Mooney M20S Eagle

Pre-inspection

- Documents - on board
- Walk around - complete
- Landing gear - extended, doors and struts checked
- Chocks and tie-downs - removed
- Pitot and static ports - clear
- Control surfaces and trim tabs - free movement
- Fuel quantity - verified, caps secure
- Fuel sumps - drained
- Oil quantity - checked
- Cowl flaps - checked free
- Tires, gear, retraction linkages - checked

Before engine start

- Seats and seat belts - fastened
- Fuel selector - fullest tank
- Mixture - rich
- Propeller - full forward / fine
- Throttle - cracked 1/4 inch
- Cowl flaps - open
- Landing gear lever - down and locked
- Brakes - hold
- Master switch - on
- Beacon - on
- Area - clear, shout 'clear prop'

Engine start

- Magnetos - both / start
- Engine - start
- Oil pressure - rises within 30 seconds
- Throttle - 1000 RPM
- Alternator - check ammeter

After engine start

- Avionics master - on
- PFD / MFD - initialize
- Radios - set
- ATIS / weather - obtain
- Altimeter - set to QNH
- Transponder - set code
- Flight plan - load and activate
- Landing gear lights - three green confirmed

Before taxi

- Flaps - up
- Doors - closed and latched
- Flight controls - free and correct
- Brakes - check

- Gear handle - down

Before takeoff

- Throttle - 1800 RPM run-up
- Magnetos - check L and R
- Propeller - cycle
- Manifold pressure - check stable
- Gear handle and lights - three green
- Throttle - idle
- Trim - takeoff
- Flaps - takeoff position
- Auxiliary fuel pump - on
- Lights - landing, strobe, beacon on
- Cowl flaps - open
- Departure briefing - complete

Takeoff

- Throttle - full per POH manifold pressure
- RPM - maximum
- Engine instruments - green
- Airspeed - alive
- Rotation - at Vr
- Positive rate - verify

Climb

- Landing gear - UP at positive rate, no runway remaining
- Gear lights - verify all out
- Power - climb power
- Propeller - climb RPM
- Airspeed - Vy then cruise climb
- Flaps - up
- Auxiliary fuel pump - off above 1000 ft AGL
- Mixture - lean above 3000 ft DA
- Cowl flaps - manage CHT

Cruise

- Power - cruise per POH
- Propeller - cruise RPM
- Mixture - leaned
- Cowl flaps - trail or closed
- Engine instruments - monitor
- Pressurization - monitor (if equipped)

Descent

- Power - reduced gradually
- Mixture - enrich
- ATIS at destination - obtain
- Approach briefing - complete
- Pressurization - set destination QNH (if equipped)

Before landing

- Fuel selector - fullest tank
- Mixture - rich
- Propeller - full forward
- Auxiliary fuel pump - on
- Landing gear - DOWN below Vle
- Gear lights - three green confirmed
- Flaps - set per phase, below Vfe
- Landing light - on
- Speeds - per POH

Landing

- Final approach - per POH
- Gear - verify down one more time on short final
- Round out and flare - smooth
- Touchdown - main wheels first
- Braking - as needed

After landing

- Flaps - up
- Auxiliary fuel pump - off
- Cowl flaps - open
- Strobe - off
- Transponder - standby
- Taxi - to parking, gear down

Shutdown

- Parking brake - set
- Avionics master - off
- Throttle - idle
- Mixture - idle cutoff
- Magnetos - off after stop
- Master switch - off
- Beacon - off
- Cowl flaps - open
- Control lock - install