

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 / Strobes - 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_r = 55 V_x = 62
V_y = 74 V_a = 105
V_{s1} = 48 V_{so} = 40
V_{fe} = 85 V_{no} = 129
V_{ne} = 163
BEST GLIDE = 68