



BLUE SKIES FLYING CLUB
THE SKY'S THE LIMIT

MOONEY
1965 M20E
N5733Q

CHECKLIST

PREFLIGHT INSPECTION

CABIN

Prep Pad	Fuel Can, Tow Bar, Knee
ADS-B IN	INSTALL
Flight Circle	DISPATCH
Window	OPEN
Control Wheel Lock	REMOVE
Keys	OUT OF IGNITION
Switches	OFF
Fuel Selector	CHECK LEFT, RIGHT
Fuel Selector Drain CAN	PULL 5 SECS INTO
Flaps	Down
Master Switch	ON
Gear Indicator Lights	CHECK
Exterior Lights	ON
Cowl Flaps	OPEN
Electrical Walk Around	CHECK
Lights/Switches	OFF (Through Window)

PREFLIGHT INSPECTION (CON'T)

RIGHT FUSELAGE

Static Port	CLEAR
Skin	INSPECT
Access Panels	SECURED

EMPENAGE

Tiedown	REMOVE
Elevator, Rudder, Skin	INSPECT

LEFT FUSELAGE

Tailcone Access Door	SECURED
Static Port	CLEAR
Skin/Access Panels	INSPECT

LEFT WING

Skin	INSPECT
Flaps	INSPECT
Aileron	INSPECT
Control Linkages	INSPECT
Leading Edge	INSPECT
Pitot Tube	REMOVE COVER
Stall Warning Vane	INSPECT

PREFLIGHT INSPECTION (CON'T)

Fuel Tank	CHECK LEVEL
Fuel Tank Cap	SECURE
Chocks	REMOVE
Tie Down	REMOVE
Gear Shocks	INSPECT
Tire and Brakes	INSPECT
Fuel Drain	SUMP
Fuel Tank Vent	CHECK
Windshield	CLEAN
Left Cowl Fasteners	SECURE

NOSE

Propeller and Spinner	INSPECT
Forward Engine	CHECK
Boost Air Scoop	CLOSED AND SEALED
Landing Light	CHECK
Nose Gear	CHECK
Shock Discs	CHECK
Right Cowl Fasteners	SECURED
Engine Oil	CHECK

PREFLIGHT INSPECTION (CON'T)

Exhaust Pipe INSPECT

Right Air Inlet CLEAR

Windshield CLEAN

RIGHT WING

Fuel Drain SUMP

Tank Vent UNOBSTRUCTED

Chocks REMOVE

Gear Shocks INSPECT

Tire and Brakes INSPECT

Fuel Tank CHECK LEVEL

Fuel Tank Cap SECURE

Leading Edge INSPECT

Wing Skins INSPECT

Aileron INSPECT

Flaps INSPECT

Baggage Door CLOSED AND LATCHED

Overview Walkaround INSPECT

Weight and Balance Calculations As Needed.

PASSENGER BRIEFING

Seat Adjustment

Seat Belts

Door Latch/Unlatch

Door in Emergency

Air Vents and Heat

Controls and No Touching

Fire Extinguisher

Medical Issues/Sick Sack

Bathroom

See and Say Traffic

Photography

Headset Ops

Sterile Cockpit

Emergencies and Go-arounds

Life Vests

Questions?

BEFORE STARTING ENGINE

ELT	ARMED
Door	CLOSE AND LATCH
Loose Items	SECURED
Seat Belts	ADJUST AND LOCK
Night Flight	FLASHLIGHT AVAIL.
Fuel Selector Valve	FULLEST TANK
Switches	OFF
Parking Brake	SET
Power Boost	OFF
Cowl Flaps	OPEN
Throttle	OPEN 1/8"
Mixture Control	IDLE CUTOFF
Propeller	FULL FORWARD
Timer/Stopwatch	START

ENGINE START

Master Switch	ON
Fuel Pump	ON/CHECK PRESSURE
Mixture	FULL RICH 3 SEC; AFT
Area	CLEAR
Ignition	START AND PRESS IN
Mixture	FULL RICH SLOWLY
Throttle	1000 - 1200 RPM
Oil Temp and Pressure	GREEN ARC
Instruments	CHECK
Mixture	LEAN FOR TAXI
Ammeter	CHECK (PITOT HEAT)
Fuel Flow	CHECK

TAXI

Avionics Master	ON
Head Phones	ON AND CHECK
Transponder	1200
GPS	SET/PROGRAM
Radios	SET
Weather	MONITOR
Altimeter	SET
Heading Indicator	SET
Step	RETRACT
Ground Ops	RADIO CALLS
Brakes and Steering	TEST
Compass	CHECK STABLE
Turn Coordinator	MOVEMENT
Heading Indicator	MOVEMENT
Attitude Indicator	UPRIGHT

RUN-UP

Nose Wheel	STRAIGHT
Brakes	SET
Flight Controls	FREE AND CORRECT
Fuel Selector (timer)	FULLEST TANK/SET
Cowl Flaps	OPEN
Power Boost	OFF
Trim	SET FOR TAKEOFF
Flaps	SET FOR TAKEOFF
Propeller	FULL FORWARD
Mixture	FULL RICH
Toe Brakes	HOLD
Throttle	1700 RPMS
Oil Temp/Pressure	IN GREEN
Cylinder Head Temp	CHECK
Suction	4.5 - 5.5
Ammeter	CHECK

RUN-UP (CON'T)

Magnetos	CHECK <125 RPM
Propeller	CYCLE 3X
Throttle	FULL IDLE THEN 1000
Fuel Pump	CHECK OFF - ON
Window and Door LOCKED	CLOSED AND
Lights	ON AS REQ'D
Transponder	ALT
Seats	LOCKED
Abort Plan	CHECK
Taxi	TO HOLD SHORT
Before TO	RADIO CALLS

FLIGHT

TAKEOFF

Propeller	FULL FORWARD
Mixture	FULL RICH
Throttle	FULL
Gauges	GREEN AND ALIVE
Rotate	65 - 75 MPH
Brakes	TAP
Gear	RETRACT
Flaps	UP

CLIMB

Cruise Climb	26" X 2600 RPM
Airspeed	$V_y = 105 \text{ MPH}$
Fuel Pump	OFF
Fuel Pressure	CHECK
Landing Light	OFF

FLIGHT

CRUISE

Cowl Flaps	CLOSED
Trim	LEVEL FLIGHT
Power	KEY NUMBERS
Mixture	25° LOP

FUEL TANK CHANGE

Fuel Pump	ON
Fuel Selector	OPPOSITE TANK
Fuel Pump	OFF
Clock	TIME

DESCENT

Seat Belts	FASTENED
Power	AS REQ'D
Cylinder Head Temp	>300°
Weather	GET
Altimeter	SET

FLIGHT

DESCENT (CON'T)

Radios SET TO CTAF/TOWER

Approach Procedures BRIEFED

Tower / Traffic CONTACT/REPORT

APPROACH / PATTERN

Fuel Pump ON

Fuel Selector FULLEST

Landing Light ON

Power Boost OFF

Gear DOWN <120MPH

Gear Light CHECK

Mixture FULL RICH

Propeller FULL FORWARD

Flaps DOWN 15° <100MPH

Downwind Airspeed 90 MPH

Base Airspeed 80 MPH

FLIGHT

DESCENT (CON'T)

Flaps (base)	DOWN
GUMPS	CHECK
Final Airspeed	80 MPH
Flaps	FULL
GUMPS	CHECK

LANDING

NORMAL

Airspeed	75 - 80 MPH
Flaps	FULL
Touchdown	MAIN WHEELS
Landing Roll	NOSE WHEEL DOWN
Clear of Runway	RADIO CALL
Taxi	RADIO CALL
Flaps	UP

AFTER LANDING

Fuel Pump	OFF
Lights	AS NEEDED
Cowl Flaps	OPEN
Trim	TAKEOFF
Fuel	BOTH TANKS FULL
Step	LOWER
Throttle	1000 RPM
Avionics Master	OFF
Mixture	IDLE CUTOFF
Magnetos	OFF
Throttle	FULL AFT
Master Switch	OFF
Timer/Stopwatch	STOP
Flight Circle	CHECK IN
Control Lock	INSTALL
Wheel Chocks	INSTALL

AFTER LANDING (CON'T)

Tiedown	INSTALL
Pitot Tube	COVER
Leading Edges	CLEAN
Windshield	CLEAN
Canvas	INSTALL
Tools and Equipment	STOW
Job Box	LOCK
Keys	IN LOCK BOX

Note: Please leave our plane cleaner than you found it.

FREQUENCY: 121.5

SQUAWK 7700

EMERGENCY PROCEDURES

ENGINE FAILURE - TAKEOFF ROLL

Throttle	IDLE
Brakes	APPLY
Mixture	IDLE CUTOFF
Ignition	OFF
Master Switch	OFF

ENGINE FAILURE - AFTER TAKEOFF

Airspeed	BEST GLIDE
Mixture	IDLE CUTOFF
Fuel Selector	OFF
Ignition	OFF
Flaps	AS NEEDED
Master Switch	OFF
Cabin Doors	UNLATCH AND BLOCK

FREQUENCY: 121.5

SQUAWK 7700

EMERGENCY PROCEEDURES

ENGINE FAILURE - IN FLIGHT

Airspeed	TRIM FOR BEST
GLIDE	

Landing Area	SELECT
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Fuel Selector	FULLER TANK
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Mixture	FULL RICH
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Ignition	BOTH - START
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If no restart:

Mixture	IDLE CUTOFF
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Fuel Selector	OFF
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Ignition	OFF
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Master Switch	OFF
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Prepare for	FORCED LANDING
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FREQUENCY: 121.5

SQUAWK 7700

EMERGENCY PROCEDURES

ENGINE FIRE - ON GROUND

Mixture	IDLE CUTOFF
Fuel Selector	OFF
Ignition	OFF
Master Switch	OFF
Brakes	HOLD
Evacuate	IMMEDIATELY
Fire Extinguisher	USE IF ABLE

ENGINE FIRE - IN FLIGHT

Mixture	IDLE CUTOFF
Fuel Selector	OFF
Master Switch	OFF
Cabin Heat and Air	CLOSED
Airspeed	INCREASE
Prepare For	FORCED LANDING

FREQUENCY: 121.5

SQUAWK 7700

EMERGENCY PROCEEDURES

ELECTRICAL FIRE - SMOKE IN CABIN

Master Switch	OFF
Vents	OPEN
Cabin Heat	OFF
Fire Extinguisher	ACTIVATE

After confirming fire is out:

Master	ON
Land	ASAP

ALTERNATOR FAILURE

Alternator Circuit Breaker. CHECK AND RESET

Reduce Electrical Load. AS NEEDED

Land	ASAP
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LOCAL WX FREQUENCIES

S50 CTAF	122.975	KAWO AWOS	135.625
KSEA ATIS	118.0	KBVS AWOS	121.125
KPLU AWOS	128.575	KPWT AWOS	121.2
KRNT ATIS	126.95	KTIW ATIS	124.05
KPAE ATIS	128.65	KOLM ATIS	135.725

LIGHT GUN SIGNALS

		INFLIGHT	ON GROUND
		CLEARED TO LAND	CLEARED FOR TAKEOFF
		RETURN FOR LANDING	CLEARED TO TAXI
		YIELD, CONTINUE CIRCLING	STOP
		UNSAFE, DO NOT LAND	TAXI CLEAR OF RUNWAY
		N/A	RETURN TO STARTING PT.
		EXERCISE EXTREME CAUTION	EXERCISE EXTREME CAUTION

NOTES

QUICK POWER SETTINGS

RPM	74%	64%	55%
2600	22"	19"	16"
2500	23"	20"	17"
2400	24"	21"	15"
2350	24.5"	21.5"	18.5"
KEY #	48	45	42

M20E IMPORTANT SPEEDS

V _r	NORMAL TAKEOFF	65-75
V _x	BEST ANGLE OF CLIMB	80
V _y	BEST RATE OF CLIMB	105
V _a	MANEUVERING SPEED	135
V _{fe}	MAX. FLAPS EXTENDED SPEED	100
V _{le}	MAX. GEAR EXTENDED SPEED	120
V _s	STALL SPEED, FLAPS 15°	68
V _{so}	STALL SPEED, LANDING CONFIG.	57
	NORMAL CLIMB	115-120
	BEST GLIDE: Windmilling/Stop'd	105/100