

AeroDynamic's Cessna 172M Checklist

Preflight Inspection	
Documents (AROW)	On board
Control wheel lock	Removed
Ignition switch	Off
Avionics	Off
Master switch	On
Fuel quantity	Check
Flaps	Down
Lights & Pitot Heat	Check
Master switch	Off
Hobbs & tach	Record
<i>External walkaround</i>	<i>Complete</i>
BEFORE START	
Passenger brief	Complete
Seats & seatbelts	Adjusted
Brakes	Test & Set
Avionics	Off
Circuit breakers	Check in
Electrical equipment	Off
Fuel selector	Both
STARTING ENGINE	
Primer (cold engine)	2-3 strokes
Primer (hot engine)	0-1 strokes
Carb heat	Cold
Throttle	Open 1/4 inch
Mixture	Rich
Master switch	On
Beacon light	On
Prop area	"Clear"
Ignition/Mags	Start
Throttle	Slowly advance
AFTER START	
Throttle	800-1000 RPM
Oil pressure	Check
Avionics	On
Mixture	Lean for taxi
Flaps	Up
Transponder	ALT + 1200
ATIS/AWOS/ASOS	Check

TAXI	
Brakes	Check
Turn coordinator	Check
Vacuum instruments	Check
RUN-UP	
Brakes	Set
Seats & seatbelts	Secure
Doors & windows	Closed & locked
Flight controls	Free & correct
Trim	Set for takeoff
Instruments	Check & set
Fuel selector	Both
Mixture	Rich
Primer	In & locked
Throttle	1700 RPM
- Ignition/mags	Test R & L
- Carb heat	Test
- Suction gauge	Check
- Engine & ammeter	Check
Throttle	Idle, then 800-1000 RPM
Throttle friction	Adjusted
BEFORE TAKEOFF	
Radios	Set
Transponder	ALT + code
Flaps	Set
Mixture	Best power
Carb heat	Cold
Lights	As Required
Time	Note
NORMAL TAKEOFF	
Throttle	Full forward
Oil pressure/temp	Check
Lift nosewheel	55 KIAS (60 MPH)
Climb V _X or V _Y	65 to 74 KIAS (75 or 85 MPH)
ENROUTE CLIMB	
Airspeed	70-80 KIAS (80-90 MPH)
Engine gauges	Check
Mixture	Rich < 3000'

CRUISE

Throttle (<75% power)	Set
Mixture	Lean for alt
Engine instruments	Check
Flight instruments	Check
Fuel selector	Both

DESCENT

ATIS/AWOS/ASOS	Check
Flight instruments	Check
Approach briefing	Complete
Mixture	Richen
Fuel quantity	Check
Carb heat	As required

BEFORE LANDING

Seats & seatbelts	Adjusted
Fuel selector	Both
Mixture	Rich
Carb heat	On
Flaps	As required
Airspeed (flaps up)	65-70 KIAS (70-80 MPH)
Airspeed (flaps down)	60-65 KIAS (65-70 MPH)

AFTER LANDING

Flaps	Up
Mixture	Lean for taxi
Carb heat	Cold
Lights	As required
Trim	Takeoff
Radios	Call for taxi

SHUTDOWN

Avionics & electrical	Off
Throttle	1000 RPM
Mixture	Idle cutoff
Ignition/mags	Off
Master	Off
Fuel selector	Left or Right
Control lock	Install
Sunshade	Install
Pitot cover & tiedowns	Install
Hobbs & tach	Record
Doors	Locked

SHORT-FIELD TAKEOFF

Flaps	Up or 10°
Brakes	Apply
Throttle	Full open
Engine instruments	Check
Brakes	Release
Climb at V _X	59 KIAS (68 MPH)
Once obstacles clear:	
Airspeed V _Y	74 KIAS (85 MPH)
Flaps	Up

SOFT-FIELD TAKEOFF

Flaps	10°
Control wheel	Full aft
Brakes	Minimize use
Throttle	Full open
Engine instruments	Check
After liftoff, maintain ground effect until:	
Airspeed	Climb V _X or V _Y
V_X 59 KIAS (68 MPH)	V_Y 74 KIAS (85)
Flaps	Retract

SHORT-FIELD LANDING

Normal approach, then on final:	
Flaps	40°
Airspeed	60 KIAS (70 MPH)
Brakes	Apply
Flaps	*Retract

SOFT-FIELD LANDING

Touchdown	Nose high
Control wheel	Aft
Brakes	Minimize

GO AROUND

Throttle	Full power
Carb heat	Cold
Flaps	Retract to 20°
Climb speed	59 KIAS (65 MPH)
Once clear of obstacles:	
Airspeed	V _X or V _Y
Flaps	10°
Once at safe altitude:	
Flaps	Up

ENGINE FIRE (during start)

Continue cranking engine to start
 -- If engine starts:
 Throttle 1700 RPM for a few minutes
 Shut down engine & inspect
 -- If engine fails to start:
 Throttle Full open
 Mixture Idle cutoff
 Cranking Continue
 Fire extinguisher Obtain
 Master switch Off
 Ignition/mags Off
 Fuel selector Off
 Fire Extinguish
 Fire damage Inspect

ENGINE FIRE (in flight)

Fuel selector Off
 Mixture Idle cutoff
 Ignition/mags Off
 Cabin heat & air Off
 Airspeed 100 KIAS (120 MPH)
 -- Fire extinguished or landing imminent:
 Forced Landing checklist ----- Complete

ENGINE FAILURE (after takeoff)

Airspeed V_{BG} 60-65 KIAS
 (75-70 MPH)
 Fuel selector Off
 Mixture Idle cutoff
 Ignition switch Off
 Flaps As required/40°
 Master switch Off

ENGINE FAILURE (restart)

Airspeed 70 KIAS (80 MPH)
 Primer In & locked
 Master switch On
 Ignition/mags Both or start
 Carb heat On
 Mixture Rich
 Fuel selector Both
 -- If no restart:
 Forced Landing checklist ----- Complete

FORCED LANDING

Seats & seatbelts Secure
 Airspeed 60-65 KIAS
 (75-70 MPH)
 Fuel selector Off
 Mixture Idle cutoff
 Ignition/mags Off
 Radios MAYDAY call
 Transponder Squawk 7700
 Flaps As required
 Master switch Off
 Doors Unlatched

ELECTRICAL FIRE

Master switch Off
 Vents, cabin air & heat Closed
 Fire extinguisher Use as needed
 Avionics Off
 Electrical equipment Off
 -- If fire appears out:
 Master switch On
 Circuit breakers Check, no reset
 Radios Off
 Avionics On
 Radios & electrical --- Turn on req. items
 one at a time to isolate source of fire
 Vents, cabin air & heat Open

LOW VOLTAGE

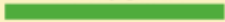


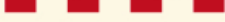
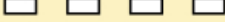

Ammeter shows a discharge:
 Electrical equipment Off
 Avionics Off
 Alternator breaker Check in
 Master switch Off
 Master switch On
 Ammeter Check positive
 Low-voltage light Check out
 Avionics On
 -- If still low voltage:
 Alternator Off
 Noncritical electrical Off
 Land as soon as practical
 Be prepared for lost communications

VFR Lost Communications Procedures

Audio Panel Set on appropriate Comm channel
 Power..... Check and verify comm “ON”
 Ammeter Verify positive charge
 Com Volume and Squelch..... Check
 Com Frequencies..... Try Others That May Work
 Lost Comm Transponder Code (7600)..... Squawk, if Necessary
 Nearest voice-capable VOR frequency..... Listen for ATC

If landing at a towered airport:

1. Remain clear of Class D airspace until direction of traffic flow is noted
2. Join the traffic pattern and maintain visual contact with the tower
3. Watch for light signals and obey them
4. Acknowledge light signals by rocking wings (day) or flashing your lights (night)

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
Steady green 	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
Flashing green 	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
Steady red 	Stop	Stop	Give way to other aircraft and continue circling
Flashing red 	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
Flashing white 	Return to starting point on airport	Return to starting point on airport	Not applicable
Alternating red and green 	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!

IFR Lost Communications Procedures

Lost Comms (VFR).....Land at Nearest Airport
 Lost Comms (IMC) Fly the appropriate route and altitude per segment as follows:

Loss of Communications under IFR (14 CFR 91.185)

Route:

Altitude:
Choose highest of the following for route segment being flown

Clearance limit is fix from which approach begins?

Start descent and approach as close as possible to the EFC time if one has been received, or if one has not been received, as close as possible to the ETA from the filed or amended ETE.

Leave clearance limit at the EFC time or upon arrival over the clearance limit. Proceed to a fix from which an approach begins and commence descent and approach as close as possible to the ETA as calculated from the filed or amended ETE.