

## N24155

### 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

## Cessna 172P Checklist

### 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/ 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 ..... 0<sup>o</sup>-10<sup>o</sup>  
 Throttle ..... FULL OPEN  
 Elevator ..... ROTATE @ 55 KIAS  
 Climb ..... 70-80 KIAS

### **SHORT FIELD TAKEOFF**

Flaps ..... 10<sup>o</sup>  
 Brakes ..... HOLD  
 Throttle ..... FULL ( $\geq$  2300 RPM)  
 Brakes ..... RELEASE  
 Elevator ..... SLIGHTLY TAIL LOW  
 Climb ..... 56 KIAS (*V<sub>x</sub> Until Clear*)  
 Accel ..... 76 KIAS (*V<sub>y</sub>*)  
 Flaps ..... UP

### **SOFT FIELD TAKEOFF**

Flaps ..... 10<sup>o</sup>  
 Yoke ..... FULL AFT  
 Throttle ..... FULL  
 Level Off In Ground Effect.

No Obstacle..... Accel V<sub>y</sub>  
 50 ft. Obstacle ..... Climb 56 KIAS V<sub>x</sub>  
 Once Clear ..... Accel V<sub>y</sub>  
 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 1<sup>st</sup>  
 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 1<sup>st</sup>  
 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..... 20<sup>o</sup> (immediately)  
 Climb Speed ..... 55 KIAS  
 Flaps..... 10<sup>o</sup> (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 .....20°  
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° 85 – 20° & 30°
$V_X$	56/60	$V_Y$ 76
$V_S$	48	$V_{SO}$ 44
$V_A$	99	Best Glide 65

### Acft Servicing

Fuel 100 LL  
Normal Capacity ..... 62Gal (59 Usable)  
Oil – Aeroshell W100 SAE 50  
..... Max/Min - 8qts/5 qts

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