

**PILOT'S
ABBREVIATED
FLIGHT CREW CHECKLIST**

MAULE MT-7-235

1 MARCH 2001

NOTE

FLIGHT MANUAL

This checklist does not replace the amplified version of the procedures in the manufacturer's AIRPLANE FLIGHT MANUAL.

NORMAL PROCEDURES

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PREFLIGHT and FLIGHT CHECKS

CAUTION

Prior to moving the flaps beyond the zero position ensure the cargo and right passenger door are closed. Lowering the flaps with the cargo or passenger door open will cause damage to the flaps.

Failure to fully engage the flap release button prior to moving the flap handle may result in damage to the flap handle. Never force the flap handle.

INTERIOR INSPECTIONS

1. Control Lock(s) – REMOVE
2. Forms and Publications – CHECK
 - a. Airworthiness Certificate
 - b. Registration
 - c. Pilot's Operating Handbook
 - d. Weight and Balance
 - e. Maintenance Logbooks
 - f. Navigation Publications
3. BAT Switch - OFF
4. Tachometer/Hobbs meter Time – RECORD
5. Parking Brake – SET
6. Trim Controls – NEUTRAL
7. Fire Extinguisher – FULLY CHARGED
8. Fuel Selector – BOTH (Handle =big end, pointer=little end)
9. Avionics Power Switch – OFF
10. Electrical Equipment – OFF
 - a. Pitot Heat
 - b. Interior Lights
 - c. Exterior Lights
 - d. Electrical Fuel Pump
 - e. Alternator
11. Battery Switch – ON

WARNING

When turning on the master switch, using an external power source, or pulling the propeller through by hand, treat the propeller as if the ignition switch were on. Do not stand, nor allow anyone else to stand, within the arc of the propeller, since a loose or broken wire, or a component malfunction could cause the propeller to rotate.

12. Fuel Gauges – CHECK INDICATIONS
13. Pitot Heat – CHECK, then OFF (As Required)
14. Stall Warning System – CHECK
15. Exterior Lights – CHECK, then OFF (As Required)
 - a. Navigation Lights
 - b. Landing Light
 - c. Taxi Light
 - d. Pulse Light
 - e. Anticollision (Strobe) Light
16. Battery Switch – OFF

CAUTION

Prior to moving the flaps beyond the zero position ensure the cargo and right passenger door are closed. Lowering the flaps with the cargo or passenger door open will cause damage to the flaps.

Failure to fully engage the flap release button prior to moving the flap handle may result in damage to the flap handle. Never force the flap handle.

17. Flaps – FULL DOWN (3rd Notch)

LEFT WING SECTION

1. Fuel Drains (Behind Step) – DRAIN (2)
2. Main Landing Gear – CHECK TIRE INFLATION & BRAKE LINING
 - a. Tire Condition and Inflation (25-26 psi recommended)
 - b. Brake Line Security
3. Wing Main Fuel Tank Drain – DRAIN (1)
4. Flap – CHECK (Hinges and Control Attachments)
5. Aileron – CHECK (Hinges and Control Attachments)
6. Wing Top – CHECK (Wrinkles Indicate Internal Damage)
7. Wing Tip and Navigation Light – CHECK
8. Wing Tie down – REMOVE
9. Auxiliary Fuel Tank Drain – DRAIN (1)
10. Auxiliary Fuel Tank Quantity – CHECK
11. Landing Light – CHECK
12. Pitot Tube – Remove Cover and check for obstruction
13. Stall Warning Switch – CHECK (Moves Freely)
14. Vortex Generators – CHECK (MAX 5 Total Missing on Aircraft)
15. Main Fuel Tank Quantity – CHECK

NOSE SECTION

1. Gascolator – DRAIN (1)
2. Oil Quantity – CHECK (8 qt max, 6 qt min)
3. Cowl – CHECK
4. Propeller – CHECK
5. Air Inlets – CHECK
6. Nose Gear – CHECK
 - a. Tire Condition and Inflation (25-26 psi recommended)
 - b. Strut Extension and Clean Strut (min. 2-3 in)

RIGHT WING SECTION

1. Main Landing Gear – CHECK
 - a. Tire Condition and Inflation (25-26 psi recommended)
 - b. Brake Line Security
2. Wing Main Fuel Tank Drain – DRAIN (1)
3. Vortex Generators – CHECK (MAX 5 Total Missing on Aircraft)
4. Main Fuel Tank Quantity – CHECK
5. Wing Tiedown – REMOVE

6. Auxiliary Fuel Tank Quantity – CHECK
7. Wing Auxiliary Fuel Tank Drain – DRAIN (1)
8. Wing Tip and Navigation Light – CHECK
9. Wing Top – CHECK (Wrinkles Indicate Internal Damage)
10. Aileron – CHECK (Hinges and Control Attachments)
11. Flap – CHECK (Hinges and Control Attachments)

EMPENNAGE

1. Right Fuselage, Side and Top – CHECK (Wrinkles Indicate Internal Damage)
2. Right Side Static Port – CHECK
3. Right Stabilizer – CHECK (Attachment Points and Strut)
4. Vortex Generators – CHECK (MAX 5 Total Missing on Aircraft)
5. Right Elevator – CHECK (Hinge Points)
6. Rudder – CHECK (Hinge Points and Control Attachments)
7. Navigation Light – CHECK
8. Tail Skid – CHECK
9. Tail Tie down – REMOVE
10. Left Elevator – CHECK (Hinge Points)
11. Left Stabilizer – CHECK (Attachment Points and Strut)
12. Vortex Generators – CHECK (MAX 5 Total Missing on Aircraft)
13. Left Fuselage, Side and Top – CHECK (Wrinkles Indicate Internal Damage)
14. Left Side Static Port – CHECK

OPERATING CHECKS

BEFORE STARTING ENGINE

1. Preflight Inspection – COMPLETE
2. Passenger/Egress Briefing – COMPLETE
3. Personal Electronic Devices – OFF
4. Rear Doors – CLOSED and LATCHED
5. Seat Belts and Shoulder Harnesses – FASTENED
6. Flaps – RETRACTED
7. Avionics Power Switch – OFF
8. Electrical Equipment – OFF
 - a. Pitot Heat

- b. Interior Lights
- c. Exterior Lights
- d. Electrical Fuel Pump
- e. Alternator
9. Circuit Breakers – CHECK IN

STARTING ENGINE

1. Parking Brake – ON and SET
2. Fuel Selector Value – FULLER TANK or BOTH (If Equal)

NOTE

Do not confuse handle (large part) with pointer (small pointy part)

3. Navigation Lights – ON
4. Battery Switch – ON
5. Throttle – OPEN 1/2 INCH
6. Propeller – HIGH RPM
7. Prime – AS REQUIRED (Do Not Prime for Hot Starts)
 - a. Fuel Boost Pump – ON
 - b. Mixture – FULL RICH (Until a slight/steady flow is indicated, approx. 3 to 5 Seconds)
 - c. Mixture – IDLE/CUTOFF
 - d. Fuel Boost Pump OFF

NOTE

If engine does not start, repeat priming. Over prime can be detected by fuel coming from the cowl bottom center drain.

8. Ignition Switch – START
9. Mixture – FULL RICH (When Engine Starts to Fire)
10. Ignition Switch – BOTH (When Engine Starts)
11. Throttle – ADJUST to 900 – 1000 RPM
12. Oil Pressure – CHECK (25 PSI or more within 30 seconds)
13. Mixture – ADJUST (As Required for Ground Operations)
14. External Power – Disconnect (If Applicable)
15. Alternator – ON
16. Ammeter – CHECK (Positive Indication)
17. Starter – CHECK DISENGAGED
18. Avionics Power Switch – ON

BEFORE TAXI

1. Doors and Windows – AS DESIRED
2. Radio, Transponder, NAV Aids – SET (AS Required)
3. Flight Instruments – CHECKED and SET
 - a. Altimeter – SET
 - b. Artificial Horizon(s) – ERECT
 - c. Airspeed Indicator - CHECK
 - d. Directional Gyro – CHECK and SET
 - e. VSI – 0±100ft/min or less
 - f. Turn and Slip - CHECK
4. Radio(s) – CHECK
5. Parking Brake – OFF

TAXI

1. Brakes – CHECK
2. Turn and Slip – CHECK
3. Instruments – CHECK
4. Fuel System – CHECK

NOTE

Except when taxi wind conditions require other positions, maintain the yoke in an aft position during taxi to the maximum extent possible. With a passenger in the rear seat, full aft yoke may cause the tailskid to contact the surface.

ENGINE RUN UP

1. Parking – ON and SET
2. Prop Blast – CLEAR
3. Engine Instruments – CHECK
4. Mixture – FULL RICH
5. Throttle – 2000 RPM
6. Engine Instruments – CHECK
7. Ignition System – CHECK
 - a. Magnetos – <175 RPM DROP
 - b. Magnetos – <50 RPM DIFFERENCE
8. Propeller Control – EXERCISE
 - a. Retard Slowly Until Max of 500 RPM Drop
 - b. Return to High RPM
 - c. Repeat Twice for First Flight of the Day
9. Alternate Air Control – CHECK
 - a. Turn Left and Pull Out
 - b. Check for 50 RPM Drop
 - c. Push In and Turn Right to Lock (See note)

NOTE

Over rotation of the alternate air control to the right during locking may result in the inability to actuate the alternate air control.

10. Vacuum Gauge – CHECK
11. Ammeter – CHECK
12. Alternator Light – OUT
13. Throttle – RETARD (900 – 1000 RPM)

BEFORE TAKEOFF

1. Seat Belt and Shoulder Harnesses – RECHECK FASTENED
2. Doors – CLOSED and LATCHED
3. Fuel Selector Value - FULLER TANK or BOTH (If Equal)
4. Flaps – SET FOR TAKEOFF (MAX 24 Degrees/2nd Notch)
5. Trim Controls – SET FOR TAKEOFF
6. Flight Controls – CHECK FREE and CORRECT
7. Crew Briefing – COMPLETE
 - a. Departure
 - b. Emergencies
8. Radios and NAV Equipment – AS DESIRED
9. Altimeter – SET
10. Mixture Control – FULL RICH
11. Propeller Control – HIGH RPM
12. Alternate Air Control – IN and LOCKED
13. Anti-collision Light – ON
14. Pulse Lights – As Required
15. Transponder - ALT
16. Engine Instruments – CHECK
17. Attitude Indicator – CHECK ERECT
18. Directional Gyro – CHECK and SET
19. Parking Brake – OFF

ROTATE	CLIMB	GLIDE
50 mph	90 mph	83 mph

CAUTION

High engine RPM and low manifold pressure operations and/or use rapid throttle movements could cause sever damage to the engine counterweights, roller and bushings.

AFTER TAKEOFF/CLIMB

1. Airspeed – 90 –100 MPH
2. Power – SET
 - a. Throttle – 29 IN MP
 - b. Prop Control – 2400 RPM
3. Mixture – FULL RICH OR AS NEEDED FOR BEST POWER

CAUTION

Climb under 90 mph only when necessary & check cylinder head temperature frequently.

LEVEL OFF/CRUISE

1. Fuel Quantity – CHECK
2. Engine Instruments – CHECK
3. Power – SET
 - a. Throttle – 14.5 to 29 IN Manifold Pressure
 - b. Propeller – 2050 to 2400 RPM
4. Mixture – LEAN
 - a. *Maximum Power Cruise* (Approximately 75% power). Never lean beyond 150°F on rich side of peak. Monitor cylinder head temperatures.
 - b. *Best Economy Cruise*. (Approximately 60% power or less). Operate at Peak EGT.
5. Flaps – SET (Fully Retracted/ –7° or 1st Notch/0°)
6. Rudder and Elevator Trim – ADJUST
7. Flight Plan – OPEN
8. Pulse Lights – As Required
9. CO Detector – CHECK

DESCENT

1. Crew Briefing – COMPLETE
 - a. MSA/ESA
 - b. NAV Frequencies
 - c. Descent Profile
 - d. Minimums
 - e. Aerodrome
 - f. Lost Communications
 - g. Weather
 - h. Landing Configuration
2. Flight Instruments – SET
3. Seat Belt and Shoulder Harness – Adjusted
4. Power – AS Desired
5. Mixture – LEAN for Smoothness
6. Flaps – AS DESIRED
7. CO Detector – CHECK
8. Pulse Lights – As Desired

LANDING SPEEDS MPH			
FLAP	40	24	0
APPH	75		90
LAND	65		80

BEFORE LANDING

1. Fuel Selector Value – FULLER TANK or BOTH (If Equal)
2. Mixture – FULL RICH
3. Propeller – HIGH RPM
4. Flaps – AS REQUIRED
5. Alternate Air Control – IN and LOCKED
6. Seat Belts and Shoulder Harnesses – FASTENED

GO AROUND/BALKED LANDING

1. Throttle – SET
2. Trim - SET
3. Flaps – RETRACT TO 24⁰
4. Airspeed – 90 MPH
5. Flaps – RETRACT

TOUCH and GO

1. Flaps – SET
2. Trim – SET
3. Throttle – SET

AFTER LANDING

1. Flaps – UP
2. Pitot Heat – OFF
3. Transponder – Standby
4. Landing and Taxi Lights – AS REQUIRED
5. Anticollision (Strobe) Light – OFF
6. Pulse Lights - OFF
7. Mixture – ADJUST

ENGINE SHUTDOWN

1. Parking Brake – As Required
2. Electrical Equipment – OFF
3. Magneto Grounding – CHECK (Perform below 1000 RPM)
4. Avionics Power Switch – OFF
5. External Lights – OFF
6. Mixture – IDLE/CUTOFF
7. Ignition Switch – OFF
8. Battery and Alternator Switch – OFF

BEFORE LEAVING AIRCRAFT

1. Control Locks – INSTALL (As Required)
2. Tachometer/Hobbs Meter – RECORD
3. Wheel Chocks – INSTALL
4. Parking Brake – OFF
5. Tie Downs and Grounding Wires – INSTALL
6. Pitot Cover – INSTALL (As Required)
7. Gust Locks – INSTALL (As Required)
8. Window Covers – INSTALL (As Required)
9. Flight Plan – CLOSED

CAP/DOV-MT-7-235-CL-1

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