

PILOTĀ'S ABBREVIATED CHECKLIST

T Ā- 41 B

N 146AC

Eglin Aero Club

Bld 898

Eglin Air Force Base, FL 32542

850-882-5148

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Ā Ā T Ā- 41 B Ā Ā =Ā Ā N 146AC
Ā MPH

ROTATION	60
NORMAL CLIMB	85
V _x (SL-10,000 MSL)	75
V _y (SL-10,000 MSL)	95-87
SHORT FIELD TAKE-OFF	60
V _a (2500 lbs)	127
BEST GLIDE	85
SLOW FLIGHT (1.2xV _s)	77
STALL ENTRY	60
V _{no}	145
V _{ne}	182
V _{fe}	100
V _s	64
V _{so}	56
DOWNWIND	95
BASE	85
FINAL	75
SHORT FINAL Ā Ā Ā FLAPS UP Ā Ā	70
SHORT FINAL Ā Ā Ā FLAPS DOWN	65
SHORT FIELD LANDING	60
FULL OIL (qts)	8
USABLE FUEL (GAL)	51
RATED HP (SEA LEVEL)	210
MAX WEIGHT Ā (lbs)	2500

PREFLIGHT

Interior Inspection

- Ā 1. Parking Brake ----- SET
 Ā 2. Hobbs- and Tach-Meter Reading ----- VERIFY
 Ā 3. Required Documents ----- ON BOARD
 Ā 4. Avionics Master Switch ----- OFF
 Ā 5. Mixture ----- IDLE CUT OFF
 Ā 6. Electrical Switches ----- OFF
 Ā 7. Circuit Breakers ----- IN
 Ā 8. Control Wheel Lock ----- REMOVE
 Ā (and store in pilot seat pocket)
 Ā 9. Ignition Switch ----- OFF

10. Primer----- IN AND LOCKED
11. AuxiliaryFuel Pump Switch----- OFF
12. FuelShutoffKnob----- IN
13. Master Switch (both alternator and battery) ----- ON
14. FuelQuantity----- CHECK
15. WarningLights----- PRESSTO TEST
16. Flaps----- DOWN 30 DEGREES
17. Taxi / Landing Lights ----- CHECK, THEN OFF
18. PitoHeat----- CHECK, THEN OFF
19. Nav / Beacon Lights ----- CHECK, THEN OFF
20. Strobe Lights (toggle switch) ----- CHECK, THEN OFF
21. Master Switch (both alternator and battery)----- OFF
22. BeaconLightSwitch----- ON
23. ElevatorTrim----- SET FOR TAKE OFF
24. FuelSelector----- BOTH

Exterior Inspection

LEFT SIDE

- Â 1. Fuel Tank Sump ----- DRAIN
- Â 2. Baggage Door ----- CLOSED AND LOCKED
- Â 3. Static Port ----- CLEARÂ
- Â 4. E.L.T. Antenna----- CONDITION
- Â 5. Left Fuselage----- CONDITION

EMPENAGE

- Â 1. Vertical Stabilizer (left side) ----- CONDITION
- Â 2. Horizontal Stabilizer (left side) ----- CONDITION
- Â 3. Left Elevator----- CONDITION
 - Â• Movement and Stops----- CHECK
 - Â• Security (cable & Hinges) ----- CHECK
- Â 4. Lights----- CONDITION
- Â 5. VOR Antenna----- CONDITION
6. Rudder----- CONDITION
 - Â• Movement and Stops----- CHECK
 - Â• Security (Cable & Hinges) ----- CHECK
- Â 7. Tie Down----- DISCONNECT
- Â 8. Right Elevator----- CONDITION
 - Â• Movement and Stops----- CHECK
 - Â• Security (Cable & Hinges) ----- CHECK
 - Â• Trim Tab (Alignment)----- CHECK
- Â 9. Vertical Stabilizer (right side) ----- CONDITION
10. Horizontal Stabilizer (right side) ----- CONDITION
11. Right Side Fuselage----- CONDITION
12. Static Port ----- CLEAR

RIGHT MAIN LANDING GEAR

- Â 1. Chock----- REMOVE
- Â 2. Tire----- INFLATION & CONDITION
- Â 3. Brake Assembly----- CHECK
- Â 4. Main Gear Strut----- CHECK

RIGHT WING

- Â 1. Fuel Tank Sump ----- DRAIN
- Â 2. Flap----- CONDITION & SECURE
 - Â• Tracks ----- CONDITION
 - Â• Control Rod ----- SECURE
- Â 3. Aileron ----- CONDITION & MOVEMENT
 - Â• Hinges & Control Rod ----- SECURE
- Â 4. Wing Tip and Lights----- CONDITION
- Â 5. Leading Edge----- CONDITION
- Â 6. Under Surface and Wing Strut ----- CONDITION
- Â 7. Tie Down ----- DISCONNECT
- Â 8. Fuel Quantity----- CHECK VISUALLY
- Â 9. Fuel Filler Cap ----- SECURE
10. Top of Wing and Antennas ----- CONDITION
11. Air Vent Inlets----- CLEAR

- Â 3. MasterSwitch----- ON
- Â 4. AuxiliaryFuel Pump Switch----- HIGH
- Â 5. Throttle ----- SET for 8-10 gal/hr fuel flow
- Â 6. Auxiliary Fuel Pump Switch ----- RELEASE
- Â 7. Throttle----- IDLE, then IN Â¼ to Â½ inch.
- Â 8. PropellerArea----- CLEAR
(Shout Warning and Clear Area 360Â°)
- Â 9. IgnitionSwitch----- START
(release when engine starts)
If engine fails to start within 10 blades, discontinue cranking and allow starter to cool for two minutes.
- 10. Throttle----- 1000 RPM
- 11. AuxiliaryFuel Pump Switch----- OFF
- 12. OilPressure/ Suction----- CHECK
- 13. Ammeter----- CHECK
- 14. VoltageLight----- OUT

AFTER ENGINE START

- Â 1. AvionicsMasterSwitch----- ON
- Â 2. Nav Lights (Sunset to Sunrise) ----- ON
- Â 3. Flaps----- UP (checkvisually)
- Â 4. Mixture ----- LEAN to mech. Stop (above 5000Â' MSL)
- Â 5. Radios ----- SET PROPER FREQUENCIES
- Â 6. NavInstruments----- AS REQUIRED
- Â 7. AudioControlPanel----- SET
- Â 8. Transponder----- SET PROPER CODEÂ
- Â 9. ParkingBrake----- RELEASE

TAXI

- Â
- Â 1. Obtain Taxi Clearance or announce on CTAFÂ
- Â 2. ToeBrakes ----- CHECK
- Â 3. Control Surfaces ----- POSITION (according wind)
- Â 4. FlightInstruments----- CHECKÂ Â
- Â

BEFORE TAKEOFF

- Â 1. ParkingBrake----- SET
- Â 2. Mixture (mech. stop if above 5000Â' MSL) ----- SET
- Â 3. Throttle----- 1800 RPM
- Â 4. Engine Instruments / Suction ----- CHECK
- Â 5. Ammeter (Voltage Light out) ----- CHECK
- Â 6. Propeller----- CYCLE
- Â 7. Magnetos----- CHECK
- Â Â Â Â Â Â Â Â Â Â (check right first, 150 max drop / 50 max diff)
- Â 8. Throttle ----- IDLE CHECK, THEN 1000 RPM
- Â 9. Seat Belt(s)Â ----- FASTENED
- 10. Doors & Windows ----- CLOSED and LOCKED
- 11. FlightInstruments----- SET
- 12. Radios ----- ON and CORRECT FREQUENCY SET
- 13. EmergencyProcedures----- REVIEW
- 14. ParkingBrake----- RELEASE

TAKE-OFF

- Â 1. Obtain take-off clearance or announce on CTAF
- Â 2. Landing Light and Strobe Lights ----- ON
- Â 3. Transponder-----ALT
NOTE: Step 2 and 3 when cleared for take-off
Â or when beginning take-off roll .
- Â 4. LandingLight----- OFF after Take-Off

NORMAL TAKE-OFF

- Â 1. Flaps----- 0Â°
- Â 2. Throttle(smoothly)-----FULL OPEN
- Â 3. RPM (2500 min) / MP (in the green) ----- CHECK
- Â 4. Oil Pressure / Airspeed Indicator ----- CHECK
- Â 5. Rotate----- 60 MPH
- Â 6. NormalClimbSpeed----- 85 MPH
- Â 7. When safe airborne:
 - Â• Propeller----- 2600 RPM
 - Â• Throttle----- 25 inchesMP
- Â 8. FuelFlow----- ADJUST

in accordance with Fuel Flow Placard

SHORT FIELD TAKE-OFF

1. Flaps----- 20°
2. Brakes ----- APPLY
3. Throttle(smoothly)----- FULL OPEN
4. RPM (2500)/ Oil Pressure----- CHECK
5. Brakes ----- RELEASE
6. Elevator Control -----SLIGHTLY TAIL LOW
7. AirspeedIndicator ----- CHECK
8. ClimbSpeed----- 60 MPH
9. Flaps----- RETRACT at 75 MPH
10. Reduce Power to 2600 RPM and 25 inches of MP

SOFT FIELD TAKE-OFF

1. Flaps----- 20°
2. Brakes ----- DO NOT APPLY
3. Power as necessary to keep rolling.
4. ElevatorControl----- FULL BACK
5. Throttle(smoothly)----- FULL OPEN
(when aligned with the runway)
6. ElevatorControl----- RELAX
7. RPM (2500) / MP (in the green) ----- CHECK
8. Oil Pressure / Airspeed indicator ----- CHECK
8. When airborne level off immediately and accelerate to normal climb speed of 85 MPH using ground effect.
9. Flaps----- RETRACT at 85 MPH
10. Reduce power to 2600 RPM and 25 inches of MP

ENROUTE

CLIMB

1. NormalClimbSpeed----- 90 - 100 MPH
2. Best Rate (Vy) ----- 95 (SL) - 87(10K) MPH
3. Propeller----- 2600 RPM
4. Throttle----- 25" MP
5. EngineInstruments----- CHECK
6. Flaps----- UP
7. Check landing light off

CRUISING

1. Propeller----- 2200 - 2600 RPM
2. Throttle----- 15 - 25" MP
3. Trim----- ADJUST
4. FuelFlow----- LEAN AS REQUIRED
WARNING: Improper leaning procedures will greatly reduce endurance.
5. EngineInstruments----- CHECK
6. FlightInstruments----- CHECK

DESCENT

1. FuelQuantity----- CHECK
2. FuelSelector----- BOTH
3. FuelFlow----- RICH AS REQUIRED
4. Throttle& Propeller----- AS DESIRED

LANDING

BEFORE LANDING

1. LandingLight----- ON
2. FuelSelector----- BOTH
3. FuelFlow----- RICH AS REQUIRED
4. Propeller----- HIGH RPM
5. SeatBelt(s)----- FASTEN

NORMAL LANDING

1. Airspeed----- 70 - 80 MPH (flaps up)
 2. Flaps----- AS REQUIRED
 3. Touchdown----- MAIN WHEELS FIRST
 4. Landing Roll ----- LOWER NOSE WHEEL GENTLY
 5. Braking----- MINIMUM REQUIRED

GO-AROUND

1. Throttle (smoothly)----- FULL OPEN
 2. Establish climb attitude
 3. Flaps----- UP
 4. When safe airborne:
 • Propeller----- 2600 RPM
 • Throttle----- 25"

TOUCH-AND-GO PROCEDURE

1. Flaps----- UP (check visually)
 2. Throttle (smoothly)----- FULL OPEN
 3. Rotate----- 60 MPH
 4. Normal Climb Speed----- 85 MPH
 5. When safe airborne:
 • Propeller----- 2600 RPM
 • Throttle----- 25"

SHORT FIELD LANDING

1. Airspeed----- 75 - 85 MPH (flaps up)
 2. Flaps ----- FULL DOWN (wind permitting)
 3. Airspeed----- 65 MPH (until flare)
 4. Power----- REDUCE TO IDLE
 5. Touchdown----- MAIN WHEELS FIRST
 6. Brakes ----- APPLY HEAVILY
 7. Flaps----- RETRACT

SOFT FIELD LANDING

1. Airspeed----- 70 - 80 MPH (flaps up)
 2. Flaps ----- FULL DOWN (wind permitting)
 3. Airspeed----- 65 - 75 MPH
 4. Power----- AS REQUIRED
 to touch main wheels first as soft as possible
 5. Landing Roll ----- LOWER NOSE WHEEL GENTLY
 as late as possible
 6. Elevator Control ----- FULL BACK (speed permitting)
 7. Brakes ----- DO NOT APPLY
 8. Flaps----- DO NOT RETRACT
 9. Power----- AS NECESSARY
 to keep rolling until clear of runway

AFTER LANDING

1. Flaps----- UP
 2. Transponder----- STANDBY
 3. Landing and Strobe Lights----- OFF
 4. Obtain taxi clearance or announce on CTAF

POST FLIGHT

SHUT DOWN

1. Parking Brake----- SET
 2. Avionics Master Switch----- OFF
 3. Nav Lights (if used)----- OFF
 4. Throttle----- IDLE
 5. Magneto Grounding----- CHECK
 6. Throttle----- 1000 RPM
 7. Mixture----- IDLE CUT OFF
 8. Throttle----- CLOSE
 9. Ignition Switch ----- OFF & KEY REMOVED

Â 7. Wings level (**coordinated**)

Â 8. Recover to normal cruise

SIMULATED FORCED LANDING

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Â 1. Establish best glide airspeed of 85 MPH

Â 2. Select proper landing area

Â 3. If altitude permits Â- Attempt restart

Â 4. If altitude is too low or restart fails Â- Secure engine

Â 5. Clear engine every 20 Â- 30 seconds

Â 6. 500 feet AGL minimum

Â 7. Propeller Â- High RPM

Â 8. Execute GO-AROUND

STEEP TURN

Â 1. Normal cruise / 1500 feet AGL min

Â 2. Propeller Â- 2600 RPM

Â 3. Roll into 45Â° bank turn

Â 4. Add power as necessary to maintain airspeed

Â 5. Maintain angle of bank and altitude