

Beechcraft

BE76

DUCHESS

Date: 09/09/2014
Format Change to
Revision 2; 09/09/2014



CABIN PREFLIGHT

1. Parking Break.....Set
2. Control Lock.....Removed
3. POH.....Accessible
4. A/C Documents.....On board
5. Fuel Selectors.....ON
6. Avionics Power.....OFF
7. Electrical Equip.....OFF
8. Ignition Sw.....OFF
9. Landing Gear Lever.....Dn
10. Em. Gear Extension Tool.....Stowed
11. Em. Extension Valve.....Closed
12. Alt. Static Source.....OFF
13. Trim tabs.....Neutral
14. Battery Sw.....ON
15. Avionics Pwr.....ON/OFF
16. Landing Gear Indicators.....Checked
17. Fuel Quantity Indicators.....Checked
18. Pitot Heat & Lights.....ON/Check
19. L Stall Warn.....Checked
20. Flaps.....Full
21. R Stall Warn.....Checked
22. Electrical Equip.....OFF
23. Battery Sw.....OFF

PREFLIGHT

LEFT WING

- 1. Flap..... Checked
- 2. Fuel Vent.....Checked
- 3. Aileron.....Checked
- 4. Wing Tip.....Checked
- 5. Pitot Tube.....Checked
- 6. Fuel Tank.....Qty Checked
- 7. Leading Edge.....Checked
- 8. Flush-Type Fuel Valve.....Drained
- 9. Fuel Selector Valve.....Drained
- 10. Eng Cowling.....Checked
- 11. Air Intake.....Checked
- 12. Prop.....Checked
- 13. Eng Oil.....Min 6 Qts
- 14. Cowl Flap..... ..Checked
- 15. Wheel Well & Tire.....Checked
- 16. Flush Cross-feed Valve.....Drained

NOSE

- 1. Nose Cowling & Cone.....Checked
- 2. Heater Air Intake.....Checked
- 3. Heater Exhaust Vent.....Checked
- 4. Wheel Well & Tire.....Checked

RIGHT WING

- 1. Flush Cross-feed Valve.....Drained
- 2. Wheel Well & Tire.....Checked
- 3. Cowl Flap..... ..Checked
- 4. Eng Cowling.....Checked
- 5. Air Intake.....Checked
- 6. Prop.....Checked
- 7. Eng Oil.....Min 6 Qts
- 8. Fuel Selector Valve.....Drained
- 9. Flush-Type Fuel Valve.....Drained
- 10. Leading Edge.....Checked
- 11. Fuel Tank.....Qty Checked
- 12. Wing Tip.....Checked
- 13. Aileron.....Checked
- 14. Fuel Vent.....Checked
- 15. Flap..... Checked

RT FUSELAGE

- 1. Battery Vent.....Checked
- 2. Static Port.....Checked
- 3. ELT.....Checked

EMPENNAGE

- 1. Control Surfaces.....Checked
- 2. Tail Cone.....Checked

LEFT FUSELAGE

- 1. Static Port..... Checked
- 2. Cabin Air Outlet.....Checked
- 3. Antennas.....Checked
- 4. Load Distribution.....Checked
- 5. Baggage.....Checked
- 6. Baggage Door.....Qty Checked

START

- 1. PreflightComplete
- 2. Cabin.....Ready
- 3. Emergency Extension Tool.....Stowed
- 4. Parking Break (Pump).....Set
- 5. Electrical Equip.....OFF
- 6. Circuit Breakers.....IN
- 7. Gear Handle.....DN
- 8. Carb Heat.....OFF
- 9. Cowl Flaps.....OPEN
- 10. Fuel Selectors.....ON
- 11. Prop Area.....Clear
- 12. Battery & Alternator Sw.s.....ON
- 13. Fuel Quantity Indicators.....Checked
- 14. Landing Gear Pos Lights.....Checked
- 15. Undervoltage Lights.....Checked
- 16. Mixture.....FULL RICH
- 17. Props.....FULL FWD
- 18. Throttles.....SET
- 19. AUX Fuel Pumps.....ON
OMIT AUX FUEL PUMPS IF WARM
- 20. Strobe/NAV Lights.....ON/ As Req
- 21. Prop Area.....CLEAR
- 22. Magneto/Start Sw.....ENGAGE
PUSH TO PRIME
- 23. Checklist Complete

AFTER START

- 1. Throttle1000 RPM
- 2. Oil Pressure.....Checked
- 3. Mixture.....LEAN
- 4. Load Meter.....Charge Checked

Other Engine Start

- 5. Left Alternator and Battery Sw.....OFF
 - 6. Left Alt/Undervoltage Light.....ON
 - 7. Right Load Meter.....INCREASE
 - 8. Left Alt/Battery Sw.....ON

Right Alternator Check

- 9. Flaps.....UP
- 10. Avionics Power.....ON
- 11. Warning Lights.....Checked
- 12. Aux Fuel Pumps.....Pressure Check
- 13. Flight & Engine Instruments....Checked
- 14. Transponder.....ALT
- 15. Checklist Complete

TAXI

- 1. Brakes..... Checked
- 2. Flight Instruments.....Checked
- 3. Checklist Complete

PRE-TAKE OFF

- 1. Parking Break.....SET
- 2. Cabin.....Ready
- 3. Engine Instruments.....Checked
- 4. Fuel Selectors.....ON
- 5. Flaps.....Verify UP
- 6. Flight Controls.....Check
- 7. Trim.....Neutral
- 8. Mixture.....FULL RICH
- 9. THROTTLES.....2200 RPM
 - 10. PropsExercise
 - 11. Magnetos 175/50.....Check
 - 12. Carb Heat.....Check/OFF
- 13. THROTTLES.....1500 RPM
 - 14. Props.....Feather Check
 - 15. Gyro Pressure/Load Meter..Check
- 16. THROTTLES.....1000 RPM
 - 17. Mixture.....LEAN
 - 18. AUX Fuel Pumps.....ON
- 19. Flight & Engine Instruments....Checked
- 20. COM/NAV.....SET
- 21. Take Off & Emergency Brief.....GIVE
- 22. Parking Break.....Release
- 23. Checklist Complete

TAKE OFF

- 1. Landing Light.....ON
- 2. Pitot Heat.....As Req.
- 3. Transponder.....Verify Code/ALT
- 4. Mixture.....FULL RICH
- 5. Checklist Complete

CLIMB

- 1. Gear.....UP
- 2. Flaps.....UP
- 3. POWER....2600 RPM Above 1000’ AGL
- 4. Engine Instruments.....Checked
- 5. AUX Fuel Pumps.....OFF
- 6. Mixture.....LEAN Above 5000’ MSL
- 7. Cowl Flaps.....As Req.
- 8. Landing/Taxi Light.....As Req.
- 9. Checklist Complete

CRUISE

- 1. Power.....As Req.
- 2. Mixture.....LEAN As Req.
- 3. Engine Instruments.....Checked
- 4. Cowl Flaps.....As Req.
- 5. Checklist Complete

PRE-LAND

- 1. Cabin.....Ready
- 2. NAV AIDS/ Approach Brief....Complete
- 3. Altimeters.....Set/Cross-Checked
- 4. AUX Fuel Pumps.....ON
- 5. Power.....SET
- 6. Mixture.....Enrich As Req.
- 7. Carb Heat.....As Req.
- 8. Cowl Flaps.....As Req.
- 9. Fuel Selectors.....ON
- 10. Lights.....Verified

LAND

- 1. Landing Gear.....DOWN
- 2. Flaps.....SET
- 3. Mixture.....FULL RICH
- 4. PROPS.....FULL FWD
- 5. Checklist Complete

In-Range / Descent

1. ATIS / AWOS (early as possible) - check
2. Altimeter.....SET
3. Preliminary Approach Brief
 - Type of Approach
 - Runway length / Lighting
 - Field elevation / Sector altitude
 - Highest Obstacle / Terrain Review
 - NAV / Course / Minimums / Missed
 - Crosswind Component.....COMPLETE
4. Airport Diagram (Keep available)Check
5. Seat beltsFastened
6. MixtureSlightly Enrich

Approach (Approx 15nm from Airport)

1. ATIS / AWOSCheck
2. Approach BriefingComplete
3. Altimeter.....SET
4. Heading Indicator to CompassSET
5. Fuel SelectorFulllest Tank
6. Parking BrakeCheck Released
7. Landing Light.....ON

When Direct to IAF or Vectored

8. Flight & Nav InstrumentsSET/Ident
9. GPS (As Required for Approach)SET
10. Airspeed110-100 KIAS

BALKED LANDING

- 1. THROTTLES.....FULL PWR
- 2. AIRSPEED.....71 KTS
- 3. FLAPS.....UP
- 4. LANDING GEAR.....UP
- 5. Carb Heat.....As Req.
- 6. Cowl Flaps.....As Req.
- 7. Checklist Complete

AFTER LANDING

- 1. Lights..... As Req.
- 2. Pitot Heat.....OFF
- 3. Flaps.....UP
- 4. Mixture.....LEAN
- 5. Carb Heat.....OFF
- 6. Cowl Flaps.....OPEN
- 7. Trim.....Neutral
- 8. Checklist Complete

SHUT DOWN

- 1. Parking Break.....SET
- 2. Transponder.....STBY
- 3. AUX Fuel Pumps.....OFF
- 4. Avionics Power.....OFF
- 5. Throttles... ..IDLE
- 6. Mixture.....I.C.O.
- 7. Magnetos/Start Sw.s.....OFF
- 8. Electrical Equipment.....OFF
- 9. Battery and Alternator Sw.s.....OFF
- 10. HOBBS/TACH.....NOTE
- 11. Checklist Complete

SECURE

- 1. Control Lock/Tie Down.....Install
- 2. Checklist Complete

LANDING GEAR MANUAL EXTENSION

1. Landing Gear Circuit Breaker..... PULL
2. Landing Gear Handle.....DOWN
3. AIRSPEED..... MAX 100KTS
4. Emergency Extension Valve.....OPEN
Use Emergency Extension Tool- Turn
Counter Clockwise

If Electrical system is Operable

5. Gear Position Lights..... CHECK 3 GREEN
6. CHECKLIST COMPLETE

Warning

After emergency landing gear extension, do not move any landing gear controls or reset any switches or circuit breakers until airplane is on jacks, as failure may have been in the "GEAR UP" Circuit and the gear might retract with the airplane on the ground.

UNLATCHED DOOR IN-FLIGHT

Door will trail in a position approximately 3 inches open. A buffet may be encountered with the door open in flight.

RETURN TO FIELD IN A NORMAL MANNER

If practicable, during the landing flare, have a passenger hold the door to prevent it from swinging open.

PRESSURE PUMP –FAIL**LAND AS SOON AS PRACTICABLE**

Red indicator on pressure gauge will indicate failure. If either pump fails, check valves automatically close and the remaining pump continues to operate all gyro instruments

ALTERNATE AIR/STATIC SOURCE

1. Alternate Static Source.....ON
For airspeed calibration and altimeter correction, refer to PERFORMANCE SECTION.
2. Checklist Complete

AIRSTART

With UNFEATHERING ACCUMULATORS:

1. Fuel Selector.....ON
2. Throttle.....1/4 Travel
3. AUX Fuel Pump.....ON
4. Magneto/Start Switch.....BOTH
5. Prop.....FULL FWD then MIDRANGE
6. Airspeed.....Pitch for 100 KTS
Once Propeller begins to windmill:

7. Mixture.....FULL RICH

Engine Warm Up Power Setting: 15"/2000RPM

If engine fails to run, clear engine by allowing it to windmill with mixture in the FULL LEAN position. When the engine fires, advance mixture to FULL RICH.

8. Throttle/Prop/Mixture.....Adjust
9. AUX Fuel Pump.....OFF
10. Alternator Switch.....ON
11. Engine Instruments.....Checked
12. Checklist Complete

AIRSTART

WITHOUT UNFEATHERING ACCUMULATORS:

1. Fuel Selector.....ON
2. Throttle.....1/4 Travel
3. AUX Fuel Pump.....ON
4. Magneto/Start Sw.....BOTH
5. Mixture.....FULL RICH
6. Prop.....MIDRANGE
7. Magneto/Start Sw.....Start/Prime

If airstart is unsuccessful, return propeller control to the FEATHER position and secure engine.

Engine Warm Up Power Setting: 15"/2000RPM

8. Throttle/Prop/Mixture.....Adjust
9. AUX Fuel Pump.....OFF
10. Alternator Switch.....ON
11. Engine Instruments.....Checked
12. Checklist Complete

ENGINE FIRE ON GROUND

1. MIXTURE..... I.C.O.
 2. Start Switch.....Crank
 3. Fuel Selectors..... OFF
 4. Battery & Alternator Sw.s.....OFF
 5. Fire Extinguisher.....USE
 6. CHECKLIST COMPLETE
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ENGINE FIRE IN-FLIGHT

AFFECTED ENGINE:

1. Fuel Selector..... OFF
 2. Mixture.....I.C.O.
 3. PROP.....Feather
 4. AUX Fuel Pump.....OFF
 5. Magneto/Start Sw.....OFF
 6. Alternator Sw.....OFF
 7. Single Engine Profile.....Establish
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DUAL ALTERNATOR FAIL

Check loadmeters for load indication. If condition indicates malfunction of both alternator circuits:

1. Alternator Sw.sOFF
2. Electrical Loads.....Minimize
3. Alternators.....Reset
If proper operation is not restored, secure both alternators.
4. LAND AS SOON AS PRACTICAL

ELECTRICAL SMOKE OR FIRE

Action to be taken must consider existing conditions and equipment installed:

1. Battery and Alternator Sw.s.....OFF
Electrically driven instruments and stall warning horn will become inoperative
2. All Electrical Sw.s.....OFF
3. Battery and Alternator Sw.s.....ON
4. Essential Electrical Equip.....ON

Ensure fire is out and will not be aggravated by draft. Turn off **CABIN HEAT** switch and push in the **CABIN AIR** control. To aid in smoke evacuation, open pilot's storm window if required.

5. CHECKLIST COMPLETE
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COMPLETE LOSS OF ELECTRICAL POWER

1. Alternator Sw.s.....OFF
2. Battery Sw.sOFF
3. Both Bus/ISO Circuit Breakers.....PULL
4. Electrical Loads.....Remove
5. Alternator Sw.s.....ON
6. Electrical Loads.....Minimize
Select only that electrical equipment essential for flight.
7. Landing Gear..... Extend Manually
8. LAND AS SOON AS PRACTICAL

ENGINE FAILURE- GROUND ROLL

1. THROTTLES.....IDLE
2. BRAKING.....MAX
3. Fuel Selector.....OFF
4. Battery / Alt/ MAG Sw.s.....OFF
5. CHECKLIST COMPLETE

Braking effectiveness is improved if the brakes are not locked.

ENGINE FAILURE- IN-FLIGHT

1. Power.....FULL
2. Gear/Flaps.....UP
3. AUX Fuel Pumps.....ON

Identify/Verify Failed Engine

Below safe altitude and after positive aircraft control, continue with **“Secure Affected Engine”** checklist.

Above Safe altitude and after positive aircraft control,

troubleshoot:

1. Fuel Selectors.....Cross Feed
2. Carb Heat.....ON
3. Mixture.....As Req.
4. Magneto/Start Sw.s.....Checked

If engine starts, Land As Soon As Practical

If Engine Fails to start, continue with **“Secure Affected Engine”** Checklist.

5. CHECKLIST COMPLETE

SECURE AFFECTED ENGINE

1. Throttle.....IDLE
2. PROP.....FEATHER

After positive aircraft control and above safe altitude:

3. Mixture.....I.C.O.
4. Fuel Selector.....OFF
5. Aux Fuel Pump.....OFF
6. Magneto/Start Sw.....OFF
7. Alternator.....OFF
8. Cowl Flaps.....Close
9. Airspeed.....85 KTS
10. Electrical Load.....Monitor
11. Land..... Nearest Suitable Airport
12. CHECKLIST COMPLETE

Most important Aspect of engine failure is the NECESSITY to maintain lateral and directional control.