

**—INTERIOR PREFLIGHT—**

Pitot Tube Cover.....Remove  
Hobbs and Tach.....Check  
Certificates and Documents.....Check  
Control Wheel Lock.....Remove  
Fuel Selector.....Both  
Fuel Shutoff.....On (full in)  
Cabin Air/Heat.....Set  
Alternate Static Source.....Off (In)  
Mixture.....Idle Cut-Off  
Throttle.....Idle  
Interior Lights.....Off  
Avionics Master.....Off  
Switches.....Off  
Circuit Breakers.....In  
Magnetos.....Off  
Master Switch.....On  
Flaps.....Extend(Check Visually)  
Fuel Qty Indicators.....Check  
Low Fuel Annunciators.....Extinguished  
Avionics Master.....On  
Avionics Cooling Fan.....On  
Annunciator Panel.....Test  
Avionics Master.....Off  
Lights and Pitot Heat.....Check  
Master Switch / All Switches.....Off  
Fire Extinguisher.....Check Pressure

**—EXTERIOR PREFLIGHT—**

Fuselage and Windows.....Check  
Empennage.....Check  
Control Surfaces.....Check  
Tail Tie Down.....Remove  
Trim Tab.....Check  
Antennas.....Check  
Windows and Fuselage.....Check  
Right Flap and Aileron.....Check  
Right Wingtip Condition / Lights.....Check  
Right Wing Lower Surface.....Check  
Right Wing Leading Edge.....Check  
Right Wing Tie Down.....Remove  
Right Main Gear Assembly.....Check  
Fuel Sumps (5).....Sample  
Fuel Reservoir Quick Drain Valve.....Sample  
Fuel Selector Quick Drain Valve.....Sample  
Fuel Strainer Quick Drain Valve.....Sample  
Exhaust.....Check  
Fuel Quantity.....Check  
Fuel Filler Cap.....Secure / Vent Open  
Right Wing Upper Surface.....Check

Antennas.....Check  
Windshield.....Check & Clean  
Cowling.....Secure  
Oil Quantity... 6-8 Quarts(Fly at 6 Quarts)  
Engine Cooling Air Inlets.....Clear  
Alternator Belt.....Check  
Propeller and Spinner.....Check  
Air Filter.....Check  
Nose Wheel Strut and Tire.....Check  
Static Port.....Check  
Left Wing Leading Edge.....Check  
Pitot Tube.....Check  
Stall Warning Opening.....Check  
Fuel Tank Vent.....Check  
Left Wing Tie Down.....Remove  
Landing and Taxi Lights.....Check  
Left Wingtip Condition / Lights.....Check  
Left Wing Lower Surface.....Check  
Left Aileron and Flap.....Check  
Left Main Gear Assembly.....Check  
Fuel Sumps (5).....Sample  
Fuel Quantity.....Check  
Fuel Filler Cap.....Secure / Vent Open  
Left Wing Upper Surface.....Check  
Baggage Door.....Check Locked

**—BEFORE START—**

Preflight Inspection.....Complete  
Seats / Belts.....Adjust and Lock  
Cabin Doors.....Closed  
Passengers.....Secured / Briefed  
Brakes.....Hold

**—ENGINE START—**

Mixture.....Idle Cut-Off  
Throttle.....Open SLIGHTLY  
Master Switch.....On  
Beacon.....On  
Strobes.....On (As Required)  
Navigation Lights.... On (Night Ops. Only)  
Mixture.....Rich  
(If engine is warm, omit next three steps)  
• Fuel Pump.....On  
• Fuel Flow.....3-5 GPH,  
• Fuel Pump.....Off  
Area.....Clear(Visually and Verbally)  
Starter.....Engage  
Throttle.....1000 RPM  
Engine Instruments.....Check

**—BEFORE TAXI—**

**Mixture.....Lean (EGT / RPM)**  
Flaps.....Up(Check Visually)  
Circuit Breakers.....In  
Avionics Master.....On  
Avionics.....Set and Check  
Flight Instruments.....Set and Check  
Taxi Area.....Clear  
Brakes.....Release

**—TAXI—**

Brakes.....Check  
Flight Instruments.....Check

**—BEFORE TAKEOFF—**

Brakes.....Hold  
Flight Controls.....Free and Correct  
Fuel Selector.....Both  
Manual Electric Trim (MET).....Test  
Autopilot.....Test  
Trim.....Set for Takeoff  
Mixture.....Rich  
Throttle.....1800 RPM  
Magnetos.....Check  
.....Max Drop 150 RPM  
.....Max Difference 50 RPM  
Amps/Volts.....Check  
Vacuum Gauge.....Check  
Engine Instruments.....Check  
Annunciator Panel.....Clear  
Throttle.....Idle, Then 1000 RPM  
Circuit Breakers.....In  
Autopilot.....Off  
Pitot Heat.....As Required

*Seats / Belts.....Secure  
Doors/windows.....Closed & Locked  
Flaps.....Set for Takeoff  
Flight Instruments.....Set and Check  
Strobes.....On  
Landing Light.....On  
Transponder.....ALT / Check code  
Mixture.....Rich*

Takeoff Briefing.....Complete

**—CLIMB—**

Flaps.....As Required  
Climb Airspeed.....74 KIAS  
At 300 Ft. AGL.....Flaps Up

**—CRUISE—**

Cruise Power.....Set  
Mixture.....Set  
Fuel Selector.....Set  
Landing Light.....Off  
Pitot Heat.....As Required

**— DESCENT —**

Seats / Belts.....Secure  
Fuel Selector.....Both  
Mixture.....Set  
Descent Power.....Set  
Pitot Heat.....As Required  
Engine / Flight Instruments.....Set / Check  
Avionics.....Set and Check  
Approach Briefing.....Complete

**—BEFORE LANDING—**

*Seats / Belts.....Secure  
Fuel Selector.....Both  
Mixture.....Rich  
Landing Light.....On  
Magnetos.....Both  
Engine Gauges.....Check*  
Autopilot.....Off

**—AFTER LANDING—**

*Mixture.....Lean (EGT / RPM)  
Transponder.....SBY  
Flaps.....Up  
Landing Light.....Off  
Lights.....As required  
Trim.....Set For Takeoff*  
Flight Plan.....Close

**—SHUTDOWN—**

Avionics Master.....Off  
Mixture.....Idle Cut-Off  
Magnetos.....Off  
All Switches / Lights.....Off  
Master Switch.....Off  
Fuel Selector.....Left or Right  
Control Lock.....Install  
Hobbs and Tach.....Record  
Seat Belts.....Secure  
**Doors.....Lock**  
Cowl Plugs/Pitot Cover.....Install  
Aircraft.....Tie Down

 = Pattern Work

# Cessna 172S Emergency Procedures

## —V-SPEEDS—

V<sub>r</sub>.....55-60 KIAS  
 V<sub>SO</sub>.....40 KIAS  
 V<sub>S1</sub>.....48KIAS  
 V<sub>X</sub>.....62 KIAS  
 V<sub>Y</sub>.....74 KIAS  
 V<sub>FE</sub>.....110 KIAS (10 degrees)  
 .....85 KIAS (20-30 degrees)  
 V<sub>A</sub>.....105 KIAS @ 2550 lbs.  
 .....98 KIAS @ 2200 lbs.  
 .....88 KIAS @ 1900 lbs.  
 V<sub>NO</sub>.....129 KIAS  
 V<sub>NE</sub>.....163 KIAS  
 Best Glide.....68 KIAS  
 Oil.....Min. 6 Max. 8 qt.  
 Max. Takeoff/Landing Weight...2550 LBS.

## —ENGINE FAILURES—

### —DURING TAKEOFF—

Throttle.....Idle  
 Brakes.....Apply  
 Mixture.....Idle Cut-Off  
 Ignition.....Off  
 Master Switch.....Off

### —IMMEDIATELY AFTER —

#### —TAKEOFF—

Airspeed.....70 KIAS (Flaps UP)  
 .....**65 KIAS (Flaps DOWN)**  
 Mixture.....Idle Cut-Off  
 Fuel Valve.....Off (Out)  
 Ignition Switch.....Off  
 Flaps.....As Required  
 Master Switch.....Off  
 Cabin Door.....Unlatch  
 Land.....As Briefed

## —IN CRUISE FLIGHT—

### (RESTART PROCEDURE)

Airspeed.....68 KIAS(Best Glide)  
 Possible Landing Area.....Identify  
 Fuel Selector.....Both  
 Fuel Shutoff Valve.....On (In)  
 Mixture.....Rich  
 Fuel Pump.....On  
 Ignition Switch.....Both or  
 .....Start (if propeller stopped)

### —FORCED LANDINGS—

#### —WITHOUT ENGINE POWER—

Transponder.....7700  
 Radio(s).....121.5 (if time permits)  
 Seats / Belts.....Upright / Locked  
 Airspeed.....70 KIAS (Flaps UP)  
 .....**65 KIAS (Flaps DOWN)**  
 Place to Land.....Pilot Option  
 Fuel Shutoff Valve.....Off (Pull Out)  
 Mixture.....Idle Cut-Off  
 Ignition.....Off  
 Flaps.....As Required  
 .....(30° recommended)  
 Master Switch.....Off  
 Doors.....Unlatch  
 Cockpit/Passengers.....Prepare

## —FIRES—

### —ENGINE FIRE DURING START—

Cranking.....Continue

#### If Engine Starts:

Throttle.....1700 RPM for 3 minutes  
 Engine.....Shutdown and Inspect

#### If Engine Does NOT Start:

Throttle.....Full  
 Mixture.....Idle Cut-Off  
 Cranking.....Continue  
 Fuel Valve.....Off  
 Fuel Pump.....Off  
 Extinguisher.....Obtain  
 Engine.....Secure  
 Master Switch.....Off  
 Ignition.....Off  
 Brakes.....Off

#### EVACUATE AND EXTINGUISH FIRE IF POSSIBLE

Aircraft.....Inspect for Damage

### —ENGINE FIRE IN FLIGHT—

Mixture.....Idle Cut-Off  
 Fuel Valve.....Off  
 Fuel Pump.....Off  
 Master Switch.....Off  
 Heat and Air.....Off  
 Airspeed.....100 KIAS

#### EXECUTE FORCED LANDING WITHOUT ENGINE POWER

### —ELECTRICAL FIRE IN FLIGHT—

Master Switch.....Off  
 Vents, Cabin Air.....Closed  
 Avionics Master.....Off  
 Electrics (except ignition).....Off  
 Fire.....Extinguish  
 When Fire is Out, if electrical power is necessary:  
 Master Switch.....On  
 Breakers.....Check / Do Not Reset  
 Radios Electrical.....On, one at a time

### Always Check POH For Other Emergency Checklists



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