

# SOLBERG AVIATION CESSNA 172P

## PROCEDURES and CHECKLIST

### **PREFLIGHT INSPECTION**

#### **Cabin**

1. AROW
2. Aircraft Inspections- CHECKED
3. Control Wheel Lock- REMOVE
4. Ignition Switch- OFF
5. Avionics Master Switch- OFF
6. Master Switch- ON (listen for electric gyro)
7. Fuel Quantity Indicators- CHECK operation
8. Flaps- 30° (10° when below 32°F/0°C)
9. Avionics Master Switch- ON, CHECK cooling fan operation then OFF
10. Aircraft Lights- CHECK operation
11. Master Switch- OFF
12. Fuel selector valve- CHECK operation then BOTH

#### **Empennage**

1. General Condition - CHECK
2. Horizontal Stabilizer- CHECK for security
3. Elevator- CHECK for free movement + attachment points
4. Tail Tie-Down- DISCONNECT
5. Vertical Stabilizer- CHECK for security
6. Rudder- CHECK for free movement + attachment points
7. Trim Tab- CHECK for neutral alignment + attachment

#### **Right Wing**

1. Flaps- CHECK tracks + push rod
2. Aileron- CHECK for free movement, push rod and hinges
3. NAV/Strobe Lights- CHECK
4. Wing Tie Down- DISCONNECT
5. Main Wheel Tire- CHECK for inflation (28 psi) + wear
6. Brakes- CHECK pad wear + leaking fluid
7. Fuel- SUMP and **visually CHECK tanks cap**

#### **Nose**

1. Windshield- CHECK and clean if required
2. Oil Level- CHECK (minimum 5QTS, maximum 7QTS)
3. Fuel Strainer- PULL check for water + contaminants
4. Belly Drain- DRAIN two draining ports first flight of the day
5. Nose Wheel Assembly- CHECK for pressure (34psi) + attachment pts
6. Propeller + Spinner- CHECK for nicks and security
7. Air Filter- CHECK for dirt, obstructions
8. Landing light- CHECK condition + cleanliness
9. Nose Wheel Strut- CHECK for proper inflation approx. 4 fingers inflated
10. Static Source Opening- CHECK for stoppage

#### **Left Wing**

1. Main Wheel Tire- CHECK for inflation (28 psi) + wear
2. Brakes- CHECK for pad wear + leaking fluid
3. Fuel- SUMP and **visually CHECK tanks cap**
4. Pitot Tube Cover- REMOVE
5. Stall Warning Opening- CHECK for stoppage
6. Fuel Tank Vent Opening- CHECK for stoppage
7. Wing Tie Down- DISCONNECT
8. NAV/Strobe Lights- CHECK
9. Aileron- CHECK for free movement, push rod and hinges
10. Flaps- CHECK tracks + push rod

**\*CALCULATE AND SUPPLY FUEL FOR PLANNED FLIGHT\***  
**ASSURE ALL TIE DOWNS, CHOCKS, COVERS, AND**  
**PLUGS ARE REMOVED!**

## **EMERGENCY PROCEDURES**

### **ENGINE FAILURES**

#### **RESTART PROCEDURE**

1. Airspeed- 65 KIAS (Best Glide)
2. Carburetor Heat- ON
3. Fuel Selector Valve- BOTH
4. Mixture- RICH
5. Ignition Switch- BOTH or START if prop is stopped
6. Primer- IN an LOCKED
7. EMERGENCY- DECLARE

#### **FORCED LANDING/SECURE**

1. Seats, Seat Belt, Shoulder Harnesses- SECURE
2. Airspeed- 65KIAS (Flaps UP)  
60KIAS (Flaps DOWN)
3. Mixture- IDLE CUTOFF
4. Fuel Selector Valve- PUSH DOWN AND OFF
5. Ignition Switch- OFF
6. Wing Flaps- AS REQUIRED
7. Master Switch- OFF
8. Doors- UNLATCH PRIOR TO TOUCHDOWN
9. Touchdown- SLIGHTLY TAIL LOW
10. Brakes- APPLY HEAVILY

#### **ENGINE FIRE IN FLIGHT**

1. Mixture- IDLE CUTOFF
2. Fuel Selector Valve- PUSH DOWN AND OFF
3. Master Switch- OFF
4. Cabin Heat and Air- OFF
5. Airspeed- 100KIAS (adjust glide speed to provide incombustible mixture for fire)
6. FORCED LANDING CHECK- EXECUTE

#### **ENGINE FIRE DURING START ON GROUND**

1. Cranking- CONTINUE
2. If Started- 1700 RPM
3. If Start Fails:
4. Throttle- FULL OPEN
5. Mixture- IDLE CUTOFF
6. Cranking- CONTINUE
7. ENGINE- SECURE (Master Switch- OFF, Ignition Switch- OFF)
8. Airplane- EVACUATE
9. Fire Extinguisher- OBTAIN AND EXTINGUISH FIRE
10. Fire Damage- INSPECT AND REPAIR BEFORE FLIGHT

## **BEFORE STARTING ENGINE**

1. Preflight Inspection- COMPLETE
2. Passenger Briefing- COMPLETE
3. Seats, Seat Belts, Shoulder Harness- ADJUST and LOCK
4. Brakes- TEST and SET
5. Electrical Equipment- OFF
6. Avionics Power Master Switch- OFF
7. Circuit Breakers- CHECK IN
8. Fuel Selector Valve - BOTH

### **Before Starting Engine Checklist Complete**

## **STARTING ENGINE**

1. Prime- AS REQUIRED (2 to 6 strokes; none if engine is warm)
  2. Carburetor Heat- COLD
  3. Throttle- CHECK TRAVEL then OPEN 1/8 inch
  4. Mixture- RICH
  5. Propeller Area- CLEAR (Audibly)
  6. Master Switch- ON
  7. Rotating Beacon and NAV light (ADS-B OUT)- ON
  8. Ignition Switch- START (release when engine fires)
  9. Throttle- ADJUST for 1,000 RPM
  10. Oil Pressure- CHECK (<30 seconds)
  11. Starter – CHECK Disengaged
  12. Avionics Master Switch - ON
  13. Flaps- UP and VERIFY
  14. Mixture – LEAN for Ground Ops
  15. Exterior Lights – AS REQUIRED
- ### **Starting Engine Checklist Complete**

## **BEFORE TAXI**

1. Weather – OBTAIN
  2. Radios- SET AND CHECK
  3. Brakes – Roll Forward & CHECK
- ### **Before Taxi Checklist Complete**

## **BEFORE TAKEOFF “Run up”**

1. Nose wheel - STRAIGHT
2. Brakes- SET
3. Seats, Seat Belts, Shoulder Harnesses- CHECK SECURE
4. Cabin Doors / Windows- CLOSED and LOCKED
5. Flight Controls- FREE and CORRECT
6. Flight Instruments- CHECK and SET
7. Fuel Quantity- CHECK
8. Primer- VERIFY IN & LOCKED
9. Mixture- RICH (below 3,000’)
10. Fuel Selector Valve - BOTH
11. Elevator trim- SET for takeoff
12. Throttle- 1700 RPM
  - a. Magnetos- CHECK (RPM drop not to exceed 125RPM or 50 RPM between)
  - b. Carb Heat- CHECK (for RPM Drop)
  - c. Suction Gage- CHECK (4.5-5.4)
  - d. Engine Instruments and Ammeter- CHECK
13. Throttle- IDLE, CHECK smooth operation, Carb. Heat

COLD then 1000RPM

14. Mixture – LEAN for ground ops
15. Radios and Avionics- SET
16. Throttle Friction Lock- ADJUST

### **\*\*Lineup Items (prior to taxing onto runway)\*\***

17. Takeoff Brief – VSPEEDS/EMER. procedures
18. Flaps – SET for type of takeoff
19. Mixture – RICH prior to takeoff
20. Landing & Strobe light – AS REQUIRED
21. Transponder – code 1200 (VFR) and ALT
22. Flight Instruments - RECHECK
23. Final Leg – CHECK for traffic
24. Radio – CALL

### **Before Takeoff Checklist Complete**

## **TAKEOFF**

\*\* Refer to NORMAL PROCEDURES in POH\*\*

## **CRUISE**

1. Power – SET (as per POH)
2. Elevator Trim – ADJUST
3. Mixture – LEAN (above 3000 feet)
4. Landing Light – OFF (if used)

### **Cruise Checklist Complete**

## **BEFORE LANDING**

1. Seats, Seatbelts, Shoulder Harnesses- SECURE
2. Fuel Selector Valve- BOTH
3. Mixture – RICH
4. Carb Heat – ON
5. Landing Light – ON (if used)

## **GUMPS**

### **Before Landing Checklist Complete**

## **LANDING**

\*\*\*\* Refer to NORMAL PROCEDURES in POH

## **AFTER LANDING**

1. Carb Heat- COLD
  2. Wing Flaps- UP
  3. Trim- NEUTRAL
  4. Landing & Strobe Light- OFF (if used)
  5. Mixture- LEAN for ground ops
- ### **After Landing Checklist Complete**

## **SECURING AIRPLANE**

1. Brakes- SET
2. Avionics Master Switch- OFF
3. Electrical Equipment- OFF except beacon and NAV
4. Mixture- IDLE CUT- OFF
5. Ignition Switch- OFF & remove key
6. Master Switch- OFF
7. Control Wheel Lock- INSTALL
8. Wheel Chocks, Tie Downs, Covers, Plugs- SECURE