

DOCUMENT NUMBER CKL 006-4HFG, INITIAL RELEASE CENTEX AEROSPACE INCORPORATED, 7925 KARL MAY DRIVE, WACO, TX 76708

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This document is an abbreviation of the check lists and procedures contained in Section 3 Emergency Procedures, Section 3A Abnormal Procedures, and Section 4 Normal Procedures of the FAA Approved Airplane Flight Manuals for King Air B200GT series airplanes modified in accordance with STC SA02131SE (BLR Aerospace Ultimate Performance Package). This document also merges the respective procedures from the CenTex Aerospace Halo 275 STC (SA11103SC) Commuter Category conversion and gross weight increase so the pilot operator has a single document to go to for combined procedures. These procedures are in abbreviated form so most explanatory items and some notes and cautions have been omitted for brevity. Consequently, users of this check list must be familiar with and operate the airplane in accordance with the applicable procedures contained in the FAA Approved basic Airplane Flight Manual and STC SA11103SC Airplane Flight Manual Supplement.

# NOTES

Operators should add to these check lists any procedures from the applicable Airplane Flight Manual or Pilot's Operating Handbook and AFM Supplement(s) not already included in these check lists as required by 14 CFR 91.503.

These check lists apply to B200GT in the King Air 250 configuration with high flotation landing gear and equipped with Rockwell Collins Pro Line Fusion integrated avionics.

Current with AFMS 006-4HFG, Initial Release

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REFERENCE

SUBJECT

PAGE

# NORMAL PROCEDURES PILOT CHECK LIST

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NOTE

SEE POH FOR EXPANDED AND OTHER PROCEDURES NOT CONTAINED IN THIS CHECKLIST.

All airspeeds quoted in this section are indicated airspeeds (IAS) and assume zero instrument error.

# AIRSPEEDS FOR SAFE OPERATION

NORMAL PROCEDURES

PILOT CHECK LIST

Maximum Demonstrated Crosswind Component 25 Knots
Maximum Demonstrated Wind Components for Coupled Approaches
Crosswind 16 Knots
Tailwind 10 Knots
Takeoff - Flaps Up
Decision Speed, V <sub>1</sub> See TAKEOFF SPEEDS – FLAPS UP, NP-18
Rotation, V <sub>R</sub> PP-18
Safety Speed, V2See TAKEOFF SPEEDS – FLAPS UP, NP-18
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Decision Speed, V <sub>1</sub> See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
Rotation, V <sub>R</sub> See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
Safety Speed, V <sub>2</sub> See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
Enroute Climb, V <sub>ENR</sub> See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
Two-Engine Best Angle-of-Climb (V <sub>x</sub> ) 100 Knots
Two-Engine Best Rate-of-Climb (Vy) 125 Knots
Cruise Climb:
Sea level to 10,000 feet 160 Knots
10,000 feet to 20,000 feet 140 Knots
20,000 feet to 25,000 feet
25,000 feet to 35,000 feet
Maximum Airspeed for Effective Windshield Anti-icing
Operating Maneuvering Speed (V <sub>o</sub> ) 181 Knots
Turbulent Air Penetration 170 Knots

# CAUTION

For turbulent air penetration, use an airspeed of 170 knots. Avoid overaction on power levers. Turn off autopilot altitude hold. Keep wings level, maintain attitude and avoid use of trim. Do not chase airspeed and altitude. Penetration should be at an altitude which provides adequate maneuvering margins when severe turbulence is encountered.

Landing Approach, Flaps Down	V <sub>REF</sub> , see LANDING	SPEEDS, NP-24
Balked Landing Climb	V <sub>REF</sub> , see LANDING	SPEEDS, NP-24
Intentional One-Engine-Inoperative	Speed (V <sub>SSE</sub> )	104 Knots
Air Minimum Control Speed (V <sub>MCa</sub> ),	Flaps Up	92 Knots
	Flaps Approach	87 Knots

#### PREFLIGHT INSPECTION

After the first flight of each day, the Preflight Inspection may be omitted except for items marked with a "+". Fuel tank caps, engine oil quantity, and filler cap need not be checked unless system(s) were serviced. External inspections with flaps down may be conducted at intervals deemed appropriate by the pilot.

## CABIN/COCKPIT

- 1. Monogram Electric Toilet (If Installed) KNIFE VALVE OPEN
- + 2. Baggage SECURE
- 3. Emergency Lighting Cabin Switch ON
- 4. Emergency Cabin Light Control Switch ARM
- 5. Emergency Cabin Flood Lamps CHECK (illuminated)
- 6. Emergency Exit SECURE AND UNLOCKED
- 7. Control Locks REMOVE AND STOWED
- 8. Trim Tabs SET TO "0" UNITS

# CAUTION

The elevator trim system must not be forced past the limits which are indicated on the elevator trim indicator scale, either manually, electrically, or by action of the autopilot.

- 9. Condition Levers FUEL CUTOFF
- 10. Landing Gear Control DN
- 11. Parking Brake SET
- 12. Ignition and Engine Start ENSURE OFF
- Left PFD, MFD, Right PFD CLEAN (See Section 8, Handling, Servicing and Maintenance of the basic POH for instructions)
- 14. Battery ON, CHECK 23 VOLT MINIMUM
- 15. Emergency Cabin Flood Lamps CHECK (not illuminated)
- 16. Fuel Quantity (Main and Auxiliary) CHECK
- 17. Gear Down Annunciators ILLUMINATED
- 18. Flap Control (if desired) APPROACH, THEN DOWN (check indicator)
- 19. Airstair Door Warning Annunciator Circuitry CHECK
- 20. Oxygen System Preflight Inspection COMPLETE
- + 21. Battery OFF
- 22. Emergency Lighting Cabin Switch OFF
- 23. Emergency Escape Path Markings MUST BE UNCOVERED & VISIBLE

## LEFT WING AND NACELLE

- 1. Cabin Door Seal, Step Extension Cable, Light Wire, Damper, and Handrails – CHECK
- 2. Cabin Windows CHECK
- + 3. Auxiliary Fuel Tank Cap SECURE
- 4. Flaps (condition, asymmetry protection and flap tracks) CHECK
- 5. Oil Breather Vent CLEAR
- + 6. Brake Lines, Brake Wear, Brake Deice Lines (if installed) CHECK
  - 7. Fire Extinguisher CHECK PRESSURE

FIRE EXTINGUISHER PRESSURE VS. TEMPERATURE										
	°F	-40	-20	0	20	40	60	80	100	120
	°C	-40	-29	-18	-7	4	16	27	38	49
	PSI	190	220	250	290	340	390	455	525	605
	RANGE	То								
		240	275	315	365	420	480	550	635	730

# FIRE EXTINGUISHER PRESSURE VS. TEMPERATURE

- 8. Aileron and Aileron TrimTab CHECK
- 9. Flush Outboard Wing Fuel Tank Sump DRAIN
- 10. Static Wicks (4) CHECK
- 11. Navigation, Recognition, & Strobe Lights CHECK
- + 12. Main Fuel Tank Cap SECURE
  - 13. Stall Warning Vane CHECK
- + 14. Tiedown REMOVE
  - 15. Outboard Deice Boot and Stall Strip CHECK
  - 16. Ice Light CHECK
  - 17. Heated Fuel Vent CLEAR
  - 18. Ram Scoop Fuel Vent CLEAR
  - 19. Gravity Line Drain DRAIN
  - 20. Inverter Cooling Louvers CLEAR
  - 21. Wing Leading Edge Tank Sump DRAIN
- + 22. Landing Gear (Doors, Wheel Well, Strut, Tires, Brakes) CHECK
- + 23. Chock REMOVE
  - 24. Fuel Filter and Fuel Strainer Drains DRAIN
- + 25. Engine Oil CHECK QUANTITY, CAP SECURE

- 26. Engine Compartment Door (Outbd) SECURE
- 27. Exhaust Stack (Outbd) CHECK FOR CRACKS
- 28. Top Cowling Locks (Outbd) SECURE
- 29. Nacelle Cooling Ram Air Inlets CLEAR
- +30. Propeller CHECK PROPELLER AND DEICE BOOT CONDITION
- 31. Engine Intake CLEAR
- 32. Top Cowling Locks (Inbd) SECURE
- 33. Exhaust Stack (Inbd) CHECK FOR CRACKS
- 34. Generator Cooling Inlet CLEAR
- 35. Engine Compart. Door (Inbd) SECURE, BLEED VALVE EXHAUST CLEAR
- 36. Heat Exchanger Inlet CLEAR
- 37. Hydraulic Landing Gear Service Door SECURE
- 38. Inboard Deice Boot CHECK
- 39. Heat Exchanger Outlet CLEAR
- 40. Hydraulic Landing Gear Vent Lines CLEAR
- 41. Auxiliary Fuel Tank Sump DRAIN
- 42. Lower Antennas and Beacon CHECK

# NOSE SECTION

- 1. OAT Probe/Relief Tube Vent CHECK
- 2. Brake Reservoir Vent CLEAR
- 3. Left Avionics Access Panel SECURE
- 4. Air Conditioner Condenser Exhaust Duct CLEAR
- 5. Windshield and Wipers CHECK
- 6. Radome CHECK
- 7. Pitot Masts CLEAR
- 8. Landing and Taxi Lights CHECK
- + 9. Nose Gear (shimmy damper, stop block, torque knee strut, tire) CHECK
- +10. Chocks REMOVE
- 11. Nose Gear Doors and Wheel Well CHECK
- 12. Air Conditioner Condenser Intake Duct CLEAR
- 13. Right Avionics Access Panel SECURE

**RIGHT WING AND NACELLE** 

- 1. Ejector Exhaust CLEAR
- 2. Auxiliary Fuel Tank Sump DRAIN
- 3. Battery Drain CLEAR
- 4. Heat Exchanger Outlet CLEAR
- 5. Inboard Deice Boot CHECK
- 6. Heat Exchanger Inlet CLEAR
- 7. Engine Oil CHECK QUANTITY, CAP SECURE
  8. Engine Compartment Door (Inbd) SECURE
  9. Exhaust Stack (Inbd) CHECK FOR CRACKS
- 10. Top Cowling Locks (Inbd) SECURE
- 11. Nacelle Cooling Ram Air Inlets CLEAR
- +12. Propeller CHECK PROPELLER AND DEICE BOOT CONDITION
- 13. Engine Intake CLEAR
- 14. Top Cowling Locks (Outbd) SECURE
- 15. Exhaust Stack (Outbd) CHECK FOR CRACKS
- 16. Generator Cooling Inlet CLEAR
- 17. Engine Compart. Door (Outbd) SECURE, BLEED VALVE EXHST CLEAR
- 18. Fuel Filter and Fuel Strainer Drains DRAIN
- +19. Landing Gear (Doors, Strut, Tires, Wheel Well) CHECK
- 20. Fire Extinguisher CHECK PRESSURE
- +21. Chock REMOVE
- 22. Heated Fuel Vent CLEAR
- 23. Ram Scoop Fuel Vent CLEAR
- 24. Gravity Line Drain DRAIN
- 25. Inverter Cooling Louvers CLEAR
- 26. Wing Leading Edge Tank Sump Drain
- +27. External Power Door CLOSED
- 28. Ice Light CHECK
- 29. Outboard Deice Boot and Stall Strip CHECK
- +30. Tiedown REMOVE
- 31. Flush Outboard Wing Fuel Tank Sump DRAIN
- +32. Main Fuel Tank Cap SECURE
- 33. Navigation, Recognition, and Strobe Lights CHECK
- 34. Static Wicks (4) CHECK
- 35. Aileron and Bendable Tab CHECK
- 36. Flaps CHECK (condition, asymmetry protection, flap tracks, limit switches, and position transmitter)
- +37. Brake Lines, Brake Wear, Brake Deice Lines (If installed) CHECK
- 38. Oil Breather Vent CLEAR
- +39. Auxiliary Fuel Tank Cap SECURE
- 40. Cabin Windows CHECK

# RIGHT AFT FUSELAGE

- 1. Lower Antennas CHECK
- 2. Ventral Fin Drain Holes CLEAR
- 3. Lower Aft Cabin Access Door SECURE
- +4. Tiedown REMOVED
- 5. Oxygen Service Access Door SECURE
- 6. Static Ports CLEAR
- 7. Cabin Air Exhaust CLEAR
- 8. Access Panel SECURE

#### TAIL

- 1. Ventral Fin and Static Wick (1) CHECK
- 2. VOR Antennas (Right and Left) CHECK
- 3. Rudder, Rudder Tab, Stinger and Static Wicks (4) CHECK
- 4. Horizontal Stabilizer, Boots and Static Wicks (Right and Left) CHECK
- 5. Elevator, Tab, and Static Wicks (3 each side) CHECK Verify Tabs are in "0" (Neutral) Position
- 6. Position Light, Tail Floodlights (Left and Right) CHECK

# NOTE

The elevator trim tab "0" (neutral) position is determined by observing that the trailing edge of the elevator trim tab aligns with the trailing edge of the elevator when the elevator is resting against the down stops.

LEFT AFT FUSELAGE

- 1. Access Panel SECURE
- 2. Static Ports CLEAR
- 3. Oxygen Overpressure Discharge and Aft Compartment Drain Tubes – CLEAR
- 4. Relief Tube CLEAR

#### **BEFORE ENGINE STARTING**

# NOTE

Items marked with an "\*" may be omitted at pilot's discretion after the first flight of each day.

## NOTE

Power Settings and Performance shall be based on the OAT from the pilot's side console display and not from the temperature displayed on the EICAS.

# WARNING

Only a crew member or properly trained ground personnel should close and lock the airstair door and cargo door (if installed).

- 1. Airstair Door (B200GT) LOCKED
  - a. Close and lock the door.
  - b. Ensure that the door handle will not move out of the locked position without depressing the release button.
  - c. Lift the top door step and ensure that the red safety arm is around the plunger.
  - d. Ensure that the green index mark on each of the 4 locking bolts aligns with the black pointer in the observation port.
- 2. Cargo Door (B200CGT) LOCKED
  - a. Check upper handle position CLOSED AND LOCKED
    (Open access panel on upper left side of door and attempt to open cargo door latches without releasing safety lock.)
  - b. Ensure that the orange index mark on each of the four rotary cam locks aligns with the notch in the plate on the door frame.
  - c. Check Lower Pin Lock Handle Position CLOSED AND LOCKED (Open access panel on lower forward area of door and attempt to rotate the handle without lifting the orange lock hook.)
  - d. Ensure that the orange stripe on the latch pin linkage is aligned with the orange pointer. (Observe through window at lower aft corner.)
- 3. Airstair Door (B200CGT) LOCKED
  - a. Close and lock the door.
  - b. Ensure that the door handle will not move out of the locked position without depressing the release button.
  - c. Lift the door step and ensure that the red safety arm is around the plunger.
  - d. Ensure that the orange index mark on each of the six rotary cam locks aligns with the notch in the plate on the door frame.

- \* 4. Monagram Electric Toilet (if installed) KNIFE VALVE CONFIRM OPEN
- 5. Emergency Lighting Cabin Switch ON
- 6. Load and Baggage CONFIRM SECURE
- 7. Weight and C.G. CHECKED
- 8. Seats and Tables POSITIONED
  - a. All Seats Seat backs upright, Headrests fully extended
  - b. Lateral-tracking seats Outboard position
  - c. Tables Stowed
- 9. Emergency Exit CONFIRM SECURE AND UNLOCKED
- 10. Passenger Briefing COMPLETE
- 11. Control Locks CONFIRM REMOVED
- 12. Seats and Rudder Pedals ADJUSTED
- 13. Seatbelts and Shoulder Harnesses FASTENED
- \* 14. Oxygen System Preflight Inspection CONFIRM COMPLETE
- 15. ELT ARM, Yellow XMT Light EXTINGUISHED
- 16. Fuel Panel Circuit Breakers IN
- 17. Pilots Instrument Panel and Subpanel CHECK
  - a. Standby Flight Display System Power TEST (Green Light ILLUMINATED)
  - b. Standby Flight Display System Power ON

(Amber Light ILLUMINATED)

- c. Parking Brake CONFIRM SET
- d. Engine Anti-ice Switches ON

# NOTE

The engine anti-ice system should be ON for all ground operations to minimize ingestion of ground debris. Turn engine anti-ice off when required to maintain oil temperature within limits.

- e. Landing Gear Control DN
- f. Landing Gear Relay Circuit Breaker IN
- g. All Other Switches OFF
- 18. Pilot's Audio SET
- 19. Power Console CHECK
  - a. Power Levers IDLE, FRICTION SET
  - b. Propeller Levers FULL FORWARD, FRICTION SET
  - c. Condition Levers FUEL CUT OFF, FRICTION SET
  - d. Elevator, Aileron, and Rudder Trim Controls SET
  - e. Oxygen System Ready CONFIRM ON
  - \* f. Flashlight CHECK
  - g. Landing Gear Alternate Extension Handle STOWED

ONIC

- 20. Pedestal CHECK
  - a. Cabin Pressure Switch PRESS
  - b. Rudder Boost Switch ON
  - c. Pressurization Controller SET
- 21. Reversionary Switch Panel CHECK
  - a. Prop Sync ON
  - b. DG FREE/NORM NORM
  - c. Slew +/- CENTER
  - d. PFD1 NORM
  - e. MFD NORM
  - f. PFD2 NORM
  - g. AHS NORM
  - h. ADS NORM
  - i. PFD1 Inhibit NORM
  - j. MFD Inhibit NORM
  - k. PFD2 Inhibit NORM
  - I. Pilot Static Air Source NORM
  - m. EMER FREQ EXTINGUISHED
- 22. COPILOT'S Audio SET
- 23. Copilot's Subpanel CHECK
  - a. Cabin Sign NO SMOKE & FSB
  - b. ECS Mode OFF
  - c. Cockpit and Cabin Blowers AUTO
  - d. Bleed Air Valve Switches ENVIR OFF
  - e. Oxygen Pressure CONFIRM
  - f. All Other Switches OFF
- 24. Electric Heat AS REQUIRED WITH GPU
  - a. Battery VERIFY ON
  - External Power Source TURN OFF, CONNECT TO AIRPLANE; TURN ON
  - c. Voltmeter 27.5 to 28.4 VOLTS
  - d. External Power -

External Power CAS MESSAGE DISPLAYED

ECS Mode – ELEC HEAT

CAS MESSAGE DISPLAYED

f. All other Switches – OFF

CAUTION

Do not operate the electric heat with the pedestal floor outlet blocked or the cockpit door closed.

#### Electric Heat On CAS MESSAGE MUST BE REMOVED

when ELEC HEAT mode is de-selected. Electric heat must be off at least 2 minutes prior to and during engine start.

- 25. Right Panel Circuit Breakers CHECK
- \*26. Fire Extinguisher (Under Copilot's Chair) CHECK
- Battery ON
- \*28. Fuel System CHECK
- 29. Fuel Quantity (Main and Auxiliary) CHECK
- \*30. Landing Gear Handle Lights PRESS TO TEST
- \*31. Hydraulic Fluid Sensor TEST,

#### Hyd Fluid Low CAS MESSAGE DISPLAYED

- 32. Beacon ON
- 33. DC Volt/Loadmeters PRESS TO CHECK VOLTAGE, (23 volts minimum)
- \*34. Annunciators TEST
- \*35. Stall Warning TEST
- \*36. Fire Detectors and Fire Extinguishers TEST
- 37. Cockpit Voice Recorder Panel TEST
- 38. Left Power Lever ADVANCE TO AT LEAST 80% POSITION
- 39. Autofeather Switch ARM
- 40. Elevator Trim Warning System TEST
- 41. Elevator Trim Control SET FOR TAKEOFF
- 42. Autofeather Switch OFF
- 43. Left and Right Power Levers IDLE

# ENGINE STARTING (Battery)

1. Right Ignition and Engine Start – ON

RIGHT DISPLAYED Red [R Fuel Press] CAS MESSAGE REMOVED

2. Right Condition Lever (13% N<sub>1</sub> or above) – LOW IDLE

3. Right ITT and N<sub>1</sub> – MONITOR (1000°C maximum)

# CAUTION

If no ITT rise is observed within 10 seconds after moving the condition lever to LOW IDLE, move the condition lever to FUEL CUTOFF. Allow 60 seconds for fuel to drain and starter to cool, and then follow ENGINE CLEARING Procedures.

- 4. Right Oil Pressure CHECK
- 5. Right Ignition and Engine Start (50% N1 or above) OFF
- 6. Right Condition Lever HIGH IDLE
- 7. Right Generator RESET, THEN ON
- 8. Battery CHARGE (until loadmeter reads approximately 50% or less)
- 9. Left ignition and Engine Start ON

# LEFT IGN DISPLAYED

Red [L Fuel Press] CAS MESSAGE REMOVED

- 10. Left Condition Lever (13%  $N_1$  or above) LOW IDLE
- 11. Left ITT and  $N_1 MONITOR$  (1000°C maximum)
- 12. Left Oil Pressure CHECK
- 13. Left Ignition and Engine Start (50% N<sub>1</sub> or above) OFF
- 14. D.C. Volt/Loadmeters PRESS TO CHECK VOLTAGE (27.5 to 29.0 volts)
- 15. Left Generator RESET, THEN ON
- 16. Right Condition Lever REDUCE TO LOW IDLE

# **ENGINE STARTING (External Power)**



NEVER CONNECT AN EXTERNAL POWER SOURCE TO THE AIRPLANE UNLESS A BATTERY INDICATING A CHARGE OF AT LEAST 20 VOLTS IS IN THE AIRPLANE. If the battery voltage is less than 20 volts, the battery must be recharged, or replaced with a battery indicating at least 20 volts, before connecting external power.

#### NOTE

When an external power source is used, it must be set to 28.0 to 28.4 volts and be capable of producing 1000 amperes momentarily and 300 amperes continuously. The battery should be on to absorb transients present in some external power sources.

The External Power CAS MESSAGE IS DISPLAYED

to alert the crew when an external DC power plug is connected to the airplane.

- 1. Avionics Master Switch CONFIRM OFF
- 2. Left and Right Generator Switches CONFIRM OFF
- 3. Battery ON
- 4. External Power Source TURN OFF, THEN CONNECT TO AIRPLANE
- 5. External Power Source TURN ON
- 6. Voltmeter 28.0 to 28.4 VOLTS
- 7. Propeller Levers FEATHER
- 8. Right Ignition and Engine Start ON

RIGHT IGN DISPLAYED Red [R Fuel Press] CAS MESSAGE REMOVED

- 9. Right Condition Lever (13% N<sub>1</sub> or above) LOW IDLE
- 10. Right ITT and N<sub>1</sub> MONITOR (1000°C maximum)

# CAUTION

If no ITT rise is observed within 10 seconds after moving the condition lever to LOW IDLE, move the condition lever to FUEL CUTOFF. Allow 60 seconds for fuel to drain and starter to cool, and then follow ENGINE CLEARING Procedures.

- 11. Right Oil Pressure CHECK
- 12. Right Ignition and Engine Start (50%  $N_1$  or above) OFF
- 13. Left Ignition and Engine Start ON

# LEFT IGN DISPLAYED

Red [L Fuel Press] CAS MESSAGE REMOVED

- 14. Left Condition Lever (13% N<sub>1</sub> or above) LOW IDLE
- 15. Left ITT and N<sub>1</sub> MONITOR (1000°C maximum)
- 16 Left Oil Pressure CHECK
- 17. Left Ignition and Engine Start (50% N<sub>1</sub> or above) OFF
- 18 External Power Source TURN OFF, DISCONNECT, SECURE DOOR
- 19. Left and Right Generators RESET, THEN ON
- 20. Propeller Levers FULL FORWARD

#### HOT START OR HUNG START

If rate of ITT increase predicts an over-temperature occurrence, or if  $N_1$  ceases to accelerate in a normal manner.

- 1. Condition Lever FUEL CUTOFF
- 2. Ignition and Engine Start STARTER ONLY (for remainder of time limitation)
- 3. Ignition and Engine Start OFF
- 4. Do not attempt another start until the cause of the hot start or hung start has been corrected.

# NO LIGHT START

If no ITT rise is observed within 10 seconds after moving the Condition Lever to LOW IDLE

- 1. Condition Lever FUEL CUTOFF
- 2. Ignition and Engine Start OFF
- 3. Follow ENGINE CLEARING procedure

# **ENGINE CLEARING**

Use the following procedure to remove internally trapped fuel and vapor, or if there is evidence of a fire within the engine.

- 1. Condition Lever CONFIRM FUEL CUT OFF
- 2. Starter COOL FOR 1 MINUTE AFTER PREVIOUS START ATTEMPT
- 3. Ignition and Engine Start STARTER ONLY (for a maximum of 40 seconds)
- 4. Ignition and Engine Start OFF
- 5. Starter COOL FOR 1 MINUTE BEFORE ATTEMPTING ANOTHER START

#### **BEFORE TAXI**

# NOTE

Items marked with an " \* " may be omitted at pilot's discretion after the first flight of the day

- 1. Loadmeters PARALLEL WITHIN 10%
- 2. Annunciators TEST
- 3. Avionics Master ON
  - a. Before entry of the first flight plan of the day, clear/delete the origin airport on both the active and secondary FMS plan pages and execute the modified flight plan.
- 4. External Lights AS REQUIRED
- 5. Cabin Lights AS REQUIRED
- 6. Furnishings AS REQUIRED
- 7. Cabin Sign NO SMK & FSB
- 8. Environmental System Controls SET (see basic AFM/POH)
- 9. Bleed Air Valves OPEN or ENVIR OFF

Use ENVIR OFF for more efficient cooling on the ground.

- \*10. Brake Deice (if installed) CHECK (see basic AFM/POH)
- 11. Standby Flight Display System INITIALIZATION COMPLETE
- 12. Prop Sync ON
- 13. TCAS I (if installed) TEST (see basic AFM/POH)
- 14. TCAS II (if installed) TEST (see basic AFM/POH)
- 15. EMER FREQ EXTINGUISHED
- 16. TAWS+ PREFLIGHT (see basic AFM/POH)
- 17. Flight and Engine Instruments CHECK
  - a. Altimeters SET
  - b. Standby Flight Display Altimeter SET
- 18. Flaps CHECK AND SET
- 19. Flight Controls CHECK FOR FULL FREEDOM OF MOVEMENT AND PROPER DIRECTION OF TRAVEL
- 20. Brakes RELEASE AND CHECK



Never taxi with a flat tire or flat shock strut. During taxi operations, particular attention should be given to propeller tip clearance. Extreme caution is required when operating on unimproved or irregular surfaces or when high winds exist. If operations produce a propeller rpm over 1600, retard propeller levers to the detent to limit rpm to 1600 to help reduce the possibility of ingestion of ground debris.

# BEFORE TAKEOFF (Runup)

#### NOTE

Items marked with an " \* " may be omitted at pilot's discretion after the first flight of the day.

- 1. Avionics and Radar CHECK
- 2. Pressurization CHECK AND SET
- 3. Autopilot CHECK
- 4. Yaw Damp CHECK
- \* 5. Electric Pitch Trim CHECK

# WARNING

Operation of the electric elevator trim system should occur only when both elements of the dual-element switch are activated. Any movement of the elevator trim wheel while activating only one element denotes a system malfunction. The electric elevator trim must then be turned OFF and flight conducted only by manual operation of the elevator trim control.

- 6. Trim Tabs CONFIRM SET
- 7. Engine Control Friction Locks SET
- \* 8. Primary Governors, Overspeed Governors and Rudder Boost CHECK
- \* 9. Autofeather CHECK
- 10. Autofeather ARM
- 11. Manual Prop Feathering CHECK
- \* 12. Vacuum and Pneumatic Pressure CHECK
- \* 13. Engine Anti-ice CHECK

# WARNING

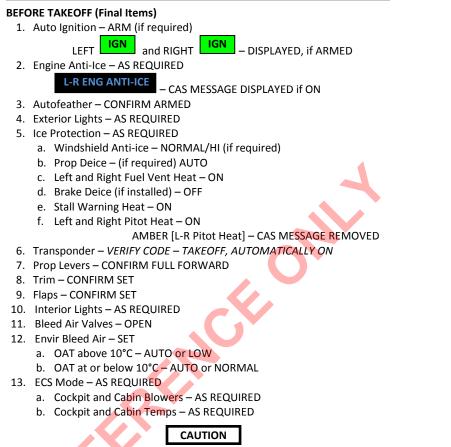
Either the MAIN or STANDBY engine anti-ice actuator must be operational on each engine before takeoff.

- 14. Ice Protection Equipment (if required) CHECK
- 15. Surface Deice Switch SINGLE CYCLE, THEN RELEASE
- 16. Stall Warning Ice Mode Annunciator ILLUMINATED
- 17. Stall Warning TEST
- 18. Stall Warning Ice Mode Annunciator PRESS (to select Normal Mode)

#### NOTE

The stall warning system must not be in the Ice Mode during takeoff and initial climb-out. If a takeoff is conducted with the stall warning system in the Ice Mode, a misleading stall warning following lift-off will likely occur.

- 19. Fuel Quantity, Flight and Engine Instruments CHECK
- 20. V<sub>1</sub>, V<sub>R</sub>, V<sub>2</sub>, V<sub>ENR</sub>, and Minimum Takeoff Power CONFIRM



Use of electric heat is for ground operations only and should not be selected for takeoff or flight operations.

**Electric Heat On** 

The **Charles** 

CAS message must be removed when ELEC HEAT

mode is de-selected.

- 14. Generator Load CHECK
- 15. Battery Ammeter CHECK (Charge current 10 amps or less if required)
- 16. CAS Messages REMOVED OR CONSIDERED

# TAKEOFF

# WARNING

Do not cycle deice boots during takeoff.

- 1. Brakes HOLD
- 2. Power SET (Ensure Minimum Takeoff Power is available)
- AFX AFX and Right - CONFIRM DISPLAYED ON EICAS 3. Left
- 4. Brakes RELEASED

# NOTE

Increasing airspeed will cause torque and ITT to increase.

- 5. V<sub>R</sub> ROTATE TO APPROX 8° NOSE UP ATTITUDE
- 6. Landing Gear (when positive climb established) UP
- 7. Airspeed MAINTAIN V<sub>2</sub> UNTIL CLEAR OF OBSTACLES
- 8. Flaps (at V<sub>2</sub> + 5) UP

TAKEOFF SPEEDS – FLAPS UP				
Weight - Lbs	V1	VR	V <sub>2</sub>	V <sub>ENR</sub>
14,000	106	106	116	116
13,500	104	104	114	114
13,000	103	103	111	111
12,500	103 ┥	103	109	109
12,000	103	103	107	107
11,500	103	103	105	105
11,000	103	103	104	104
and less				

# TAKEOFF SPEEDS – FLAPS APPROACH

Weight - Lbs	V <sub>1</sub>	VR	V2	V <sub>ENR</sub>
14,000	98	98	104	116
13,500	98	98	102	114
13,000	98	98	100	111
12,500	98	98	99	109
12,000	98	98	99	107
11,500	98	98	99	105
11,000	98	98	99	104
and less				

# CLIMB

- 1. Yaw Damp ON
- 2. Climb Power SET
- 3. Propellers 1800 RPM
- 4. Windshield Anti-Ice NORMAL

# CAUTION

It is recommended to turn on the windshield anti-ice early in the flight if it is anticipated that it will be required later. Activating the windshield anti-ice after the windshield has been cold-soaked may cause the windshield to crack.

- 5. Engine Instruments MONITOR
- 6. Cabin Sign AS REQUIRED
- 7. Pressurization CHECK
- 8. ECS Mode AS REQUIRED
  - a. Cockpit and Cabin Blowers AS REQUIRED
  - b. Cockpit and Cabin Temps AS REQUIRED
- 9. Lights AS REQUIRED

# CLIMB IN ICING CONDITIONS

L-R ENG ANTI-ICE

- CAS MESSAGE DISPLAYED

- Engine Anti-Ice ON,
  Auto Ignition ARM
- 3. Prop Deice AUTO
- 4. Stall Warning Heat CONFIRM ON
- 5. Left and Right Fuel Vent Heat CONFIRM ON
- 6. Left and Right Pitot Heat CONFIRM ON
- 7. Windshield Anti-Ice CONFIRM NORMAL OR HI
- At first sign of ice accretion on aircraft.
- 8. Surface Deice Switch SINGLE AND RELEASE (repeat as required)
- 9. Stall Warning Ice Mode Annunciator ILLUMINATED
- 10. Climb Power SET MAX CONT POWER (to expedite climb)
- 11. Airspeed 148 KNOTS MINIMUM AIRSPEED

# CRUISE

5.

WARNING

Do not lift power levers in flight.

# NOTE

Power settings and performance shall be predicated on the OAT from the pilot's side console display and not from the temperature displayed on the EICAS.

- 1. Cruise Power SET PER CRUISE POWER TABLES OR GRAPHS
- 2. Autofeather OFF
- 3. Engine Instruments MONITOR
- 4. Auxiliary Fuel Gages MONITOR

(Ensure fuel is being transferred from the auxiliary tanks)

Pressurization – MONITOR (Reset if cruise altitude changes by 1,000 feet or more)

# CRUISE IN ICING CONDITIONS

At first sign of ice accretion on aircraft.

- 1. Airspeed 148 KNOTS MINIMUM
- 2. Surface Deice Switch SINGLE AND RELEASE

3. Stall Warning Ice Mode Annunciator – VERIFY ILLUMINATED

OUTSIDE OF ICING CONDITIONS AND WINGS FREE OF ICE

- 1. Stall Warning Ice Mode Annunciator PRESS (to select Normal Mode)
- 2. Stall Warning Ice Mode Annunciator EXTINGUISHED

ICING CONDITIONS

# WARNING

Due to distortion of the wing airfoil, ice accumulation on the leading edges can cause a significant loss in rate of climb and in cruise speed, as well as increases in stall speed. Even after cycling deicing boots, the ice accumulation remaining on the boots plus ice accumulations on unprotected areas can cause large performance losses. In order to minimize ice accumulation on unprotected surfaces of the wing, maintain a minimum of 148 knots during operations in sustained icing conditions. In the event of windshield icing, reduce airspeed to 226 knots or below. Prior to a landing approach, cycle the deicing boots to shed any accumulated ice. The stall warning system will sound the aural warning at 15 to 20 knots above the normal warning speed when it is in the ice mode, which is appropriate when there is ice on the wings.

## 1. Engine Ice Protection

When visible moisture is encountered at an OAT of +5°C and below, or;

At night when freedom from visible moisture is not assured at an OAT of +5°C and below (Operation of strobe lights will sometimes show ice crystals not normally visible)

a. Engine Anti-Ice – ON

L-R ENG ANTI-ICE CAS MESSAGE DISPLAYED

b. Check for proper operation by noting a drop in torque.

WARNING

Engine icing can occur even though no surface icing is present. If freedom from visible moisture cannot be assured, engine ice protection should be activated. Visible moisture is moisture of any form: clouds, ice crystals, snow, rain, sleet, hail or any combination of these. Operation of strobe lights will sometimes show ice crystals not normally visible. If in doubt, actuate the Engine Anti-Ice System.

# NOTE

**R Engine Ice Fail** L-R Engine Ice Fail

Display of the CAS message indicates failure of selected system on affected engine(s). Immediate display indicates loss of power to the actuator. Select the other actuator(s).

2. Auto Ignition – ARM

# NOTE

Auto Ignition must be ARMED for icing flight, precipitation, and operation during turbulence. To prevent prolonged operation of the igniters with the system ARMED, do not reduce power levers below 500 ft-lbs torque.

# 3. Prop Deice – AUTO

a. The system may be operated continuously in flight, and will function automatically until the switch is turned off.

b. Relieve propeller imbalance due to ice by increasing rpm briefly and returning to the desired setting. Repeat as necessary.

# CAUTION

If the deice ammeter does not indicate 18 to 24 amps or the automatic timer fails to switch, refer to AP-13, ABNORMAL PROCEDURES.

# 4. Surface Deice

# WARNING

All components of the surface deice system must be monitored during icing flight to ensure the system is functioning normally. These components include:

#### Pneumatic Pressure Gage

The gage should indicate 12.0 to 20.0 psi before activating boots. The pressure will momentarily decrease when the boots are activated.

#### Vacuum Gage

The gage should indicate in the green arc. Vacuum will momentarily decrease when the boots are activated.

# Pneumatic Boots

Visually monitor the boots, where possible, to ensure ice is being removed.

# CAUTION

Operation of the surface deice system in ambient temperatures below -40°C can cause permanent damage to the deice boots.

# NOTE

Either engine will supply sufficient pneumatic pressure for deice operation.

At first sign of ice accretion on aircraft:

- a. Airspeed 148 KNOTS MINIMUM
- b. Surface Deice Switch SINGLE AND RELEASE
- c. Stall Warning Ice Mode Annunciator VERIFY ILLUMINATED
- d. Repeat as required

If Single Position of the Surface Deice Switch Fails:

e. Surface Deice Switch – MANUAL AND HOLD

FOR A MINIMUM OF 6 SECONDS, THEN RELEASE

f. Stall Warning Ice Mode Annunciator – VERIFY ILLUMINATED

g. Repeat as required.

OUTSIDE OF ICING CONDITIONS AND WINGS FREE OF ICE

a. Stall Warning Ice Mode Annunciator – PRESS (to select Normal Mode)
 b. Stall Warning Ice Mode Annunciator – EXTINGUISHED

5. Windshield Anti-Ice – NORMAL/HIGH

NOTE: Maximum airspeed for effective windshield anti-icing is 226 Knots.

- 6. Left and Right Fuel Vent Heat CONFIRM ON
- 7. Left and Right Pitot Heat CONFIRM ON
- 8. Stall Warning Heat CONFIRM ON
- 9. Ice Lights AS REQUIRED
- 10. Alt Static Air Source (if req) Refer to AP-15 ABNORMAL PROCEDURES

# DESCENT

- 1. Pressurization SET PER TABLE (Refer to NP-29)
  - a. Cabin Altitude SET
  - b. Rate Control AS DESIRED
- 2. Altimeter SET
- 3. Cabin Sign AS REQUIRED
- 4. Windshield Anti-ice AS REQUIRED
- 5. ECS Mode AS REQUIRED
  - a. Cockpit and Cabin Blowers AS REQUIRED
  - b. Cockpit and Cabin Temps AS REQUIRED
- 6. Fuel Balance CHECK
- 7. Power AS REQUIRED

#### NOTE

Approximately 75%  $N_1$  is required to maintain the cabin pressurization schedule during descent.

8. Seats and Tables - POSITIONED

- a. All Seats Seatbacks Upright, Headrests fully extended
- b. Lateral tracking seats Outboard position
- c. Tables Stowed

# **BEFORE LANDING**

# NOTE

With TAWS+, if either a non-precision or visual approach is being used at an airport and there is an active ILS frequency at the airport tuned into NAV 1, then unwarranted "GLIDESLOPE" cautions may be annunciated. To prevent this, either tune NAV 1 to another frequency or select the G/S INHIB switch/annunciator before starting the approach.

1. Landing Approach Speed – CONFIRM VREF

- 2. Autofeather ARM
- 3. Pressurization CHECK
- 4. Cabin Sign NO SMOKE & FSB
- 5. Flaps APPROACH
- 6. Landing Gear DN
- 7. Lights AS REQUIRED

# NOTE

Under low visibility conditions, landing and taxi lights should be left off due to light reflections.

8. Radar - AS REQUIRED

9. Surface Deice - CYCLE AS REQUIRED

If wings are free of ice:

10. Stall Warning Ice Mode Switch - PRESS (to select Normal Mode)

If ice remains on wing boots and/or unprotected surfaces:

11. Surface Deice - CYCLE

12. Stall Warning Ice Mode Annunciator - ILLUMINATED

13. Approach Speed and Landing Distance – INCREASE V<sub>REF</sub> BY 15 KNOTS AND INCREASE EXPECTED LANDING DISTANCE BY 25 PERCENT

#### NOTE

Prior to the landing approach, cycle the wing deice boots to shed as much ice as possible, regardless of the amount of ice remaining on the boots. Stall speeds can be expected to increase as much as 15 knots if ice is present on the wings and/or horizontal tail surfaces.

#### NOTE

If crosswind landing is anticipated, determine crosswind component from Section 5, PERFORMANCE. Immediately prior to touchdown, lower upwind wing and align the fuselage with the runway by use of rudder. During rollout, hold aileron control into the wind and maintain directional control with rudder and brakes. Use propeller reverse as desired.

# LANDING APPROACH SPEEDS (Note - no ice on wings)

	Flaps DOWN	
Weight	V <sub>REF</sub> Speeds,	
Lbs	Knots	
14,000	106	
13,500	105	
13,000	104	
12,500	103	
12,000 🧹	102	
11,000	99	
10,000	96	
9,000	93	

# NORMAL LANDING

1. Flaps – DOWN

2. Airspeed  $- V_{REF}$  (With ice on wings,  $V_{REF} + 15$ )

3. Yaw Damper – OFF

4. Power Levers – IDLE

5. Prop Levers – FULL FORWARD

# CAUTION

To ensure constant reversing characteristics, the propeller levers must be in the high rpm position.

After Touchdown:

6. Power Levers – LIFT AND SELECT GROUND FINE

7. Brakes – AS REQUIRED

# MAXIMUM REVERSE THRUST LANDING

When Landing Is Assured:

- 1. Flaps DOWN
- 2. Airspeed  $V_{REF}$  (With ice on wings,  $V_{REF} + 15$ )
- 3. Yaw Damp OFF
- 4. Condition Levers HIGH IDLE
- 5. Power Levers IDLE
- 6. Propeller Levers -FULL FORWARD

# After Touchdown:

- 7. Power Levers LIFT THROUGH GROUND FINE AND LIFT TO REVERSE.
- 8. Brakes AS REQUIRED
- 9. Condition Levers LOW IDLE

# CAUTION

If possible, propellers should be moved out of reverse at approximately 40 knots to minimize blade erosion. Care must be exercised when reversing on runways with loose sand, dust, or snow on the surface. Flying gravel will damage propeller blades and dust or snow may impair the pilot's visibility.

# BALKED LANDING

- 1. Power MAXIMUM ALLOWABLE
- 2. Airspeed MAINTAIN  $V_{REF}$

When clear of obstacles or 400 Feet AGL, establish a normal climb

- 3. Flaps (at V<sub>REF</sub> + 10) APPROACH
- 4. Landing Gear UP
- 5. Flaps (at 125 knots) UP

## AFTER LANDING

- 1. Auto Ignition OFF
- 2. Engine Anti-ice ON

L-R ENG ANTI-ICE

– CAS MESSAGE DISPLAYED

# CAUTION

The engine anti-ice system should be on for all ground operations to minimize ingestion of ground debris. Turn engine anti-ice off, when required, to maintain oil temperatures within limits.

- 3. Lights AS REQUIRED
- 4. Ice Protection OFF
- 5. Transponder STANDBY
- 6. Radar AUTOMATICALLY OFF UPON LANDING
- 7. Trim Tabs SET
- 8. Flaps UP
- 9. Pressurization Differential VERIFY 0

10. Bleed Air Valves – OPEN or ENVIR OFF

Use ENVIR OFF for more efficient cooling on the ground

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#### SHUTDOWN AND SECURING

- 1. Parking Brake SET
- 2. Standby Boost Pumps and Crossfeed OFF
- 3. Avionics Master OFF
- 4. Standby Flight Display System Power OFF
- 5. Autofeather OFF

# Autofeather Off – CAS MESSAGE DISPLAYED

- 6. Lights OFF
- 7. Oxygen System Ready PUSH OFF
- 8. ECS Mode OFF
- 9. Cockpit and Cabin Blowers AUTO
- 10. Battery CHARGED
- 11. ITT STABILIZED AT MIN OBTAINABLE TEMPERATURE FOR ONE MINUTE
- 12. Condition Levers FUEL CUT OFF

# CAUTION

Monitor ITT during shutdown. If sustained combustion is observed, proceed immediately to the engine clearing procedure. During shutdown, ensure that the compressors decelerate freely. Do not close the firewall fuel valves for normal engine shutdown.

- 13. Propeller Levers FEATHER
- 14. DC Volt/Loadmeters CHECK VOLTAGE

No voltage indicates current limiter is out

- 15. Overhead Panel Switches OFF
- 16. Emerg Cabin Lt Switch OFF
- 17. Battery and Generator Switches (below 15% N<sub>1</sub>) OFF

# NOTE

N1 decreasing below 15% indicates the starter relay is not engaged.

- 18. Control Locks INSTALL
- 19. Emergency Exit LOCKED
- 20. Emergency Cabin Light Power Switch OFF
- 21. Monagram Electric Toilet (if installed) SERVICE AS REQUIRED
- 22. Tiedowns and Chocks AS REQUIRED
- 23. External Covers AS REQUIRED
- 24. Propeller Locks AS REQUIRED
- 25. Oil Quantity CHECK IF REQUIRED
- 26. Parking Brake OFF
- 27. Baggage Compartment Light OFF
- 28. Cabin Entry Lights OFF

# **OPERATIONS AT AIRPORTS ABOVE 10,000 FEET PRESSURE ALTITUDE**

# **BEFORE ENGINE STARTING**

Prior to	turning	battery on:
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Oxygen Controls..... DO NOT PULL ON

# WARNING

With the Oxygen Controls not pulled on, crew oxygen and automatic deployment of the passenger oxygen masks is not available.

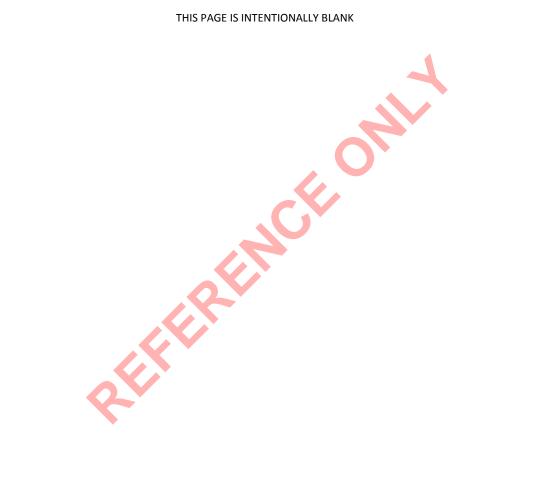
After	turning battery on: Cabin Alt High CAS MESSAGE DISPLAYED
	(above approximately 12,000 feet)
BEFO	RE TAKEOFF (FINAL ITEMS)
Env	ir Bleed AirLOW
CLIME	3
1.	Envir Bleed AirAUTO
2.	Cabin Controller SET AT PLANNED CRUISE
	ALTITUDE PLUS 500 FEET (if desired)
3.	PressurizationCHECK
4.	Oxygen Controls (after cabin altitude descends
	through 11,000 feet) PULL ON SYSTEM READY
DESCE	ENT Contract of the second
When	landing at field elevations above 11,000 feet pressure altitude:
1.	Oxygen Controls (prior to cabin altitude climbing
	through 11,000 feet) PUSH OFF
2.	Envir Bleed AirLOW
3.	Cabin Alt High
-	(above approximately 12,000 feet)

# WARNING

With the Oxygen Controls not pulled on, crew oxygen and automatic deployment of the passenger oxygen masks is not available.

PRESSURIZATION CONTROLLER SET	TING FOR LANDING
Closest	Add to
Altimeter Setting	Airport Elevation
28.00	+2400
28.10	+2300
28.20	+2200
28.30	+2100
28.40	+2000
28.50	+1900
28.60	+1800
28.70	+1700
28.80	+1600
28.90	+1500
29.00	
29.10	+1300
29.20	
29.30	+1100
29.40	+1000
29.50	+900
29.60	+800
29.70	+700
29.80	+600
29.90	+500
30.00	+400
30.10	+300
30.20	+200
30.30	+100
30.40	0
30.50	100
30.60	200
30.70	300
30.80	
30.90	500

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EMERGENCY PROCEDURES

EMERGENCY PROCEDURES

EMERGENCY PROCEDURES PILOT CHECK LIST CENTEX AEROSPACE CKL 006-4HFG HALO 275 CONVERSION

All airspeeds quoted in this section are Indicated Airspeeds (IAS) and assume zero instrument error.

NOTE

Immediate action procedures are delineated by bold type with the remaining procedures following.

# EMERGENCY AIRSPEEDS

One-Engine Inoperative Best Angle-of-Climb (V <sub>XSE</sub> )		
One-Engine-Inoperative Enroute Climb		
	14,000 pounds 116 Knots	
	13,500 pounds 114 Knots	
	13,000 pounds 111 Knots	
	12,000 pounds 107 Knots	
	11,000 pounds 104 Knots	
	10,000 pounds 104 Knots	
Air Minimum Control Speed (V <sub>MCa</sub> )		
Emergency Descent		
Maximum Range Glide		
E	END	

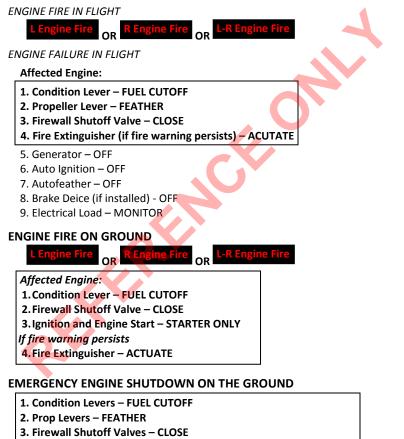
## **ENGINE FAILURE**

NOTE

To obtain best performance with one engine inoperative, the airplane must be banked  $3^{\circ}$  to  $5^{\circ}$  into the operating engine while maintaining a constant heading.

### EMERGENCY ENGINE SHUTDOWN

UNSCHEDULED ENGINE TORQUE INCREASE IN FLIGHT (Not Responsive to Power Lever Movement)



4. Master Switch, Left & Right Generator Switches (gang bar) - OFF

5. SFDS Power - OFF

# ENGINE FAILURE DURING TAKEOFF (AT OR BELOW $V_1$ ) – TAKEOFF ABORTED

- 1. Power Levers GROUND FINE
- 2. Brakes AS REQUIRED TO ACHIEVE STOPPING DISTANCE
- 3. Operative Engine MAXIMUM REVERSE or AS REQUIRED

### WARNING

Extreme care must be exercised when using single engine reversing on surfaces with reduced traction.

# ENGINE FAILURE DURING TAKEOFF (AT OR ABOVE V<sub>1</sub>) – TAKEOFF CONTINUED

- 1. V<sub>R</sub> Speed ROTATE TO APPROX 8° NOSE UP ATTITUDE
- 2. Landing Gear (when positive climb established) UP
- 3. Airspeed V<sub>2</sub> (MAINTAIN TO 400 FEET AGL)
- 4. Propeller Inoperative Engine VERIFY FEATHERED
- 5. Airspeed at 400 Feet AGL V<sub>ENR</sub>
- 6. Flaps (if extended) UP AT V<sub>2</sub> + 5
- 7. Climb to 1,500 Feet AGL

## WARNING

Do not retard engine power lever until the Autofeather system has completely feathered the propeller and propeller rotation has stopped. To do so will deactivate the autofeather circuit and prevent automatic feathering.

8. Clean up (Inoperative engine)

- a. Condition Lever FUEL CUTOFF
- b. Propeller Lever FEATHER
- c. Firewall Shutoff Valve CLOSE
- d. Auto Ignition OFF
- e. Autofeather OFF
- f. Generator OFF
- 9. Electrical Load MONITOR

### ENGINE FAILURE IN FLIGHT BELOW AIR MIN CONTROL SPEED VMCa.

- 1. Power Reduce as required to maintain directional control.
- 2. Nose Lower to accelerate above V<sub>MCa</sub>.

3. Power (operative engine) – AS REQUIRED

4. Failed Engine – SECURE (See EMERGENCY ENGINE SHUTDOWN)

ENGINE FLAMEOUT (2<sup>ND</sup> Engine)

1. Power Lever - IDLE

- 2. Propeller Lever DO NOT FEATHER
- 3. Condition Lever FUEL CUT OFF
- 4. Conduct Air Start Procedures (ABNORMAL PROCEDURES AP-2)

NOTE

The propeller will not unfeather without engine operating.

### **OIL PRESSURE LOW**

Press Low OR R Oil Press Low OR L-R Oil Press Low

1. Oil Pressure – CONFIRM BELOW 60 PSI

### If Confirmed

2. Engine – SECURE (See Emergency Engine Shutdown)

Or

3. Land at the nearest suitable airport using the minimum power required to sustain flight.

## FUEL SYSTEM

FUEL PRESSURE LOW



## 1. Standby Pump (Failed Side) – ON

2. Red [L Fuel Press] or [R Fuel Press] or [L-R Fuel Press] CAS Message – REMOVED 3. Oil Temperature and Pressure Indicators (failed side) – MONITOR

## SMOKE AND FUME ELIMINATION

Attempt to identify the source of smoke or fumes. Smoke associated with electrical failures is usually gray or tan in color, and irritating to the nose and eyes. Smoke produced by environmental system failures is generally white in color, and much less irritating to the nose and eyes. If smoke is prevalent in the cabin, cabin oxygen should not be intentionally deployed. If masks are automatically deployed due to an increase in cabin altitude, passengers should be instructed not to use them unless the cabin altitude exceeds 15,000 feet.

### WINDSHIELD ELECTRICAL FAULT

The smell of an electrical overheat, or observing smoke and/or fire at the lower inboard corner of either windshield, adjacent to the center post, may indicate an overheat condition in the electrical power terminal for the normal heat mode of the pilot's or copilot's windshield heat.

1. WSHLD ANTI-ICE - OFF

If Smoke and /or Fire does not cease:

2. Conduct ELECTRICAL SMOKE OR FIRE procedure.

If Smoke and/or Fire cease:

3. Continue flight with Windshield Anti-Ice OFF, if possible.

*If Windshield Anti-Ice is required:* 

4. If the source of the smell, smoke, or fire can be isolated to the pilot's or copilot's windshield, the opposite windshield (without the overheat condition) may be operated in the NORMAL or HI windshield heat mode.

ELECTRICAL SMOKE OR FIRE

## WARNING

When operating at airports above 10,000 feet, normal procedures require oxygen to be off, therefore, crew oxygen and automatic deployment of the passenger oxygen masks are not available until the Oxygen System is turned ON.

1. Oxygen Mask(s) - DON 2. Mask Selector Switch – EMER POSITION 3. MIC Switch(es) - OXY

4. ECS Mode – MAN HEAT

- 5. Envir Bleed Air NORMAL
- 6. Cockpit Temp FULL INCREASE
- 7. Cabin Temp FULL DECREASE
- 8. Man Temp AS REQUIRED
- 9. Cockpit and Cabin Blowers AS REQUIRED
- 10. Master Switches (Batt. & Generators) OFF (Use SFDS for airplane control)
- 11. Avionics Master OFF
- 12. Nonessential Electrical Equipment OFF
- 13. Cockpit Door OPEN
- 14. If Fire or Smoke Persists SKIP TO STEP 26

If Fire or Smoke Ceases:



Dissipation of smoke is not sufficient evidence that a fire has been extinguished. If it cannot be visually confirmed that no fire exists, land at the nearest suitable airport.

- 15. Instrument Panel
  - a. No. 3 and No. 4 Bus Feeder Circuit Breakers (2 each on Fuel Panel) – PULL
  - b. Avionics No. 2 and No. 3 Circuit Breakers (Right Panel) PULL
- 16. Battery ON
- 17. Generators ON
- 18. Avionics ON
- 19. Maintain Wings-Level Unaccelerated Flight by the SFDS until AHS alignment is complete.
- 20. The following avionics will be available:
  - PFD1, NAV1, ATC1, AHS1, ADS1, CAS1&2, CCP1, MKP, Audio 1, Audio Control 1, Aural Warnings, Flight Director, Left IAPS, ELT, GPS1, Engine Indications (DCU), FMS1, CVR
- 21. If required, exercise caution restoring pulled circuit breakers RESTORE ONE AT A TIME

If smoke resumes, isolate equipment by pulling circuit breaker.

- 22. Avionics No. 2 Circuit Breaker (Right Panel) PULL
- 23. Avionics No. 3 Circuit Breaker (Right Panel) PULL
- 24. Bus Feeder No. 3 Circuit Breaker (2 each on Fuel Panel) PULL
- 25. Bus Feeder No. 4 Circuit Breaker (2 each on Fuel Panel) PULL

*If Smoke Persists or if Extinguishing of Fire is Not Confirmed:* 

26. Cabin Pressure (if required) – DUMP

(battery must be ON while dumping pressure)

- 27. Storm Window (if required) OPEN
- 28. Flaps DO NOT ACTIVATE
- 29. Landing Gear LOWER MANUALLY
- 30. Land NEAREST SUITABLE AIRPORT

1

### ENVIRONMENTAL SYSTEM SMOKE OR FUMES

## WARNING

When operating at airports above 10,000 feet, normal procedures require oxygen to be off, therefore, crew oxygen and automatic deployment of the passenger oxygen masks are not available until the Oxygen System is turned ON.

- 1. Oxygen Mask(s) DON
- 2. Mask Selector Switch EMER POSITION
- 3. MIC Switch(es) OXY
- 4. ECS Mode MAN HEAT
- 5. Cockpit and Cabin Blowers AS REQUIRED
- 6. Left Bleed Air Valve ENVIR OFF

L Bleed Air Off CAS MESSAGE DISPLAYED

#### If Smoke Decreases:

7. Continue operation with left bleed air off.

## If Smoke Does Not Decrease:

- 8. Left Bleed Air Valve OPEN
- 9. Right Bleed Air Valve ENVIR OFF

R Bleed Air Off CAS MESSAGE DISPLAYED

If Smoke Decreases:

10. Continue operation with right bleed air off

### NOTE

Each bleed air valve must remain closed long enough to allow time for smoke purging to positively identify the smoke source.

### If smoke persists:

11. Bleed Air Valves – ENVIR OFF

R Bleed Air Off CAS MESSAGE DISPLAYED

- 12. Cabin Pressurization DUMP
- 13. Storm Window (if required) OPEN
- 14. Land NEAREST SUITABLE AIRPORT

## AIRSTAIR DOOR / CARGO DOOR UNLOCKED

Door Unlocked

## WARNING

Do not attempt to check the security of the airstair door or cargo door in flight. Remain as far from the door as possible with seatbelts securely fastened.

## If the **Door Unlocked** CAS MESSAGE IS DISPLAYED,

Or If An Unlatched Airstair Door/Cargo Door Is Suspected:

1. All Occupants - SEATED WITH SEAT BELTS SECURELY FASTENED

- 2. Cabin Sign NO SMOKE & FSB
- 3. Cabin Differential Pressure REDUCE TO LOWEST VALUE PRACTICAL (zero is preferred)
  - a. Descend and/or
  - b. Select higher cabin altitude setting.
- 4. Oxygen AS REQUIRED
- 5. Land NEAREST SUITABLE AIRPORT.

## **EMERGENCY DESCENT**

- 1. Power Levers IDLE
- 2. Prop Levers FULL FORWARD
- 3. Flaps (200 knots maximum APPROACH
- 4. Landing Gear (181 knots maximum) DN
- 5. Airspeed 181 KNOTS MAXIMUM

GLIDE	WARNING
1. Landing Gear – UP	Determine that procedures for restarting
2. Flaps – UP	first and second failed engines are
3. Propellers – FEATHERED	ineffective before feathering second
4. Airspeed – 136 KNOTS	engine propeller.

- Glide Ratio 2.0 nautical miles for each 1000 feet of altitude. Decrease by 0.2 nautical miles for each 10 knots of headwind.
- 6. ELT Switch ON (Yellow XMT BLINKING)

## ELECTRICAL

### **DUAL GENERATOR FAILURE**



The following procedure will provide 30 minutes of battery duration if the following criteria are met:

### NOTE

Ensure that the IGNITION AND ENGINE START switches are selected OFF otherwise it will not be possible to reset the generators.

- Load shedding is completed within 5 minutes .
- Discharge current at completion of load shedding does not exceed . approximately 35 amps.
- The battery is in good condition and was not subjected to cold soaking prior to the flight.

### 1. Generators – RESET. THEN ON

If Either Generator Will Reset:

- Operating Generator Loadmeter DO NOT EXCEED 100%
  - (88% above 31,000 feet)

3. Inoperative Generator – OFF

If Neither Generator Will Reset:

- 4. No. 3 & No. 4 Bus Feeder Circuit Breakers (2 ea. On Fuel Panel) PULL
- Avionics No. 2 & Avionics No. 3 Circuit Breakers (right panel) PULL
- 6. ECS Mode OFF
- Cockpit and Cabin Blowers AUTO
- 8. Generators OFF
- 9. Non-Essential Equipment
  - a. Auto Ignition OFF
  - Engine Anti-Ice LEAVE IN EXISTING POSITION b.
  - c. All Exterior Lights OFF, Beacon ON when required
  - All Ice Protection except L Pitot Heat OFF d.
  - Cabin Furnishings, Lights, No Smoke/FSB OFF e.
  - Right Bleed Air Valve ENVIR OFF f.

**R Bleed Air Off** CAS MESSAGE DISPLAYED

- Instrument Indirect Lights ON (if required)
- g. h. All Other Cockpit Lights – OFF
- 10. Land NEAREST SUITABLE AIRPORT
- 11. Flaps DO NOT LOWER
- 12. Landing Gear EXTEND MANUALLY
- 13. Battery Ammeter MONITOR BATTERY DISCHARGE CURRENT

(should not exceed approximately 35 amps)

- 14. Revert to the Standby Flight Display if the Pilot's PFD fails.
- 15. The following equipment will be operational until the airplane battery is depleted:

Pilot's PFD, Nav 1, ATC 1, GPS1, Aural Warnings, FMS 1, AHS 1, ADS1, CAS 1&2, CCP1, MKP, Audio 1, Audio Control, ELT, CVR, Engine Indications (DCU), Flight Director, Left IAPS

END

Pro Line Fusion

## **ENVIRONMENTAL SYSTEMS**

### **USE OF OXYGEN**

## WARNING

Beards and mustaches should be carefully trimmed so that they will not interfere with the proper sealing of an oxygen mask. The fit of the oxygen mask around the beard or mustache should be checked on the ground for proper sealing. Studies conducted by the military and the FAA conclude that oxygen masks do not seal over beards and mustaches. Hats and "ear-muff" type headsets must be removed prior to donning crew oxygen masks. Headsets and eyeglasses worn by crew members may interfere with quick-donning capabilities.

### WARNING

The following table sets forth the average time of useful consciousness (TUC) (time from onset of hypoxia until loss of effective performance) at various altitudes. Rapid decompression can reduce these times to 1/3 - 1/2 of their original value.

Cabin Pressure Altitude 🍐	Time of Useful Consciousness
35,000 feet	1/2 - 1 minute
30,000 feet	1 - 2 minutes
25,000 feet	3 to 5 minutes
22,000 feet	5 to 10 minutes
12 - <u>18,000</u> feet	30 minutes or more

## WARNING

When operating at airports above 10,000 feet, normal procedures require oxygen to be off, therefore, crew oxygen and automatic deployment of the passenger oxygen masks are not available until the Oxygen System is turned ON.

### CREW

1. Oxygen Masks – DON

2. Mic Switches – OXY

3. Oxygen Duration – CONFIRM

(Refer to Oxygen Duration in Section 4 of POH)

To Discontinue Use:

- 4. Oxygen Mask(s) RETURN TO OVERHEAD COMPARTMENT
- 5. Mic Switches NORMAL

### PASSENGERS

### WARNING

Adequate oxygen pressure is not provided to the passengers for sustained flight at cabin altitudes above 34,000 feet. The highest recommended cabin altitude for sustained flight is 25,000 feet.

1. Passenger Manual Drop-Out – PULL ON

## PAX Oxy On CAS MESSAGE DISPLAYED

- 1. Lanyard Pin For Each Mask Used PULL OUT
- 2. Mask DON
- 3. Oxygen Duration CONFIRM

(refer to Oxygen Duration in Section 4, NORMAL PROCEDURES of AFM)

To Discontinue Use:

- 4. Passenger Manual Drop-Out PUSH OFF
- Lanyard Pin INSERT
- 6. Mask RETURN TO COMPARTMENT
- 7. Compartment Cover (if cabin altitude is below 12,500 feet) CLOSE

### FIRST AID OXYGEN

- 1. Oxygen Compartment PULL COVER TO OPEN
- 2. ON/OFF Valve ON
- 3. Mask DON
- To Discontinue Use:
- 4. ON/OFF Valve OFF
- 5. Mask RETURN TO COMPARTMEN
- 6. Compartment Cover CLOSE

### PRESSURIZATION LOSS

- 1. Oxygen Mask(s) DON
- 2. Mic Switch(es) OXY
- 3. Passenger Manual Drop-Out PULL ON

PAX Oxy On CAS MESSAGE DISPLAYED

### 4. Descend – AS REQUIRED

5. Passengers – PULL LANYARD PIN, DON MASK

### WARNING

Adequate oxygen pressure is not provided to the passengers for sustained flight at cabin altitudes above 34,000 feet. The highest recommended cabin altitude for sustained flight is 25,000 feet.

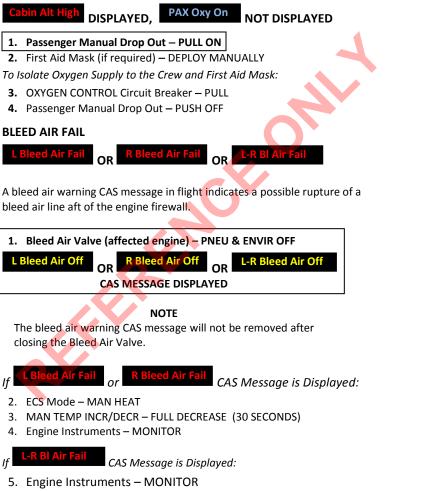
- 6. Range DETERMINE FOR FINAL CRUISE ALTITUDE
- Oxygen Duration CONFIRM (refer to Oxygen Duration in Section 4, NORMAL PROCEDURES of AFM) CONTINUED

### HIGH DIFFERENTIAL PRESSURE

(Cabin Differential Pressure Exceeds 6.6 psi)

- 1. Bleed Air Valves ENVIR OFF
- 2. Oxygen (Crew and Passengers) AS REQUIRED
- 3. Descend AS REQUIRED

### AUTO-DEPLOYMENT OXYGEN SYSTEM FAILURE



## EMERGENCY EXIT

Emergency Exit Handle – PULL

### NOTE

This is a plug-type hatch that opens into the cabin. The hatch can either be set aside inside the cabin, or placed outside the cabin through the hatch opening.

The outside handle may be locked from the inside with the EXIT LOCK lever. The inside EXIT-PULL handle will unlatch the door regardless of the position of the EXIT LOCK lever. Before flight, make certain the lock lever is in the unlocked position.

## SPINS

Intentional spins are prohibited. If an unintended spin is encountered, perform the following procedure IMMEDIATELY – THE LONGER THE DELAY, THE MORE DIFFICULT RECOVERY WILL BECOME. Steps 1 through 3 should be done AGGRESSIVELY and SIMULTANEOUSLY. The full forward position of the control column may be reduced slightly, if required, to prevent the airplane from exceeding a 90° nose down (inverted) attitude.

- 1. Control Column FULL FORWARD, AILERONS NEUTRAL
- 2. Full Rudder OPPOSITE THE DIRECTION OF SPIN
- 3. Power Levers IDLE
- 4. Rudder NEUTRALIZE WHEN ROTATION STOPS
- 5. Execute a smooth pullout.

## NOTE

The Federal Aviation Administration does not recommend the spin-testing of multi-engine airplanes. The recovery technique presented above is based upon the best available information, but shall not be construed as any assurance that the airplane can, in fact, be recovered from a spin. In accordance with industry practice, no spin tests have been conducted on this airplane.

## FLIGHT CONTROLS

### UNSCHEDULED ELECTRIC ELEVATOR TRIM ACTIVATION

- 1. Airplane Attitude MAINTAIN (using elevator control)
- 2. AP/Trim Disconnect DEPRESS FULLY & HOLD

DISPLAYED ON PFDs

NOTE

Autopilot will disengage when the disconnect switch is depressed.

- 3. Manually retrim airplane.
- 4. AP/Tim Disconnect RELEASE

*If Trim Continues to Run:* 

5. AP/Trim Disconnect - DEPRESS FULLY & HOLD

DISPLAYED ON PFDs

- 6. Pitch Trim Circuit Breaker (R/H CB Panel) PULL
- 7. AP/Trim Disconnect RELEASE
- 8. Manually retrim airplane.
- 9. Autopilot DO NOT ENGAGE

## UNSCHEDULED RUDDER BOOST ACTIVATION

Rudder boost operation without a large variation of power between the engines indicates a failure of the system.

1. Directional Control – MAINTAIN USING RUDDER PEDALS

2. Rudder Boost – OFF

If Condition Persists

3. Rudder Boost Circuit Breaker --- PULL

4. Either Bleed Air Valve – PNEU & ENVIR OFF

- 5. Rudder Trim AS REQUIRED
- 6. Perform normal landing.

## **AVIONICS**

See basic AFM/POH and applicable system AFM Supplement(s).

EMERGENCY PROCEDURES PILOT CHECK LIST

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REFERENCE



## ABNORMAL PROCEDURES

## PILOT CHECK LIST

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AVIONICS See basic AFM/POH and applicable system AFM Supplement

All airspeeds quoted in this section are indicated airspeeds (IAS) and assume zero instrument error.

### AIR START

## CAUTION

The pilot should determine the reason for engine failure before attempting an air start. Do not attempt an air start if  $N_1$  indicates zero and mechanical failure is suspected.

### STARTER ASSIST

## CAUTION

Air starts may not be possible above 25,000 feet. Descend to a lower altitude if necessary. Above 20,000 feet, starts tend to be hotter. During engine acceleration to idle speed, it may become necessary to move the condition lever periodically into FUEL CUT OFF in order to avoid an over temperature condition.

- 1. ECS Mode OFF
- 2. Cockpit and Cabin Blowers AUTO
- 3. Bleed Air Valve (inoperative engine) ENVIR OFF

L Bleed Air Off OR R Bleed Air Off CAS MESSAGE DISPLAYED

- 4. Furnishings OFF
- 5. Radar STANDBY
- 6. Windshield Heat OFF
- 7. Power Lever IDLE
- 8. Prop Lever (inoperative engine) LOW RPM
- 9. Condition Lever FUEL CUTOFF
- 10. Firewall Shutoff Valve OPEN
- 11. Generator (inoperative engine) OFF

### NOTE

If Conditions permit, reduce operative engine ITT to 700°C or less to reduce the possibility of exceeding ITT limit. Reduce electrical load to minimum consistent with flight conditions.

12. Ignition and Engine Start – ON,



CONTINUED

ABNORMAL PROCEDURES

- 13. Condition Lever ( $N_1 \ge 13\%$ ) LOW IDLE
- 14. ITT and N<sub>1</sub> MONITOR (I000°C maximum)
- 15. Ignition and Engine Start (>50%  $N_{\rm 1})-OFF$
- 16. Prop Lever AS REQUIRED
- 17. Power Lever AS REQUIRED
- 18. Generator ON
- 19. Auto Ignition ARM
- 20. Bleed Air Valve OPEN
- 21. ECS Mode AUTO
- 22. Electrical Equipment AS REQUIRED
- 23. Cockpit/Cabin Blower AS REQUIRED
- 24. Radar AS REQUIRED
- 25. Windshield Heat AS REQUIRED

### NO STARTER ASSIST (WINDMILLING ENGINE AND PROPELLER)

## CAUTION

Windmill air starts tend to be hotter if the start  $N_1$  is less than 13%. During engine acceleration to idle speed, it may become necessary to move the condition lever periodically into FUEL CUTOFF to avoid an over temperature condition.

- 1. Power Lever IDLE
- 2. Propeller Lever FULL FORWARD, CONFIRM 2000 RPM
- 3. Condition Lever FUEL CUTOFF
- 4. Engine Anti-ice (inoperative engine) OFF
- 5. Firewall Shutoff Valve OPEN
- 6. Generator (inoperative engine) OFF
- 7. Airspeed 140 KNOTS MINIMUM
- 8. Altitude BELOW 20,000 Feet

9. Auto Ignition – ARM,

IGN DISPLAYED ON EICAS

- 10. Condition Lever (11.5%  $N_1$  or above) LOW IDLE
- 11. ITT and  $N_1-MONITOR$  (1000°C MAXIMUM)
- 12. Power (after ITT has peaked) AS REQUIRED
- 13. Generator ON

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## LANDING

### FLAPS UP LANDING

Refer to Section 5 of Supplement AFM 006-4HFG for Flaps Up Landing Distance.

	Flaps UP
Weight	V <sub>REF</sub> Speeds,
Lbs	Knots
14,000	126
13,500	124
13,000	121
12,500	119
12,000	115
11,000	111
10,000	106
9,000	101

- 1. Approach Speed, V<sub>REF</sub> (Flaps UP) CONFIRM
- 2. Autofeather ARM
- 3. Pressurization CHECK
- 4. Cabin Sign NO SMOKE & FSB
- 5. Flaps UP

CAUTION Do not silence the landing gear warning horn, since the flap actuated portion of the landing gear warning

system will not be actuated during a flaps-up landing.

6. Flap Override – SELECT

### NOTE

If the FLAP OVRD switch/annunciator is deselected below 500 feet AGL, the ACTIVE annunciator will extinguish; but, the MODE 4b, "TOO LOW FLAPS" protection will not be rearmed and no Mode 4b "TOO LOW FLAPS" protection will be provided to the pilot. Mode 4b, "TOO LOW FLAPS" protection will rearm after the airplane has landed or has climbed back to an altitude higher than 500 feet AGL.

- 7. Landing Gear DN
- 8. Lights AS REQUIRED

### NOTE

Under low visibility conditions, landing and taxi lights should be left off due to light reflections.

9. Radar – AS REQUIRED

### 10. Surface Deice - CYCLE AS REQUIRED

*If wings are free of ice:* 

11. Stall Warning Ice Mode Switch – PRESS (to select Normal Mode)

If residual ice remains on wing boots:

- 12. Surface Deice CYCLE
- 13. Stall Warning Ice Mode Annunciator ILLUMINATED
- 14. Approach Speed and Landing Distance INCREASE V<sub>REF</sub> BY 15 KNOTS AND INCREASE LANDING DISTANCE BY 25 PERCENT.

See LANDING DISTANCE chart in Section 5 of Supplement AFM 006-4HFG.

### NOTE

Prior to the landing approach, cycle the wing deice boots to shed as much ice as possible, regardless of the amount of ice remaining on the boots. Stall speeds can be expected to increase as much as 15 knots if ice is present on the wings and/or horizontal tail surfaces.

### NOTE

If crosswind landing is anticipated, determine Crosswind Component from Section 5, PERFORMANCE. Immediately prior to touchdown, lower upwind wing and align the fuselage with the runway. During rollout, hold aileron control into the wind and maintain directional control with rudder and brakes. Use propeller reverse as desired.

When Landing Is Assured:

- 15. Approach Speed, V<sub>REF</sub> ESTABLISHED (With ice on wings, V<sub>REF</sub> + 15)
- 16. Yaw Damp OFF
- 17. Power Levers IDLE
- 18. Propeller Levers FULL FORWARD

After Touchdown:

- 19. Power Levers LIFT AND SELECT GROUND FINE OR REVERSE (as required)
- 20. Brakes AS REQUIRED

N

### **ONE-ENGINE-INOPERATIVE APPROACH AND LANDING**

	Flaps DOWN
Weight	V <sub>REF</sub> Speeds,
Lbs	Knots
14,000	106
13,500	105
13,000	104
12,500	103
12,000	102
11,000	99
10,000	96
9,000	93

- 1. Approach Speed,  $V_{REF}$  CONFIRM
- 2. Fuel Balance CHECK
- 3. Pressurization CHECK
- 4. Cabin Sign NO SMOKE & FSB

When it is certain that the field can be reached:

- 5. Flaps APPROACH
- 6. Landing Gear DN
- 7. Propeller Lever FULL FORWARD
- 8. Airspeed  $V_{REF}$  + 10
- 9. Interior and Exterior Lights AS REQUIRED
- 10. Radar As Required
- 11. Surface Deice CYCLE AS REQUIRED

If wings are free of ice:

12. Stall Warning Ice Mode Switch – PRESS (to select Normal Mode)

*If residual ice remains on wing boots:* 

- 13. Surface Deice CYCLE
- 14. Stall Warning Ice Mode Annunciator ILLUMINATED

15. Approach Speed and Landing Distance – INCREASE V<sub>REF</sub> BY 15 KNOTS AND INCREASE LANDING DISTANCE BY 25 PERCENT See LANDING DISTANCE chart in Section 5 of Supplement AFM 006-4HFG.

### NOTE

Prior to the landing approach, cycle the wing deice boots to shed as much ice as possible, regardless of the amount of ice remaining on the boots. Stall speeds can be expected to increase as much as 15 knots if ice is present on the wings and/or horizontal tail surfaces.

### NOTE

If crosswind landing is anticipated, determine Crosswind Component from Section 5, PERFORMANCE. Immediately prior to touchdown, lower upwind wing and align the fuselage with the runway. During rollout, hold aileron control into the wind and maintain directional control with rudder and brakes.

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When It is Certain There is No Possibility of a Go-Around

- 16. Flaps DN
- 17. Airspeed  $V_{REF}$  (With ice on wings,  $V_{REF}$  + 15)
- 18. Perform normal landing.

### NOTE

Single-engine reverse thrust may be used with caution after touchdown on smooth, dry, paved surfaces.

### **ONE-ENGINE-INOPERATIVE GO-AROUND**

- 1. Power MAXIMUM ALLOWABLE
- 2. Landing Gear UP
- 3. Flaps UP AT V<sub>REF</sub> + 10
- 4. Airspeed  $V_{REF}$  + 20

### **OVERWEIGHT LANDING**

WEIGHT ~ POUNDS	<b>V</b> <sub>REF</sub> ~ KNOTS
14,000	106
13,500	105

- When Landing Is Assured:
- 1. Flaps DOWN
- 2. Airspeed  $V_{REF}$
- 3. Yaw Damp OFF
- 4. Power Levers IDLE
- 5. Propeller Levers FULL FORWARD
- 6. Sink Rate TOUCHDOWN WITH NOMINAL OR LESS SINK RATE After Touchdown:
- 7. Power Levers LIFT AND SELECT GROUND FINE
- 8. Brakes AS REQUIRED

### NOTE

An overweight landing is defined as any landing made when the airplane gross weight is greater than 13,500 pounds, which is the maximum landing weight limitation. When the airplane is landed at a gross weight above 13,500 pounds the pilot should request that an inspection in accordance with the King Air 200 Series Maintenance Manual Section 5-50-00 Inspection After Hard Landing be performed before the next flight. Also, an overweight landing where the touchdown sink rate is nominal will not result in damage to the landing gear or airframe structure.

## SYSTEMS

### **ENGINE OIL SYSTEM**

LOW OIL PRESSURE INDICATION (60 PSI THROUGH 89 PSI, YELLOW INDICATION)

- 1. 85-89 PSI at 21,000 Feet and Above NO ACTION REQUIRED
- 2. 60-84 PSI at 21,000 feet and above or 60-89 PSI below 21,000 feet
  - a. Do not exceed 1100 ft-lbs of torque
  - b. Correct fault prior to next flight

For oil pressures below 60 psi, see EMERGENCY PROCEDURES.

HIGH OIL PRESSURE INDICATION (Above 135 psi Not Exceeding 200 psi) Ground Operation, excluding transients during cold ground starts

• Correct fault prior to flight

In Flight:

- 1. Continue flight to destination at pilot's discretion
- 2. Correct fault prior to next flight.

CHIP DETECT



1. Engine Instruments – MONITOR

2. If Abnormal – SHUT DOWN ENGINE AT PILOT'S DISCRETION

### FUEL SYSTEM

CROSSFEED (ONE-ENGINE-INOPERATIVE OPERATION) 1. Crossfeed – LEFT OR RIGHT, AS REQUIRED

Fuel Crossfeed

CAS MESSAGE DISPLAYED

- 2. Standby Pumps OFF
- 3. Auxiliary Tank Transfer AUTO
- 4. Fuel Balance MONITOR

If Fuel is Required from the Inoperative Engine's Auxiliary Fuel Tank and the

- Reason for Shutdown was Not an Engine Fire or Fuel Leak:
- 5. Firewall Shutoff Valve (inoperative engine) OPEN

RED [L Fuel Press] OR [R Fuel Press] CAS MESSAGE REMOVED

6. No Transfer Light (inop engine) – EXTINGUISHED IN 30 - 50 SECONDS TO DISCONTINUE CROSSFEED

7. Crossfeed Flow Switch – OFF (centered)

AUXILIARY FUEL TRANSFER FAILURE (NO TRANSFER LIGHT)

- 1. Auxiliary Tank Transfer OVERRIDE
- 2. No Transfer Light EXTINGUISHED

(If light does not extinguish, auxiliary fuel may not be available.)

3. Auxiliary Fuel Quantity – MONITOR

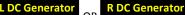
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4. Auxiliary Tank Transfer – AUTO (when auxiliary fuel tank is empty)

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### ELECTRICAL SYSTEM

SINGLE GENERATOR FAILURE



- 1. Loadmeter VERIFY GENERATOR IS OFF (0% LOAD)
- 2. Generator RESET, THEN ON

If generator will not reset:

- 3. Generator OFF
- 4. Loadmeter DO NOT EXCEED 100% (88% Above 31,000 feet)

In the event of a single generator failure, the following systems may be shut off to reduce the electrical load below 100%:

- Furnishing Systems
- Tail Flood Lights
- Prop Sync
- Copilot Windshield Anti-Ice
- Strobe Lights
- Cabin Lights
- Cockpit/Cabin Blowers (Low Speed)

EXCESSIVE LOADMETER INDICATION (over 100%

- 1. Battery OFF (monitor loadmeter)
- If Loadmeter Still Indicates Above 100%:
- 2. Nonessential Electrical Equipment OFF
- If Loadmeter Indicates 100% or Below:
- 3. Battery ON

CIRCUIT BREAKER TRIPPED

- 1. Nonessential Circuit DO NOT RESET IN FLIGHT
- 2. Essential Circuit (necessary for continued safe flight)
  - a. Circuit Breaker (allow to cool for 10 seconds min.) PUSH TO RESET

If Circuit Breaker Trips Again

b. Circuit Breaker – DO NOT RESET

BUS FEEDER CIRCUIT BREAKER TRIPPED

(FUEL PANEL BUS FEEDERS AND RIGHT CIRCUIT BREAKER PANEL BUS FEEDERS)

• A short is indicated, do not reset in flight.

### NOTE

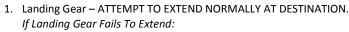
The items that may be inoperative can be determined from the electrical system schematic in Section 7, SYSTEMS DESCRIPTION in the basic POH/AFM.

## EXTERNAL POWER

This message is displayed when the external DC power plug is connected to the airplane. This message does not verify cart power or power to the airplane is correct.

### LANDING GEAR SYSTEM

### HYDRAULIC FLUID LOW



**Hyd Fluid Low** 

2. Follow LANDING GEAR MANUAL EXTENSION PROCEDURES.

LANDING GEAR MANUAL EXTENSION

*If the Landing Gear Fails to Extend After Placing the Landing Gear Control Down, Perform the Following:* 

- 1. Landing Gear Relay Circuit Breaker (pilot's subpanel) PULL
- 2. Landing Gear Control CONFIRM DN
- 3. Alternate Extension Handle UNSTOW AND PUMP
  - a. Pump handle up and down until the three green gear-down annunciators are illuminated.
  - b. While pumping, do not lower handle to the level of the securing clip as this will result in loss of pressure.
- If All Three Green Gear-Down Annunciators Are Illuminated:
- 4. Alternate Extension Handle STOW
- 5. Landing Gear Controls DO NOT ACTIVATE
  - a. The Landing Gear Control and the Landing Gear Relay Circuit Breaker MUST NOT BE ACTIVATED.
  - b. The landing gear should be considered UNSAFE until the airplane is on jacks and the system has been cycled and checked.

If One or More Green Gear-Down Annunciators Do Not Illuminate for Any Reason and a Decision is Made to Land in this Condition:

- 6. Alternate Extension Handle CONTINUE PUMPING
  - a. Continue to pump the handle until maximum resistance is felt.
  - b. When pumping is complete, leave handle at the top of the stroke. DO NOT LOWER AND STOW.

Prior To Landing

- 7. Alternate Extension Handle PUMP AGAIN
  - a. Pump the handle again until maximum resistance is felt.
  - b. When pumping is complete, leave handle at the top of the stroke. DO NOT LOWER AND STOW.

### After Landing

- 8. Alternate Extension Handle PUMP AGAIN WHEN CONDITIONS PERMIT
  - a. Pump the handle again, when conditions permit, to maintain hydraulic pressure until the gear can be mechanically secured.
  - b. DO NOT STOW HANDLE
  - c. DO NOT ACTIVATE THE LANDING GEAR CONTROL OR THE LANDING GEAR RELAY CIRCUIT BREAKER.
  - d. The landing gear should be considered UNLOCKED until the airplane is on jacks and the system has been cycled and checked.

### **ENVIRONMENTAL SYSTEMS**

ABNORMAL PROCEDURES

PILOT CHECK LIST



This CAS message is displayed when the respective environmental bleed air valve is off.

## DUCT OVERTEMPERATURE

## Duct Overtemp

- 1. ECS Mode MAN HEAT
- 2. MAN TEMP INCR/DECR DECR(30 seconds)
- If Condition Persists:
- 3. Left Bleed Air Valve ENVIR OFF

L Bleed Air Off

CAS MESSAGE DISPLAYED

### **Duct Overtemp**

- If the CAS message is not removed after 2 minutes:
- 4. Oxygen AS REQUIRED
- 5. Right Bleed Air Valve ENVIR OFF

### L-R Bleed Air Off

- CAS MESSAGE DISPLAYED
- Descend AS REQUIRED

## ELECTRIC HEAT ON

## Electric Heat On

CAS Message is not Removed When ELEC HEAT is

De-Selected During Ground Operations:

ECS Mode – ELEC HEAT
 (Initiate SHUTDOWN AND SECURE PROCEDURES when practical)

## Electric Heat On

```
CAS message displays in flight and the ECS mode is in the
```

ELEC HEAT position:

If the

If the

1. ECS Mode – SELECT ANOTHER MODE

## Electric Heat On

- If the CAS message remains displayed:
- 2. Cockpit Blower HIGH
- 3. Loadmeters MONITOR

### NOTE

Turn off non-essential equipment as necessary to maintain loads within limits

### ICE PROTECTION SYSTEM

ELECTROTHERMAL PROPELLER DEICE (Auto System)

Abnormal Reading on Deice Ammeter (Normal operation is 18 to 24 amps):

- 1. Zero Amps:
  - a. Automatic Prop Deice CHECK ON
  - b. If OFF, reposition to ON after 30 seconds.
  - c. If ON with zero amps reading, system is inoperative: position the switch to OFF.
  - d. Use manual prop deice system.
- 2. Below 18 amps:
  - a. Continue operation.
  - b. If propeller imbalance occurs, increase rpm briefly to aid in ice removal.
- 3. Over 24 amps.
  - a. If the Auto Prep Deice circuit breaker switch does not trip, continue operation.
  - b. If propeller imbalance occurs, increase rpm briefly to aid in ice removal.
  - c. If the Auto Prop Deice circuit breaker switch trips, use the manual system. Monitor loadmeter for excessive current drain.
  - d. If the Prop Deice Control circuit breaker or the Left or Right Prop Deice circuit breaker trips, avoid icing conditions.

### ELECTROTHERMAL PROPELLER DEICE (MANUAL SYSTEM)

- 1. Manual Prop Deice MANUAL FOR 90 SECONDS
- 2. Loadmeters MONITOR FOR SMALL NEEDLE DEFLECTION (APPROX 8%)
- 3. Repeat as required.

### ENGINE ANTI-ICE FAILURE



1. Engine Anti-ice Actuator(s) - SELECT OTHER ACTUATOR(S)



- message Is not removed:
- 2. Exit icing conditions.
- 3. Assume engine anti-ice is ON for performance calculations.

CAS message

#### PITOT STATIC MAST HEAT FAILURE

ABNORMAL PROCEDURES



**R** Pitot Heat

Display of the L Pitot Heat

PILOT CHECK LIST

L-R Pitot Heat

indicates that pitot mast heat is inoperative. The CAS message will also display anytime the PITOT switches are in the OFF position.

### BRAKE DEICE (IF INSTALLED)

If operation does not automatically terminate approximately 10 minutes after gear retraction, system must be manually selected OFF.

If inadequate pneumatic pressure is developed for proper wing boot inflation, select brake deice system OFF.

### STALL FAIL

### Stall Fail

This CAS message indicates that the stall computer has failed. Maintain airspeed appropriate for phase of flight.

### NOTE

Halo 250 equipped aircraft have two stall computer modes, Normal Mode and Icing Mode. The Stall Fail CAS message applies to the mode in use at the time of failure.

### STATIC AIR SYSTEM

PILOT'S ALTERNATE STATIC AIR SOURCE

### Altn Static Src

THE PILOT'S ALTERNATE STATIC AIR SOURCE SHOULD BE USED IN SITUATIONS WHERE THE NORMAL STATIC SOURCE HAS BEEN OBSTRUCTED. After the airplane has been exposed to moisture and/or icing conditions (especially on the ground), the possibility of obstructed static ports should be considered. Partial obstructions will result in the rate of climb indication being sluggish during a climb or descent. Verification of suspected obstruction is possible by switching to the alternate system and noting a sudden sustained change in rate of climb. This may be accompanied by abnormal indicated airspeed and altitude changes beyond normal calibrated differences.

Whenever Any Obstruction Exists in The Normal Static Air System, or, When The Alternate Static Air System Is Desired For Use:

- 1. Pilot's Static Air Source (Reversion Panel) ALTERNATE
- 2. Altn Static Src CAS Message – DISPLAYED

3. The pilot's airspeed and altimeter indications are corrected for the new static reference.

## NOTE

Be certain the static air valve is in the NORMAL position when the alternate system is not needed.

### CRACKED OR SHATTERED WINDSHIELD

The following procedure should be used when one or more cracks occur in the inner or outer ply of the windshield. The procedure is also applicable if the windshield shatters. This usually occurs in the inner ply and is characterized by a multitude of cracks which will likely obstruct the crew members' vision and may produce small particles or flakes of glass that can break free of the windshield.

- 1. Altitude MAINTAIN 25,000 FEET OR LESS, IF POSSIBLE
- 2. Pressurization Controller RESET
  - a. Cruise and Descent MAINTAIN A CABIN DIFFERENTIAL PRESSURE OF 2.0 TO 4.6 PSI (A cabin differential pressure of 4.6 psi will produce approximately a 10,500-foot cabin altitude at an airplane altitude of 25,000 feet)
  - b. Before Landing DEPRESSURIZE CABIN PRIOR TO TOUCHDOWN
- 3. Other In-flight Considerations
  - a. Visibility through a shattered windshield may be sufficiently reduced to dictate flying the airplane from the opposite side of the cockpit.
  - b. Precautions should be taken to prevent particles or flakes of glass from a shattered inner ply of the windshield from interfering with the crew's vision.
  - c. A cracked outer windshield ply may damage operating windshield wipers.
  - d. Windshield heat may be inoperative in the area of the crack(s).
  - e. The structural integrity of the windshield will be maintained.
- 4. Postflight Considerations SEE SECTION 2 LIMITATIONS IN BASIC AFM/POH

## CRACK IN ANY SIDE WINDOW (COCKPIT OR CABIN)

- 1. Altitude DESCEND IF REQUIRED
  - a. Descend to an altitude not requiring oxygen, if possible or
  - b. Descend to at least 25,000 feet if passengers are on board.
- 2. Crew and Passengers DON OXYGEN MASKS, IF REQUIRED
- 3. Pressurization Controller RESET AS REQUIRED TO DEPRESSURIZE CABIN
- 5. Cabin Pressure switch DUMP
- 6. Postflight Considerations SEE SECTION 2, LIMITATIONS IN BASIC AFM/POH

## SEVERE ICING CONDITIONS

THE FOLLOWING WEATHER CONDITIONS MAY BE CONDUCIVE TO SEVERE INFLIGHT ICING:

- Visible rain at temperatures below 0° Celsius outside air temperature.
- Droplets that splash or splatter on impact at temperatures below 0° Celsius outside air temperature.

PROCEDURES FOR EXITING THE SEVERE ICING ENVIROMENT:

These procedures are applicable to all phases of flight from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18° Celsius, increased vigilance is warranted at temperatures around freezing with visible moisture present. If the visual cues specified in Section 2 Limitations of the Halo 275 FAA Approved AFM Supplement for identifying severe icing conditions are observed, accomplish the following.

- Immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the airplane has been certificated.
- 2. Avoid abrupt and excessive maneuvering that may exacerbate control difficulties.
- 3. Do not engage the autopilot.
- 4. If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- 5. If an unusual roll response or uncommanded roll movement is observed, reduce angle-of-attack.
- 6. Do not extend flaps when holding in icing conditions. Operation with the flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area (i.e., leading-edge boot).
- 7. If the flaps are extended, do not retract them until the airframe is clear of ice.
- 8. Report these weather conditions to Air Traffic Control.

## PROPELLERS

AUTOFEATHER OFF

Autofeather Off

Autofeather switch is not armed and the landing gear is extended.1. Autofeather Switch (if not single engine) – ARM

### REVERSERS NOT READY

Rvs Not Ready

The propeller levers are not in the high rpm, low pitch position with the landing gear extended.

1. Propeller Levers – FULL FORWARD

### AVIONICS

See basic AFM/POH and applicable system AFM Supplement.

ABNORMAL PROCEDURES PILOT CHECK LIST

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