M20F Checklist

✓ Vs0 (Dirty) 54 Kts / 62 MPH
✓ Vs1 (Clean) 59 Kts / 69 MPH
✓ Vrotate 65 Kts / 75 MPH
✓ Vfinal (dirty) 70 Kts / 80 MPH
✓ Vx 82 Kts / 94 MPH
✓ BEST GLIDE 87 Kts / 100 MPH
✓ Vy 94 Kts / 108 MPH
✓ Vlo 104 Kts / 120 MPH
✓ Vfe 109 Kts / 125 MPH
✓ Va 117 Kts / 135 MPH
✓ Vno 152 Kts / 175 MPH
✓ Vne 174 Kts / 200 MPH

1. IFR SPEEDS CLEAN
✓ KIAS MP
✓ Level 90 16”
✓ Level 110 20”
✓ Descent 1000 fpm 110 9”
✓ IFR SPEEDS GEAR DOWN
✓ KIAS MP
✓ Level 90 20”
✓ Descent 500 fpm 90 14”
✓ BEFORE STARTING ENGINE
✓ Preflight Inspection COMPLETE
✓ Seats, Seatbelts, Harness SECURE
✓ Parking Brake SET
✓ Circuit Breakers IN
✓ Radio Master OFF
✓ Fuel Selector FULLEST TANK
✓ Cowl Flaps OPEN
✓ **STARTING ENGINE**
✓ Master Switch ON
✓ Gear Light **GREEN**
✓ Fuel Pump (Check Pressure) ON
✓ Propeller Full Forward
✓ Throttle 1/2” OPEN
✓ Mixture 5 SECOND RICH/CUTOFF
✓ Area CLEAR
✓ Beacon ON
✓ **Starter ENGAGE**
✓ Throttle 1000-1200 RPM When very cold outside, idle at minimum RPM until oil circulation is assured.
✓ Oil Pressure CHECK
✓ Fuel Pump OFF
✓ Standby Vacuum Pump CHECK
✓ Suction **GREEN**
✓ Ammeter CHECK
✓ Mixture LEAN
✓ Radio ON
✓ Xponder STANDBY
✓ Time NOTED
✓ **ENGINE RUN-UP**
✓ Parking Brake SET
✓ Fuel Selector FULLEST TANK
✓ Mixture RICH / As Required
✓ Throttle 1900 RPM
✓ Magnetos (max drop 175, diff 50) **CHECK**
✓ Propeller CYCLE
✓ Suction **GREEN**
✓ Ram Air CLOSED
✓ Engine Instruments GREEN
✓ Throttle IDLE
✓ **BEFORE TAKEOFF & TAXI BACK**
✓ Ammeter/Annunciator CHECK
✓ Flight Instruments SET
✓ **Wing Flaps Set For Takeoff**
✓ Trim Tab Set For Takeoff
✓ Flight Controls Free And Correct
✓ Radios SET
✓ Door LATCHED
✓ Seatbelts and Shoulder
✓ Harness
✓ **FASTENED**
✓ Parking Brake OFF
✓ RUNWAY ITEMS
✓ Xponder ALT - 1200
✓ Mixture SET
✓ Fuel Pump ON
✓ Strobe Lights ON
✓ Clock / Timer START
✓ Window CLOSE
✓ AFTER TAKEOFF
✓ Tap brakes and Landing Gear RETRACT
✓ Flaps UP
✓ Power 26” MP, 2600 RPM
✓ Fuel Pump OFF
✓ CRUISE
✓ Power 24” MP, 2400 RPM
✓ Mixture LEAN
✓ Cowl Flaps CLOSED
✓ Ram Air OPEN above 5,000' and only in clean clear air. DO NOT USE RAM AIR IN IMC!
✓ DESCENT
✓ ATIS ACQUIRED
✓ Mixture RICH
✓ Fuel FULLEST TANK
✓ Power AS REQUIRED
✓ Altimeter SET
✓ Ram Air CLOSED
✓ BEFORE LANDING
✓ Booster Pump ON
✓ Undercarriage FLAPS, GEAR, LANDING LIGHTS
✓ Mixture RICH
✓ Propeller FULL FORWARD
✓ Seatbelts FASTENED
✓ AFTER LANDING
✓ Wing Flaps UP (on all Mooney models, once up, I then adjust flaps for take off position for next time and to help discourage people from stepping on the flap.
✓ Cowl Flaps OPEN
✓ Mixture LEAN
✓ Transponder STANDBY
✓ Fuel Pump OFF
✓ Lights AS REQUIRED
✓ SHUTDOWN
✓ Radio Master OFF
✓ Mixture IDLE / CUTOFF
✓ Magnetos OFF
✓ Master Switch OFF
✓ Interior Dome Light OFF
✓ Time NOTED