Piper M500

Pre-inspection

- Documents - on board
- Walk around aircraft - complete
- Landing gear - extended, struts and doors checked
- Chocks and tie-downs - removed
- Pitot and static ports - clear
- Control surfaces - free and correct
- Fuel quantity - verified, caps secure
- Fuel sumps - drained, no water
- Engine inlets and exhausts - clear, blanks removed
- Propellers - free movement, no damage
- Oil and hydraulics - checked

Before engine start

- Seats and seat belts - fastened
- Battery and ground power - as required
- Avionics - off initially
- Fuel selector - on / auto
- Condition lever(s) - cutoff
- Power lever(s) - idle
- Propeller(s) - feather
- Bleed air - off for start
- Beacon - on
- Area - clear, shout 'clear prop'

Engine start

- Starter - engage / start switch
- Ng / N1 - monitor rise
- Condition lever - ground idle at 13% Ng
- ITT - monitor, do not exceed start limit
- Oil pressure - rises within 30 seconds
- Generator - on after stabilization
- Bleed air - on after start
- Repeat for second engine if twin - same sequence

After engine start

- Avionics master - on
- PFD / MFD - boot and initialize
- FMS - initialize, position to GPS
- Radios - set frequencies
- ATIS / weather - obtain
- Altimeter - set to QNH
- Transponder code - set
- Pressurization - set destination altitude
- Flight plan - load and activate

Before taxi

- Flaps - up or per POH

- Doors - closed and latched
- Flight controls - free and correct
- Brakes - check
- Hydraulic pressure - check

Before takeoff

- Condition levers - max RPM / takeoff position
- Engine instruments - green
- Trim - takeoff position
- Flaps - takeoff position
- Autofeather - armed
- Anti-ice - as required
- Lights - landing, strobe, beacon, recognition on
- Transponder - ALT
- Departure briefing - V-speeds, abort criteria, single-engine plan

Takeoff

- Power - smoothly to takeoff torque
- Torque, N1, ITT - within limits
- Airspeed - alive
- Rotation - at Vr per PERF page
- Positive rate - verify

Climb

- Landing gear - UP at positive rate
- Power - climb torque per POH
- Flaps - up below Vfe
- Airspeed - Vy or per profile
- Pressurization - monitor cabin climb
- Autofeather - off above 400 ft AGL or per POH
- Engine instruments - monitor ITT and torque

Cruise

- Power - cruise torque, RPM per POH
- Engine instruments - monitor
- Fuel flow - monitor, switch tanks per schedule
- Pressurization - monitor cabin altitude
- Anti-ice - as required for conditions

Descent

- Power - reduced for desired descent
- ATIS at destination - obtain
- Approach briefing - complete
- Pressurization - set destination QNH
- Anti-ice - as required

Before landing

- Landing gear - DOWN below Vlo
- Gear lights - three green confirmed
- Flaps - set per phase below Vfe

- Condition levers - max RPM
- Autofeather - armed
- Anti-ice - as required
- Landing lights - on
- Speeds - per PERF page

Landing

- Final approach - Vref per PERF
- Gear - verify down on short final
- Power - as required
- Touchdown - main wheels first
- Reverse - as required, avoid below 40 KIAS
- Condition levers - ground idle after rollout

After landing

- Flaps - up
- Anti-ice - off
- Strobe - off
- Transponder - standby
- Autofeather - off
- Taxi lights - on
- Taxi - to parking

Shutdown

- Parking brake - set
- Power levers - idle
- Bleed air - off
- Condition levers - cutoff
- ITT cooldown - observe
- Generators - off
- Avionics master - off
- Battery - off
- Beacon - off