

Cessna 172 M Checklist

N5123R

N80507

N61943

N1304U

5 August 2024

General Information

PASSENGER BRIEFING

"SEATTT"

- Seats – Adjustment & Belts
- Egress – Door Operation
- Air – Vents; Air Sickness
- Talk – Sterile Cockpit
- Traffic – Help Scan
- Tasks – Pilot Assistance

DEPARTURE BRIEFING

"SWAN"

- Surface – Runway ID'd; Condition
- Winds/Weather – Condition Assessment
- Abort Point – Runway Required
- Numbers – Vr; Climbout; Engine Failure Procedure

APPROACH BRIEFING (VFR)

- Tower: Contacted
 - Uncontrolled: Self-announce
- Landing Runway: confirmed
- Pattern entry: determined

APPROACH BRIEFING (IFR)

- ATIS
- Stack: frequencies set
- Altimeter: set
- Procedure: reviewed
- Procedure: loaded/activated GNS
- Identify GPS waypoints
- CDI/VLOC: set as needed
- Approach mode: verify sequenced
- Marker Beacon: on
- Identify Nav Signals
- Course: set
- Entry: vectors/hold/procedure turn
- Altitudes
- Times
- Missed Approach

FREQUENCIES

TVC ATIS.....	119.175
TVC GND.....	121.8
TVC TWR.....	124.2
TVC UNICOM.....	122.9
TVC FBO – AVFlight	
Tel.: (231) 929-1126	
Minneapolis Center.....	132.9
Lansing FSS.....	122.2/122.65
TVC VOR.....	114.6
TVC ILS 28.....	110.7
GLR VOR.....	109.2
CGG VOR.....	109.8
MBL VOR.....	111.4
PLN VOR.....	111.8
KACB CTAF.....	122.7
KACB AWOS.....	119.275
KCAD CTAF.....	122.8
KCAD AWOS.....	128.325
KFKS CTAF.....	123.05
KFKS AWOS.....	118.325
Thompsonville (7Y2) CTAF.....	122.9
Empire (Y87) CTAF.....	122.9
KMBL CTAF.....	122.8
KMBL AWOS.....	111.4

FLUIDS

Windscreen.....Washed
All Fuel Sumps.....Sample
Fuel Level....Visually Check All Tanks
Fuel Caps.....Verify Secure
Oil Level.....Min 5.5 qts

INTERIOR PREFLIGHT

Aircraft Documents.....Check
Hobbs & Tach Times.....Verify/Log
Alternate Static.....Check
Control Wheel Lock.....Remove
Magnetos.....Confirm Off
Avionics Master.....Confirm Off
Master Switch.....On
Ammeter.....Verify Discharge
Flaps.....Extend Full
Fuel Gauges.....Verify Qty

Exterior Lights.....On/Check
Pitot Heat.....Check if Required
Electrical Switches.....Off
Master Switch.....Off
Fuel Selector.....Both

EXTERIOR PREFLIGHT

Windows/Fuselage.....Check
Left Wheel Assembly.....Check
Baggage Door.....Verify Secure
Left Empennage.....Check
ELT Antenna.....Check
Vertical Stabilizer/Rudder.....Check
Navigation Antennas.....Check
Horizontal Stabilizer.....Check
Tail Tie Down.....Check/Remove
Elevator.....Check
Elevator Trim Tab.....Check
Right Empennage.....Check
Right Wheel Assembly.....Check
Right Wing Strut.....Check
Right Flap.....Check
Right Wing Surfaces.....Check
Right Aileron.....Check
Right Wing Tip.....Check
Right Wing Leading Edge.....Check
Fuel Strainer.....Drain
Lower Fuselage.....Check
Exhaust.....Check

Nose Wheel Assembly.....Check
Air Intakes.....Check
Prop & Spinner.....Check
Cowling.....Check
Static Port.....Check
Left Wing Strut.....Check
Left Wing Surfaces.....Check
Left Wing Leading Edge.....Check
Pitot Tube.....Clear
Stall Warning Horn.....Check
Fuel Vent.....Check
Left Wingtip.....Check
Left Aileron.....Check
Left Flap.....Check
Wing Tie Downs.....Remove
Chocks & Towbar.....Remove

BEFORE ENGINE START

Preflight Inspection.....Complete
Passenger Briefing.....**SEATT**
Seats.....Adjusted/Locked
Seatbelts/Harness.....Fastened
Cabin Doors.....Closed/Latched
Circuit Breakers.....In
Elevator Trim.....Set for Takeoff

ENGINE START

Brakes.....Set
Mixture.....Rich
Throttle.....Set
Carb Heat.....Off
Beacon.....On
Prime.....As Required
Propeller.....Clear
Master Switch.....On
Ignition Switch.....Start
Oil Pressure.....Verify Rise 30/60sec
Throttle.....1000 RPM
Flaps.....Up

BEFORE TAXI

Avionics Master.....On
Mixture.....Lean approx. 1"
Intercom.....Check
Radio Stack.....Set
Garmin430/530.....Program
ATIS/Weather.....Obtain
Lights.....As Required
Transponder.....Alt/Verify Code

ENGINE RUN-UP

Area.....Clear
Nose Wheel.....Straight
Brakes.....Set
Primer.....In/Locked
Fuel Quantity.....Verify
Mixture.....Rich
Throttle.....1700 RPM
Engine Instruments.....Check
Magnetos.....Check 125/50
Carb Heat.....Check RPM Drop
Idle RPM.....Check
Carb Heat.....Check at Idle
Ammeter.....Verify Charge
Throttle.....1000 RPM
Auto-pilot (N5123R).....Check

BEFORE TAKEOFF

Windows/Doors.....Closed
Flight Controls.....Free/Correct
Carb Heat.....Off
Landing/Taxi/Strobe Lights.....On
Nav Lights.....On As Needed
Mixture.....Rich
Throttle Friction.....Set
Flaps.....As Required
Transponder.....Alt/Verify Code
Nav Source.....Verify
(On GNS 530/430; G5 and Nav 2)
Engine Instruments.....Check
Takeoff Brief.....**SWAN**
Time Off.....Note

TAKEOFF

Throttle.....Advance to Full Open
Callouts – Audible Verify:
Power/Gauges/Airspeed/Abort Point
Rotate.....55 kts/60 mph
Climbout.....80 kts/90 mph
Short Field Climbout: 59 kts/ 68 mph

CRUISE CLIMB

Airspeed.....80-90 kts/90-100 mph
Throttle.....Full Open
Lights.....Off/As Req'd
Mixture.....Lean As Req'd
Engine Instruments.....Check

CRUISE

Throttle.....2200-2600RPM
Pitch/Power/Trim
Mixture.....Lean As Req'd

DESCENT AND APPROACH

ATIS.....Obtain
Avionics.....Set
Instruments.....Set
Landing & Taxi Lights.....On
Mixture.....Rich
Fuel Selector.....Both
Seatbelts/Harness.....Fastened
Approach Brief.....Complete

BEFORE LANDING

Carb Heat.....On
Flaps.....As Required

AFTER LANDING

Lights.....As Required
Carb Heat.....Off
Mixture.....Lean
Flaps.....Up

ENGINE SHUTDOWN

Throttle.....1000 RPM
Lights.....Off
Beacon.....LEAVE ON
Avionics Master.....Off
Mixture.....Idle Cut-Off
Propeller.....Verify Stopped
Magnetos.....Off
Master Switch.....Off

POST FLIGHT

Control Lock.....Installed
Tach/Hobbs Time.....Record
Aircraft Interior.....Check Condition
Chocks.....In Place
Post-Flight Walk Around....Complete
Tie Down.....As Necessary

CLOSE FLIGHT PLAN

Emergency Procedures

ENGINE FIRE DURING START

Starter.....Continue Cranking
IF ENGINE STARTS
Throttle.....1700 rpm - few minutes
Engine.....Shut Down & Inspect
IF ENGINE DOES NOT START
Starter.....Continue Cranking
Throttle.....Full Open
Mixture.....Idle Cut-Off
Master.....Off
Fuel Selector.....Off

ENGINE FIRE IN FLIGHT

Mixture.....Idle Cut-Off
Fuel Selector.....Off
Master Switch.....Off
Airspeed (to extinguish fire).....100 kts/120 mph
Cabin Heat/Air (except overhead vents).....Off
PREPARE FOR POWER OFF LANDING

ELECTRICAL FIRE IN FLIGHT

Master Switch.....Off
Cabin Vents/Heat/Overhead Vents.....Off
Avionics Master.....Off
All Electrical Switches.....Off
IF FIRE OUT AND ELECTRICAL POWER NEEDED:
Master Switch.....On
Circuit Breakers.....Check
Do NOT Reset Tripped Breakers
Avionics Master.....On
Electrical Switches.....On: ONE AT A TIME
AS NEEDED
Immediately Turn Off Switch if Fire/Smoke
Cabin Vents/Heat.....Open: Only if Fire Out

ENGINE FAILURE IN FLIGHT

Airspeed.....65 kts/80 mph
Carb Heat.....On
Possible Landing Site.....Identify/Head To
Engine Restart
Fuel Selector.....Both
Mixture.....Rich
Ignition Switch.....Both
Primer.....In/Locked
If Engine Does Not Restart: Prepare for Power Off Landing

POWER OFF EMERGENCY LANDING

Mixture.....Idle Cut-Off
Fuel Selector.....Off
Transponder.....7700
Airspeed.....65 kts/80 mph
WHEN LANDING ASSURED
Flaps.....As needed
Airspeed.....60 kts/65 mph (if flaps down)
Master Switch.....Off
Cabin Doors.....Unlatch
Touchdown.....Slightly Tail Low

CARBURETOR ICING

Throttle.....Full
Carburetor Heat.....On Until Engine Runs Smoothly
Throttle.....Readjust
Carburetor Heat.....Use Minimum Necessary if Ice Reforms
Mixture.....Lean for Smooth Operation

NON-EMERGENCY ABNORMAL OPERATION PROCEDURES

LOW OIL PRESSURE

If Oil Temp High Engine Failure May be Imminent

Prepare for a Power Off Landing – Land Immediately

If Oil Temp Low faulty pressure gauge possible

- Monitor Oil Temp
- Landing at nearest airport advisable

FOULED PLUGS DURING RUNUP – ENGINE BURNOUT

Runup engine for roughness or failed mag check

Brakes.....Set

Throttle.....2000 rpm

Mixture.....Lean Until Small Power Reduction

Run engine for two minutes in this configuration.

Repeat Run-up checks.

If checks again failed discontinue flight and refer to maintenance

LOW VOLTAGE - ELECTRICAL FAILURE

Ammeter.....Verify Discharge

Avionics Master.....Off

Alternator Field Current Circuit Breaker.....Verify Set

Electrical Load.....Reduce

Master Switch Alternator Side.....Off

Master Switch Alternator Side.....ON

Ammeter.....Verify Charge

IF ALTERNATOR RESET SUCCESSFUL

Avionics Master.....On

Electrical Switches.....On

Ammeter.....Monitor

IF ALTERNATOR RESET UNSUCCESSFUL

Master Switch Alternator Side.....Off

Non-essential Electrical Devices.....Off

Conserve Power; Land as Soon as Practical

EXCESSIVE RATE OF ELECTRICAL CHARGE

Master Switch Alternator Side.....Off

Avionics Master.....Off

Master Switch Alternator Side.....On

If Overvoltage Fixed Battery Master ON continue flight

***If Overvoltage Continues Master OFF, Conserve Power
and Land as soon as practical***

For Use With 1974, 1975 Cessna 172M N5123R, N61943

V SPEEDS

V _{SO}	49 mph
V _{S1}	57 mph
V _X	75 mph
V _Y	91 mph
V _R	60 mph
V _G	80 mph
V _{FE}	100 mph
V _A	92-112 mph
V _{NO}	145 mph
V _{NE}	182 mph

WEIGHT LIMITS

Empty Weight.....	1,475.2 lbs
Arm: 40.39"	
Max Weight.....	2,300 lbs

SPECIFICATIONS

Engine: Lycoming O-320-E2D (23R), O-320-D2J (943)	
-160 hp at 2700 rpm	
Fuel Capacity.....	42 gal
USEABLE Fuel.....	38 gal
-Wing Tanks: 21 gal each	
(19 gal useable)	
Oil Capacity.....	8 qts
-MINIMUM 5.5 qts	

ELECTRICAL

14 Volt System/12 volt Battery
60 Amp Engine Drive Alternator
Over-voltage Sensor/Warning Light

FLAPS

Slotted
Electrical (motor in right wing)
Maximum 40°
-Gauge shows 10° increments
-When engaged flaps travel until switch returned to neutral

PATTERN SPEEDS: 100/90/80/70

Normal Landing: 65 mph

Short Field Landing: 60 mph (40° Flaps)

For Use With 1976 Cessna 172M N80507, N1304U

V SPEEDS

V _{SO}	44 kts
V _{S1}	50 kts
V _X	64 kts
V _Y	78 kts
V _R	55 kts
V _G	65 kts
V _{FE}	85 kts
V _A	80-97 kts
V _{NO}	128 kts
V _{NE}	160 kts

WEIGHT LIMITS

Empty Weight.....	1,454.25 lbs
Max Weight.....	2,300 lbs

SPECIFICATIONS

Engine: Lycoming O-320-E2D (04U), O-320-D2J (507)	
-160 hp at 2700 rpm	
Fuel Capacity.....	42 gal
USEABLE Fuel.....	38 gal
-Wing Tanks: 21 gal each	
(19 gal useable)	
Oil Capacity.....	8 qts
-MINIMUM 5.5 qts	

ELECTRICAL

14 Volt System/12 volt Battery
60 Amp Engine Drive Alternator
Over-voltage Sensor/Warning Light

FLAPS

Slotted
Electrical (motor in right wing)
Maximum 40°
-Gauge shows 10° increments
-When engaged flaps travel until
switch returned to neutral

PATTERN SPEEDS: 95/85/75/65

Normal Landing: 60 KIAS

Short Field Landing: 55 KIAS (40° Flaps)

