HALO 250

CENTEX AEROSPACE GWI STC SERIES

COMMUTER CATEGORY CONVERSION
INCREASED MAXIMUM TAKEOFF WEIGHT

PILOT CHECK LISTS

NORMAL PROCEDURES

EMERGENCY PROCEDURES

ABNORMAL PROCEDURES

FOR

KING AIR B200GT AIRPLANES
SERIALS BY-1 thru BY-116, BY-118
AND
KING AIR B200 and B200C AIRPLANES
WITH ROCKWELL COLLINS PROLINE 21 AVIONICS
SERIALS: BB-1834, BB-1843 thru BB-2019
BL-148 thru BL-171

MODIFIED IN ACCORDANCE WITH
CENTEX AEROSPACE HALO 250 STC SA11103SC

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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 B200 series airplanes with ProLine 21 Avionics and B200GT series airplanes. This document also merges the respective procedures from the CenTex Aerospace Halo 250 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.

NOTE

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.

NOTE

Some checklist procedures will vary between aircraft with the "old" environmental system and aircraft with the new dual zone environmental system. Where applicable, the checklist procedures will be noted "old environmental system", or "new environmental system".

Old Environmental System:

BB-1834, BB-1843 thru BB-1977, BB-1979 thru BB-1987
BL-148 thru BL-151

New Environmental System

BB-1978, BB-1988 thru BB-2019
BL-152 thru BL-171
BY-1 thru BY-116, BY-118

Current with AFMS 006-2A, Revision 1

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NORMAL PROCEDURES
PILOT CHECK LIST

TABLE OF CONTENTS

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

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_1 .....See TAKEOFF SPEEDS – FLAPS UP, NP-18
- Rotation, V_R.....See TAKEOFF SPEEDS – FLAPS UP, NP-18
- Safety Speed, V_2.....See TAKEOFF SPEEDS – FLAPS UP, NP-18
- Enroute Climb, V_{ENR}.....See TAKEOFF SPEEDS – FLAPS UP, NP-18

Takeoff - Flaps Approach
- Decision Speed, V_1 .....See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
- Rotation, V_R.....See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
- Safety Speed, V_2.....See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18
- Enroute Climb, V_{ENR}.....See TAKEOFF SPEEDS – FLAPS APPROACH, NP-18

Two-Engine Best Angle-of-Climb (V_X)..... 100 Knots
Two-Engine Best Rate-of-Climb (V_Y) ..... 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 ..... 130 Knots
- 25,000 feet to 35,000 feet ..... 120 Knots

Maximum Airspeed for Effective Windshield Anti-icing ..... 226 Knots
Operating Maneuvering Speed (V_o) ..... 181 Knots
Turbulent Air Penetration..... 170 Knots

CAUTION

For turbulent air penetration, use an airspeed of 170 knots. Avoid over-action 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_{REF}, see LANDING SPEEDS, NP-24

Balked Landing Climb..... V_{REF}, see LANDING SPEEDS, NP-24
Intentional One-Engine-Inoperative Speed (V_{SSE}) ..... 104 Knots
Air Minimum Control Speed (V_{MCa})
- Hartzell propellers..... 86 Knots
- Raisbeck Hartzell STC SA2698NM-S, Flaps Up ..... 91 Knots; Flaps Approach ..... 88 Knots
- BLR Hartzell STC SA02130SE, Flaps Up ..... 92 Knots; Flaps Approach ..... 87 Knots

END

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. Emerg 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
13. Battery – ON, CHECK 23 VOLT MINIMUM
14. Emergency Cabin Flood Lamps – CHECK (not illuminated)
15. Fuel Quantity (Main and Auxiliary) – CHECK
16. Gear Down Annunciators – ILLUMINATED
17. Flap Control (if desired) – APPROACH, THEN DOWN (check indicator)
18. Airstair Door Warning Annunciator Circuitry – CHECK
19. Oxygen System Preflight Inspection – COMPLETE
+ 20. Battery – OFF
21. Emergency Lighting Cabin Switch – OFF

CONTINUED

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

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 – REMOVED
15. Outboard Deice Boot and Stall Strip – CHECKED
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

CONTINUED

26. Engine Compartment Door (Outbd) – SECURE,
    BLEED VALVE EXHAUST CLEAR (B200)
27. Exhaust Stack (Outbd) – CHECK FOR CRACKS
28. Top Cowling Locks (Outbd) – SECURE
29. Nacelle Cooling Ram Air Inlets – CLEAR
+30. Propeller – CHECK FOR NICKS, DEICE BOOT SECURE
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

CONTINUED

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,
   BLEED VALVE EXHAUST CLEAR (B200)
9. Exhaust Stack (Inbd) – CHECK FOR CRACKS
10. Top Cowling Locks (Inbd) – SECURE
11. Nacelle Cooling Ram Air Inlets – CLEAR

+12. Propeller – CHECK FOR NICKS, DEICE BOOT SECURE

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, asym protect, flap tracks, limit sws, & 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

CONTINUED

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

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.

6. Position Light, Tail Floodlights (Left and Right) - CHECK

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

END

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 pilot's PFD and MFD

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 6 rotary cam locks aligns with the notch in the plate on the door frame.

CONTINUED

* 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] – EXTINGUISHED
16. Fuel Panel Circuit Breakers – IN
17. Pilots Instrument Panel and Subpanel – CHECK
   a. ESIS Power – TEST (Green Light ILLUMINATED)
   b. ESIS 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. Pilot Air Control – AS REQUIRED *(Old Environmental System)*
   f. Defrost Air Control – AS REQUIRED *(Old Environmental System)*
   g. Landing Gear Control – DN
   h. Landing Gear Relay Circuit Breaker – IN
   i. All Other Switches – OFF
*18. Pilot's Clock (Control wheel) (if installed) – CHECK AND SET
19. Pilot's Audio – SET
20. 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

CONTINUED

21. Pedestal – CHECK
    a. Cabin Pressure Switch – PRESS
    b. Rudder Boost Switch – ON
    c. Pressurization Controller – SET
22. Reversionary Switch Panel – CHECK
    a. DG FREE/NORM – NORM
    b. Slew +/- - CENTER
    c. ATC Select – STBY
    d. Pilot Display – NORM
    e. AHRS – NORM
    f. ADC – NORM
    g. TUNE – NORM
    h. RMT TUNE – NORM
    i. Slew +/- - CENTER
    j. DG FREE/NORM – NORM
    k. GND COM – EXTINGUISHED

∗ 23. Copilot's Clock (control wheel) (if installed) – CHECK AND SET

24. COPILOT'S Audio – SET
25. Copilot's Subpanel – CHECK
    a. Cabin Sign – NO SMOKE & FSB
    b. Bleed Air Valve Switches – ENVIR OFF
    c. Oxygen Pressure – CONFIRM

    New Environmental System
        1) ECS Mode – OFF
        2) Cockpit and Cabin Blowers – AUTO

    Old Environmental System
        1) Vent Blower Switch – AUTO
        2) Cabin Temp Mode Control – OFF
        3) Cabin/Cockpit Air Control – AS REQUIRED
        4) Copilot Air Control – AS REQUIRED

    d. All Other Switches – OFF
26. Electric Heat – AS REQUIRED WITH GPU (*New Environmental System*)
    a. Battery – VERIFY ON
    b. External Power Source – TURN OFF, CONNECT TO AIRPLANE; TURN ON
    c. Voltmeter – 27.5 to 28.4 VOLTS
    d. External Power – [EXT PWR] – ILLUMINATED
    e. ECS Mode – ELEC HEAT, [ELEC HEAT ON] – ILLUMINATED
    f. All other Switches – OFF

CAUTION

Do not operate the electric heat with the pedestal floor outlet blocked or the cockpit door closed. [ELEC HEAT ON] must extinguish when ELEC HEAT mode is de-selected. Electric heat must be off at least 2 minutes prior to and during engine start.

27. Right Panel Circuit Breakers – CHECK
*28. Pilot's Static Air Source – NORMAL
29. Overhead Switch Panel (if installed)
    a. BARO ALT – AS REQUIRED
    b. BARO – AS REQUIRED
    c. FL 180 – AS REQUIRED
    d. AVIONICS MAINT - OFF
*30. Fire Extinguisher (Under Copilot's Chair) – CHECK
31. Battery – ON
*32. Fuel System – CHECK
33. Fuel Quantity – (Main and Auxiliary) – CHECK
*34. Landing Gear Handle Lights – PRESS TO TEST
*35. Hydraulic Fluid Sensor – TEST, [HYD FLUID LOW] - ILLUMINATED
36. Beacon – ON
37. DC Volt/Loadmeters – PRESS TO CHECK VOLTAGE, (23 volts minimum)
*38. Annunciators – TEST
*39. Stall Warning – TEST
*40. Fire Detectors and Fire Extinguishers – TEST
41. Cockpit Voice Recorder Panel – TEST
42. Left Power Lever – ADVANCE TO AT LEAST 80% POSITION
43. Autofeather Switch – ARM
44. Elevator Trim Warning System – TEST
45. Elevator Trim Control – SET FOR TAKEOFF
46. Autofeather Switch – OFF
47. Left and Right Power Levers – IDLE

END

ENGINE STARTING (Battery)

1. Right Ignition and Engine Start – ON
   [R IGNITION ON] – ILLUMINATED and [R FUEL PRESS] – EXTINGUISHED
2. Right Condition Lever (13% N_1 or above) – LOW IDLE
3. Right ITT and N_1 – 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% N_1 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
   [L IGNITION ON] – ILLUMINATED and [L FUEL PRESS] – EXTINGUISHED
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_1 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

END

ENGINE STARTING (External Power)

CAUTION

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. An EXT PWR annunciator is provided 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 0N
6. Voltmeter - 28.0 to 28.4 VOLTS
7. Propeller Levers - FEATHER
8. Right Ignition and Engine Start – ON
   [R IGNITION ON] – ILLUMINATED and [R FUEL PRESS] - EXTINGUISHED
9. Right Condition Lever (13% N_1 or above) - LOW IDLE
10. Right ITT and N_1 - 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
    [L IGNITION ON] – ILLUMINATED and [L FUEL PRESS] - EXTINGUISHED
14. Left Condition Lever (13% N_1 or above) – LOW IDLE
15. Left ITT and N_1 - MONITOR (1000°C maximum)
16. Left Oil Pressure - CHECK
17. Left Ignition and Engine Start (50% N_1 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

END

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

END

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. Avionics Master – ON
3. External Lights – AS REQUIRED
4. Cabin Lights – AS REQUIRED
5. Furnishings – AS REQUIRED
6. Cabin Sign – NO SMK & FSB
7. Environmental System Controls – SET
8. Bleed Air Valves – OPEN or ENVIR OFF

   Use ENVIR OFF for more efficient cooling on the ground.

* 9. Brake Deice (if installed) – CHECK (see basic AFM/POH)

10. ESIS Display – INITIALIZATION COMPLETE
11. Prop Sync – ON
12. TCAS I (if installed) – TEST (see basic AFM/POH)
13. TCAS II (if installed) – TEST (see basic AFM/POH)
14. EMER FREQ – EXTINGUISHED
15. EGPWS (if installed) – PREFLIGHT (see basic AFM/POH)
16. TAWS+ (if installed) – PREFLIGHT (see basic AFM/POH)
17. Flight and Engine Instruments – CHECK
    a. Altimeters – SET
    b. ESIS 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

END

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 elevator trim control switch must then be turned OFF and flight conducted only by manual operation of the elevator trim wheel.

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_1, V_R, V_2, V_{ENR}, and Minimum Takeoff Power - CONFIRM

END

BEFORE TAKEOFF (Final Items)

1. Auto Ignition – ARM (if required)
   [L IGNITION ON] and [R IGNITION ON] – ILLUMINATED, if ARMED
2. Engine Anti-Ice – AS REQUIRED
   [L ENGINE ANTI-ICE] and [R ENGINE ANTI ICE] – ILLUMINATED if ON
3. Autofeather – CONFIRM ARMED
4. Exterior Lights – AS REQUIRED
5. Ice Protection – ON (if Required)
   a. Windshield Anti-ice – NORMAL/HI (if required)
   b. Prop Deice – (if required) AUTO
   c. Left and Right Fuel Vent Heat – ON
   d. Brake Deice (if installed) – OFF
   e. Stall Warning Heat – ON
   f. Left and Right Pitot Heat – ON
      [L PITOT HEAT] and [R PITOT HEAT] – EXTINGUISHED
6. Transponder – SELECT 1 OR 2
7. Prop Levers – CONFIRM FULL FORWARD
8. Trim – CONFIRM SET
9. Flaps – CONFIRM SET
10. Interior Lights – AS REQUIRED
11. Bleed Air Valves – OPEN
12. Envir Bleed Air – SET (*New Environmental System)*
    a. OAT above 10°C – AUTO or LOW
    b. OAT at or below 10°C – AUTO or NORMAL
13. ECS Mode – AS REQUIRED (*New Environmental System)*
    a. Cockpit and Cabin Blowers – AS REQUIRED
    b. Cockpit and Cabin Temps – AS REQUIRED

CAUTION

Use of electric heat is for ground operations only and should not be selected for takeoff or flight operations. [ELEC HEAT ON] must be extinguished when ELEC HEAT mode is de-selected.

14. Elec Heat – OFF (*Old Environ System)* [ELEC HEAT ON] – EXTINGUISHED
15. Aft Blower – AS REQUIRED (*Old Environmental System)*
16. Generator Load – CHECK
17. Battery Ammeter – CHECK (Charge current 10 amps or less if required)
18. Annunciators – EXTINGUISHED OR CONSIDERED

END

TAKEOFF

WARNING

Do not cycle deice boots during takeoff.

1. Brakes - HOLD
2. Power - SET (Ensure Minimum Takeoff Power is available)
3. [L AFX] and [R AFX] – ILLUMINATED or
   [L AUTOFEATHER] and [R AUTOFEATHER] - ILLUMINATED
4. Brakes - RELEASED

NOTE

Increasing airspeed will cause torque and ITT to increase.

5. V_R - ROTATE TO APPROX 8° NOSE UP ATTITUDE
6. Landing Gear (when positive climb established) - UP
7. Airspeed - MAINTAIN V_2 UNTIL CLEAR OF OBSTACLES
8. Flaps (at V_2 + 5 Knots) – UP

TAKEOFF SPEEDS – FLAPS UP

Weight	V_1	V_R	V_2	V_{ENR}
13,420 LBS	114	115	125	125
13,000 LBS	112	113	123	123
12,500 LBS	110	111	121	121
12,000 LBS	108	109	120	120
11,500 LBS	106	107	118	118
11,000 LBS and less	104	105	115	115

TAKEOFF SPEEDS – FLAPS APPROACH

Weight	V_1	V_R	V_2	V_{ENR}
13,420 LBS	96	97	107	125
13,000 LBS	95	97	106	123
12,500 LBS	95	97	105	121
12,000 LBS	94	97	104	120
11,500 LBS	94	97	104	118
11,000 LBS and less	94	97	104	118

END

CLIMB

1. Yaw Damp – ON
2. Climb Power – SET
3. Propellers – 1800 RPM (B200GT)
   1900 RPM (B200)
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 (*New Environmental System)*
   a. Cockpit and Cabin Blowers – AS REQUIRED
   b. Cockpit and Cabin Temps – AS REQUIRED
9. Lights – AS REQUIRED

CLIMB IN ICING CONDITIONS

1. Engine Anti-Ice – ON, [L ENG ANTI-ICE] & [R ENG ANTI-ICE] ILLUMINATED
2. 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 – 145 KNOTS MINIMUM AIRSPEED

END

CRUISE

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 pilot's PFD and MFD.

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)
5. 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 – 145 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 145 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.

CONTINUED

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 ENG ANTI-ICE] and [R ENG ANTI-ICE] – ILLUMINATED
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

Illumination of the [L ENG ICE FAIL] or [R ENG ICE FAIL] caution annunciator indicates failure of selected system on affected engine. Immediate illumination 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-12, ABNORMAL PROCEDURES.

CONTINUED

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 – 145 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-13 ABNORMAL PROCEDURES

END

DESCENT

1. Pressurization – SET PER TABLE (Refer to NP-27)
   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 (*New Environmental System)*
   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

1. Landing Approach Speed – CONFIRM V_{REF}
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. Landing Approach Speed and Distance – INCREASE V_{REF} BY 15 KNOTS AND INCREASE EXPECTED LANDING DISTANCE BY 25 PER CENT

CONTINUED

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)

Weight Lbs	Flaps DOWN V_{REF} Speeds, Knots
13,420	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

END

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_{REF} + 10) – APPROACH
4. Landing Gear – UP
5. Flaps (at 125 knots) – UP

AFTER LANDING

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

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 – STANDBY or OFF
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

END

SHUTDOWN AND SECURING

1. Parking Brake – SET
2. Electric Heat – OFF (*Old Environmental System)*
3. Standby Boost Pumps and Crossfeed – OFF
4. Avionics Master – OFF
5. ESIS Power – OFF
6. Autofeather – OFF
7. Lights – OFF
8. Oxygen System Ready – PUSH OFF
9. ECS Mode – OFF (*New Environmental System)*
10. Cockpit and Cabin Blowers – AUTO (*New Environmental System)*
11. Vent Blower – AUTO (*Old Environmental System)*
12. Cabin Temp Mode – OFF (*Old Environmental System)*
13. Aft Blower – OFF *(Old Environmental System)*
14. Battery – CHARGED
15. ITT – STABILIZED AT MIN OBTAINABLE TEMP FOR ONE MINUTE
16. 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.

17. Propeller Levers – FEATHER
    After Generators Drop Off Line [L DC GEN] and [R DC GEN] *illuminated*
18. DC Volt/Loadmeters – CHECK VOLTAGE
    No voltage indicates current limiter is out
19. Overhead Panel Switches – OFF
20. Emerg Cabin Lt Switch – OFF
21. Battery and Generator Switches (below 15% N_1) – OFF
22. Control Locks – INSTALL
23. Emergency Exit – LOCKED
24. Emergency Cabin Light Power Switch – OFF
25. Monagram Electric Toilet (if installed) – SERVICE AS REQUIRED
26. Tiedowns and Chocks – AS REQUIRED
27. External Covers – AS REQUIRED
28. Propeller Locks – AS REQUIRED
29. Oil Quantity – CHECK IF REQUIRED
30. Parking Brake – OFF
31. Baggage Compartment Light – OFF
32. Cabin Entry Lights – OFF

END

PRESSURIZATION CONTROLLER SETTING FOR LANDING

Closest Altimeter Setting	Add to 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	+1400
29.10	+1300
29.20	+1200
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	-400
30.90	-500

END

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HALO 250

CENTEX AEROSPACE GW I STC SERIES

EMERGENCY PROCEDURES

EMERGENCY PROCEDURES - PILOT CHECK LIST
TABLE OF CONTENTS

EMERGENCY PROCEDURES

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

Closed [BRACKETS] in this section denote annunciator(s).

NOTE

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

EMERGENCY AIRSPEEDS

One-Engine Inoperative Best Angle-of-Climb (V_{XSE})	115 Knots
One Engine Best Rate of Climb (V_{YSE})	125 Knots
One-Engine-Inoperative Enroute Climb (V_{ENR}):	
13,420 pounds	125 Knots
13,000 pounds	123 Knots
12,000 pounds	120 Knots
11,000 pounds	115 Knots
10,000 pounds	111 Knots
Air Minimum Control Speed (V_{MCa})	86 Knots
Raisbeck Engineering STC Prop Installation (V_{MCA})	91 Knots
BLR Aerospace STC Prop Installation (V_{MCA})	92 Knots
Emergency Descent	181 Knots
Maximum Range Glide	136 Knots

END

ENGINE FAILURE

NOTE

To obtain best performance with one engine inoperative, the airplane must be banked 3° to 5° into the operating engine while maintaining a constant heading.

EMERGENCY ENGINE SHUTDOWN

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

ENGINE FIRE IN FLIGHT [L ENG FIRE] OR [R ENG FIRE]

ENGINE FAILURE IN FLIGHT

Affected Engine:

1. Condition Lever – FUEL CUTOFF
2. Propeller Lever – FEATHER
3. Firewall Shutoff Valve – CLOSE
4. Fire Extinguisher (if fire warning persists) – ACUTATE

5. Generator – OFF
6. Auto Ignition – OFF
7. Autofeather – OFF
8. Brake Deice (if installed) - OFF
9. Electrical Load – MONITOR

ENGINE FIRE ON GROUND [L ENG FIRE] OR [R ENG FIRE]

Affected Engine:
1. Condition Lever – FUEL CUTOFF
2. Firewall Shutoff Valve – CLOSE
3. Ignition and Engine Start – STARTER ONLY
If fire warning persists
4. Fire Extinguisher – ACTUATE

EMERGENCY ENGINE SHUTDOWN ON THE GROUND

1. Condition Levers – FUEL CUTOFF
2. Prop Levers – FEATHER
3. Firewall Shutoff Valves – CLOSE
4. Master Switch, Left & Right Generator Switches (gang bar) – OFF
5. ESIS Power - OFF

CONTINUED

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_1) – TAKEOFF CONTINUED

1. V_R Speed – ROTATE TO APPROX 8° NOSE UP ATTITUDE
2. Landing Gear (when positive climb established) – UP
3. Airspeed – V_2, MAINTAIN TO 400 FEET AGL
4. Propeller Inoperative Engine – VERIFY FEATHERED
5. Airspeed at 400 Feet AGL – V_{ENR}
6. Flaps (if extended) – UP AT V_2 + 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 V_{MCa}.

1. Power – Reduce as required to maintain directional control.
2. Nose – Lower to accelerate above V_{MCa}.

3. Power (operative engine) – AS REQUIRED
4. Failed Engine – SECURE (See EMERGENCY ENGINE SHUTDOWN)

CONTINUED

ENGINE FLAMEOUT (2ND 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 [L OIL PRESS] OR [R OIL PRESS]

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 [L FUEL PRESS] OR [R FUEL PRESS]

1. Standby Pump (Failed Side) – ON
2. [FUEL PRESS] – EXTINGUISHED
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.

END

ELECTRICAL SMOKE OR FIRE

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

New Environmental System

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 ESIS 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 27

If Fire or Smoke Ceases:

15. Battery – ON
16. Individually restore avionics and equipment previously turned off.
17. Isolate defective equipment. (SKIP TO STEP 18, EP-7)

Old Environmentl System

4. Master Switches (Batt & Generators) – OFF,(Use ESIS for airplane control)
5. Avionics Master – OFF
6. External Lights – OFF
7. Ice Protection – OFF
8. Internal Lights and Furnishings – OFF
9. Aft Blower – OFF
10. Vent Blower – AUTO
11. Cabin Temp Mode - OFF
12. Cockpit Door – OPEN
13. If Fire or Smoke Persists – SKIP TO STEP 27

If Fire or Smoke Ceases:

14. Battery – ON (SKIP TO STEP 18, EP-7)

WARNING

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.

CONTINUED

Check the following areas for the source of the smoke. If smoke is present, pull the respective circuit breaker to isolate equipment.

18. Instrument Panel
    a. Pilots's PFD Heater (pull PILOT PFD HEATER circuit breaker)
    b. MFD (pull MFD circuit breaker)
    c. MFD Heater (pull MFD HTR circuit breaker)
    d. Pilot's Audio Control Panel (pull PILOT AUDIO CONT circuit breaker)
19. Pedestal
    - Data Base Unit (DBU) (pull DBU circuit breaker)
20. Generators – ON
21. Avionics – ON
22. Maintain Wings-Level Unaccelerated Flight Until AHRS Alignment is Complete.

Check the following areas for the source of the smoke. If smoke is present, pull the respective circuit breaker to isolate equipment

23. Instrument Panel
    a. Pilot's and/or Copilot's PFD (pull PILOT PFD and/or COPILOT PFD circuit breaker(s).
    b. Pilot's and/or Copilot's DCP (pull PILOT DCP and/or COPILOT DCP circuit breaker(s).
    c. Copilot's PFD Heater (pull COPILOT PFD HEATER circuit breaker).
    d. Copilot's Audio Control Panel (pull COPILOT AUDIO CONT circuit breaker)
    e. Radio Tuning Unit (RTU) – (pull RTU circuit breaker)
24. Pedestal
    - CDU No. 1 (and CDU No. 2 if installed) – (pull CDU NO. 1 and/or CDU NO. 2 circuit breaker(s))
25. Below the Cabin Floor
    a. DC Converter No. 1 – (pull DC CONV NO. 1 circuit breaker)
    b. Radio Altimeter – (pull RADIO ALTM circuit breaker)
26. Other Required Electrical Equipment – RESTORE ONE AT A TIME
    (if smoke resumes, isolate equipment by turning switch back off)

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

27. Cabin Pressure (if required) – DUMP
    (battery must be ON while dumping pressure)
28. Storm Window (if required) – OPEN
29. GND COM Switch (as required) – PRESS TO RESTORE COMM 1
30. Flaps – DO NOT ACTIVATE
31. Landing Gear – LOWER MANUALLY
32. Land – NEAREST SUITABLE AIRPORT

END

ENVIRONMENTAL SYSTEM SMOKE OR FUMES

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

New Environmental System

4. ECS Mode – MAN HEAT
5. Cockpit and Cabin Blowers – AS REQUIRED

Old Environmental System

4. Cabin Temp Mode – OFF
5. Vent Blower – HIGH

6. Left Bleed Air Valve – ENVIR OFF

If Smoke Decreases:

7. Continue operation with left bleed air off.

If Smoke Does Not Decreases:

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

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

END

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] Illuminates, 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

1. **Landing Gear – UP**
2. **Flaps – UP**
3. **Propellers – FEATHERED**
4. **Airspeed – 136 KNOTS**

WARNING

Determine that procedures for restarting first and second failed engines are ineffective before feathering second engine propeller.

5. 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)

END

ELECTRICAL

DUAL GENERATOR FAILURE [L DC GEN] and [R DC GEN]

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:

2. 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
5. Avionics No. 2 & Avionics No. 3 Circuit Breakers (right panel) – PULL
6. Left & Right Fuel Control Heat Circuit Breakers (B200) (right panel) – PULL
7. ECS Mode – OFF (*New Environmental System)*
8. Cockpit and Cabin Blowers – AUTO (New Environmental System)
9. Generators – OFF
10. Non-Essential Equipment
    a. Auto Ignition – OFF
    b. Engine Anti-Ice – LEAVE IN EXISTING POSITION
    c. All Exterior Lights – OFF, Beacon ON when required
    d. All Ice Protection except L Pitot Heat – OFF
    e. Cabin Furnishings, Lights, No Smoke/FSB – OFF
    f. Right Bleed Air Valve – ENVIR OFF
    g. Prop Sync – OFF
    h. Vent Blower – AUTO *(Old Environmental System)*
    i. Aft Blower – OFF *(Old Environmental System)*
    j. Cabin Temp Mode Control – OFF *(Old Environmental System)*
    k. Instrument Indirect Lights – ON (if required)
    l. All Other Cockpit Lights – OFF
11. Land – NEAREST SUITABLE AIRPORT
12. Flaps – DO NOT LOWER
13. Landing Gear – EXTEND MANUALLY

CONTINUED

14. Battery Ammeter – MONITOR BATTERY DISCHARGE CURRENT
(should not exceed approximately 35 amps)
15. Revert to the ESIS if the Pilot's PFD fails.
16. The following equipment will be operational until the airplane battery is depleted:
    - Pilot PFD, AHRS 1, ADC 1, RTU, DCP 1, NAV 1, COMM 1, and DC Converter No. 1

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 - 18,000 feet	30 minutes or more

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

CONTINUED

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 [PASS OXY ON] - ILLUMINATED
2. Lanyard Pin For Each Mask Used – PULL OUT
3. Mask – DON
4. Oxygen Duration – CONFIRM
   (refer to Oxygen Duration in Section 4, NORMAL PROCEDURES of AFM)

To Discontinue Use:

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

FIRST AID OXYGEN

1. Oxygen Compartment – PULL COVER TO OPEN
2. 2.ON/OFF Valve – ON
3. Mask – DON

To Discontinue Use:

4. ON/OFF Valve – OFF
5. Mask – RETURN TO COMPARTMENT
6. Compartment Cover – CLOSE

PRESSURIZATION LOSS [ALT WARN]

1. **Oxygen Mask(s) - DON**
2. **Mic Switch(es) - OXY**
3. **Passenger Manual Drop-Out – PULL ON [PASS OXY ON] - ILLUMINATED**
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
7. 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
[ALT WARN] ILLUMINATED, [PASS OXY ON] EXTINGUISHED

1. **Passenger Manual Drop Out – PULL ON**
2. First Aid Mask (if required) – DEPLOY MANUALLY

To Isolate Oxygen Supply to the Crew and First Aid Mask:

3. OXYGEN CONTROL Circuit Breaker – PULL
4. Passenger Manual Drop Out – PUSH OFF

BLEED AIR FAIL [L BL AIR FAIL] OR [R BL AIR FAIL]

The warning annunciators should be monitored during engine start. Either engine will extinguish both annunciators upon starting.

Illumination of an annunciator in flight indicates a possible rupture of a bleed air line aft of the engine firewall.

1. **Bleed Air Valve (affected engine) – PNEU & ENVIR OFF**
   [L BL AIR OFF] or [R BL AIR OFF] ILLUMINATED

NOTE

The bleed air warning annunciator will not extinguish after closing the Bleed Air Valve.

2. ECS Mode – MAN HEAT *(New Environmental System)*
3. MAN TEMP INCR/DECR – FULL DECREASE (30 SECONDS) *(New Enviro System)*
4. Engine Instruments – MONITOR

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.

END

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 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**
   [TRIM] – ILLUMINATED 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
   [TRIM] – ILLUMINATED on PFDs
6. Pitch Trim Circuit Breaker (right panel) – PULL
7. AP/Trim Disconnect – RELEASE
8. Manually retrim airplane.
9. Autopilot – DO NOT ENGAGE

CONTINUED

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).

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HALO 250

CENTEX AEROSPACE GW I STC SERIES

ABNORMAL PROCEDURES
PILOT CHECK LIST
TABLE OF CONTENTS

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

Closed [BRACKETS] in this section denote annunciator(s).

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 *(New Environmental System)*
2. Cockpit/Cabin Blower – AUTO *(New Environmental System)*
3. Cabin Temp Mode – OFF *(Old Environmental System)*
4. Vent Blower – AUTO *(Old Environmental System)*
5. Bleed Air Valve (inoperative engine) – ENVIR OFF
6. Aft Blower – OFF *(Old Environmental System)*
7. Furnishings - OFF
8. Radar - STANDBY
9. Windshield Heat - OFF
10. Power Lever - IDLE
11. Prop Lever (inoperative engine) – LOW RPM
12. Condition Lever – FUEL CUTOFF
13. Firewall Shutoff Valve - OPEN
14. 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.

15. Ignition and Engine Start – ON
    [IGNITION ON] - ILLUMINATED
16. Condition Lever ($N_1 \geq 13\%$) – LOW IDLE

CONTINUED

17. ITT and N_1 – MONITOR (I000°C maximum)
18. Ignition and Engine Start (>50% N_1) - OFF
19. Prop Lever – AS REQUIRED
20. Power Lever – AS REQUIRED
21.Generator - ON
22. Auto Ignition – ARM
23. Prop Sync - ON
24. Bleed Air Valve - OPEN
25. ECS Mode – AUTO *(New Environmental System)*
26. Cabin Temp Mode – AUTO *(Old Environmental System)*
27. Electrical Equipment – AS REQUIRED
28. Aft Blower – AS REQUIRED *(Old Environmental System)*
29. Cockpit/Cabin Blower – AS REQUIRED *(New Environmental System)*
30. Radar – AS REQUIRED
31. 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
   [IGNITION ON] - ILLUMINATED
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
14. Prop Sync - ON

END

LANDING

FLAPS UP LANDING

Refer to AFMS Section 5, PERFORMANCE, for Flaps Up Landing Distance and Approach Speed

WEIGHT ~ POUNDS	**V_{REF} (Flaps Up) ~** KNOTS
13,420	135
13,000	133
12,500	131
12,000	129
11,000	125
10,000	121
9,000	117

1. Approach Speed, V_{REF} (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
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

CONTINUED

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_{REF} BY 15 KNOTS AND INCREASE LANDING DISTANCE BY 25 PERCENT.
See LANDING DISTANCE chart in Section 5 of Supplement AFM 006-2A

NOTE

Prior to the landing approach, cycle the wing deice boots to shed as much residual ice as possible, regardless of the amount of ice remaining on the boots. Stall speeds can be expected to increase if ice is not shed from the deice boots.

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.

When Landing Is Assured:
15. Approach Speed, V_{REF} – ESTABLISHED (With ice on wings, V_{REF} + 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

END

ONE-ENGINE-INOPERATIVE APPROACH AND LANDING

Weight Lbs	Flaps DOWN V_{REF} Speeds, Knots
13,420	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_{REF} BY 15 KNOTS AND INCREASE LANDING DISTANCE BY 25 PERCENT
See LANDING DISTANCE chart in Section 5 of Supplement AFM 006-2A.

NOTE

Prior to the landing approach, cycle the wing deice boots to shed as much residual ice as possible, regardless of the amount of ice remaining on the boots. Stall speeds can be expected to increase if ice is not shed from the deice boots.

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.

CONTINUED

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_{REF} + 10 KNOTS
4. Airspeed – V_{REF} + 20 KNOTS

OVERWEIGHT LANDING

WEIGHT ~ POUNDS	**V_{REF} ~** KNOTS
13,420	105
13,000	104
12,500	103

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

Brakes – AS REQUIRED

NOTE

An overweight landing is defined as any landing made when the airplane gross weight is greater than 12,500 pounds, which is the maximum landing weight limitation (except for an airplane equipped with Beechcraft Hi-Flotation landing gear). When the airplane is landed at a gross weight above 12,500 pounds (except for an airplane equipped with Beechcraft Hi-Flotation landing gear) 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

END

SYSTEMS

ENGINE OIL SYSTEM

LOW OIL PRESSURE INDICATION -60 PSI THROUGH 89 PSI (-52 ENGINE)
(YELLOW INDICATION) 60 PSI THROUGH 99 PSI (-42 ENGINE)

1. 85-89(-52)/99(-42) PSI at 21,000 Feet and Above – NO ACTION REQUIRED
2. 60-85 PSI at 21,000 feet and above or 60-89(-52)/99(-42) 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 [L CHIP DETECT] OR [R 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] – ILLUMINATED
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
   [FUEL PRESS] - EXTINGUISHED
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
4. Auxiliary Tank Transfer – AUTO (when auxiliary fuel tank is empty)

END

ELECTRICAL SYSTEM

SINGLE GENERATOR FAILURE [L DC GEN] OR [R DC GEN]

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) (New Environmental System)

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.

LANDING GEAR SYSTEM

HYDRAULIC FLUID LOW [HYD FLUID LOW]
If The {HYD FLUID LOW] Illuminates During Flight:

1. Landing Gear – ATTEMPT TO EXTEND NORMALLY AT DESTINATION.

If Landing Gear Fails To Extend:

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.

END

ENVIRONMENTAL SYSTEMS

DUCT OVERTEMPERATURE [DUCT OVERTEMP]

New Environmental System

1. ECS Mode – MAN HEAT
2. MAN TEMP INCR/DECR – DECR(30 seconds)

If Condition Persists:

3. Left Bleed Air Valve – ENVIR OFF

If the [DUCT OVERTEMP] *Does Not Extinguish After 2 Minutes:*

4. Oxygen – AS REQUIRED
5. Right Bleed Air Valve – ENVIR OFF
6. Descend – AS REQUIRED

Old Environmental System

1. Electric Heat – OFF
2. Vent Blower – HIGH
3. Cabin/Cockpit Air – PUSH TO INCREASE AIRFLOW TO CABIN

If Condition Persists:

4. Cabin Temp Mode – MAN HEAT
5. Manual Temp – DECR (60 Seconds)

If Condition Continues to Persist:

6. Left Bleed Air Valve – ENVIR OFF

If The [DUCT OVERTEMP] *Does Not Extinguish After 2 Minutes:*

7. Oxygen – AS REQUIRED
8. Right Bleed Air Valve – ENVIR OFF
9. Descend – AS REQUIRED

CONTINUED

ELECTRIC HEAT ON [ELEC HEAT ON] (New Environmental System)

If the [ELEC HEAT ON] *does not extinguish when ELEC HEAT is de-selected during ground operations:*

- ECS Mode – ELEC HEAT

  (Initiate SHUTDOWN AND SECURE PROCEDURES when practical)

If the [ELEC HEAT ON] *illuminates in Flight and the ECS Mode is in the ELEC HEAT position:*

1. ECS Mode – SELECT ANOTHER MODE

If Annunciator Remains Illuminated:

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.

CONTINUED

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 [L ENG ICE FAIL] *OR* [R ENG ICE FAIL]

1. Engine Anti-ice Actuator – SELECT OTHER ACTUATOR

IF [ENG ICE FAIL] Does Not Extinguish:

2. Exit icing conditions.
3. Assume engine anti-ice is ON for performance calculations.

PITOT STATIC MAST HEAT FAILURE [L PITOT HEAT] OR [R PITOT HEAT]

Illumination of the L or R PITOT HEAT annunciator indicates that pitot mast heat is inoperative. The annunciator will also illuminate anytime the PITOT switch is 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.

STATIC AIR SYSTEM

PILOT'S ALTERNATE STATIC AIR SOURCE

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 (right side panel) – ALTERNATE
2. For Airspeed Calibration and Altimeter Correction, refer to basic AFM/POH SECTION 5 PERFORMANCE.

NOTE

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

END

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

END

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 250 FAA Approved AFM Supplement for identifying severe icing conditions are observed, accomplish the following.

1. 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.

AVIONICS

See basic AFM/POH and applicable system AFM Supplement.

END

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