

## Cessna 172SP G1000

**MAXIMUM TAKEOFF WEIGHT** ..... **2550 LBS**  
**MAXIMUM BAGGAGE WEIGHT** ..... **120 LBS**

### STALL SPEED

V<sub>SO</sub> ..... 40 KIAS  
V<sub>S1</sub> ..... 48 KIAS

### MANEUVERING SPEED

V<sub>A</sub> 2550 lbs ..... 105 KIAS  
V<sub>A</sub> 2200 lbs ..... 98 KIAS  
V<sub>A</sub> 1900 lbs ..... 90 KIAS

### TAKEOFF & CLIMB

V<sub>Y</sub> ..... 73 KIAS  
V<sub>X</sub> (Flaps 10) ..... 56 KIAS  
V<sub>X</sub> ..... 65 KIAS  
V<sub>R</sub> ..... 55 KIAS  
ENROUTE CLIMB SPEED ..... 75 - 85 KIAS

### OPERATING SPEEDS

V<sub>NE</sub> NEVER EXCEED SPEED ..... 163 KIAS  
V<sub>NO</sub> MAXIMUM STRUCTURAL CRUISING SPEED ..... 129 KIAS  
V<sub>FE</sub> FLAP EXTENDED SPEED(10/30 degrees) ..... 110/85 KIAS  
FLAP OPERATING RANGE ..... 40 - 85 KIAS  
NORMAL OPERATING RANGE ..... 48 - 129 KIAS  
CAUTION RANGE ..... 129 - 163 KIAS  
CRUISE ..... 2100-2700 RPM  
MAX. DEMONSTRATED CROSSWIND COMPONENT ..... 15 KTS

### DESCENT SPEEDS

NORMAL APPROACH (FLAPS UP) ..... 65 – 75 KIAS  
NORMAL APPROACH (FLAPS 30°) ..... 65 – 75 KIAS  
SHORT FINAL (Short Field Approach) ..... 61 KIAS  
V<sub>GLIDE</sub> (Flaps Up) ..... 68 KIAS  
GO AROUND ..... MAX POWER, FLAPS 20° ..... 60 KIAS

### FUEL CAPACITY

Each Tank ..... 28.0 gal  
Unusable fuel (Each tank) ..... 1.5 gal

## FLIGHT PLANNING

Airplane ..... CHECK MAINTENANCE RECORDS  
Route & Navigation  
Planning ..... COMPLETE  
Weather ..... BRIEFING COMPLETE  
Baggage ..... WEIGH  
Weight & Balance/ CG ..... CALCULATE/WITHIN LIMITS  
Performance Planning ..... COMPLETE  
Flight Plan ..... FILE

## INSIDE CABIN

Pitot Tube Cover ..... REMOVE & STOW  
Pilot's Operating Handbook/W&B ..... CHECKED/ACCESSIBLE  
G1000 Cockpit Reference Guide ..... ACCESSIBLE TO PILOT  
Airworthiness Cert/Registration ..... CHECK  
Fire Extinguisher ..... CHECK  
Fuel Selector Valve ..... BOTH  
Fuel Shutoff Valve ..... FULL IN/FORWARD  
Elevator Trim ..... SET for TAKEOFF  
Control Wheel Lock ..... REMOVE  
Ignition Switch ..... OFF  
Avionics Switch (BUS 1 & BUS 2) ..... OFF  
Master Switch ..... ON  
Primary Flight Display (PFD) ..... VERIFY ON  
Fuel Quantity Indicators ..... CHECK QUANTITY  
Hobbs and Tach ..... VERIFY  
Avionics Switch (BUS 1) ..... ON  
Forward Avionics Fan ..... VERIFY AUDIBLE  
Avionics Switch (BUS 1) ..... OFF  
Avionics Switch (BUS 2) ..... ON  
Aft Avionics Fan ..... VERIFY AUDIBLE  
Avionics Switch (BUS 2) ..... OFF  
External Lights/Pitot Heat ..... ON/CHECK/OFF  
Flaps ..... EXTEND  
Low Fuel L and R Annunciators ..... CHECK NOT SHOWN  
Oil Pressure and Low Vac Annunciators ..... CHECK SHOWN  
Low Volts Annunciator ..... CHECK SHOWN  
Master Switch ..... OFF  
Static Pressure Alternate Source Valve ..... TEST

## Cessna 172SP Checklist G1000

### EMPENNAGE

Baggage Door ..... SECURE  
Aft Static Source ..... UNOBSTRUCTED  
Control Surfaces ..... CHECK freedom of movement and security  
Tail Tiedown ..... DISCONNECT  
Elevator Trim Tab ..... CHECK security  
Antennas ..... CHECK

### RIGHT WING TRAILING EDGE

Flap ..... CHECK  
Aileron ..... CHECK  
Wing Tip & Lights ..... CONDITION/SECURITY

### RIGHT WING LEADING EDGE

Wing Tie-Down ..... DISCONNECT  
Cabin Air Vents ..... CLEAR  
Landing Gear/Brake/Tire (38.0 PSI) ..... CHECK  
Fuel Sump Quick Drain Valves (5) ..... DRAIN  
Fuel Quantity ..... CHECK VISUALLY  
Fuel Filler Cap ..... SECURE & VENT UNOBSTRUCTED

### NOSE

Windshield ..... CHECK & CLEAN  
Engine Oil ..... (5 to 8qts)CHECK  
Cowling ..... SECURE  
Fuel Sump Quick Drain Valves (3) ..... DRAIN  
Nose Gear Strut ..... CHECK  
Nose Wheel & Tire (45.0 PSI) ..... CHECK  
Exhaust ..... CHECK  
Propeller & Spinner ..... CHECK  
Alternator Belt ..... CHECK  
Cowling Air Intakes ..... CLEAR  
Induction Air Filter ..... CLEAR

Left Static Source ..... CHECK

### LEFT WING LEADING EDGE

Cabin Air Vents ..... CLEAR  
Pitot Tube ..... CHECK  
Stall Warning ..... CHECK  
Fuel Tank Vent ..... CHECK  
Tie Down ..... REMOVE  
Landing & Taxi Lts ..... CHECK FOR CONDITION & CLEANLINESS  
Leading Edge ..... CHECK

### LEFT WING TRAILING EDGE

Wing Tip & Lights ..... CONDITION/SECURITY  
Aileron ..... CHECK  
Flap ..... CHECK  
Landing Gear/Brake/Tire (38.0 PSI) ..... CHECK  
Fuel Sump Quick Drain Valves (5) ..... DRAIN  
Fuel Quantity ..... CHECK VISUALLY  
Fuel Cap ..... SECURE

**\*Pull aircraft out of spot perpendicular to line using towbar\***

### BEFORE STARTING ENGINE

Preflight Inspection ..... COMPLETE  
Passenger Briefing ..... COMPLETE  
Seats/Seat Belts ..... ADJUST & LOCK  
Doors & Windows ..... CLOSE & LOCK  
Fuel Selector Valve ..... BOTH  
Fuel Shutoff Valve ..... FULL IN/FORWARD  
Brakes ..... TEST & SET  
Circuit Breakers ..... CHECK IN  
ATIS ..... LISTEN  
Avionics Switch (BUS 1 & 2) ..... ENSURE OFF

**SEE OPERATING HANDBOOK FOR FLOODED START**

**STARTING ENGINE**

Throttle ..... OPEN ¼ INCH  
 Mixture ..... IDLE/CUTOFF  
 STBY BATT Switch ..... TEST  
 ..... (Hold for 20 sec, verify green lamp stays on)  
 ..... ARM  
 ..... (Verify PFD comes on)  
 Engine Indicating System ..... CHECK PARAMETERS  
 ..... (Verify no red X's through engine indicators)  
 BUS E Volts ..... VERIFY 24 VOLTS MIN  
 M BUS Volts ..... VERIFY 1.5 OR LESS  
 BATT S Amps ..... VERIFY DISCHARGE  
 STBY BATT Annunciator ..... VERIFY ANNUNCIATOR IS SHOWN  
 Propeller Area ..... CLEAR  
 Master Switch ..... ON  
 Beacon ..... ON

**COLD START**

Fuel Pump Switch ..... ON  
 Mixture ..... RICH  
 ..... (full rich until fuel flow is stable; 3-5 sec) then...  
 ..... MIXTURE IDLE/CUTOFF  
 Fuel Pump Switch ..... OFF  
 Ignition ..... START  
 Mixture ..... ADVANCE SMOOTHLY TO RICH THEN 1" OUT  
 ..... (when engine starts)

**WARM START (SKIP COLD START)**

Ignition ..... START  
 Mixture ..... ADVANCE SMOOTHLY TO RICH THEN 1" OUT  
 ..... (when engine starts)

**AFTER ENGINE START**

Oil Pressure ..... CHECK  
 AMPS (M BATT and BATT S) ..... CHECK POSITIVE  
 LOW VOLTS ANNUNCIATOR ..... CHECK NOT SHOWN  
 Lights ..... AS REQUIRED  
 Avionics Switch (Bus 1 & 2) ..... ON

**BEFORE TAXI**

Flaps ..... UP  
 Autopilot ..... CHECK  
 Transponder ..... VERIFY CODE  
 MFD ..... VERIFY DATA BASE & ACKNOWLEDGE  
 Radios ..... SET & CHECK  
 Flight Instruments ..... CHECK & SET  
 External Lights ..... AS REQD  
 Taxi Area ..... CLEAR  
 Parking Brake ..... RELEASE

**TAXI CHECK**

Brakes & Steering ..... CHECK  
 Flight Instruments ..... CHECK

**BEFORE TAKEOFF**

Parking Brake ..... SET  
 Seats & Belts ..... SECURED  
 Doors & Windows ..... CLOSED & LATCHED  
 Flight Controls ..... FREE & CORRECT  
 PFD Flight Instruments ..... NO RED X's  
 Altimeters 3x ..... SET  
 Fuel Quantity ..... VERIFY  
 Standby Flight Instruments ..... SET  
 Elevator Trim (Manual and Electric) ..... CHECK / SET FOR TAKEOFF  
 Fuel Selector Valve ..... BOTH  
 Throttle ..... 1800 RPM  
     Mixture ..... ADJUST BEST POWER  
     Magnetos ..... CHECK (RPM drop < 150/50 diff)  
     Engine Instruments/Ammeter/Voltmeters/Vacuum ..... CHECK  
 Annunciator Panel ..... VERIFY NO ANNUNCIATIONS  
 Throttle ..... CHECK IDLE  
 Throttle ..... 1000 RPM or LESS  
 Throttle Friction Lock ..... ADJUST  
 Transponder ..... VERIFY  
 Radios & Avionics ..... SET  
 CDI Softkey ..... SELECT NAV SOURCE  
 Autopilot ..... OFF  
 Flaps ..... SET for TAKEOFF (0° - 10°)  
 Takeoff Briefing ..... PERFORM  
 Landing & Strobe Lights ..... AS REQUIRED  
 Parking Brake ..... RELEASE

**NORMAL TAKEOFF**

Flaps ..... 0° - 10°  
 Throttle ..... FULL  
 Mixture ..... SET BEST POWER  
 Elevator Control ..... LIFT NOSEWHEEL (at 55 KIAS)  
 Climb Airspeed ..... 70-80 KIAS  
 Flaps ..... RETRACT

**SHORT FIELD TAKEOFF**

Flaps ..... 10°  
 Brakes ..... APPLY  
 Throttle ..... FULL  
 Mixture ..... SET BEST POWER  
 Brakes ..... RELEASE  
 Elevator Control ..... SLIGHTLY TAIL LOW  
 Climb Speed ..... 56 KIAS (until all obstacles are cleared)  
 Flaps ..... RETRACT SLOWLY

**CLIMB**

Flaps ..... RETRACT  
 Engine Instruments ..... CHECKED  
 Airspeed ..... 70-85 KIAS

**ENROUTE CLIMB**

Airspeed ..... 70-85 KIAS  
 Throttle ..... FULL  
 Landing/Unnecessary lights ..... OFF  
 Transponder ..... VERIFY "ALT"  
 Mixture (Above 3000 MSL lean for Max RPM) ..... LEAN

**CRUISE**

Power (No more than 75% recommended) ..... 2100 - 2700 RPM  
 Trim ..... ADJUST  
 Mixture ..... LEAN

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### DESCENT

Power .....AS REQUIRED  
 Mixture ..... ADJUST  
 Altimeter 3x ..... SET  
 Fuel Selector ..... BOTH  
 Flaps (0° - 10° below 110 KIAS, 10° - 30° below 85 KIAS)..AS DESIRED

#### BEFORE LANDING CHECK

Seats, Seat Belts, Shoulder Harness ..... SECURE  
 Fuel Selector Valve ..... BOTH  
 Mixture ..... ADJUST  
 Landing/Taxi Lights ..... ON  
 Autopilot ..... OFF  
 Cabin Pwr 12v  
 Switch ..... OFF

#### NORMAL LANDING

Airspeed (Flaps Up) ..... 65 - 75 KIAS  
 Flaps (0° - 10° below 110 KIAS, 10° - 30° below 85 KIAS)..AS DESIRED  
 Airspeed (Flaps Down) ..... 60 – 70 KIAS  
 Touchdown ..... MAIN WHEELS FIRST  
 Landing Roll ..... LOWER NOSE WHEEL GENTLY  
 Brakes ..... MINIMUM REQUIRED

#### SHORT FIELD LANDING

Airspeed (Flaps Up) ..... 65 - 75 KIAS  
 Flaps ..... FULL DOWN (30°)  
 Airspeed ..... 61 KIAS (Until flare)  
 Power ..... REDUCE AFTER CLEARING OBSTACLE  
 Touchdown ..... MAIN WHEELS FIRST  
 Flaps ..... RETRACT  
 Brakes ..... APPLY HEAVILY

#### GO-AROUND

Throttle ..... FULL

Flaps ..... RETRACT TO 20°  
 Climb Speed ..... 60 KIAS  
 Flaps ..... 10° Until Obstacle Cleared  
 After reaching safe altitude ..... RETRACT FLAPS

### AFTER LANDING

Flaps ..... RETRACT  
 Mixture ..... LEAN FOR TAXI  
 Unnecessary Lights ..... OFF

### SHUTDOWN AND SECURING AIRCRAFT

Parking Brake ..... SET  
 Throttle ..... 1000 RPM  
 Magneto Safety Check ..... IGNITION KEY OFF then BOTH  
 Throttle ..... 1800 RPM  
 Mixture ..... LEAN FOR MAX RPM  
 Avionics BUS 1 & BUS 2 ..... OFF  
 Lights ..... OFF (except Beacon)  
 Throttle ..... 1200 RPM  
 Mixture ..... IDLE CUTOFF  
 Ignition Switch ..... OFF/KEY OUT  
 Hobbs and Tach ..... LOG  
 Master Switch ..... OFF  
 STBY BATT Switch ..... OFF  
 Fuel Selector Valve ..... LEFT or RIGHT  
 All Cabin Vents ..... CLOSE  
 Control Lock ..... INSTALL  
 Aircraft ..... TIE DOWN

### CROSS COUNTRY FLIGHT PROCEDURE

- Park and tie down aircraft.
- Order fuel.
- Call FSS to close flight plan, update weather, file new flight plan.
- Return to aircraft and check fuel/oil. Pay for fuel and get receipt.

***DID YOU LOCK THE AIRPLANE?  
 CLOSE FLIGHT PLANS?***