

**MAULE M7-235B Amphib**

**PREFLIGHT**

**Interior**

- |                        |                       |
|------------------------|-----------------------|
| 1. BAT Switch          | ON                    |
| 2. Fuel Gauges         | Check Qty             |
| 3. Aux Fuel Pumps      | ON, then OFF          |
| 4. Electrical Switches | All OFF               |
| 5. BAT Switch          | OFF                   |
| 6. Flaps               | Full DN               |
| 7. Approved AFM & AFMS | Check on brd          |
| 8. Life Vests          | Avail. for Crew & Pax |

**Exterior**

- |                             |   |
|-----------------------------|---|
| 1. Fuselage Fuel Drains     | DRAIN (2)   |
| 2. L Flap Attach.           | Check Hinges & Cntl   |
| 3. L Aileron Attach.        | Check Hinges & Cntl   |
| 4. L Wing Top               | Check Cond. & VGs (5 or more Total Missing All Surfaces, Not Airworthy) |
| 5. L Wing Fuel Drains       | DRAIN (2)   |
| 6. L Wing Tip & Nav Lgt     | Check Cond.   |
| 7. Aux Fuel Tank            | Check Qty   |
| 8. Landing Light            | Check Cond.   |
| 9. L Wing Tiedown           | Remove  |
| 10. Pitot Tube              | Remove Cover  |
| 11. Stall Warn Switch       | Check   |
| 12. L Main Fuel Tank        | Check Qty   |
| 13. Left Main Gear          | Inflation, Brake, Shock   |
| 14. L Bottom Cowl           | Drain Gascolator  |
| 15. Oil Qty                 | Check (11-12 Qts)   |
| 16. Propeller               | Check   |
| 17. Air Inlets              | Check   |
| 18. R Wing & Cntls          | Insp Same As L  |
| 19. R Wing Fuel Drains      | DRAIN (2)   |
| 20. R. Main Gear            | Inflation, Brake, Shock   |
| 21. R Fuse, Top, Side, Bot. | Check Cond.   |
| 22. R Static Port           | Clear   |
| 23. R Stabilizer            | Check Attach. & Strut   |
| 24. R Elevator              | Check Hinge Pt  |
| 25. Rudder Attach, Nav Lgt  | Check Hinge Pt, Cntl  |

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|----------------------------------|-----------------------|
| 26. L Elevator Hinge Pt          | Check Tab Cntl &      |
| 27. L Stabilizer                 | Check Attach. & Strut |
| 28. L Fuse, Top, Side, Bot.      | Check Cond.           |
| 29. L Static Port                | Clear                 |
| 30. Floats, Struts, Flying Wires | Check Attach. & Cond. |
| 31. R Nose Gear                  | Check Tire & Attach.  |
| 32. L Nose Gear                  | Check Tire & Attach.  |
| 33. Water Rudder                 | Check Ops & Rig       |
| 34. Float Compartments           | Check for Water       |

**BEFORE STARTING**

- |                           |                  |
|---------------------------|------------------|
| 1. Seat Belts & Harnesses | Fastened         |
| 2. Flaps                  | Retracted        |
| 3. Circuit Breakers       | Check            |
| 4. Water Rudder Ops       | Check Visually   |
| 5. Water Rudders          | Up (Ld) Dn (Wtr) |

**STARTING**

- |                        |                      |
|------------------------|----------------------|
| 1. Parking or Toe Brks | ON                   |
| 2. Fuel Selector       | Fullest Tank or BOTH |
| 3. Throttle            | OPEN ¼ inch          |
| 4. Propeller Cntl      | FULL Inc RPM         |
| 5. Mixture Cntl        | Rich                 |
| 6. Anti-Collision Lgt  | ON                   |
| 7. BAT / ALT Switch    | ON                   |

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|---------------------------|------------------|
| 8. Prime                  | As Reqd          |
| 9. Starter                | Start            |
| 10. After Start           | Check Oil Press. |
| 11. Alternator            | Check Charging   |
| 12. Radio & Elec Switches | ON               |
| 13. Parking Brake         | OFF              |

**ENGINE CHECK**

- |                        |                        |
|------------------------|------------------------|
| 1. Parking or Toe Brks | ON                     |
| 2. Engine Inst.        | Check in Green Arc     |
| 3. Throttle            | 2000 RPM               |
| 4. Magnetos            | <175 drop & Δ<50       |
| 5. Propeller           | Cycle for 500 RPM drop |
| 6. Carburator Heat     | HOT- RPM drop 150±50   |
| 7. Carburator Heat     | COLD                   |
| 8. Vacuum Gauge        | Check in Green Arc     |
| 9. Alternator          | Charging               |
| 10. Throttle           | Idle                   |

**BEFORE TAKEOFF**

- |                            |                             |
|----------------------------|-----------------------------|
| 1. Fuel Selector           | Fullest Tank or BOTH        |
| 2. Landing Gear – WATER    | UP – Check Visually         |
| LAND                       | DN – Check Visually         |
| 3. Water Rudders           | UP                          |
| 4. Flaps                   | 2 <sup>nd</sup> Notch – 24° |
| 5. Trim                    | Set for Takeoff             |
| 6. Mixture                 | Rich                        |
| 7. Propeller Cntl          | Full Inc RPM                |
| 8. Carburator Heat         | COLD                        |
| 9. Engine Inst.            | Normal Range                |
| 10. Radios                 | Set                         |
| 11. Altimeter              | Set                         |
| 12. Attitude Ind           | Erect                       |
| 13. Directional Ind        | Set                         |
| 14. Seat Belts & Harnesses | Fastened                    |
| 15. Doors                  | Rear Closed & Latched       |
| 16. Flight Controls        | Free and Correct            |
| 17. Life Vests             | Avail. for Crew & Pax       |
| 18. Pax                    | Belts /Harnesses /Briefed   |
| 19. Parking Brake          | OFF                         |

**TAKEOFF – WATER**

- |                  |                                 |
|------------------|---------------------------------|
| 1. Control Stick | Hold Full Aft                   |
| 2. Throttle      | FULL                            |
| 3. Control Stick | Move fwd when nose stops rising |
| 4. Airspeed      | 48 – 55 mph                     |
| 5. Control Stick | Lgt. back press to lift off     |

**TAKEOFF – LAND**

- |                 |                           |
|-----------------|---------------------------|
| 1. Throttle     | FULL                      |
| 2. Rotate       | 48 – 55 mph               |
| 3. Climb Speed  | 75 mph                    |
| 4. Flaps        | Retract @ safe alt        |
| 5. Landing Gear | Retract (Visually verify) |

**BEFORE LANDING**

- |                           |                      |   |
|---------------------------|----------------------|---|
| 1. Landing Gear – WATER   | UP                   | Flap Operating Range: 50 – 95 mph                           |
| LAND                      | DN                   | VX 75 mph (Flaps 24°)                                       |
| 2. Gear Ind Lgt – WATER   | BLUE                 | VY 90 mph (Flaps 0°)  |
| LAND                      | GREEN                | VA 125 mph  |
| 3. Gear Position          | Visually Check       | VNE 164 mph   |
| 4. Water Rudders          | UP                   | Glassy Water Cfg 70 mph, 24°, 2000 RPM (50-150 ft/min down) |
| 5. Seat Belts & Harnesses | Fastened             | Normal Climb 25” MP, 2500 RPM                               |
| 6. Fuel Selector          | Fullest Tank or BOTH | Normal Cruise 23” MP, 2300 RPM                              |
| 7. Mixture Cntl           | Rich                 | Low Cruise 20” MP, 2300 RPM                                 |
| 8. Propeller Cntl         | FULL Inc RPM         | Pattern Power 80 mph, 24°, 2300 RPM                         |
| 9. Carburator Heat        | HOT                  |   |
| 10. Flaps                 | As Required          |   |
| 11. Airspeed – Flaps UP   | 62 – 95 mph          |   |
| Flaps DN                  | 50 – 95 mph          |   |

**LANDING – WATER**

- |                  |                   |
|------------------|-------------------|
| 1. Touchdown     | Slightly Tail Low |
| 2. Control Stick | Hold Full Aft     |
| 3. Water Rudders | DN for slow taxi  |

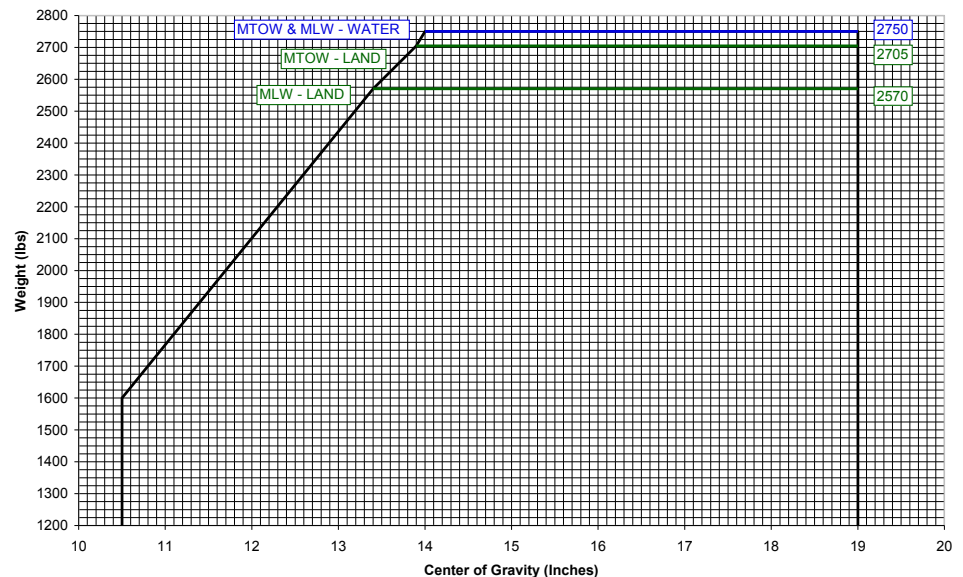
**LANDING – LAND**

- |                  |                          |
|------------------|--------------------------|
| 1. Touchdown     | Slightly Tail Low        |
| 2. Control Stick | Lower Nose wheels to rwy |
| 3. Brakes        | As Required              |

**SHUTDOWN**

- |                         |                        |
|-------------------------|------------------------|
| 1. Parking or Toe Brks  | ON                     |
| 2. Radios               | OFF                    |
| 3. Elec Switches        | OFF                    |
| 4. Flaps                | As Rqd                 |
| 5. Magneto Gnding Check | Perform Below 1000rpm  |
| 6. Mixture Control      | Full Lean              |
| 7. Magneto Switch       | OFF                    |
| 8. Anti-Collision Lgt   | OFF                    |
| 9. BAT & ALT Switch     | OFF                    |
| 10. SECURING Aircraft   | Tied to Dock or Ramped |

**Weight & Balance Envelope**



## EMERGENCY CHECKLISTS

### EMERGENCY BASIC RULES

1. Maintain Aircraft Control
2. Analyze the situation & take proper action
3. Land as soon as conditions permit

### ENGINE EMERGENCY SHUTDOWN

1. Mixture Full LEAN
2. Fuel Selector OFF
3. Ignition Switch OFF

### ENGINE FIRE DURING STARTING

1. Mixture Full LEAN
2. Throttle OPEN
3. Continue Cranking for several revolutions
4. Accomplish ENGINE EMERGENCY SHUTDOWN

### ENGINE FIRE AFTER STARTING

1. Accomplish ENGINE EMERGENCY SHUTDOWN
2. Master Switch OFF

### EMERGENCY EXIT ON GROUND

1. Accomplish ENGINE EMERGENCY SHUTDOWN
2. Master Switch OFF
3. Leave aircraft by either door / kick out side window or bag door

### TAKEOFF ABORT (BEFORE LIFT-OFF)

1. Throttle CLOSED
2. Brakes As Required

### ENGINE FAILURE AFTER TAKEOFF (FORCED LNDG)

1. Glide Est. 80 mph Flaps 0°
2. Fuel Selector Fullest Tank
3. Elec Fuel Pump ON
4. Mixture Rich
5. Ignition ON
6. Carburetor Heat HOT
7. If engine does not restart, Accomplish ENGINE EMERGENCY SHUTDOWN
8. Flaps As Required
9. Master Switch OFF

### PARTIAL POWER IN FLIGHT

1. Mixture Rich
2. Carburetor Heat HOT
3. Airspeed Glide @ 80 mph
4. Fuel Selector BOTH
5. Elec Fuel Pump ON
6. Ignition Switch BOTH
7. Master Switch ON

### COMPLETE POWER FAILURE IN FLIGHT

1. Glide Est 80mph
2. Attempt Engine Airstart if Warranted

### ENGINE AIRSTART

1. Fuel Selector BOTH
2. Elec Fuel Pump ON
3. Mixture RICH
4. Ignition Switch BOTH
5. If engine does not start try flooded engine clearing proc. with throttle wide open and mixture full lean.
6. If no start FORCED LANDING

### ELECTRICAL FIRE

1. Master Switch OFF

### ENGINE FIRE IN FLIGHT

1. Accomplish ENGINE EMERGENCY SHUTDOWN
2. Make forced landing

### SMOKE AND FUME ELIMINATION

1. Cabin Heat Knob IN
2. Cabin Air Knob IN
3. Upper Air Vents OPEN
4. Pilot's Window OPEN (below 120mph)

### STRUCTURAL DAMAGE

1. On Takeoff ABORT
2. In Flight, maintain controllable airspeed
3. Climb to safe stall recovery altitude
4. Notify ATC
5. Determine control difficulty airspeed by slowing straight ahead, do not stall
6. Make full stop landing using 5 – 10 mph above difficulty airspeed or normal approach speed whichever is higher.

### RECOVERY FROM INADVERTANT SPIN

1. Rudder FULL in opp dir of spin
  2. Elevator FULL nose down
  3. Ailerons Neutral
  4. Throttle Idle
- When Rotation Stops
5. Rudder Neutral
  6. Elevator Neutral, then ease back for level flt
  7. Flaps Retract

### ALTERNATOR FAILURE

1. Output Monitor
  2. Throttle Inc to at least 900 RPM
- If Ammeter reads (-) or ALTERNATOR OFF WARNING light is illuminated:
3. ALT Switch OFF then ON (Repeat twice)
- If system will not reset:
4. Electrical Load Reduce
  5. Land as Soon as Practical

### ENG FAILURE DURING TAKEOFF – WATER

1. Throttle IDLE
2. Control Wheel FULL AFT
3. Mixture CUT-OFF
4. Ignition Switch OFF
5. Master Switch OFF

### FORCED LANDING ON WATER w/o POWER

1. Airspeed 83mph
2. Landing Gear UP (BLUE lgt)
3. Gear Position Confirm Visually
4. Mixture Cutoff
5. Fuel Selector OFF
6. Ignition Switch OFF
7. Water Rudders UP
8. Flaps As Required
9. Master Switch OFF
10. Doors Unlatch
11. Touchdown Slightly Tail Low
12. Control Wheel Full Aft

### FORCED LANDING ON LAND w/o POWER

1. Airspeed 83mph
2. Landing Gear DN (GREEN lgt) smooth
3. Gear Position Confirm Visually

4. Mixture Cutoff
5. Fuel Selector OFF
6. Ignition Switch OFF
7. Water Rudders UP
8. Flaps As Required
9. Master Switch OFF
10. Doors Unlatch
11. Touchdown Level Attitude
12. Control Wheel Full Aft
13. Brakes As Required

### LANDING GEAR FAILS TO RETRACT / EXTEND

1. BAT Switch ON
  2. Gear Switch Check in desired Position
  3. Gear Circuit Breaker Check IN
  4. Gear Lights Verify
  5. Gear Position Check visually
- If gear still in improper position:
6. Gear Circuit Breaker Check IN
  7. Gear Switch Cycle
  8. Gear Motor Check Red Light ON
  9. Gear Lights Verify
  10. Gear Position Check Visually
  11. Airspeed Reduce to min loads
- If pump is running intermittently or gear not moving:
12. Gear Circuit Breaker PULL OUT
  13. Gear Switch Desired Position
  14. Emer Hand Pump Select Same position as gear switch
  15. Gear Circuit Breaker Push IN
  16. Gear Motor Check red light on
  17. Gear Lights Verify
  18. Gear Position Check Visually
- If gear motor inop or gear still not in desired position:
19. Gear Circuit Breaker Pull OUT
  20. Gear Switch Desired Position
  21. Emer Hand Pump Select Same position as gear switch
  22. Emer Hand Pump PUMP
  23. Gear Lights Verify Desired Ind
  24. Gear Position Confirm Visually

### GEAR UP or PARTIALLY EXTENDED – LAND on LAND ONLY

1. Seat Belts & Harnesses Fastened
2. Select longest smooth surface available
3. Gear Switch UP
4. Flaps DN
5. Airspeed 55 mph
6. Doors Unlatch
7. Master Switch OFF
8. Touchdown Level, min sink
9. Control Wheel Full AFT
10. Mixture Cutoff
11. Fuel Selector OFF