



C-172N CHECKLIST (MAY 2021)

P.A.V.E.

P.....**PERSONAL** / PILOT
Illness/**M**eds/**S**tress/**A**lcohol/**F**atigue/**E**motion

A.....**AIRCRAFT**
Air Worth / **R**egistration / **O**ps Limits / **W**&**B**
Air Speed / **T**ach / **O**il Press / **M**anifold Press /
Altimeter / **T**emp Gauge / **O**il Temp / **F**uel
Gauge / **L**and Gear Indicator / **A**nti-Collision /
Mag Compass / **E**LT / **S**afety Belts

V.....**ENVIRONMENT**
NOTAMS / **W**X / **K**nown ATC / **R**unway Length
/ **A**lternates / **F**uel Req / **T**O+**L**nd Data / (**T**FR)

E.....**EXTERNAL**
Invulnerability / **I**mpulse / **M**acho / **G**et Home

PREFLIGHT INSPECTION

Weather.....CHECK
Fuel.....CHECK
Weight/Balance.....COMPUTE
Aircraft Binder.....OBTAIN

Cabin

Control Wheel Lock.....REMOVE
Ignition Switch.....OFF
Avionics Master.....OFF
Master.....ON
Fuel Quantity.....CHECK
Flaps.....EXTEND
External Lights.....CHECK
Pitot Heat.....CHECK (A/R)
Master.....OFF
Walk Around.....PERFORM

PRE-START

Pre-flight Inspection.....COMPLETE
Tiedown/Chocks/Towbar.....OUT

Baggage Door.....SECURE
Passenger Brief.....SAFETY
Seats.....ADJUST/LOCK
Safety Belts.....FASTENED/SECURE
Fuel Selector.....BOTH
Avionics Master.....OFF

CAUTION:

Off to prevent avionics damage

Brakes.....TEST and SET
Circuit Breakers.....CHECK IN
Loose Items.....STOWED

ENGINE START

Mixture.....RICH
Carb Heat.....COLD
Primer (2-6, 0 if warm)....IN/LOCKED
Masters (Batt + Alt)ON
Beacon.....ON
Throttle.....OPEN 1/8 INCH
Prop Area....."CLEAR PROP"
Ignition Switch.....START
-- (Throttle ADJUST to 1000 RPM)
Oil Pressure.....CHECK
-- (**30" Summer / 60" Winter**)
Starter.....DISENGAGED

AFTER START

Avionics Master.....ON
NAV Lights.....ON
Headset.....ON
COMMS.....ATIS
PSM ATIS: 132.05 GRND: 120.95
Altimeter.....SET
XPDR.....ALT
Flight Instruments.....CHECK
Flaps.....UP
IFR Clear / Flt Follow... OBTAIN (A/R)



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TAXI

Airport Diagram.....AS REQ'D
Taxi Light.....ON
Taxi Area.....CLEAR
Brakes.....TEST
Flight Instruments.....CHECK
Flt Controls.....Turn Into/Dive Away
Taxi Clearance.....OBTAIN/BRIEF

CROSSWIND ROT'S

30° = 50% / 45° = 75% / 60° = 100%

VFR Day Min Equipment

Air Speed / **T**ach / **O**il Press / **M**anifold Press /
Altimeter / **T**emp Gauge / **O**il Temp / **F**uel Gauge
/ **L**and Gear Indicator / **A**nti-Collision / **M**ag
Compass / **E**LT / **S**afety Belts

VFR Night Min Equipment

Fuses/CB's (Spares) / **L**anding Light / **A**nti-
Collision Lights (Beacon / Strokes) / **P**ositions
Lights (NAV) / **S**ource of Electricity

IFR Min Equipment

Generator (Alternator) / **R**adio/Nav appropriate
for flight / **A**ttitude / **B**all (Inclinometer) / **C**lock /
Altimeter (Pressure Sensitive) / **R**ate of Turn /
Dir Gyro / **V**OR (30)

ENGINE RUNUP

Brakes.....CHECK/HOLD
Seat/Harness.....CHECK SECURE
Door/Windows.....CLOSED/LOCKED
Flight Controls.....FREE/CORRECT
Elevator Trim.....TAKEOFF
Flight Instruments.....SET
Radios.....SET

Fuel Selector.....BOTH
Run Up Area.....CLEAR BEHIND
Throttle.....1700 RPM
-- Magnetos...**125 MAX/50 DIFF**
-- Carb Heat.....CHK RPM DROP
-- Ammeter...CHK(Land Lt/Flaps)
- Engine Instruments...IN LIMITS
Throttle.....CHECK IDLE
Throttle.....1000 RPM
Throttle Friction.....ADJUST
Primer.....IN/LOCKED

PRE-TAKEOFF BRIEF

Engine Fail/Abnormal on T/O Roll

- Close Throttle / Stop St-Ahead
- Ref ENG Fail – Reject Checklist

Engine Fail: Liftoff w/ RWY remain

-- Airspeed..**65 (Up) / 60 (10-Full)**
-- Throttle.....CLOSED
-- Land.....MAX BRAKING

Airborne: Insufficient Runway

-- Airspeed..**65 (Up) / 60 (10-Full)**
-- Landing Area.....SELECT
-- Mixture.....IDLE CUT OFF
-- Fuel Shutoff Valve.....CLOSED
-- Ignition Switch.....OFF
-- Flaps.....A/R
-- Master.....OFF
-- Land.....MIN AIRSPEED
-- Tech: 180 MIN ALT / Dir o Turn
TOLD ROT...70% Spd NLT 50% Rwy



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BEFORE TAKEOFF

PSM TWR: 128.4 DEPT: 125.05

Pre-Takeoff Brief.....COMPLETE
Carb Heat.....COLD
Mixture.....RICH
Elevator Trim.....TAKEOFF
Flaps.....UP
Doors/Windows...CLOSED+LOCKED
XPDR.....SET
Strobes.....ON (taking the active)
Land Lt.....ON (cleared for T/O)

NORMAL TAKEOFF

Throttle.....FULL (2280-2400 RPM)
Rotate.....55 KIAS
Climb.....73 KIAS (Vy)

MAX (SHORT) FIELD TAKEOFF

Flaps.....UP
Carb Heat.....COLD
Brakes.....APPLY
Throttle.....FULL
Brakes.....RELEASE
Elevator.....SLIGHT TAIL LOW
Climb....59 KIAS (Vx) until OBST Clr

SOFT FIELD TAKEOFF

Flaps.....10°
Elevator Control.....TAIL LOW
After Lift Off.....LEVEL FLIGHT
-- Attain Vx or Vy as Req'd
Flaps.....RETRACT SLOW > 60 KIAS

ENROUTE CLIMB (> 1000' AGL)

Airspeed.....80 – 85 KIAS
Throttle.....FULL OPEN
Mixture.....FULL RICH (Lean>3K)

CRUISE

Power.....2200-2700 RPM (55-75%)
Mixture.....LEAN
-- Power.....Lean to Peak RPM
Fuel Selector.....LEFT/RIGHT A/R
Lights (External).....A/R
CRUISE ROT (%HP/RPM/TAS/GPH)
4K: 75% = 2550 / 117kts / 8.5gph
4K: 55% = 2200 / 96kts / 6.6gph
6K: 75% = 2600 / 119kts / 8.6gph
6K: 55% = 2300 / 101kts / 6.4gph

IN RANGE / DESCENT

PSM ATIS: 132.05

ATIS.....CONFIRM
Fuel.....ON/GOOD QTY
Mixture.....RICH
Carb Heat.....ON IF < 2100 RPM
Descent.....1500 RPM (tech)
Approach.....REVIEW/BRIEF
Min Alt.....CONFIRM

APPROACH (APPROX 15 NM)

TWR: 128.4

Approach.....BRIEFED
Confirm Freqs / In-bound Crs / Mins are set
Altimeters.....SET
Fuel Selector.....BOTH
Taxi Light.....ON
Flt / Nav Instruments.....SET
Engine Instruments.....MONITOR
Go-Around Proc.....REVIEW



C-172N CHECKLIST (MAY 2021)

BEFORE LANDING

Seat/Harness.....CHECK/LOCKED
Engine Instruments.....IN LIMITS
Fuel Selector.....BOTH
Mixture.....RICH
Carb Heat.....ON < 2100 RPM
Land + Taxi Lights.....ON

BALKED LANDING / GO AROUND

Throttle.....FULL OPEN
Attitude.....CLIMB
Carb Heat.....COLD
Flaps.....20°
Airspeed.....55 KIAS
Flaps.....10° UNTL OBST CLR
Flaps.....RETRACT > 60 KIAS

CROSSWIND ROT'S

30° = 50% / 45° = 75% / 60° = 100%

LANDING

NORMAL LANDING

Airspeed.....60 – 70 KIAS (Flaps UP)
Flaps.....A/R < 85 KIAS
Airspeed....55 – 65 KIAS (Flaps FULL)
Touchdown.....MAINS FIRST
Landing Roll.....LOWER NOSE gently
Braking.....MINIMUM REQ'D

MAX (SHORT) LANDING

Airspeed.....60 – 70 KIAS (Flaps UP)
Wing Flaps.....FULL < 85 KIAS
Airspeed.....59 KIAS until flare
Power.....IDLE as OBST is cleared
Touchdown.....MAINS FIRST
Wing Flaps.....UP
Control Yoke.....FULL BACK
Braking.....MAX (don't skid tires)

SOFT FIELD LANDING

Airspeed.....60 – 70 KIAS (Flaps UP)
Wing Flaps.....FULL < 85 KIAS
Airspeed.....60 KIAS until flare
Power....As Red'd, control descent
Control Yoke.....AFT (Hold nose off)
Braking.....NONE / MINIMUM
When Nose touch...YOKE FULL AFT
Power.....AS REQ'D (keep rolling)

AFTER LANDING

PSM GRND: 120.95

Carb Heat.....COLD
Flaps.....UP
Strobes....OFF (clearing the active)
Landing Light.....OFF

SHUTDOWN / SECURE AIRPLANE

Throttle.....1000 RPM
Parking Brake.....A/R
Avionics Master.....OFF
Taxi and NAV Lights.....OFF
Mixture.....IDLE CUT OFF
Ignition.....OFF
Master Switch.....OFF

When Prop Stops

Key.....REMOVE
Elevator Trim.....SET TAKEOFF
Tach Time.....RECORD
Hobbs.....RECORD
Aircraft.....CHOCK AND SECURE
Post Flt Walkaround.....COMPLETE
Gust Locks.....INSTALL
Pitot Cover.....INSTALL



C-172N CHECKLIST (MAY 2021)

FIRES

ENGINE FIRE DURING START

Cranking.....CONTINUE

IF ENGINE STARTS

Power...1700 RPM for few minutes

Engine.....SHUTDOWN + INSPECT

IF ENGINE FAILS TO STARTS

Throttle.....FULL OPEN

Mixture.....IDLE CUT OFF

Cranking.....CONTINUE

Fire Extinguisher.....OBTAIN

Engine.....SECURE

-- Master Switch.....OFF

-- Ignition Switch.....OFF

-- Fuel Selector.....OFF

Fire.....EXTINGUISH

ENGINE FIRE – IN FLIGHT

Mixture.....IDLE CUT OFF

Fuel Selector.....OFF

Master Switch....OFF

Air Vents.....CLOSED

Cabin Heat.....CLOSED

Airspeed.....**100 KIAS**

-- Do not exceed **Vne (158 KIAS)**

Radio.....MAYDAY on **121.5**

XPDR.....**7700**

WARN: DO NOT RESTART ENGINE

Forced Landing.....PERFORM

ELECTRICAL FIRE – IN FLIGHT

Master Switch.....OFF

Avionics Master.....OFF

All Other Switches.....OFF

-- **LEAVE IGNITION ON**

Air Vents/Cabin Heat.....CLOSED

Fire Extinguisher.....ACTIVATE

Land.....AS SOON AS **POSSIBLE**

WARNING

After using extinguisher, vent cabin

IF ELEC POWER ESSENTIAL

Master Switch.....ON

Circuit Breakers...CHECK TO ISOLATE

-- DO NOT RESET POPPED BREAKER

Electrics.....1 AT TIME, CHK BREAKER

Air Vents.....OPEN w/FIRE OUT

CABIN FIRE

Master.....OFF

Vents / Cabin Heat.....CLOSED

Extinguisher.....ACTIVATE

WARNING

After using extinguisher, vent cabin

Land.....AS SOON AS **POSSIBLE**

WING FIRE

Lights/Strobes.....OFF

Pitot Heat.....OFF

Side Slip.....PERFORM

Land.....AS SOON AS **POSSIBLE**



C-172N CHECKLIST (MAY 2021)

ENGINE

ENGINE FAILURE – REJECT

Throttle.....IDLE

Brakes.....APPLY

Flaps.....RETRACT

Mixture.....IDLE CUT OFF

Ignition Switch.....OFF

Master Switch.....OFF

Takeoff ROT...70% Spd NLT 50% Rwy

ENGINE FAILURE - AFTER TAKEOFF

Airspeed.....**65 (Up) / 60 (10-Full)**

Engine Fail: Liftoff w/ RWY remain

-- Airspeed..**65 (Up) / 60 (10-Full)**

-- Throttle.....CLOSED

-- Land.....MAX BRAKING

Airborne: Insufficient Runway

-- Airspeed..**65 (Up) / 60 (10-Full)**

-- Landing Area.....SELECT

-- Mixture.....IDLE CUT OFF

-- Fuel Shutoff Valve.....CLOSED

-- Ignition Switch.....OFF

-- Flaps.....A/R

-- Master.....OFF

-- Land.....MIN AIRSPEED

-- Tech: 180 MIN ALT / Dir o Turn

TOLD ROT...70% Spd NLT 50% Rwy

ENGINE FAIL / RESTART IN FLIGHT

Airspeed.....**65 KIAS**

Best Place to Land.....CHOOSE

Carb Heat.....ON

Fuel Selector.....BOTH

Mixture.....RICH

Ignition Switch.....BOTH / START

Primer.....IN and LOCKED

IF ENGINE DOES NOT START

Forced Landing.....PERFORM

PARTIAL POWER / RUN ROUGH

-- Carb Ice?.....CARB HEAT ON

-- Spark Plug?.....MIXTURE LEAN

-- Mag Malf?.....IGNITION L or R

ABNORMAL OIL PRESS / TEMP

RPM.....REDUCE MIN NECESSARY

Precautionary Landing....PERFORM

POH NOTES

- Check other Engine instruments

- Low Press and Normal Temp

-- Pressue Guage Malfucntion

-- Relief Valve Malfunction

-- Land as soon as **PRACTICAL**

- Low Press and High Temp

-- Loss of engine oil

-- **Engine Fail possible imminent**

-- Land as soon as **POSSIBLE**



C-172N CHECKLIST (MAY 2021)

DESCENT / LANDING

EMERGENCY DESCENT

Throttle.....CLOSED
Yoke.....Bank 30° - 45°
Speed.....INCREASE
-- Do not exceed **Vne (158 KIAS)**
Throttle.....(every 1,000 ft) CLEAR

FORCED LANDING – NO POWER

Airspeed.....**65 (Up) / 60 (10-Full)**
Mixture.....IDLE CUT OFF
Fuel Shutoff.....OFF
Ignition Switch.....OFF
Flaps.....A/R
Radio.....MAYDAY on **121.5**
XPDR.....**7700**

FINAL APPROACH

Airspeed.....**60 KIAS**
Flaps.....DOWN (Land assured)
Master Switch.....OFF
Doors.....UNLATCH
Seat/Harness.....CHECK SECURE

PRECAUTION APPROACH / LAND

Airspeed.....**60 KIAS**
Flaps.....20°
Landing Field.....OVERFLY
Avionics + Electrics.....OFF
Flaps.....30°
Master Switch.....OFF
Doors.....UNLATCH
Seat/Harness.....CHECK SECURE
Touchdown.....TAIL LOW
Ignition Switch.....OFF
Brakes.....APPLY HEAVILY

LOSS OF BRAKE

Landing Spot.....LONG RUNWAY
NOTE

X-Wind from Inop brake side
Touch Down.....MIN AIRSPEED
When Stop.....SHUTDOWN ENGINE

NOTE

Good Brake (Drag) in the middle

FLAT MAIN TIRE

Approach.....NORMAL
Touch Down.....GOOD TIRE FIRST

NOTE

Flat Tire (Drag) in the middle

ELECTRICAL

NOTE

- Monitor Ammeter + Low Volt Light

EXCESSIVE RATE OF CHARGE

- > 2 needle with > 30 min of flight
Alternator Switch.....OFF
Alternator Circuit Breaker.....PULL
Non Essential Elec Equip.....OFF
Land.....AS SOON AS **PRACTICAL**

INSUFFICIENT RATE OF CHARGE

- Ammeter shows discharge
- Low Voltage Light Illuminated
Avionics Master.....OFF
Alternator Circuit Breaker.....CHK IN
Batt + Alt Master.....OFF, THEN ON
If Low Volt Light goes out
Avionics Master.....ON
If Low Volt Light stays illuminated
Alternator.....OFF
Non-essential Elecs.....OFF
Battery.....CONSERVE
-- Flaps and Land Light for landing



C-172N CHECKLIST (MAY 2021)

ELECTRICAL (CONT)

G5 ATTITUDE FAILURE

(Red X and Yellow “Attitude Fail”)

Standby Instruments.....USE
VFR Conditions.....SEEK
Land.....AS SOON AS PRACTICAL

G5 HDG / MAGNETOMETER FAIL

(Red X and Yellow “HDG”)

Magnetic Compass.....USE

NOTE

If G5 has valid GPS signal, HSI will display GPS track info in magenta

G5 GPS FAILURE

(“DR” or “LOI” on HIS lower left)

If Alt Nav Available (ILS, VOR).....USE

If no Alt Nav source available

Dead Reckoning “DR” displayed

Amber CDI Info.....USE
VFR Conditions.....SEEK

Loss of Integrity “LOI” displayed

VFR Conditions.....SEEK

G5 ATTITUDE “ALIGNING”

NOTE

If “ALIGNING” appears during flight and attitude remains displayed, attitude is OK for IMC conditions. Recommend maintain wings level to reduce time for system to align

G5 “ALIGNING / WINGS LEVEL”

Standby Instruments.....USE
-- Maintain Wings Level
VFR Conditions.....SEEK

G5 GAD-29B LOSS OF POWER

NOTE:

Heading and course datum unavailable to autopilot. GPS flight plan course info may be displayed on the HSI and “VFR” will be displayed in amber text on the HSI. “GPSS” will be displayed in amber if GPSS mode is selected.

GPSS Mode.....DESELECT
Lateral GPS Course.....only in VMC

GARMIN 430

“RAIM POSITION WARNING”

NOTE:

System will flag and no longer provide GPS Nav guidance. Revert to VOR / ILS receiver or alternate means of navigation.

“RAIM NOT AVAILABLE”

NOTE:

Enroute/terminal/approach Phase:

Either continue to use GPS or revert to alternate means of Nav. If continue to use GPS, position must be verified every 15 minutes using the 430’s VOR/ILS receiver or other IFR approved Nav system.

Final Approach Segment:

GPS Nav will continue for up to 5 minutes with approach CDI sensitivity (.3nm). After 5 minutes, system will flag and no longer provide course guidance with approach sensitivity. Missed approach course guidance may still be available with 1nm CDI sensitivity by executing the missed



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FLIGHT CONTROLS

LOSS OF ELEVATOR CONTROL

Horizontal Flight.....TRIM
Airspeed.....**60 KIAS**
Flaps.....20°

NOTE

Do not change Trim setting.
Control glide with power only

IN LANDING FLARE

Trim.....FULL NOSE UP
Throttle.....REDUCE SLOWLY
-- Horizontal attitude touchdown

WARNING

Nose down moment from power
reduction is adverse factor and
airplane may hit on the nose
wheel

Throttle.....IDLE AT TOUCHDOWN

SPINS

Power.....IDLE
Ailerons.....NEUTRAL
Rudder.....FULL OPPOSITE
After rudder reaches full stop
Elevator.....BRISKLY FORWARD
Hold inputs until spin stops, then
Rudder.....NEUTRALIZE
Dive.....RECOVER

INFLIGHT OVERSTRESS

Throttle.....REDUCE
Airspeed.....**65 - 75KIAS**
Flaps.....UP
Land.....AS SOON AS PRACTICAL

WEATHER

UNINTENTIONAL FLT INTO ICING

Pitot Heat.....ON
Icing Area.....LEAVE ASAP
Cabin Heat.....ON
RPM.....INCREASE
Carb Heat.....AS REQUIRED
Mixture.....LEAN FOR MAX RPM
Flaps.....LEAVE RETRACTED
ATC.....ADVISE

LANDING

Slip.....A/R for FWD VISABILITY
Airspeed.....**65 – 75 KIAS**
Touchdown.....LEVEL

CAUTION

Ice increases stall speed. Carry
extra speed on final. Stall warning
horn may not function.

SEVERE TURBULENCE

Airspeed.....< **127 KIAS**
<**100 KIAS** Personal Discomfort
Attitude.....LEVEL FLIGHT

STATIC SOURCE BLOCKAGE

Alternate Static Source.....PULL ON
Airspeed.....CALIBRATION TABLE
-- POH Section 5



C-172N CHECKLIST (MAY 2021)

SULLY MANEUVER

DITCHING

Approach.....AS REQ'D
-- Hi Wind/Hvy Sea: INTO WIND
-- Lt Wind/Hvy Swell: PARALLEL
Airspeed.....**65 (Up) / 60 (10-Full)**
Flaps.....20° - 30°
Radio.....MAYDAY on **121.5**
XPDR.....**7700**
Descent.....300 FT/MIN AT **55 KIAS**
Doors.....UNLATCH
Ignition Switch.....OFF
Seat/Harness.....CHECK SECURE
Touchdown.....LEVEL ATTITUDE
-- @300 ft/min descent
Face.....CUSHION
Airplane.....EVACUATE