

After Takeoff (Out of 1000' AGL)

AIRSPEED V_y / V_x / AS REQ
(If a maximum performance climb is necessary,
use speeds in rate-of-climb data charts
in section 5 of the POH/AFM.)

FLAPS UP
THROTTLE FULL
MIXTURE FULL RICH BELOW 3000' MSL

Cruise

POWER ($\leq 75\%$ Power per POH/AFM) SET
ENGINE INSTRUMENTS CHECK
MIXTURE LEAN AS REQUIRED
MAG COMPASS / HI CHECK / SET

In-Range / Descent

ATIS / AWOS (As early as possible) CHECK
ALTIMETER SET
PRELIMINARY APPROACH BRIEF
Type of Approach
Runway length / Lighting
Field Elevation / Sector Altitude
Highest Obstacle / Terrain Review
NAV / Course / Minimums / Missed
Crosswind Component COMPLETE
AIRPORT DIAGRAM (Keep available) CHECK
SEAT BELTS FASTENED
MIXTURE SLIGHTLY ENRICH

Approach (Approx 15 NM from Airport)

ATIS/AWOS CHECK
APPROACH BRIEFING COMPLETE
ALTIMETER SET
HEADING INDICATOR TO COMPASS SET
FUEL SELECTOR BOTH
PARKING BRAKE CHECK RELEASED
LANDING LIGHT ON

WHEN DIRECT TO IAF OR VECTORED

FLIGHT & NAV INSTRUMENTS SET/IDENT
GPS (As Required for Approach) SET
AIRSPEED 90 KIAS

Before Landing Checklist

FUEL SELECTOR BOTH
MIXTURE FWD
LANDING LIGHT AS REQ

Go Around / Missed Approach

THROTTLE FULL
FLAPS (If $> 20^\circ$) RETRACT 20°
PITCH EST CLIMB
FLAPS (> 60 KIAS) RETRACT 10°
AIRSPEED V_y / V_x / AS REQ

AT SAFE ALTITUDE & > 65 KIAS

FLAPS UP
FLY ASSIGNED/PUBLISHED HEADING & ALTITUDE

After Landing (Stopped)

TRIM CENTERED
FLAPS UP
STROBE (if in interest of safety) OFF
LANDING & TAXI LIGHTS ON
MIXTURE LEAN FOR RPM RISE
TAXI CLEARANCE OBTAIN & BRIEF

Shutdown/Terminate

AVIONICS MASTER OFF
THROTTLE 1000 RPM
MIXTURE CUTOFF
IGNITION SWITCH OFF
MASTER SWITCH OFF
ELECTRICAL SWITCHES OFF
BLOCK-IN & MX REPORT SUBMITTED & CONF. REC'D
FLIGHT CONTROLS SECURE
SUNSCREENS INSTALL
TIEDOWN / CHOCK SECURE
WALKAROUND COMPLETE

Avoid Slips with Flaps Extended



Cessna 172 R/S

NORMAL CHECKLIST

Preflight Inspection

WEATHER CHECK
WEIGHT AND BALANCE COMPUTE

PITOT HEAT (If IFR) CHECK

INTERIOR

FIRE EXTINGUISHER CHECK
AIRCRAFT DOCUMENTS CHECK
CONTROL WHEEL LOCK REMOVE
POH/AFM CHECK
IGNITION SWITCH OFF
MASTER SWITCH ON
FUEL QUANTITY CHECK
ALTERNATE STATIC SOURCE OFF
BEACON, STROBES, NAV & LANDING LIGHTS CHECK
FLAPS FULLY EXTEND
MASTER SWITCH OFF
FUEL SELECTOR VALVE BOTH
FUEL SHUTOFF VALVE IN
BAGGAGE AND LOOSE ITEMS STOWED

EMPENNAGE

BAGGAGE DOOR CHECK
RUDDER GUST LOCK (If installed) REMOVE
CONTROL SURFACES (Freedom & security) CHECK
TRIM TAB CHECK
ANTENNAS CHECK

RIGHT WING TRAILING EDGE

FLAP (Security) CHECK
AILERON (Freedom & security) CHECK

RIGHT WING & LEADING EDGE

FUEL QUANTITY CHECK VISUALLY
FUEL FILLER CAP SECURE
FUEL TANK SUMPS (5) CHECK

Check for water and sediment.

MAIN WHEEL TIRE, BRAKE DISC & PADS CHECK

Check for wear and proper inflation.

Continued..

Preflight Inspection (Continued)

NOSE

WINDSHIELDCHECK FOR CLEANLINESS
FUEL SUMPS (3)TAKE SAMPLE

Check for water & sediment.

OIL LEVEL.....CHECK & SECURE CAP
Oil level should be between 5 to 8 quarts for safe operation. It's recommended to always keep oil level around **6 quarts**.

OIL ACCESS DOOR.....SECURE
ENGINE COOLING AIR INLETSCHECK
PROPELLER & SPINNER.....CHECK
ENGINE AIR FILTER.....CHECK
NOSE WHEEL STRUT (Approx. 3" Extension)CHECK
NOSE WHEEL TIRE.....CHECK
STATIC SOURCE OPENING.....CHECK

LEFT WING & LEADING EDGE

FUEL QUANTITYCHECK VISUALLY
FUEL FILLER CAPSECURE
FUEL TANK SUMPS (5)CHECK
PITOT TUBE COVERREMOVE
PITOT TUBE.....CHECK UNOBSTRUCTED
STALL HORN OPENINGCHECK UNOBSTRUCTED
FUEL TANK VENTCHECK

LEFT WING TRAILING EDGE

AILERON.....(Freedom & security) CHECK
FLAP(Security) CHECK
MAIN WHEEL TIRE, BRAKE DISC & PADSCHECK
GENERAL WALKAROUND.....CHECK

Before Starting Engine

NOSE-TIPS-TAIL-CHOCKS-AREACLEAR
PREFLIGHT INSPECTION.....COMPLETE
WT&BAL, DOCS, PERFORMANCECHECK
CELL PHONEAIRPLANE MODE
PASSENGER BRIEFCOMPLETE

Doors, Seats & Seatbelts (Positive Latch),
Fire Extinguisher, No Smoking, PIC Authority

SEAT & SEAT BELTSADJUST AND LOCK
CIRCUIT BREAKERSCHECK IN
ELECTRICAL SWITCHES.....OFF
IGNITION SWITCHOFF
AVIONICS MASTER SWITCH.....OFF
ALTERNATE STATIC SOURCE.....OFF
FUEL SELECTOR VALVE.....BOTH
FUEL SHUTOFF VALVE(push full in) ON
MASTER SWITCHON
BEACONON
POSITION LIGHTON

Engine Start

THROTTLE..... ¼" OPEN
FUEL PUMP ON

COLD ENGINE

MIXTURE RICH 3-5 SECONDS
UNTIL STABLE FUEL FLOW, THEN CUTOFF

WARM ENGINE

MIXTURE RICH 1 SECOND THEN CUTOFF
FUEL PUMP OFF
BRAKES HOLD
PROP AREA..... CLEAR
IGNITION (ATP 8 Second Max) START
MIXTURE (Advance smoothly as engine starts) RICH

WHEN ENGINE STARTS

THROTTLE..... 1000 RPM
OIL PRESSURE(In 15 seconds) CHECK GREEN
MIXTURE LEAN FOR RPM RISE
THROTTLE..... 1000 RPM
FLAPS UP

After Start

HEADSETS ON
AVIONICS MASTER SWITCH..... ON
COMS ATIS/AWOS/CLEARANCE IF REQ
ALTIMETERSET
GPSSET
NAVS.....SET / COURSE
FLIGHT INSTRUMENTS
(AI/TC/COMPASS & HI/VS) CHECK

Taxi

AIRPORT DIAGRAMOUT / AVAILABLE
TAXI CLEARANCEOBTAIN / BRIEF
LANDING & TAXI LIGHTS ON*
TAXI AREA..... CLEAR
BRAKES CHECK
FLIGHT INSTRUMENTS (AI/TC/HI/VS).....CK
Check in turns.

STERILE COCKPIT
.....NO NON-ESSENTIAL CONVERSATION

*Turn off your taxi or landing lights when stopped, yielding, or as a consideration to other pilots, drivers or ground personnel. At all other times LANDING and TAXI lights are to remain on for all aircraft movement and flight.

Run Up

ANNUNCIATOR PANEL LIGHTSCHECK
MIXTURE RICH / FULL FWD
THROTTLE..... 1800 RPM
MAGNETOSCHECK

(Drop should not exceed 150 RPM on either magneto
or a difference of 50 RPM between the two.)

ENGINE INSTRUMENTS & AMMETER.....CHECK

THROTTLE..... IDLE / CHECK 600-800 RPM
THROTTLE..... 1000 RPM
MIXTURE LEAN FOR RPM RISE

Pre-Takeoff Brief

Engine failure or abnormality during takeoff roll:
IMMEDIATELY CLOSE THROTTLE, STOP STRAIGHT AHEAD & AVOID OBSTACLES
If not enough runway remains to stop:

MIXTURECUTOFF
FUEL SHUTOFF VALVEPULL OUT / OFF
BATTERY MASTER SWITCHOFF
IGNITION SWITCH.....OFF
AVOID OBSTACLES

Engine failure immediately after takeoff:
LAND ON REMAINING RUNWAY / WITHIN 30° OF CENTERLINE.
AVOID OBSTACLES. DO NOT ATTEMPT 180° TURN.

AIRSPEEDLOWER NOSE & ESTABLISH PITCH FOR BEST GLIDE
FLAPSAS NECESSARY
POWER.....AS AVAILABLE
TIME PERMITTING.....DECLARE AN EMERGENCY
FUEL SHUTOFF VALVEPULL OUT / OFF
MIXTUREIDLE CUTOFF
IGNITIONOFF
BATTERY MASTEROFF

Before Takeoff

PRE-TAKEOFF BRIEF..... COMPLETE
FLIGHT CONTROLS.....FREE & CORRECT
FLIGHT INSTRUMENTS CHECK & SET
AUTOPILOT (If Installed)..... OFF
FUEL GAUGE / QTYCHECK / SUFFICIENT
FUEL SELECTOR..... BOTH
TRIM.....SET T/O
FLAPSSET
GPS(As req. for departure) SET
HEADING INDICATORSET
DEPARTURE BRIEF
Initial Altitude & Heading
Brief Departure Procedure COMPLETE
MIXTUREFULL FWD (Or set for altitude)
ENGINE INSTRUMENTSCHECK
SEAT BACKSMOST UPRIGHT POSITION
SEAT BELT & SHOULDER HARNESSFASTENED

FINAL ITEMS WHEN #1 FOR TAKEOFF

DOORS & WINDOWSCLOSED & LOCKED
STROBE LIGHTON
TRANSPONDER..... ALT
TRAFFIC.....CHECK

Engine Failure During Flight

AIRSPEED BEST GLIDE
 NOTE WIND DIRECTION AND SPEED
 PICK & FLY TOWARDS LANDING SITE
 FLAPS UP
 MIXTURE RICH
 FUEL SELECTOR VALVE BOTH
 FUEL SHUTOFF VALVE PUSH IN / ON
 AUX FUEL PUMP SWITCH ON
 MAGNETOS CHECK ALL

IF PROP NOT WINDMILLING

IGNITION SWITCH START
 MAGNETOS CHECK ALL

Precautionary Landing with Engine Power

LANDING AREA SELECT & INSPECT
 RADIO & ELECTRICAL SWITCHES OFF

ON FINAL APPROACH

FLAPS (30° Recommended) AS REQ
 MASTER SWITCH OFF
 DOORS (Prior to touchdown) UNLATCH
 IGNITION SWITCH OFF
 BRAKES APPLY HEAVILY

Emergency Landing No Engine Power

LANDING AREA SELECT & INSPECT
 AIRSPEED BEST GLIDE
 RADIO & ELECTRICAL SWITCHES OFF
 MIXTURE CUTOFF
 FUEL SHUTOFF VALVE PULL OUT / OFF
 IGNITION SWITCH OFF
 FLAPS (30° Recommended) AS REQ
 MASTER SWITCH OFF
 DOORS (Prior to touchdown) UNLATCH
 BRAKES APPLY HEAVILY

Pattern Work

Touch & Go's Prohibited Except With Instructor

Before Landing Checklist

FUEL SELECTOR BOTH
 MIXTURE FWD

Go Around / Missed Approach

THROTTLE FULL
 FLAPS (If > 20°) RETRACT 20°
 PITCH EST CLIMB
 FLAPS (> 60 KIAS) RETRACT 10°
 AIRSPEED $V_y / V_x / AS REQ$

AT SAFE ALTITUDE & > 65 KIAS

FLAPS UP
 FLY ASSIGNED/PUBLISHED HEADING & ALTITUDE

Touch and Go

MAINTAIN CENTERLINE
 FLAPS UP
 THROTTLE FULL

Standardized Speeds

80 KIAS	FLAPS 10° - 1500 RPM
70 KIAS	FLAPS 20° - ON BASE
65 KIAS	FLAPS 30° - ON FINAL UNTIL ROUNDOUT
When landing assured.	
SOFT FIELD	61 KIAS - FLAPS 30°
SHORT FIELD	61 KIAS - FLAPS 30°

After Landing (Stopped)

TRIM CENTERED
 FLAPS UP
 STROBE (if in interest of safety) OFF
 LANDING & TAXI LIGHTS ON
 MIXTURE LEAN FOR RPM RISE
 TAXI CLEARANCE OBTAIN & BRIEF

Before Takeoff

PRE-TAKEOFF BRIEF COMPLETE
 FLIGHT CONTROLS FREE & CORRECT
 FLIGHT INSTRUMENTS CHECK & SET
 AUTOPILOT (if installed) OFF
 FUEL GAUGE / QTY CHECK / SUFFICIENT
 FUEL SELECTOR BOTH
 TRIM SET T/O
 FLAPS SET
 GPS (As req. for departure) SET
 HEADING INDICATOR SET
 DEPARTURE BRIEF
 Initial Altitude & Heading COMPLETE
 Brief Departure Procedure COMPLETE
 MIXTURE FULL FWD (Or set for altitude)
 ENGINE INSTRUMENTS CHECK
 SEAT BACKS MOST UPRIGHT POSITION
 SEAT BELT & SHOULDER HARNESS FASTENED

FINAL ITEMS WHEN #1 FOR TAKEOFF

DOORS & WINDOWS CLOSED & LOCKED
 STROBE LIGHT ON
 TRANSPONDER ALT



Cessna 172 R/S

EMERGENCY & ABNORMAL CHECKLIST

Engine Failure During Takeoff Roll

THROTTLE CLOSE
 BRAKES APPLY
 FLAPS UP
 MIXTURE CUTOFF
 IGNITION SWITCH OFF
 MASTER SWITCH OFF

Engine Failure During Takeoff

MAINTAIN AIRCRAFT CONTROL
 LAND ON REMAINING RUNWAY OR
 WITHIN 30° OF CENTERLINE. AVOID OBSTACLES.
 DO NOT ATTEMPT 180° TURN.
 AIRSPEED LOWER NOSE & PITCH FOR BEST GLIDE
 FLAPS AS REQ.
 POWER AS AVAILABLE
 TIME PERMITTING DECLARE EMERGENCY
 MIXTURE CUTOFF
 FUEL SHUTOFF VALVE PULL OUT / OFF
 IGNITION SWITCH OFF
 FLAPS (30° Recommended) AS REQ
 MASTER SWITCH OFF
 DOORS UNLATCH

Spin Recovery

In the event the aircraft enters an unintentional spin, proceed as follows.
THROTTLE..... IMMEDIATELY CLOSED
AILERONS NEUTRALIZE
RUDDER FULL, OPPOSITE ROTATION
ELEVATOR CONTROL
..... BRISKLY FORWARD PAST CENTER

ONCE ROTATION STOPS

RUDDER NEUTRALIZE
SLOWLY RECOVER FROM DIVE

WHEN STRAIGHT AND LEVEL

THROTTLE..... FULL

Cabin Fire

MASTER SWITCH OFF
VENTS, CABIN HEAT & AIR..... CLOSED
FIRE EXTINGUISHER ACTIVATE

WHEN FIRE IS OUT

CABIN VENTILATE
LAND AS SOON AS POSSIBLE

Wing Fire

LANDING/TAXI LIGHT SWITCHES OFF
NAV LIGHT SWITCH OFF
STROBE LIGHT SWITCH OFF
PITOT HEAT SWITCH OFF

Perform a sideslip to keep the flames away from the fuel tank and cabin.

Land as soon as possible using flaps only as required for final approach and touchdown.

Electrical Fire

MASTER SWITCH OFF
ALL ELECTRICAL SWITCHES
(Except ignition switch) OFF
VENTS, CABIN HEAT & AIR..... CLOSED
FIRE EXTINGUISHER ACTIVATE

WHEN FIRE IS OUT

CABIN VENTILATE

IF FIRE APPEARS OUT & ELECTRICAL POWER REQ'D

MASTER SWITCH ON
CIRCUIT BREAKERS (Do not reset) CHECK
MASTER AVIONICS SWITCH ON
RADIOS (One at a time with a delay after each) ON
LAND AS SOON AS POSSIBLE

Engine Fire In Flight

MIXTURE IDLE CUT OFF
FUEL SHUTOFF VALVE OFF (Pull Full Out)
AUX FUEL PUMP SWITCH..... OFF
MASTER SWITCH OFF
CABIN HEAT & AIR (Except overhead vents) OFF
AIRSPEED.....
..... INCREASE AS REQ TO EXTINGUISH FIRE
EXECUTE FORCED LANDING

Engine Fire During Start

Continue cranking to get the engine started which would suck the flames and accumulated fuel into the engine.

IF ENGINE STARTS

POWER..... (For a few minutes) 1700 RPM
ENGINE SHUTDOWN

IF ENGINE FAILS TO START

THROTTLE..... FULL OPEN
MIXTURE IDLE CUT OFF
CRANKING CONTINUE
FUEL SHUTOFF VALVE OFF (Pull Full Out)
AUX FUEL PUMP..... OFF
FIRE EXTINGUISHER..... OBTAIN
MASTER SWITCH OFF
IGNITION SWITCH..... OFF
EVACUATE AIRCRAFT
& SECURE FIRE EXTINGUISHER

Cleaning Fouled Spark Plugs

(CAUTION: Hold brakes securely and remain vigilant for aircraft movement; only perform runup on surface free from gravel/dirt.)

THROTTLE..... 2000 RPM
MIXTURE LEAN FOR SLIGHT RPM DROP
MAINTAIN FOR 60 SECONDS
MIXTURE FULL FORWARD
THROTTLE..... 1800 RPM
PERFORM MAGNETO CHECK

Note:

While performing the above checklist, do not allow oil temperature to reach redline and be vigilant of oil pressure.

Ammeter: Excessive Rate of Charge

for Ammeter Full-Scale Deflection

ALTERNATOR OFF
NON-ESSENTIAL ELEC. EQUIPMENT..... OFF
LAND AS SOON AS POSSIBLE
Compass may be off as much as 25°.

Ammeter Shows Discharge

ALTERNATOR OFF
NONESSENTIAL ELEC. EQUIPMENT OFF
LAND AS SOON AS POSSIBLE

Low Voltage Light During Flight

RADIOS, AVIONICS POWER SWITCH..... OFF
MASTER SWITCH OFF
MASTER SWITCH ON
LOW VOLTAGE LIGHT CHECK OFF
RADIOS, AVIONICS POWER SWITCH..... ON

IF LOW VOLTAGE LIGHT RE-ILLUMINATES

ALTERNATOR OFF
NON-ESSENTIAL ELECT. EQUIPMENT OFF
LAND AS SOON AS POSSIBLE

Static Source Blockage

ALTERNATE STATIC SOURCE VALVE
..... PULL ON
AIRSPEED
..... CONSULT TABLES IN POH/AFM SECTION 5