

# C-172S Normal Checklist

## PREFLIGHT

### Inside Cockpit

Maintenance Squawks - CHECKED  
Tach/Hobbs - RECORDED  
Doc's (AROW) - AVAILABLE  
Weight & Balance - COMPUTED  
Control Lock - RELEASE  
Ignition Switch - OFF  
Electrical/Avionics Switches - OFF  
Master Switch - ON  
Fuel Quantity - CHECK  
Avionics Power - ON & Audible  
Avionics Power Sw. - OFF  
Annunciator - TST & CHECK  
Flaps - EXTEND  
Pitot Heat - CHECK  
Master Switch - OFF  
Alternate Static - OFF (IN)  
Fuel Selector - BOTH  
Fuel Shutoff Valve - FULL IN

### Empennage

Baggage Door - CHECK  
Tail Tiedown - DISCONNECT  
Control Surf. - FREE & SECURE  
Antennas - CHECK

### Right Wing

Aileron - FREE & SECURE

Flap - SECURE  
Wing Tiedown - DISCONNECT  
Main Wheel/Tire - CHECK  
Fuel Quick Drain Valves (5)-  
DRAIN & CHECK  
Fuel Qty - CHECK VISUALLY  
Fuel Cap - SECURE

### Nose

Fuel Quick Drain Valves (3)-  
DRAIN & CHECK  
Engine Oil - 6-8 QTS  
Air Inlets - CHECK CLEAR  
Prop/Spinner - CHECK  
Air Filter - CHECK  
Nose Wheel Strut/Tire - CHECK  
Left Static Source - CHECK

### Left Wing

Fuel Qty - CHECK VISUALLY  
Fuel Cap - SECURE  
Fuel Quick Drain Valves (5)-  
DRAIN & CHECK  
Main Wheel/Tire - CHECK  
Fuel Tank Vent - CHECK CLEAR  
Stall Warning - CHECK CLEAR  
Wing Tiedown - DISCONNECT  
Landing/Taxi Light - CHECK  
Aileron - FREE & SECURE  
Flap - SECURE  
Tiedowns/Chocks/Towbar -  
FINAL CHECK

## BEFORE START

Pax Briefing - COMPLETE  
Seats/Belts - ADJUST & LOCK  
Circuit Breakers - CHECK IN  
Electrical Equip. & Autopilot - OFF  
Avionics Power - OFF  
Fuel Selector - BOTH  
Fuel Shutoff Valve - FULL IN

## STARTING ENGINE

Throttle - OPEN ¼ IN.  
Mixture - IDLE CUTOFF  
Master Switch - ON  
Beacon/Nav lights - ON AS REQ'D  
Aux Fuel Pump - ON  
Mixture - ADVANCE TO PRIME,  
THEN RETURN TO IDLE  
CUTOFF  
Aux Fuel Pump - OFF  
Prop Area - CLEAR  
Ignition Switch - START  
Mixture - RICH WHEN ENGINE  
STARTS  
Oil Pressure - CHECK  
Avionics Power - ON  
Flaps - RETRACT

## TAXI CHECK

Brakes - CHECK  
Flight Instruments - CHECK

## RUNUP

Cabin Doors - CLOSED & LOCK'd  
Flight Contrls - FREE & CORRECT  
Flight Instruments - CHECK & SET  
Fuel Quantity - CHECK  
Mixture - BEST POWER  
Fuel Selector - RECHECK BOTH  
Elevator Trim - TAKEOFF  
Throttle - 1800 RPM  
Magnetos - CHECK  
Suction Gauge - CHECK  
Eng Instruments/Ammeter - CHECK  
Annunciator Panel - ALL OFF  
Throttle - CHECK IDLE  
Throttle Friction - ADJUST  
Autopilot - OFF  
Wing Flaps - 0-10°

## WHEN CLEARED T/O

A/C Lights – ON  
Transponder – ALT  
Time – RECORD (cross country)

## NORMAL TAKEOFF

Wing Flaps - 0-10°  
Mixture - RICH BLW 3000'  
Elevator Cont - LIFT NOSEWHEEL  
AT 55 KIAS  
Climb Speed - 70-80 KIAS  
Wing Flaps - RETRACT

## SHORT FIELD TAKEOFF

Wing Flaps - 10°  
Brakes - APPLY  
Mixture - RICH BLW 3000'  
Throttle - FULL OPEN  
Brakes - RELEASE  
Elevator Cont - SLIGHT TAIL LOW  
Climb Speed - 57 KIAS UNTIL  
CLEAR OF OBST  
Wing Flaps - RETRACT

## SOFT FIELD TAKEOFF

Wing Flaps - 10°  
Brakes - APPLY SPARINGLY  
Mixture - RICH BLW 3000'  
Throttle - FULL OPEN  
Elevator Cont - TAIL LOW  
Accel - STAY IN GRND EFFECT  
Climb Speed - 57 KIAS UNTIL  
CLEAR OF OBST  
Wing Flaps - RETRACT

## AFTER T/O

Flaps - RETRACT  
Landing Lights – OFF

## CRUISE

Power - 2000-2400 RPM  
Mixture - LEAN  
DG - SET TO COMPASS  
Fuel Quantity - MONITOR

## DESCENT

Mixture – AS REQ'D  
Fuel Selector - BOTH

## BEFORE LANDING

**GUMPS** check:  
Gas - BOTH  
Undercarriage - N/A  
Mixture - RICH BLW 3000'  
Props - N/A  
Seatbelts - SECURE

## NORMAL LANDING

Airspeed - 65-75 KIAS  
Wing Flaps - AS DESIRED  
Touchdown - MAIN WHEELS 1st  
Brakes - USE SPARINGLY

## SHORT FIELD LANDING

Airspeed - 62 KIAS  
Wing Flaps - FULL DOWN  
Power - IDLE AFTER CLR OBST  
Touchdown - MAIN WHEELS 1st  
Wing Flaps - RETRACT  
Brakes - APPLY HEAVILY

## SOFT FIELD LANDING

Airspeed - 62 KIAS  
Wing Flaps - FULL DOWN  
Touchdown - MIN AIRSPEED  
Landing Roll - LOWER NOSE  
WHEEL GENTLY

## BALKED LANDING

Throttle - FULL OPEN  
Pitch - PITCH FOR CLIMB  
Wing Flaps - RETRACT TO 20°  
Climb Speed - 55 KIAS  
Wing Flaps - 10° UNTIL CLR OBST  
THEN RETRACT IF ABV  
60 KIAS

## AFTER LANDING

Wing Flaps - RETRACT  
Landing Light / Stobes - OFF  
Transponder - STANDBY

## SECURING AIRCRAFT

Parking Brake - SET  
Avionics Power Sw. - OFF  
Electrical Equip / Master Sw. - OFF  
Mixture - IDLE CUTOFF  
Ignition Sw. - OFF  
Control Lock - INSTALL  
Fuel Selector - AS DESIRED

## PASSENGER BRIEFING

- 1) Exit Doors and Windows --  
Location and Operation
- 2) Seatbelt Use and Operation
- 3) Seat/Seatback Operation (Upright  
For T/O and Landings)
- 4) Fire Extinguishers
- 5) Open Water Ditching Procedures if  
Applicable
- 6) Oxygen Use and Operation
- 7) Traffic - Tell Pilots if on a  
Potential Collision Course
- 8) Anything Abnormal (Noises, Fire,  
Etc.) - Tell Pilots
- 9) No Smoking
- 10) Don't Touch Controls

## V SPEEDS

V<sub>r</sub> = 55    V<sub>x</sub> = 62  
V<sub>y</sub> = 74    V<sub>a</sub> = 105  
V<sub>s1</sub> = 48    V<sub>so</sub> = 40  
V<sub>fe</sub> = 85    V<sub>no</sub> = 129  
V<sub>ne</sub> = 163  
BEST GLIDE = 68