

PREFLIGHT C-172S

1. Aircraft Documents - OK.
2. Weather - Suitable.
3. Baggage - Weighed, stowed, secured.
4. Weight and C.G. - CK.
5. Navigation - Planned.
6. Charts and Nav aids - CK.
7. Performance - Determined
8. VOR Log (IFR) - CK.

INTERIOR

1. Hobbs / Tach time - CK.
2. P.O.H. - On board.
3. Control Lock - Remove.
4. Avionics - Off.
5. Electrical Switches - Off.
6. Mixture - I.C.O.
7. Master Switch -On/Call.
8. Fuel Quantity - CK.
9. Lights (Night) - CK.
10. Flaps - Down / CK.
11. Master Switch - Off.
12. Flight Controls - CK.
13. Fuel Shutoff - On
14. Fuel Selector - Both.
15. Trim - Neutral.
16. Windows - CK Clean.

EXTERIOR

AS PER MANUAL

BEFORE START

1. Preflight - Complete.
2. Passenger Briefing - Done.
3. Cabin Doors - Closed .
4. Seats - Adjusted / Locked.
5. Belts / Harnesses - Secure
6. Circuit Breakers - CK In.
7. All Switches - Off.
8. Brakes - Set and Test.
9. Flaps - Up

START

1. Throttle - Full
2. Mixture - Rich
3. Master switch - On/Call
4. Flaps - Up
5. Beacon - on
6. Boost Pump-on 3 secs
7. Throttle - in 1/2"
8. Mixture - ICO
9. Starter - Engage
10. Mixture - rich when running
11. Throttle - 700 RPM
12. Oil Pressure - CK
13. Mixture - Lean for taxi

HOT START

1. Throttle in 1/2 "
2. Mixture - ICO
3. Master - on
4. Flaps - up
5. Beacon - on
6. Mixture - rich when running
7. Oil Pressure - CK
8. Mixture - Lean for taxi

PRE - TAXI

1. Nav Lights - as req.
2. Radios - On / Set.
3. Transponder - Sby.
4. Flaps - Up.
5. Radio Calls - As Req.
6. Taxi Area - Clear.
7. Throttle - Apply Smoothly
8. Brakes - CK.

TAXI

Controls - Position for wind
Instruments - Ck on taxi

RUN - UP

1. Brakes - Set.
2. Fuel Selector - Both.
3. Mixture - Rich.
4. Throttle - 1800 RPM.
5. Magnetos - Max Drop 150 - Max Diff 50
6. Engine Instruments - CK.
7. Suction Gauge - CK.
8. Ammeter - CK.
9. Throttle - 700 RPM.

BEFORE TAKEOFF

1. Flight Instruments - Set.
2. Radios / Avionics - Set.
3. Engine Gauges - CK.
4. Mixture - Set.
5. Belts / Harnesses - CK.
6. Flaps - As Req.
7. Trim - Set for takeoff.
8. Controls - CK.
9. Doors / Windows - Latch.
10. Brakes - Recheck.

CROSSING HOLD LINE

Transponder - Altitude
Strobes - On.

TAKEOFF

Normal Vr - 55 KTS
Short / Soft - Per Manual

CLIMB

Vx - 62 KTS
Vy - 74 KTS
Cruise Climb - 85 KTS.

CRUISE

1. Power - Per Manual.
2. Trim - Adjust.
3. Mixture - Set.
4. Landing Light - Off.
5. Engine Instruments - CK.
6. Flight Instruments - Set.

PRE - DESCENT

1. Fuel Selector - Both.
2. Power - As Req.
3. Mixture - Enrichen.
4. Flight Instruments - Set.
5. Engine Gauges - Monitor.

45 ENTRY / Downwind CK

Fuel Selector - Both.
Mixture - Full Rich.
Throttle - As Req (85 KTS).
Landing Lts / Strobes-As Req.
Ignition - Both
Master Switch - On.
Belts / Harnesses - CK.

LANDING

Normal, Short, and Soft
field As per manual.
Normal Final - 65 KTS.

ON FINAL

G. U. M.P.S.

AFTER LANDING

1. Throttle - 1000 RPM.
2. Mixture - Lean for Taxi.
3. Flaps - Up.
4. Trim - Neutral.
5. Landing / Strobes - As req.
6. Transponder - Sby / Off.
7. Unnecessary Avionics - Off.
8. Radio Calls - As Req.

SHUTDOWN / SECURING

1. Avionics / Electrical - Off.
2. Mixture - I.C.O.
3. Ignition - Off / Key on dash.
4. Master - Off.
5. All Switches - Off.
6. Windows - Close/Latch.
7. Seatbelts - Stow.
8. Control Lock - Install.
9. Name, Date, Hobbs, Tach times - Record
10. Aircraft - Properly Secure.
11. Discrepancies - Write Up.

<u>V - SPEEDS</u>	
<u>C - 172S</u>	
Vso	40 KTS
Vs	48 KTS
Vr	55 KTS
Vx	62 KTS
Vy	74 KTS
Va (2550)	105 KTS
Vfe	85 KTS
Vno	129 KTS
Vne	163 KTS
Final approach	65 KTS
Final (short field)	62 KTS
Best Glide	65 KTS

ENGINE FAILURES

TAKEOFF RUN

1. Throttle - Idle.
2. Brakes - Apply.
3. Flaps - Retract.
4. Mixture - I.C.O..
5. Ignition - Off.
6. Master Switch - Off.

AFTER TAKEOFF

1. Airspeed - 65 KTS.
2. Mixture - I.C.O..
3. Fuel Shutoff - In.
4. Ignition Switch - Off.
5. Flaps - As Required.
6. Master Switch - Off.

DURING FLIGHT

1. Airspeed - 65 KTS.
2. Fuel Shutoff - In.
3. Fuel Selector - Both.
4. Boost Pump - On
5. Mixture - Rich.
6. Ignition Switch - Both.

FORCED LANDINGS

WITHOUT POWER

1. Airspeed
65 KTS (flaps up)
60 KTS (flaps dn)
2. Mixture - I.C.O..
3. Fuel Shutoff - Off.
4. Ignition Switch - Off.
5. Flaps - As Required.
6. Master Switch - Off.
7. Doors - Unlatch.
8. Touchdown - Tail Low.
9. Brakes - Apply Heavily.

WITH POWER

1. Airspeed - 60 KTS
2. Flaps - 20 Deg.
3. Field
Overfly/Investigate Retract
Flaps at safe altitude and
airspeed.
4. Avionics / Electrical-Off.
5. Flaps - 30 Deg. (final)
6. Airspeed - 60 KTS.
7. Master Switch - Off.
8. Doors - Unlatch.
9. Touchdown - Tail Low.
10. Ignition Switch - Off.
11. Brakes - Apply Heavily.

DITCHING

1. Radio - Transmit
Mayday.
2. Heavy Objects
Secure/Toss
3. Approach
Into High Winds.
Parallel to Swells in
light winds.
4. Flaps - 20 to 30 Deg.
5. Power - 300'/min @ 55
KTS.
6. Doors - Unlatch.
7. Touchdown - Level
attitude @ 300'/min.
8. Face - Cushion at
Impact.
9. Aircraft - Evacuate.
Flood Cabin if
necessary.
10. Life Vests / Rafts -
Inflate.

FIRES

DURING START

1. Cranking - Continue...

If Engine Starts

2. Power - 1700 RPM (few
min)
3. Engine - Shutdown
Inspect for damage.

If Engine Fails to Start

2. Throttle - Full
3. Mixture I.C.O.
4. Cranking - Continue.
5. Fire Extinguisher -
Obtain.
6. Engine - SECURE.
A. Master - Off.
B. Ignition - Off.
C. Fuel Shutoff - Pull.
7. Fire - Extinguish.
8. Fire Damage - Inspect.

ENGINE FIRE IN FLIGHT

1. Mixture - I.C.O.
2. Fuel Selector - Pull.
3. Boost Pump - Off
4. Master Switch - Off.
5. Cabin Heat and Air - Off.
(except wing root vents)
6. Airspeed - 100 KTS.
(faster if needed)
7. Forced Landing- execute

ELECTRICAL FIRE IN FLIGHT

1. Master Switch - Off.
2. All Other Switches - Off.
(except ignition switch)
3. All Vents - Closed.
4. Fire Extinguisher -
Activate.
5. Cabin - Ventilate.

If fire appears Out.

6. Master Switch - On.
7. Circuit Breakers - Check
for faulty circuit, don't
reset.
8. Electrical Switches - On
one at a time with delay
until short circuit is
localized.
9. Vents - Open as
required.

CABIN FIRE

1. Master Switch - Off.
2. Vents - Close.
3. Fire Extinguisher - Activate.
4. Cabin - Ventilate.
5. Land Aircraft as soon as
possible to inspect for
damage

WING FIRE

1. Nav Lights - Off.
2. Strobes - Off.
3. Pitot Heat - Off.
4. Side slip away from
flames.

LANDING WITH A FLAT MAIN TIRE

1. Wing Flaps - As Desired
2. Approach - Normal
3. Touchdown - Good Tire
First

ELECTRICAL MALFUNCTIONS

OVER VOLTAGE LIGHT ON

1. Master Switch - Off
2. Master Switch - On.
3. Over Voltage Light - Off.

If over voltage light remains on.

4. Flight - Terminate as
soon as practical.

AMMETER SHOWS DISCHARGE

1. Avionics switch - Off
2. Alternator switch - Cycle.
3. Electrical Load- Reduce.
4. Flight - Terminate as
soon as practical.

SPIN RECOVERY

1. Power - Idle.
2. Ailerons - Neutral.
3. Rudder - Opposite.
4. Elevator - Forward.
5. Recover from dive.

C-172R CHECKLIST CONSULT
P.O.H. FOR DETAILED
INFORMATION ABOUT THIS
AIRCRAFT AND ITS
PROCEDURES.