

Preflight Mooney M20J		
1. Fuel Level	VISUAL CHECK	
2. Hobbs Book	CHECK #'s	
3. Paperwork	ARROW-AV1ATE	
4. Control Lock	REMOVE	
5. Gear Lever	GEAR DOWN	
6. Fuel Selector	Pick a Side	
7. Instruments	0's, INOP FLAGS	
8. Master	ON	
9. Fuel Qty	CHECK	
10. Turn Coordinator	LISTEN	
11. Flaps	DOWN	
12. Beacon/Nav/Lights	CHECK LIGHTS	
13. Stall Horn	TEST	
14. Gear Position	CHECK LIGHTS	
15. Pitot Heat	CHECK	
16. Master	OFF	
17. Baggage Door	LOCKED	
18. Preflight	WALK AROUND	
<input type="checkbox"/> Fuel Level	VISUAL CHECK	
<input type="checkbox"/> Fuel Sumps	DRAIN 4 SUMPS	
<input type="checkbox"/> Oil	6-8 Quarts	
<input type="checkbox"/> 360 Walk	TIE-DOWNS	

Passenger Briefing Checklist

1. Seat Belts/Harness	EXPLAIN and ON
2. Door / Exiting Plane	EXPLAIN
3. First Aid/Fire Ext	LOCATE
4. Scanning for Traffic	ASSIST
5. Exchange Controls	EXPLAIN
6. Seat Rail Locks	CHECK

Engine Start Checklist

1. Brakes	SET
2. Electrical	ALL OFF
3. Aux Pumps	BOTH OFF
4. Circuit Breakers	ALL IN
5. Cowl Flaps	OPEN
6. Ram Air	CLOSED
7. Master Switch	ON
8. Beacon	ON
9. Throttle	1/4 Inch Open
10. Mixture	FULL RICH
11. Fuel Pump	ON ~ 3sec - OFF
12. Area	*****? CLEAR ?*****
13. Magnetos/Starter	CRANK ENGINE
14. Throttle	800-1000 RPM
15. Mixture	LEAN for TAXI
16. Oil Pressure	30 Sec. GREEN
17. Flaps	UP
18. Avionics Master	ON
19. Transponder	1200 "STANDBY"
20. Radios	TUNE, TEST
21. ATIS	SET Altimeter

Contact GROUND for Taxi to Runway

While Taxi Checklist

Brakes	TEST both sides
Verify Instruments	6 PACK CHECK
	Compass/TC/DG
	INTO WIND
Position at Run-up	

Run-Up Checklist

1. Brakes	SET
2. Doors/Windows	CLOSED
3. Belts/Harness	SECURED
4. Controls	CHECK
5. Trim	SET TAKEOFF
6. Instruments	SET AI / DG
7. Fuel Selector	SWITCH TANKS
8. Blast Area	CLEAR BEHIND
9. Throttle	2000 RPM
10. Engine Instruments	ALL GREEN
11. Mixture	Rich then LEAN
12. Magnetos	175 Max, 50 Diff
13. Propellor	Cycle 3 times
14. Ammeter Check	+CHARGING
15. Vac/OilPress/Temp	ALL GREEN
16. Fuel Pressure	CHECK
17. Throttle	800-1000 RPM
18. IFR: Pitot Heat	Turn On for IFR

Ready for Takeoff Checklist

Cowl Flaps	OPEN
Elevator Trim	SET TAKEOFF (window)
Flaps	SET TAKEOFF (window)
Fuel Pump	ON
Lights	STROBES-LANDING-NAV
Camera	XPDR Code / "Altitude"
Action	Note TAKEOFF TIME
Review	Vspeeds
Review	Take Off Engine Loss
Review	WINDS

Takeoff Checklist

Mixture	FULL RICH across line
Vrotate	62 KIAS Vrotate
Climb Out	87 KIAS
Flaps	UP when Clear
Landing Gear	UP when Clear (<108kts)
Prop	Verify full 2700rpm
Prop	2500rpm after 500ft

Cruise/Climb Checklist

1. Climb Airspeed	100-105 KIAS
2. Fuel Pump	OFF
3. Landing Light	OFF
4. Power	As RQD
5. Mixture	As RQD 120ROP

Airspeeds		M20C
V1	abort takeoff	52 KIAS (50% Rwy)
Vs0	stall w/Flaps	55 KIAS
Vs1	stall clean	63 KIAS
Vr	rotate	62 KIAS
Takeoff Climb		87 KIAS
Vy	best rate	85 KIAS
Vx	best angle	70 KIAS
Vbest glide		88 KIAS
Vfe	flaps extend	115 KIAS
Va	maneuvering	105 KIAS
Vno	max cruise	176 KIAS
Vne	never exceed	198 KIAS
Vlo	gear operation	100 KIAS
Vle	gear extended	108 KIAS
Landing: 12-14"MP 90 - 80base - 71 over #'s		

Descent Checklist

1. Power	Reduce as RQD
2. Cowl Flaps	CLOSED
3. Mixture	Enrichen as RQD
4. Ram Air	CLOSED

Pre Landing Checklist

C - Cowl Flaps	CLOSED
Ram Air	CLOSED
G - Gas	Fulllest Tank
U - Undercarriage	GEAR DOWN
	VERIFY COLLAR!
M - Mixture	RICH if Necessary
P - Propellor	FULL FORWARD
P - Fuel Pump	FUEL PUMP ON
S - Switches	Landing Light ON
S - Safety	Seat Belts ON

Landing

Downwind	90 KIAS @ 15"MP
Abeam #'s	80 KIAS @ 12-14"MP
	(Incremental FLAPS)
Over the #'s	71 KIAS FULL FLAPS
** Gusty or Cross Winds No Flaps	

Go Around (ABORTED LANDING)

Throttle	FULL THROTTLE
Flaps	UP when positive rate
Airspeed	Establish +70 KIAS
Flaps	Bring up SLOWLY

Clear Runway Checklist

Trim	SET "TAKEOFF"
Flaps	UP
Fuel Pump	OFF
Cowl Flaps	OPEN
Landing Light	OFF
Transponder	1200 "STDBY"

Shutdown Checklist

Electrical	AVIONICS OFF
Throttle	IDLE
Mixture	IDLE CUTOFF
Magnetos	OFF
Master	OFF
Control Lock	SECURE
Tiedowns	FASTEN

CLOSE FLIGHT PLAN

Flooded Engine Start Checklist

Fuel Pump	OFF
Mixture	IDLE CUT OFF
Throttle	FULL
Starter	CRANK

Power Settings

Power Cruise (75%): 2500RPM, MP 24"
(lean 120ROP)

Economy cruise (50%): 2200RPM, MP 21"

Temperatures/Numbers

CHT	400 Max (POH 500 max)
TIT	1600 Max (POH 1750 max)
EGT	1560 Max
Oil Temp	245 Max (POH 100 min)

Emergency Procedures

Engine Failure

Memory Items ABCDE

A Airspeed	88 KIAS
B Best Place to Land	(Check Wind Dir)
C Checklist	TRY RESTART
D Declare Emergency	121.5 MAYDAY
	7700 IDENT
E Execute Landing	Doors Open
	Seat Belts

ENGINE RESTART Procedures

Fuel Selector	FULLEST
Fuel Pump	ON
Mixture	FULL RICH
Throttle	FULL THROTTLE
Magnetos	BOTH

Emergency Landing (without power)

Airspeed	88 KIAS
Belts	SECURE
Cushions	PROTECT HEAD
Mixture	IDLE CUTOFF
Fuel Selector	OFF
Magnetos	OFF
Flaps	FULL if possible
Master	OFF
Door	OPEN
Landing	SOFT FIELD

Engine Fire in Flight

Mixture	IDLE CUTOFF
Fuel Selector	OFF
Cabin Air/Heat	CLOSE VENTS
Flaps	FULL FLAPS
Master	OFF
Airspeed	TOP of WHITE 115 KIAS
Bank Angle	45 DEGREES
Proceed with "Emergency Landing"	

Electrical Fire in Flight

Master	OFF
Avionics	OFF
All Switches	OFF
Vents/Cabin Air	CLOSED
Fire Extinguisher	ACTIVATE
Fire	EXTINGUISHED
Vents/Cabin Air	VENT CABIN
If electrical power is necessary, then:	
Master	ON
Circuit Breakers	CHK, do not reset
Radios	OFF
Avionics Master	ON
Radios/Switches	ONE AT A TIME

Wing Fire

Navigation Lights	OFF
Pitot Heat	OFF
Strobe Lights	OFF
Side Slip	PERFORM

Excessive Rate of Charge

Alternator	OFF
Alternator Breaker	PULL OFF
Nonessential Equipment	OFF
Flight	Terminate ASAP

Low Voltage Light On

Avionics Master	OFF
Alternator Circuit Breaker	CHECK IN
Master (both sides)	OFF
Master (both sides)	ON
Low Voltage Light	CHECK
Avionics Master	ON
If low-voltage light illuminates again, then	
Alternator	OFF
Nonessential Radios/Equip	OFF
Flight	Terminate ASAP

Lost - 'CCCCC'

Climb	(Better radio range)
Communicate	(FSS, 121.5)
Confess	(Ask for help)
Comply	(Follow advice)
Conserve	(Fuel-slow down)

SPIN RECOVERY

Throttle	IDLE
Ailerons	NEUTRAL
Rudder	OPPOSITE Rotation
Elevator	FWD BRISKLY
Rotation	STOPPED
Controls	NEUTRALIZE
Recover	SLOWLY

Emergency Gear Extension

Master/ALTR Switch	ON
Circuit Breaker	CHECK IN
-- Emergency Gear Extend --	
Gear Selector	DOWN
Circuit Breaker	PULL (disengage)
Airspeed	BELOW 100 KIAS
HAND CRANK	Push FORWARD
	Crank Clockwise
Gear Indicator	GREEN

Airport	WX	Twr-CTAF	TPA	Runways
KBJC	126.250	118.6/121.7	6500	30RL/12RL
KEIK	133.825	123.000	6200	34/16rp
KLMO	120.000	122.975	6000	29/11
KFNL	135.075	118.4/121.65	6000	33/15
KBDU	118.825	122.725	6300	8/26rp
KGXY	135.175	122.800	5500	35/17/28/10
KAPA	120.300	118.9/121.8	6900	35RL/17RL
Practice Area Longmont			123.175	
Practice Area Chatfield			122.750	
Emergency		121.500		
Flight Service		122.200		
Den App	(W)126.1	(N)134.85	(E)128.25	(S)128.45
KBJC Fuel Truck		(303) 466-2336	122.950	
KBJC Tower		(303) 633-8600		
IFR Clearance		(888) 766-8267		

Performance (201hp)

Fuel Capacity	64 (32/32) Usable Gallons
Aux Tanks	17gal each (only use if reqd)
Fuel Burn	~ 10-11 GPH
Tire Pressure	49psi nose 30psi mains
Max Gross	2740 lbs (bew xlbs) xul
Max RPM	2700 rpm
Voltage	24v