

# **SOLBERG AVIATION CESSNA 152**

## **PROCEDURES and CHECKLIST**

### **PREFLIGHT INSPECTION**

#### **Cabin**

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

#### **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 (21 psi) + wear
6. Brakes- CHECK pads and for leaking fluid
7. Fuel- SUMP and **visually CHECK tanks cap**

#### **Nose**

1. Windshield- CHECK and clean if required
2. Oil Level- CHECK (4QTS is minimum and 6QTS is maximum)
3. Fuel Strainer- PULL check for water + contaminants then CLOSE
4. Belly Drain- DRAIN first flight of the day
5. Nose Wheel Assembly- CHECK for pressure (30 psi) + attachment pts
6. Propeller + Spinner- CHECK for nicks and security
7. Alternator Belt- CHECK for cracks and tension
8. Air Filter- CHECK for dirt, obstructions
9. Landing light- CHECK condition + cleanliness
10. Nose Wheel Strut- CHECK for proper inflation
11. Static Source Opening- CHECK for stoppage

#### **Left Wing**

1. Main Wheel Tire- CHECK for inflation (21 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 blockage
6. Fuel Tank Vent Opening- CHECK for blockage
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- 60 KIAS (Best Glide)
2. Carburetor Heat- ON
3. Fuel Shutoff Valve- ON
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 Shutoff Valve- 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 Shutoff Valve- 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- 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 CUT-OFF
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, Belts, Shoulder Harness- ADJUST and LOCK
4. Fuel Shutoff Valve- ON
5. Radios, Electrical Equipment- OFF
6. Brakes- TEST and HOLD
7. Circuit Breakers- IN

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

## **STARTING ENGINE**

1. Mixture- RICH
2. Carburetor Heat- COLD
3. Prime- AS REQUIRED (up to 3 strokes)
4. Throttle- CHECK TRAVEL then OPEN 1/4 inch
5. Propeller Area- CLEAR (Audibly)
6. Master Switch- ON
7. Rotating Beacon- ON
8. Ignition Switch- START
9. Throttle- adjust for 1,000 RPM
10. Oil Pressure – Check ( < 30 seconds)
11. Starter – Check Disengaged
12. Radios/Transponder/Intercom-ON/ALT/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. Nosewheel - STRAIGHT
2. Brakes- SET
3. Seats, Seat Belts, Shoulder Harnesses- CHECK SECURE
4. Cabin Doors/Windows- CLOSED & LOCKED
5. Flight Controls- FREE and CORRECT
6. Flight Instruments- CHECK and SET
7. Fuel Shutoff Valve- ON
8. Mixture- RICH (below 3000')
9. Elevator Trim- SET for takeoff
10. Primer- VERIFY IN and LOCKED
11. Throttle- 1700 RPM
  - a. Magnetos- CHECK (RPM drop not to exceed 125RPM or 50 RPM between)
  - b. Carb. Heat- ON and CHECK (for RPM drop)
  - c. Engine Instruments, Ammeter- CHECK
  - d. Suction Gage- CHECK (4.5-5.4)

12. Throttle- IDLE, Check smooth operation, Carb. Heat COLD then 1000RPM
13. Mixture – LEAN for ground ops
14. Radios and avionics- SET
15. Throttle Friction Lock- ADJUST

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

15. Takeoff Brief- VSPEEDS/EMER. procedures
16. Flaps- SET for takeoff
17. Mixture- RICH prior to takeoff
18. Nav light- ON (ADS-B OUT ON)
19. Landing & Strobe light- AS REQUIRED
20. Transponder- code 1200 (VFR) and ALT
21. Flight Instruments- RECHECK
22. Traffic Pattern- Check for Traffic
23. Radio- Call

### **Before Takeoff Checklist Complete**

## **TAKEOFF**

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

## **CRUISE**

1. Power – SET (no more than 75% 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. Mixture- RICH
3. Carb. Heat- ON
4. Landing Light- ON

## **GUMPS**

### **Before Landing Checklist Complete**

## **LANDING**

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

## **AFTER LANDING**

1. Carb Heat- COLD
2. Wing Flaps- UP
3. Trim- RESET TAKEOFF
4. Landing Light/ Strobe/ Nav- OFF
5. Mixture- LEAN for ground ops

### **After Landing Checklist Complete**

## **SECURING AIRPLANE (Shutdown)**

1. Brakes- SET
2. Radio, Transponder, Intercom- OFF
3. ALL Electrical Equip- OFF except beacon
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