Piper PA-38 Tomahawk

Pre-inspection

- Documents - on board
- Walk around - complete
- Chocks - removed
- Pitot cover - removed
- Control surfaces - free movement
- Fuel quantity - verified
- Fuel sumps - drained, no water
- Oil quantity - checked
- Tires and brakes - condition checked
- Engine cowling - secure

Before engine start

- Seats and seat belts - fastened
- Fuel selector - both / on
- Mixture - rich
- Throttle - cracked 1/4 inch
- 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

After engine start

- Avionics master - on
- Radios - set frequencies
- ATIS / weather - obtain
- Altimeter - set to QNH
- Transponder code - set, mode standby
- Heading bug - set to runway

Before taxi

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

Before takeoff

- Throttle - 1700 RPM for run-up
- Magnetos - check L and R, max 175 RPM drop
- Carb heat - check
- Engine instruments - green

- Throttle - idle
- Trim - takeoff position
- Flaps - takeoff position
- Landing and strobe lights - on
- Transponder - ALT
- Departure briefing - complete

Takeoff

- Throttle - smoothly to full
- Engine instruments - green at full power
- Airspeed - alive
- Rotation - at Vr per POH
- Initial climb - Vy

Climb

- Power - climb power
- Airspeed - Vy then cruise climb
- Mixture - lean above 3000 ft DA
- Engine instruments - monitor

Cruise

- Power - cruise setting, 75% typical
- Mixture - lean for cruise
- Engine instruments - monitor
- Fuel quantity - monitor

Descent

- Power - reduced for desired descent
- Mixture - enrich as descending
- ATIS at destination - obtain
- Approach briefing - complete

Before landing

- Fuel selector - fullest tank or both
- Mixture - rich
- Carb heat - on as required
- Landing light - on
- Flaps - set per phase

Landing

- Pattern speed - per POH
- Final approach - per POH
- Round out and flare - gentle
- Touchdown - main wheels first

After landing

- Flaps - up
- Carb heat - cold
- Strobe - off

- Transponder - standby
- Taxi - to parking

Shutdown

- Parking brake - set
- Avionics master - off
- Throttle - idle
- Mixture - idle cutoff
- Magnetos - off after engine stops
- Master switch - off
- Beacon - off
- Control lock - install