED)

1. Power lever - IDLE.
2. Propeller lever - FEATHER.
3. Condition lever - FUEL CUTOFF.
4. Fire pull handle - PULL.
5. Fire extinquisher- ACTIVE AS REQUIRED
6. Engine cleanup - PERFORM.

FUSELAGE FIRE

1. Fight the fire.
2. Land as soon as possible.

WING FIRE

1. Perform engine shutdown on affected side.
2. Land as soon as possible.

ELECTRICAL FIRE

1. Crew oxygen - 100%.
2. MASTER SWITCH - OFF.
3. All nonessential electrical equipment - OFF.
4. Battery switch - ON.
5. Generator switches (individually) - RESET, THEN ON.
6. Circuit breakers - CHECK FOR INDICATION OF DEFECTIVE CIRCUIT.
7. Essential electrical equipment - ON.
8. Land as soon as practicable.

SMOKE AND FUME ELIMINATION

1. Crew oxygen - 100% AND ON.
2. Bleed air valve switches - ENVIRO OFF.
3. Vent blower switch - AUTO.
4. Aft vent blower switch - OFF.
5. Cabin temperature mode switch - OFF.
6. If smoke and fumes are not eliminated, CABIN PRESS switch - DUMP.
7. Engine oil pressure - MONITOR.

FUEL SYSTEM

FUEL PRESS WARNING LIGHT ILLUMINATED

1. Standby pump switch - ON.
2. Fuel pressure light out - CHECK.
3. Fuel pressure light still on - RECORD UNBOOSTED TIME.

NO FUEL TRANSFER CAUTION LIGHT ILLUMINATED

1. AUX TRANSFER switch (affected side) -OVERRIDE.
2. Auxiliary fuel quantity - MONITOR.
3. AUX TRANSFER switch - AUTO.

NACELLE FUEL LEAK

1. Perform engine shutdown.
2. Fire pull handle - PULL.
3. Land as soon as practicable.

FUEL CROSSFEED

1. AUX TRANSFER switches - AUTO.
2. Standby pumps - OFF.
3. Crossfeed switch - AS REQUIRED.
4. Fuel crossfeed light illuminated - CHECK.
5. Fuel pressure light extinguished - CHECK.
6. Fuel quantity - MONITOR.

NAC LOW LIGHT ILLUMINATED

1. Twenty minutes fuel remaining - CONFIRM.
2. Land as soon as possible.

ELECTRICAL SYSTEM

DC GEN LIGHT ILLUMINATED

1. Generator switch - OFF, RESET, THEN ON.
2. Generator switch (no reset) - OFF.
3. Mission control switch - OVERRIDE.
4. Operating loadmeter - 100% MAXIMUM.

BOTH DC GEN LIGHTS ILLUMINATED

1. All nonessential equipment - OFF.
2. Land as soon as practicable.

EXCESSIVE LOADMETER INDICATION (OVER 100%)

1. Battery switch - OFF (MONITOR LOADMETER).
2. Loadmeter over 100% - NONESSENTIAL ELECTRICAL EQUIPMENT OFF.
3. Loadmeter under 100% - BATT SWITCH ON.

INVERTER LIGHT ILLUMINATED

1. Affected AIRCRAFT INVERTER switch - OFF.

INST AC LIGHT ILLUMINATED

1. N_1 and TGT indications - CHECK.
2. Other engine instruments - MONITOR.

CICRUIT BREAKER TRIPPED

1. BUS FEEDER breaker tripped - DO NOT RESET.
2. Nonessential circuit - DO NOT RESET.
3. Essential circuit - RESET ONCE.

BATTERY CHARGE LIGHT ILLUMINATED

1. Battery volt-amp meter - CHECK.
2. Battery switch - ON (FOR LANDING PRIOR TO GEAR AND FLAP EXTENSION).

EMERGENCY DESCENT

1. Power lever - IDLE.
2. Propeller lever - HIGH RPM.
3. Flap lever - APPROACH.
4. Gear- DN.
5. Airspeed - 184 KIAS MAXIMUM.

LANDING EMERGENCIES

LANDING GEAR UNSAFE INDICATION

1. LANDING GEAR RELAY circuit breaker -CHECK IN.
2. Gear lights - CHECK.
3. Gear handle - DN.
4. Manual gear extension - AS REQUIRED.

LANDING GEAR EMERGENCY EXTENSION

1. Airspeed - 130 KIAS.
2. LANDING GEAR RELAY circuit breaker - OUT.
3. Gear handle - DN.
4. Landing gear alternate engage handle - LIFT AND TURN CLOCKWISE TO THE STOP.
5. Alternate landing gear extension handle -PUMP.
6. Gear lights illuminated - CHECK.

GEAR-UP LANDING (ALL GEAR UP OR UNLOCKED)

1. Crew emergency briefing - COMPLETE.
2. Loose equipment - STOWED.
3. Bleed air valves - ENVIRO OFF.
4. Cabin pressure switch - DUMP.
5. Cabin emergency hatch - REMOVE AND STOW.
6. Seat belts and harnesses - SECURED.
7. Landing gear alternate engage handle - DISENGAGED.
8. Alternate landing gear extension handle STOWED.
9. Gear relay circuit breaker - IN.
10. Gear handle - UP.
11. Nonessential electrical equipment - OFF.
12. Flaps - AS REQUIRED (DOWN FOR LANDING).
13. Condition levers - FUEL CUTOFF.
14. Fire pull handles - PULL.
15. Master switch - OFF.

LANDING WITH NOSE GEAR UNSAFE

1. Crew emergency briefing - COMPLETE.
2. Loose equipment - STOWED.
3. Bleed air valves - ENVIRO OFF.
4. Cabin pressure switch - DUMP.
5. Cabin emergency hatch - REMOVE AND STOW.
6. Seat belts and harnesses - SECURED.
7. Nonessential electrical equipment - OFF.
8. Condition levers - FUEL CUTOFF.
9. Fire pull handle - PULL
10. Master switch - OFF.

LANDING WITH ONE MAIN GEAR UNSAFE

1. Crew emergency briefing - COMPLETE.
2. Loose equipment - STOWED.
3. Bleed air valves - ENVIRO OFF.
4. Cabin pressure switch - DUMP.
5. Cabin emergency hatch - REMOVE AND STOW.
6. Seat belts and harnesses - SECURED.
7. Nonessential electrical equipment - OFF.
8. Touchdown - ON SAFE MAIN GEAR FIRST.
9. Condition levers - FUEL CUTOFF.
10. Fire pull handle - PULL
11. Master switch - OFF.

CRACKED WINDSHIELD (INTERNAL CRACK)

1. Descend - BELOW 25,000 FEET.
2. Cabin Pressure - RESET PRESSURE DIFFERENTIAL TO 4 PSI OR LESS WITHIN 10 MINUTES.

CRACKED CABIN WINDOW

1. Oxygen - AS REQUIRED.
2. Cabin pressure - DEPRESSURIZE.
3. Descend - AS REQUIRED.

DITCHING

1. Radio calls/transponder - AS REQUIRED.
2. Crew emergency briefing - AS REQUIRED.
3. Bleed air valves - ENVIRO OFF.
4. Cabin pressurization switch - DUMP.
5. Cabin emergency hatch - REMOVE AND STOW.
6. Seat belts and harnesses - SECURED.
7. Gear - UP.
8. Flaps - DOWN.
9. Nonessential electrical equipment - OFF.
10. Approach - NORMAL, POWER ON.
11. Emergency lights - AS REQUIRED.

FLIGHT CONTROLS MALFUNCTION

UNSCHEDULED RUDDER BOOST ACTIVATION

1. Rudder boost - OFF.

IF CONDITION PERSISTS:

2. BLEED AIR VALVE (PNEU & ENVIRO) - OFF.
3. Rudder trim - ADJUST.

UNSCHEDULED ELECTRIC ELEVATOR TRIM

1. ELEV TRIM switch - OFF.
2. ELEC TRIM circuit breaker - OUT.

BAILOUT

1. Notify copilot to prepare to bail out.
2. Distress message - TRANSMIT.
3. Voice security - ZEROIZE.
4. Transponder - 7700.
5. Flaps - DOWN.
6. Airspeed - 100 KIAS.
7. Trim - AS REQUIRED.
8. Autopilot - ENGAGE.
9. Cabin pressure switch - DUMP.
10. Radio cord, oxygen hose, harnesses and seat belt -DISCONNECT.
11. Parachute - ATTACH TO HARNESS.
12. Cabin door - OPEN.
13. Abandon the aircraft.

PERFORMANCE CHECKS

OXYGEN SYSTEM

1. Oxygen supply pressure gages - Check.
2. Supply control lever (green) - ON.
3. Diluter control lever - 100% OXYGEN.
4. Emergency control lever (red) - Set to TEST MASK position while holding mask directly away from face, then return to NORMAL.
5. Oxygen masks - Don and adjust.
6. Emergency pressure control lever (red) - Set to TEST MASK position and check mask for leaks, then return lever to NORMAL.
7. Flow indicator - Check during inhalation blinker appears, during exhalation blinker disappears). Repeat a minimum of 3 times.

FUEL PUMPS/CROSSFEED OPERATION

1. Fire pull handles - Pull.
2. Standby pump switches - ON.
3. Battery switch - ON.
4. #1 and #2 fuel press warning lights - Illuminated.
5. Fire pull handles - IN.
6. #1 and #2 fuel pressure warning lights -Extinguished.
7. Standby pump switches - STANDBY PUMP.
8. #1 and #2 fuel pressure warning lights -Illuminated.

9. Crossfeed - Check. Check system operation by activating switch momentarily left then right, noting that #1/#2 FUEL PRESS warning lights extinguish and that the FUEL CROSSFEED advisory light illuminates as switch is energized.

ANTI-ICE SYSTEMS - CHECK

1. Stall warning heat switch - ON.
2. Pitot heat switches (2) - ON. Check cover removed.
3. Fuel vent heat switches (2) - ON.
4. Left wing heated fuel vent - Check by feel for heat and condition.
5. Stall warning vane - Check by feel for heat and condition.
6. Left pitot tube - Check by feel for heat and free of obstructions.
7. Right pitot tube - Check by feel for heat and free of obstructions.
8. Right wing heated fuel vent - Check by feel for heat and condition.
9. Stall warning heat switch - OFF.
10. Pitot heat switches (2) - OFF.
11. Heated fuel vent switches (2) - OFF.

ANNUNCIATOR PANELS

1. MASTER CAUTION, MASTER WARNING, #1 , FUEL PRESSURE, #2 FUEL PRESSURE, GEAR DN, L BL AIR FAIL, R BL AIR FAIL, ALT WARN, INST AC, #1 DC GEN, #1 INVERTER, #1 NO FUEL XFR, #2 NO FUEL XFR, #2 INVERTER, #2 DC GEN - Check on.
2. ANNUNCIATOR TEST switch - Press and hold Check that all lights in aircraft and mission an

nunciator panels illuminate, FIRE PULL handle lights, marker beacon lights, MASTER CAUTION and MASTER WARNING lights are on. Release switch and check that all lights except those in step 1 are extinguished.

3. MASTER CAUTION and MASTER WARNING lights - Press. Both lights extinguish.

4. Stall and gear warning system - TEST. Check that warning horn sounds and that the LDG GEAR CONTR handle lights (2) illuminate.

FIRE PROTECTION SYSTEM

1. Fire detector test switch - Rotate counterclockwise to check three DETR positions. FIRE PULL handles should illuminate in each position. Reset MASTER WARNING in each position.

2. Fire detector test switch - Rotate counterclockwise to check two EXTGH positions. SQUIB OK light, associated EXTGH DISCH caution light and MASTER CAUTION LIGHT should illuminate in each position.

INERTIAL NAVIGATION SYSTEM ALIGNMENT

1. Exterior power 28V DC - Connected.

2. Key lock switch - ON.

3. Battery switch - ON.

4. Aircraft inverters - ON.

5. Mission inverters - ON.

6. Mission control switch - As required.

7. 3 phase A.C. bus - RESET.

(Check inertial cooling for ON.)

8. Aircraft master avionics switch - EXTERNAL POWER.

9. Mode selector - ALIGN.

10. Data selector - DSTRK/STS.

(Align condition is shown on 5 digit RH display. Align will not progress beyond 8 until present position is loaded.)

11. Test button - PRESS AND HOLD.

All displays read 8, ROLL LIMIT, HOLD, INSERTS ADVANCE, WY PT, CHG, ALERT, BAT, WARN, and READY NAV LAMPS lit. When released, all extinguish except INSERT/ADVANCE. Insure all malfunction codes are cleared.

12. Data selector - L/L POS (UTM for grid nav).

13. Load present position.

    a. Select N or S degrees, minutes and tenths-INSERT/ADVANCE - PRESS.

    b. Select E or W degrees, minutes and tenths-INSERT/ADVANCE - PRESS.

NOTE

Insure correct values for UTM grid spheroid coefficients are loaded when using UTM coordinates.

WAYPOINT SELECTION

1. Data selector - L/L WY PT.

2. WYPT thumb wheel - DESIRED WY PT (Do not use 0).

3. LAT/LONG waypoint (Deg., Min., Tenths) LOAD.

4. INSERT/ADVANCE - PRESS AGAIN.

Latitude and longitude in arc-seconds relating to tenths entered is shown.

5. ARC/SEC LAT & LONG (Sec. and Tenths) LOAD.

Repeat 1 thru 5 for each WY PT.

6. Flight plan cross check - Data selector to DIS/TIME (left display will indicate distance between WY PTS TO-FROM). Press WY PT change. Verify logical distance between waypoints.

TACAN STATION SELECTION

1. Data selector - L/L WY PT.
2. Simultaneously press - KEYS 7 and 9.
3. WY PT thumb wheel - DESIRED TACAN.
4. TACAN station position - LOAD LAT/LONG.
5. INSERT/ADVANCE - PRESS.

Latitude and longitude in arc-seconds relating to tenths entered is shown.

6. ARC/SEC and Tenths - LOAD.
7. INSERT/ADVANCE - PRESS.
8. TACAN station altitude - LOAD (Select KEY 4 OR 6). Enter altitude.
9. INSERT/ADVANCE - PRESS
10. TACAN channel number - LOAD (Select KEY 2 or 8). Enter channel.

Repeat steps 1 thru 8 for all TACAN stations.

HSI INTERFACE TEST

NOTE

Interface test must be performed after alignment progresses from state 8 but prior to switching to NAV.

1. AUTO/MAN switch - MAN.
2. Couple INS to FD and engage AP.

3. Data selector (Any position but DSRTK).

4. CDU TEST - PRESS and HOLD.

MSU and CDU all lamps lit 8's. RMI all angles are 30 degrees. Cross track deviation bar is 1 dot right, NAV flags are retracted, WX radar NAV display indicates 1 dot right of course.

On HRI, a 15 degree RH steering command. Aircraft panel LINK UPDATE/TACAN UPDATE annunciated and INS light illuminated.

5. Continue holding TEST switch from MAN to AUTO. RMI all angles are 0. Cross track deviation is one dot left. A 15 degree left steering command is issued.

6. Release TEST switch - operations return to normal.

ELECTRIC ELEVATOR TRIM AND AUTOPILOT/FLIGHT DIRECTOR OPERATION

1. Pilot and copilot PITCH TRIM switches - Press to NOSE UP and NOSE DN positions, singularly and in pairs. Check that trim wheel moves in proper direction and operates only when trim switches are pressed in pairs. Any deviation requires that electric elevator trim be turned off and flight conducted using manual trim.

2. TRIM DISC switch - Press and check that electric trim disconnects and that ELEV TRIM light extinguishes.

3. Flight director (FD) and radio magnetic indicators (RMI) warning flags masked - Check.

NOTE

Since the pressure of airflow that normally opposes movement of control surfaces is absent during preflight check, it is possible to get a hard over control surface deflection if an autopilot command is allowed to remain active for any appreciable length of time. Move turn knob and pitch thumbwheel only enough to check operation, then return them to the center position.

4. Select HDG mode - Check.

5. Horizontal situation indicator (HSI) heading marker under lubber line - Set.

6. Engage autopilot and check controls stiff and AIL HI TORQUE, HDG, and AP ENG are illuminated - Check.

7. Move HSI heading marker 100 left and right and verify that FD and control wheels respond in the appropriate direction - Check.

8. Press AP/YD disengage switch and verify that autopilot disengages and that flight controls are free -Check.

9. Engage autopilot - Check.

10. Command 50 trim UP with AP pitch wheel and verify that manual trim wheel moves nose UP and AP trim light indicates UP trim - Check.

11. Press pitch trim switch nose down and verify that autopilot disengages and AUTOPILOT TRIM FAIL and MASTER WARNING lights illuminate - Check.

NOTE

The AP TRIM FAIL annunciator will extinguish by pressing the AP/YD disconnect button on the control wheel to the first detent.

12. Repeat steps 9 thru 11 above using opposite commands.

13. Engage autopilot - Check.

14. Move HSI heading marker to command a bank on Flight Director - Check.

15. Press GO-AROUND switch and verify that GA annunciator light illuminates, autopilot disengages, and that flight director commands a wings level, 7° nose-up attitude - Check.

16. Press TEST switch (pilot's HRI) and verify that attitude display indicates an additional 10° pitch up and 20° right bank - Check.

17. Engage autopilot command DN with AP pitch wheel and engage and hold AUTO PILOT TRIM TEST switch when elevator trim wheel starts to rotate.

18. Verify that autopilot disengages and AP TRIM FAIL and MASTER WARNING lights illuminate within 10 seconds.

AVIONICS CHECKS

NAV 1

1. Frequency select knob (NAV panel) - Select VOR frequency.

2. NAV TEST switch (NAV PANEL) - Press and hold.

3. RMI - Observe that single needle indicates approximately 005°.

4. VOR/LOC flag - Check that flag is out of view.

5. TO/FROM pointer - Check that pointer indicates TO.

6. HSI course deviation bar - Check for centered bar.

7. Marker beacon lights - Check that all three lamps are illuminated and flickering at approximately a 30 Hz rate.

8. VOR frequency knob (NAV panel) - Select a LOC frequency.

9. HSI course deviation bar - Check that bar indicates a deflection of approximately one dot right of center.

10. HSI glideslope pointer - Check that pointer indicates a deflection of approximately one dot below center.

11. Marker beacon lights - Check that all three lamps are illuminated and flickering at approximately a 30 Hz rate.

NAV 2

All NAV 2 self-test procedures are the same as those used for NAV 1, with the exception of the marker beacon test. There is no marker beacon receiver in the NAV 2 system.

TACAN

1. TEST pushbutton - Press and hold.

2. Range indicator - Check for an indication of 0.0 ± 0.1 nautical miles.

3. Pilot's COURSE SELECTOR switch - Select TACAN.

4. Pilot's RMI selector switch - Select TACAN.

5. RMI double needle - Check for an indication of 180° ± 20.

6. HSI course selector - Turn to 180° and adjust slowly until the course deviation bar is centered The bar should center between a selected course of 178° to 182°.

7. HSI course selector - Turn the selector +10° from the setting achieved in step 6, and check that course deviation bar is located over the far left 10° dot.

8. HSI course selector - Turn the selector +10° from the setting

9. HSI course selector - Turn the selector+10° from the setting achieved in step 6, and check that course deviation bar is located over the far right 10° dot.

10. TO-FROM indicator - Check that TO is indicated.

11. TEST pushbutton - Release.

AUTOFEATHER

1. Condition levers - LOW IDLE.

2. Autofeather switch - Hold to TEST.

3. Power levers - Advance until AUTOFEATHER lights are illuminated (approximately 22% torque).

4. #1 power lever - Retard.

a. At approximately 18% torque - #2 AUTOFEATHER light out.

b. At approximately 12% torque - Both AU, TOFEATHER lights out (propeller starts tog feather).

5. #1 power lever - Approximately 22% torque.

6. Repeat steps 2 thru 4 for #2 engine.

OVERSPEED GOVERNORS

1. Power levers - Set approximately 1950 RPM (both engines).
2. #1 propeller governor test switch - Hold.
3. #1 propeller RPM 1830 to 1910 - Check.
4. Repeat steps 2 and 3 for #2 engine.
5. Power levers - Set 1800 RPM.

PRIMARY GOVERNORS

1. Power 1800 RPM - Set/check.
2. Propeller levers aft to detent - Set.
3. Propeller RPM 1600 - 1640 - Check.
4. Propeller levers to HIGH RPM - Set.

CE VANES

1. Ice vane switches to EXTEND. Verify torque drop, TGT increase, and illumination of ICE VANE EXT light -Check.
2. Ice vane switches to RETRACT. Verify return to original torque and TGT and ICE VANE light extinguished -Check.

ANTI-ICE AND DEICE SYSTEMS

1. Left pitot switch ON - Check for loadmeter rise, then OFF.
2. Right pitot switch ON - Check for loadmeter rise, then OFF.
3. Stall warning switch ON - Check for loadmeter rise, then OFF.
4. Fuel vent switch ON - Check for loadmeter rise, then OFF.

5. Windshield anti-ice switches NORMAL and HI -Check PILOT and COPILOT (individually) foxy loadmeter rise, then OFF.

6. Propeller - AUTO (Check 14 to 18 amps).

7. Propeller switches - INNER and OUTER (momentarily), check for loadmeter rise.

8. Surface deice switch AUTO - Check for a drops in pneumatic pressure and wing deice boots inflation and after 6 seconds for a second drop in pneumatic pressure. Check manual position for proper indications.

9. Antenna deice single cycle auto - Check for drop in pneumatic pressure and boots inflated Check manual position for proper indications.

10. Radome anti-ice - ON, check for proper indications.

11. Engine inlet lip heat switches - ON, check for proper indications.

12. Anti-ice and deice systems switches - As required.

PNEUMATIC PRESSURE

1. Condition levers - HIGH IDLE.

2. Power levers - IDLE.

3. Left bleed air valve switch - PNEU & ENVIRO OFF.

4. Pneumatic pressure - 12-20 PSI - Check.

5. Left bleed air light - Check illuminated.

6. Right bleed air valve switch - PNEU & ENVIRO OFF.

7. Left and right bleed air off and left and right bleed air fail lights - Check illuminated.

8. Left bleed air valve switch - OPEN.

9. Left bleed air off, and left and right bleed air fail lights off, and pneumatic pressure - Check (12 to 20 PSI).

10. Right bleed air valve switch - OPEN.

11. Right bleed air off light - Extinguished.

PRESSURIZATION SYSTEM

1. Cabin door caution light extinguished - Check.

2. Storm windows closed - Check.

3. Bleed air valve switches OPEN - Check.

4. Cabin altitude 500 feet lower than field pressure altitude - Set.

5. Cabin pressurization switch - TEST (hold).

6. Cabin climb gage descending indication -Check, then release TEST switch.

7. Aircraft altitude set to planned cruise altitude plus 500 feet - Check (if this setting does not result in a CABIN ALT indication of at least 500 feet over takeoff field pressure altitude, adjust as required).

8. Rate control set between 9 and 12 o'clock -Check.

By Order of the Secretary of the Army:

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Chief of Staff

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Colonel, United States Army
The Adjutant General

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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 decagram = 10 grams = .35 ounce
1 hectogram = 10 decagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

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