

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 / Miniums / 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 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 COVER.....REMOVE
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-CHECKS-AREA.....CLEAR
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 BREAKERS.....CHECK IN
ELECTRICAL SWITCHES.....OFF
IGNITION SWITCH.....OFF
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..... 1/4" 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
ALTIMETER SET
GPS SET
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 LIGHTS.....CHECK
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.

AIRSPEED LOWER NOSE & ESTABLISH PITCH FOR BEST GLIDE
FLAPS AS 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
FLAPS SET
GPS(As req. for departure) SET
HEADING INDICATOR SET
DEPARTURE BRIEF

Initial Altitude & Heading

Brief Departure Procedure COMPLETE

MIXTURE FULL FWD (Or set for altitude)
ENGINE INSTRUMENTS.....CHECK
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
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