SKY SAFETY
Professional Pilot Training

N63681

Cessna 172P Checklist

CABIN

Hobbs & Tach times.....VERIFY
Documents (AROW) .....CHECK
Control Wheel Lock.....REMOVE
Ignition & Avionics Power ..... OFF
Master Switch..... ON
Fuel Quantity.....CHECK
Flaps..... DOWN
Exterior Lights .....CHECK
Master Switch..... OFF

CAUTION

Keep battery operation to a minimum. Extended battery use can cause significant reduction in battery life & adversely affect other systems.

Alt. Static Source .....CLOSED
Fuel Selector Valve.....BOTH

FUSELAGE & EMPENNAGE

Baggage Door ..... SECURE
Fuselage & tail cone .....CHECK
Tail Tie Down ..... DISCONNECT
Elevator & Trim Tab .....CHECK
Radio Antennas.....CHECK

RIGHT WING

Flap & Aileron.....CHECK
Fuel Sump(s).....DRAIN & CHECK
Gear, Tire, Brake .....CHECK *(28 psi)*
Wing, Nav & Strobe Lights .....CHECK
Wing Tie-Down.....REMOVE
Fuel Quantity..... CHECK VISUALLY

NOSE

Windscreen & Windows.....CHECK
Engine Oil..... CHECK, *5 qts. Min*
Fuel Strainer..... CHECK & CLOSED
Propeller & Spinner.....CHECK
Carburetor Air Filter .....CHECK
Nose Gear.....CHECK*; (34 psi.)*
Static Port.....CHECK

LEFT WING

Fuel Sump.....DRAIN & CHECK
Fuel Quantity..... CHECK VISUALLY
Pitot Tube.....CHECK
Wing Tie-Down.....REMOVE
Fuel Tank Vent.....CHECK
Stall Warning Opening.....CHECK
Landing/Taxi Lights .....CHECK
Wing, Nav & Strobe Lights .....CHECK
Aileron & Flap.....CHECK
Gear, Tire, Brake .....CHECK *(28 psi)*

BEFORE STARTING ENGINE

Preflight / Briefing.....COMPLETE
Seat Belts, Harnesses .....SECURE
Brakes .....TEST & HOLD
Avionics & Electrical..... OFF
Circuit Breakers..... IN
Fuel Selector Valve.....BOTH

STARTING ENGINE

Anti-Collision Beacon .....ON
Mixture ..... RICH
Throttle .....OPEN 1/8 inch
Carburetor Heat .....COLD
Master Switch .....ON
Prime..... AS REQ'D *(2-6 Strokes)*
Propeller Area.....CLEAR!
Ignition Switch..... START
Oil Pressure ..... CHECK

WARNING

If no oil pressure within 30 seconds shutdown the engine

RPM ..... SET 1000 RPM
Mixture ..... LEAN for Taxi

Hot Start

Throttle.....¼ INCH OPEN
Mixture .....FULL RICH
Ignition Switch..... START

Flooded Start

Mixture .....IDLE CUT-OFF
Throttle.....FULL OPEN
Prop Area.....CLEAR!
Ignition Switch..... START

As Engine Starts –

Mixture ..... FORWARD
Throttle .....1000 RPM
Oil Pressure ..... CHECK *(W/I 30 secs)*
Mixture .....LEAN for TAXI

Starting with External Power

Master Switch .....OFF
External Power .....CONNECT

Execute Normal Start

External Power ..... REMOVE
Master Switch .....ON

BEFORE TAXI

Avionics Power .....ON
Nav Lights ..... *(As Required)* ON
Flaps..... UP
Comm, Nav & GPS ..... SET
Transponder..... STBY or GND
Instruments ..... SET

TAXI

Taxi Light..... As Required
Nose Wheel Steering..... CHECK
Brakes ..... CHECK
Flight Instruments ..... CHECK

BEFORE TAKEOFF

Brakes .....HOLD
Trim ..... SET FOR TAKEOFF
Flight Controls.....FREE & CORRECT
Fuel Quantity..... CHECK
Fuel Selector Valve .....BOTH
Mixture .....RICH *(below 3000 feet)*
Throttle .....1700 RPM

Magnetos..... CHECK *(Drop 125, 50 Diff)*
Suction..... CHECK *(4 – 6 psi)*
Engine Instruments .....CHECK
Carb Heat .....ON *(RPM Drop)*
Throttle .....IDLE *(RPM Stable)*
Carb Heat ..... OFF
Throttle ..... 1000 RPM
Flight Instruments ..... CHECK & SET
Comm & Nav Radios .....SET
E. P.s ..... REVIEW
- Ground Run/Abort Point
- Eng. Fail Before Rotation
- Eng. Failure After Rotation
- Eng. Fail After T.O – Low
- Exchange of Flight Controls

IFR Departure Brief.....COMPLETE

HOLD SHORT

Mixture..... RICH or *(Lean Max RPM)*
Carb Heat .....COLD
Doors & Windows .....SECURED
Landing & Strobe Lights ..... ON
Transponder .....GND or ALT
Time.....RECORD
Final Approach .....CLEAR
Pitot Heat..... ON *(As Required)*

NORMAL TAKEOFF

Flaps.....0º-10º
Throttle ..... FULL OPEN
Elevator ..... ROTATE @ 55 KIAS
Climb ..... 70-80 KIAS

SHORT FIELD TAKEOFF

Flaps..... 10º
Brakes .....HOLD
Throttle .....FULL (≥ 2300 RPM)
Brakes .....RELEASE
Elevator .....SLIGHTLY TAIL LOW
Climb .....56 KIAS *(V_X Until Clear)*
Accel.....76 KIAS (V_Y)
Flaps.....UP

SOFT FIELD TAKEOFF

Flaps..... 10º
Yoke .....FULL AFT
Throttle .....FULL
Level Off In Ground Effect.
No Obstacle.....Accel V_Y
50 ft. Obstacle .....Climb 56 KIAS V_X
Once Clear .....Accel V_Y
Flaps.....UP

CLIMB

Flaps.....UP
Speed .....70-85 KIAS
Throttle ..... FULL OPEN
Mixture.....LEAN as required

CRUISE

Power .....SET
Mixture..... LEAN
Trim ..... ADJUST
Heading Indicator.....CHECK & SET
Landing Light .....OFF

DESCENT

Seat Belts & Harnesses .....SECURE
Fuel Selector Valve .....BOTH
Mixture ..... Adjust
Carb Heat.....AS REQUIRED
Landing Light .....ON

NORMAL PATTERN & LANDING

(80 KIAS Downwind; 70 Base; 65 Final)

Mixture ..... FULL RICH
Carb Heat.....ON
Power .....AS REQUIRED
Flaps.....Extend Incrementally
Touchdown ..... MAIN WHEELS 1st
Rollout ..... LOWER NOSE GENTLY
Braking .....MIN REQUIRED

SHORT FIELD LANDING

Carb Heat.....ON
Flaps..... FULL DOWN
Airspeed..... 61 KIAS *(Until Flare)*
Power ..... IDLE *(After Clearing Obs)*
Touchdown ..... MAIN WHEELS 1st
Flaps.....RETRACT
Yoke ..... FULL AFT
Brakes ..... APPLY; Do Not Skid Tires

SOFT FIELD LANDING

Carb Heat .....ON
Flaps..... FULL
Airspeed..... 65 or 61 *(Over Obstacle)*
Power ..... AS REQUIRED, IDLE
Yoke .....AFT *(thru touchdown & rollout)*
Nose Wheel .....LOWER GENTLY

BALKED LANDING

Throttle ..... FULL
Carb Heat.....COLD
Cowling/Nose..... ON THE HORIZON
Flaps..... 20º (immediately)
Climb Speed .....55 KIAS
Flaps..... 10º (Until Clear of Obstacles)
Flaps.....RETRACT (At Safe Altitude)

Touch & Go

Flaps..... UP
Trim ..... SET for Takeoff
Carburetor Heat .....COLD
Throttle .....FULL OPEN

LAND & TAXI BACK

Flaps..... UP
Mixture ..... LEAN FOR TAXI
Carburetor Heat .....COLD
Landing & Taxi Lights..... As required
Trim ..... SET for Takeoff

Before Takeoff

Mixture ..... RICH
Doors & Windows ..... SECURED
Landing & Strobe Lights .....ON

AFTER LANDING

Flaps ..... UP
Mixture ..... LEAN (for taxi)
Carburetor Heat ..... COLD
Transponder ..... GND or STBY
Pitot Heat ..... OFF
Landing & Taxi Lights ..... AS REQ'd

SHUTDOWN

Avionics Master Switch ..... OFF
All Lights Except Beacon ..... OFF
Throttle ..... 1000 – 1200 RPM
Mixture ..... IDLE CUT OFF
Ignition Switch ..... OFF
Keys SECURE
Master Switch ..... OFF
Beacon ..... OFF

SECURING AIRPLANE

Control Lock ..... INSTALL
Hobbs & Tach Times ..... RECORD
Sunscreen ..... INSTALL
Seatbelts & Shoulder Harnesses SECURE
Pitot Cover ..... INSTALL
Aircraft ..... POSTFLIGHT & TIE DOWN
Trash ..... REMOVE
Windows & Doors ... SECURE & LOCK

EMERGENCY PROCEDURES

Procedures in **Bold Face** type are immediate action items and should be committed to memory.

ENGINE FIRE ON START

1. Cranking ..... CONTINUE
If engine starts:
2. Power 1700 RPM for a few mins
3. Engine ..... SHUTDOWN
If engine fails to start:
4. Cranking ..... CONTINUE
5. Throttle ..... FULL OPEN
6. Mixture ..... IDLE CUTOFF
7. Fire Extinguisher ..... OBTAIN
8. Engine SECURE
9. Fire ..... EXTINGUISH

ABORT

1. Throttle ..... IDLE
2. Brakes ..... APPLY

ENGINE FAILURE DURING TAKEOFF ROLL

1. ABORT
2. Flaps ..... RETRACT
3. Mixture ..... IDLE CUT-OFF
4. Ignition Switch ..... OFF
5. Master Switch ..... OFF

ENGINE FAILURE AFTER TAKEOFF

1. Airspeed ..... 65 (FLAPS UP)
..... 60 (Flaps Down)
2. LAND STRAIGHT AHEAD
If time permits
3. Mixture ..... IDLE CUT-OFF
4. Fuel Selector Valve ..... OFF
5. Ignition Switch ..... OFF
6. Flaps ..... AS REQUIRED
7. Master Switch ..... OFF

ENGINE FAILURE DURING FLIGHT (RESTART)

1. Airspeed ..... 65 KIAS
2. Carburetor Heat ..... ON
3. Fuel Selector ..... BOTH
4. Mixture ..... RICH
5. Throttle ..... FORWARD
6. Ignition Switch ..... BOTH
7. Primer ..... IN & LOCKED

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed ..... 65 KIAS (Flaps UP)
60 KIAS (Flaps DOWN)
2. Mixture ..... IDLE CUTOFF
3. Fuel Selector ..... OFF
4. Ignition Switch ..... OFF
5. Transponder ..... SET 7700
6. Radio Call ..... MAYDAY
ON ACTIVE FREQ or. 121.5
7. Flaps FULL DOWN
8. Master Switch ..... OFF
9. Seatbelts ..... SECURE & TIGHT
10. Doors UNLATCH
PRIOR TO TOUCHDOWN
11. Touchdown . SLIGHTLY TAIL LOW
12. Brakes APPLY HEAVILY
(DO NOT LOCK BRAKES!)

PRECAUTIONARY LANDING W/ENGINE PWR

1. Flaps 20º
2. Airspeed ..... 60 KIAS
3. Selected Field ..... OVERFLY
4. Avionics & Electrical Switches ... OFF
5. Flaps FULL (On Final Approach)
6. Airspeed ..... 60 KIAS
7. Master Switch ..... OFF
8. Doors UNLATCH
PRIOR TO TOUCHDOWN
9. Touchdown .... SLIGHTLY TAIL LOW
10. Ignition Switch ..... OFF
11. Brakes APPLY HEAVILY

ENGINE FIRE IN FLIGHT

1. **Mixture ..... IDLE CUTOFF**
2. **Fuel Selector ..... OFF**
3. **Master Switch ..... OFF**
4. Cabin Heat & Air.....OFF
5. Airspeed..... 100 KIAS

Increase glide speed as required to provide an incombustible mixture

6. Forced Landing..... EXECUTE

ELECTRICAL FIRE INFLIGHT

1. **Master Switch ..... OFF**
2. **Avionics Master Switch .. OFF**
3. All switches except ignition ..... OFF
4. Vents/Cabin Air/Heat.....CLOSED
5. Fire ..... EXTINGUISH

CABIN FIRE

1. **Master Switch ..... OFF**
2. **Vents/Cabin Air/Heat CLOSED**
3. Fire EXTINGUISH
4. Land as soon as possible

WARNING

After discharging a fire extinguisher within a closed cabin, ventilate the cabin.

WING FIRE

1. **Landing/Taxi Lights ..... OFF**
2. **Navigation Lights ..... OFF**
3. **Pitot Heat ..... OFF**
4. **Strobe Lights ..... OFF**

Sideslip to keep the flames from fuel tank and cabin

5. Land as soon as possible

INADVERTENT ICING

1. Pitot Heat Switch ..... ON
2. Carb Heat ..... ON
3. Turn Back or Change Altitude
4. Cabin heat ..... FULL ON
5. Defroster outlets ..... OPEN to max
6. Throttle Increase to minimize ice buildup on propeller blades
7. Land as soon as Practicable (Possible)

STATIC SOURCE BLOCKAGE

1. Alternate Static Source……PULL ON

EXCESSIVE RATE OF CHARGE

1. Alternator ..... OFF
2. Alternator Circuit Breaker .....PULL
3. Non-essential Electrical .....OFF
4. Flight .....TERMINATE as soon as practical

LOW-VOLTAGE LIGHT INFLIGHT

1. Avionics Power Switch .....OFF
2. Alternator Circuit Breaker CHECK IN
3. Master Switch ..... OFF (Both Sides)
4. Master Switch .....ON
5. Low-Voltage Light .....CHECK OFF
6. Avionics Power Switch .....ON

If Low-voltage Light illuminates again:

7. Alternator .....OFF
8. Nonessential Radio and Electrical Equipment .....OFF
9. Land as soon as practical

SPIN RECOVERY

1. **THROTTLE ..... IDLE**
2. **AILERONS .....NEUTRAL**
3. **RUDDER FULL OPPOSITE DIRECTION OF ROTATION**
4. **YOKE ....FORWARD** to break stall
5. HOLD THESE CONTROL INPUTS UNTIL ROTATION STOPS.
6. When Rotation Stops ....NEUTRALIZE RUDDER, & MAKE A SMOOTH RECOVERY FROM THE RESULTING DIVE

LANDING W/FLAT MAIN TIRE

1. Approach ..... NORMAL
2. Touchdown .....GOOD TIRE FIRST

(hold airplane off flat tire as long as possible)

Airspeeds KIAS

V_{NE}	Never Exceed		158
	Caution Range		127-158
	Normal Operating Range		44-127
V_{NO}	127	V_{FE}	110 – 10^{O} 85 - 20^{O} & 30^{O}
V_X	56/60	V_Y	76
V_S	48	V_{SO}	44
V_A	99	Best Glide	65

Acft Servicing

Fuel 100 LL
Normal Capacity ……43 Gal (40 Usable)
Oil – Aeroshell W100 SAE 50
……Max/Min - 8qts/5 qts

Tire Inflation ……Nose/Mains - 31/29 PSI