

BEFORE START ENGINE

1. Preflight Inspection and Weight and Balance Checks..... COMPLETE
2. Passenger Briefing..... COMPLETE
3. Cabin Doors..... LATCHED (Check Aft Door)
4. All Seats, Seatbelts and Shoulder Harnesses..... ADJUSTED and SECURE
5. Master Switch..... ON
6. Avionics Master Switch..... ON
7. Parking Brake..... SET
8. Engine Inlet..... AS REQUIRED
9. Fuel Selector Valves..... LEFT and RIGHT ON
10. Firewall Fuel Shutoff..... FUEL ON (PUSHED IN)
11. Emergency Power Lever..... NORMAL
12. Power Lever..... IDLE
13. Propeller Control Lever..... FEATHER
14. Fuel Condition Lever..... CUTOFF
15. Wing Flaps..... UP
16. Circuit Breakers..... IN
17. Cabin Heat..... OFF
18. Takeoff Torque Limit..... DETERMINE from Max Torque for
Takeoff Chart in Section 5

ENGINE STARTS

1. Buss Voltages..... CHECK 24V Minimum
2. Flashing Beacon..... ON
3. Emergency Power Lever..... NORMAL
– Check EMER PWR LVR not Shown on PFD
4. Propeller Area..... CLEAR
5. Auxiliary Fuel Pump..... ON and NOTE-
• AUX PUMP ON Annunciator..... SHOWN ON PFD
• Fuel Flow..... ZERO
6. Ignition Switch..... AS REQUIRED-
• ON for LO/MOTOR START
• OFF for HI START
7. Starter Switch..... HI or LO/MOTOR as Required and NOTE-
• IGNITION ON Annunciator..... SHOWN ON PFD
• Engine Oil Pressure..... CHECK RISING
• Ng..... ACCELERATING THROUGH 14% MINIMUM
8. Fuel Condition Lever..... LOW IDLE and NOTE-
• Fuel Flow..... CHECK at 80 to 110 lb/hr
• ITT MONITOR (1090°C Maximum – Limited to 2 sec.)
• Ng..... 52% MINIMUM
9. Starter Switch..... OFF
– Check STARTER ON Annunciator Not Shown on PFD
10. Ignition Switch..... OFF
– Check IGNITION ON Annunciator Not Shown on PFD
11. Propeller Lever MAX RPM
12. Engine Instruments..... CHECK
13. Auxiliary Fuel Pump..... STBY
14. Generator ON
15. Alternator..... ON
16. Exterior Lights..... AS REQUIRED
17. Cabin Heat, Ventilation and Defrost..... AS REQUIRED
18. Radios / Avionics..... SET
19. Preflight Procedure for the GMA 1347 Audio Panels..... PERFORM

TAXI

1. Brakes..... CHECK
2. Flight Controls POSITIONED ACCORDING TO WIND DIRECTION
3. Flight Instruments..... CHECK

NOTE: For improved brake life, propeller BETA range may be used during ground operations to prevent excessive taxi speeds.

BEFORE TAKEOFF

1. Parking Brake..... SET
2. All Seats, Seatbelts and Shoulder Harnesses..... LOCKED and SECURE
3. Inertia Reel Levers..... LOCKED

WARNING: Failure to properly utilize the seat track locks, seatbelts, shoulder harnesses, and inertia reel locks could result in serious injury or death should an accident occur.

4. Flight Controls FREE and CORRECT
5. Flight Instruments..... CHECK and SET
6. Auxiliary Fuel Pump..... ON
7. Fuel Selectors RECHECK LEFT and RIGHT ON
8. Firewall Fuel Shutoff..... RECHECK FUEL ON (FULL IN)
9. Fuel Quantity..... CHECK and SET FUEL TOTALIZER
10. Wing Flaps..... SET FOR TAKEOFF
11. Aileron and Elevator Trim..... SYSTEM CHECKS (1st Flight of the day)
12. Elevator, Aileron and Rudder Trim..... SET FOR TAKEOFF
13. Engine Inlet..... SYSTEM CHECK (1st Flight of the day)
14. Power Lever..... 300 FT LB
• Bus Voltages..... CHECK 26 Volts Minimum
• Engine Instruments..... CHECK
15. Overspeed Governor..... SYSTEM CHECK (1st Flight of the day)
(Stabilized at 2070 ± 50 RPM)
16. Power Lever..... IDLE
17. Quadrant Friction Lock ADJUST as Necessary
18. Engine Inlet..... AS REQUIRED -
Verify Proper Annunciation Shown on PFD
19. Pitot/Static Heat..... ON When OAT is Less than 4°C and
Visible Moisture Present
20. Avionics Equipment..... CHECK and SET
21. Transponder..... SET
22. CDI SET
23. Annunciators..... CHECK
24. Strobe Lights..... AS REQUIRED
25. Parking Brake RELEASE
26. Propeller Lever..... MAX RPM
27. Fuel Condition Lever..... HIGH IDLE

TAKEOFF

NORMAL TAKEOFF

1. Wing Flaps.....0°-20°
2. Elevator Trim..... RECHECK Set for Takeoff

CAUTION: The Flap/Trim Compensation Unit is disabled on the ground through an airspeed switch. The airspeed switch activates the Flap/Trim Compensation Unit above approximately 35 knots. If the airplane is positioned into winds in excess of approximately 35 knots while the flaps are being set for takeoff, the trim will move from its previously set position and could result in an out-of-trim condition on takeoff.

3. Power SET FOR TAKEOFF
(Observe Takeoff Torque, ITT, and Ng Limits)
4. Annunciators..... CHECK
5. Engine Instruments..... CHECK
6. Rotate.....60-65 KIAS
7. Climb Speed.....85-95 KIAS
8. Wing Flaps.....RETRACT
(Retract to 10° after reaching 85 KIAS and 0° after reaching 95 KIAS)

SHORT FIELD TAKEOFF

1. Wing Flaps.....20°
2. Elevator Trim.....Set for Takeoff
3. Power SET FOR TAKEOFF
(Observe Takeoff Torque, ITT, and Ng Limits)
4. Annunciators..... CHECK
5. Engine Instruments..... CHECK
6. Brakes..... RELEASE
7. Rotate.....50 KIAS
8. Climb Speed..... 72 KIAS Until Clear of Obstacles
9. Wing Flaps.....RETRACT
(Retract to 10° after reaching 85 KIAS and 0° after reaching 95 KIAS)

ENROUTE CLIMB

1. Auxiliary Fuel Pump.....STBY
2. Pitot/Static Heat.....ON
(when OAT is Less than 4°C and Visible Moisture Present)
3. Engine Inlet AS REQUIRED
4. Airspeed 110-120 KIAS
5. Torque.....SET
6. Propeller.....2000-2200 RPM
7. ITT and Ng Limits.....OBSERVE

NOTE: Use of 740°C ITT is recommended for improved engine life.

MAXIMUM PERFORMANCE CLIMB (Non-Emergency)

1. Auxiliary Fuel Pump.....STBY
2. Pitot/Static Heat.....ON
(when OAT is Less than 4°C and Visible Moisture Present)
3. Engine Inlet AS REQUIRED
4. Airspeed 101 KIAS
5. Propeller.....2000-2200 RPM
6. Torque..... SET
7. ITT and Ng Limits.....OBSERVE

CRUISE

1. Pitot/Static Heat.....ON
(when OAT is Less than 4°C and Visible Moisture Present)
2. Propeller.....2000-2200 RPM
3. PowerSET per Cruise Power Tables
(Observe Max Cruise ITT and Ng Limits)

DESCENT

1. Engine Inlet AS REQUIRED
2. Pitot/Static Heat.....ON
(when OAT is Less than 4°C and Visible Moisture Present)
3. Altimeter.....SET
4. CDI.....SET APPROPRIATELY
5. PowerAS REQUIRED to Provide the Desired Rate of Descent
6. Seats, Seatbelts and Shoulder Harnesses.....ADJUSTED and SECURE
7. Inertial Reel Levers..... LOCKED

WARNING: Failure to properly utilize the seatbelts, shoulder harnesses, and inertia reel locks could result in serious injury or death should an accident occur.

BEFORE LANDING

1. Fuel Selector Valves..... LEFT AND RIGHT – ON
2. Auxiliary Fuel Pump.....ON
3. Firewall Fuel Shutoff.....FUEL ON (PUSHED IN)
4. Fuel Condition Lever..... HIGH IDLE
5. Propeller Lever.....MAXIMUM RPM
6. Wing Flaps..... AS DESIRED
(10° below 138 KIAS, 20° below 120 KIAS, 35° below 108 KIAS)
7. Landing/Taxi Lights..... AS REQUIRED
8. Yaw Damper.....OFF

LANDINGS

NORMAL LANDING

1. Wing Flaps.....FULL DOWN
2. Airspeed.....80-85 KIAS
3. Touchdown..... MAIN WHEELS FIRST
4. Power Lever.....BETA RANGE After Touchdown
5. Brakes..... AS REQUIRED

SHORT FIELD LANDING

1. Wing Flaps.....FULL DOWN
2. Airspeed.....76 KIAS
3. Power Lever.....SMOOTHLY REDUCE TO IDLE
4. Touchdown..... MAIN WHEELS FIRST
5. Power Lever.....BETA RANGE After Touchdown

NOTE: Landing roll may be further reduced with use of reverse thrust.

6. Brakes.....APPLY HEAVY PRESSURE
7. Elevator Control.....FULL AFT
8. Wing FlapsRETRACT for Maximum Brake Effectiveness

BALKED LANDING

1. Power Lever.....ADVANCE to TAKEOFF POWER
2. Climb Speed..... 80 KIAS Until Clear of Obstacles
3. Wing Flaps.....RETRACT to 20°
4. Wing Flaps FULLY RETRACT Upon Reaching Safe Altitude and Airspeed

AFTER LANDING

1. Wing Flaps.....UP
2. Fuel Condition Lever.....LOW IDLE
3. Auxiliary Fuel Pump.....OFF
4. Strobe Lights.....OFF
5. Landing and Taxi Lights AS REQUIRED
6. Pitot Heat (L&R).....OFF

WARNING: Accidental moving of the fuel condition lever aft of the LOW IDLE position causing the Ng to fall below 52% and then moving the fuel condition lever back to LOW IDLE can result in an ITT over-temperature condition. If the engine begins to shutdown in this situation, allow the engine to complete its shutdown process. Then, perform a normal engine start using the Engine Start checklist.

ENGINE SHUTDOWN AND AIRPLANE SECURING

1. Parking Brake.....SET
2. Environmental Control Systems.....OFF
3. AUX BUS Switch.....OFF
4. Power Lever.....IDLE
5. Propeller Control Lever..... FEATHER
6. Generator.....OFF
7. Alternator.....OFF
8. ITTSTABILIZED at Minimum Obtainable Temperature for One Minute
9. Fuel Condition Lever..... CUTOFF
10. Oxygen Supply Control Switch (If On).....OFF
11. Light Switches.....OFF
12. Fuel Selector..... OFF if Parked on a Sloped Surface
(Turn off the fuel valve of the higher wing to prevent fuel transfer)
13. Avionics Master Switch.....OFF
14. Master Switch.....OFF
15. Controls LOCK
16. Tie-Downs and Wheel Chocks..... AS REQUIRED
17. External Covers.....INSTALL
18. Firewall Fuel Filter..... CHECK FILTER BYPASS FLAG (Normal – Flush)
19. Oil Dipstick/Filler Cap.....CHECK HOT LEVEL
20. Oil Dipstick/Filler Cap CLOSED and SECURE

NOTE: If the airplane is parked on a sloped surface, it may be desirable to turn the fuel selector valve of the higher fuel tank to the OFF position in order to help prevent fuel transfer between tanks due to gravity.