

## 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  
LANDING LIGHT .....  
..... ON (for local training) / OFF (for XC cruise)  
MIXTURE ..... LEAN AS REQUIRED  
MAG COMPASS / HI ..... CHECK / SET

## In-Range / Descent (For Cross-Country, ACPP Only)

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  
CARB HEAT ..... AS REQ

## 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  
CARB HEAT ..... ON

## Go Around / Missed Approach

THROTTLE ..... FULL  
CARB HEAT ..... OFF  
FLAPS ..... (If  $> 20^\circ$ ) RETRACT  $20^\circ$   
PITCH ..... EST CLIMB  
FLAPS ..... ( $> 55$  KIAS) RETRACT  $10^\circ$   
AIRSPEED .....  $V_Y / V_X$  / AS REQ

### AT SAFE ALTITUDE & $> 65$ KIAS

FLAPS ..... UP  
FLY ASSIGNED/PUBLISHED HEADING & ALTITUDE

## After Landing (Stopped)

TRIM ..... CENTERED  
CARB HEAT ..... OFF  
FLAPS ..... UP  
LANDING & TAXI LIGHTS ..... AS REQ  
MIXTURE ..... SLIGHTLY LEAN  
TAXI CLEARANCE ..... OBTAIN & BRIEF

## Shutdown/Terminate

AVIONICS MASTER ..... OFF  
THROTTLE ..... 1000 RPM  
MIXTURE ..... CUTOFF  
IGNITION SWITCH ..... OFF  
MASTER SWITCH ..... OFF  
ELECTRICAL SWITCHES ..... OFF  
FLIGHT TRACKER & MX REPORT SMS ..... SENT & ACK'D  
FLIGHT CONTROLS ..... SECURE  
SUNSCREENS ..... INSTALL  
TIEDOWN / CHOCK ..... SECURE  
WALKAROUND ..... COMPLETE

### Avoid Slips with Flaps Extended



## CESSNA 172 N & M Normal Checklist

# Top Flight Aviation

## Preflight Inspection

BLOCK-OUT SMS ..... SENT & STATUS REC'D  
WEATHER ..... CHECK  
WEIGHT AND BALANCE ..... COMPUTE  
FUEL (Full, unless limited by W&B) ..... AS REQ  
OIL (6 Qt. Minimum) ..... CHECK  
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/ANTICOLLISION LT,  
NAV, & LANDING LIGHTS ..... CHECK  
FLAPS ..... FULLY EXTEND  
MASTER SWITCH ..... OFF  
FUEL SELECTOR VALVE ..... BOTH  
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 SUMP ..... CHECK

Check for water and sediment.

MAIN WHEEL TIRE, BRAKE DISC & PADS ..... CHECK

Check for wear and proper inflation.

Continued..

## Preflight Inspection (Continued)

### NOSE

WINDSHIELD .....CHECK FOR CLEANLINESS  
FUEL STRAINER.....TAKE SAMPLE

Check for water & sediment.

OIL LEVEL.....CHECK

Do not operate with less than 6 quarts.

Fill for extended flights.

OIL ACCESS DOOR.....SECURE

ENGINE COOLING AIR INLETS .....CHECK

PROPELLER & SPINNER.....CHECK

LANDING & TAXI LIGHT(S) (if applicable) .....CHECK

ENGINE AIR FILTER.....CHECK

NOSE WHEEL STRUT (Approx. 3" Extension) .....CHECK

NOSE WHEEL TIRE.....CHECK

STATIC SOURCE OPENING.....CHECK

### LEFT WING

FUEL QUANTITY .....CHECK VISUALLY

FUEL FILLER CAP .....SECURE

PITOT TUBE COVER .....REMOVE

PITOT TUBE.....CHECK UNOBSTRUCTED

STALL HORN OPENING .....CHECK UNOBSTRUCTED

FUEL TANK VENT .....CHECK

FUEL TANK SUMP .....CHECK

### LEFT WING TRAILING EDGE

AILERON.....(Freedom & security) CHECK

FLAP .....(Security) CHECK

MAIN WHEEL TIRE, BRAKE DISC & PADS .....CHECK

## Before Starting Engine

PREFLIGHT INSPECTION ..... COMPLETE

WT&BAL, DOCS, PERFORMANCE .....CHECK

PASSENGER BRIEF ..... COMPLETE

Doors, Seats & Seatbelts (Positive Latch),

Fire Extinguisher, No Smoking, PIC Authority

SEAT & SEAT BELTS ..... ADJUST AND LOCK

CIRCUIT BREAKERS ..... CHECK IN

ELECTRICAL SWITCHES..... OFF

IGNITION SWITCH..... OFF

AVIONICS MASTER SWITCH..... OFF

ALTERNATE STATIC SOURCE..... OFF

FUEL SELECTOR VALVE..... BOTH

CARB HEAT ..... COLD

PRIMER .....3 STROKES & LOCK (COLD DAYS ONLY)

MASTER SWITCH .....ON

BEACON .....ON

## Engine Start

MIXTURE ..... RICH

THROTTLE..... ¼" OPEN

BRAKES .....HOLD

PROP AREA..... CLEAR

IGNITION .....(ATP 8 Second Max) START

### IF ENGINE DOES NOT START

WAIT 30 SECONDS

THROTTLE.....CYCLE 2 STROKES & CLOSE

IGNITION .....(ATP 8 Second Max) START

(Do not attempt another start by cycling throttle.

Use primer only.)

### 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 ..... ENTER WPT / FPL / APR AS REQ.

NAVS.....SET / COURSE

FLIGHT INSTRUMENTS

(AI/TC/COMPASS & HI/VSI) ..... CHECK

## Taxi

TAXI CLEARANCE .....OBTAIN / BRIEF

TAXI AREA..... CLEAR

BRAKES ..... CHECK

FLIGHT INSTRUMENTS (AI/TC/HI/VSI).....CK

Check in turns.

STERILE COCKPIT .....

.....NO NON-ESSENTIAL CONVERSATION

## Run Up

MIXTURE .....FULL FWD

THROTTLE..... 1800 RPM

MAGNETOS .....CHECK

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

ENGINE INSTRUMENTS & AMMETER.....CHECK

SUCTION GAUGE .....CHECK

CARB HEAT ..... ON / CHECK FOR RPM DROP

THROTTLE..... IDLE / CHECK 600-800 RPM

CARB HEAT ..... OFF

THROTTLE..... 1000 RPM

MIXTURE ..... SLIGHTLY LEAN

### 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:

MIXTURE .....CUTOFF

FUEL SELECTOR..... ROTATE TO OFF

BATTERY MASTER SWITCH .....OFF

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.

AIRPEED.....LOWER NOSE & ESTABLISH PITCH FOR BEST GLIDE

FLAPS .....AS NECESSARY

POWER.....AS AVAILABLE

TIME PERMITTING.....DECLARE AN EMERGENCY

MIXTURE .....CUTOFF

FUEL SELECTOR..... ROTATE TO OFF

IGNITION .....OFF

BATTERY MASTER .....OFF

## 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

LANDING LIGHT ..... ON

STROBE LIGHT .....(If installed) ON

TRANSPONDER..... ALT

## Engine Failure During Flight

AIRSPEED ..... BEST GLIDE / 65-70 KIAS  
NOTE WIND DIRECTION AND SPEED  
PICK & FLY TOWARDS LANDING SITE  
CARB HEAT ..... ON  
MIXTURE ..... RICH  
FUEL SELECTOR VALVE ..... BOTH  
PRIMER ..... IN & LOCKED  
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 / 65-70 KIAS (Flaps Up)  
MIXTURE ..... CUTOFF  
FUEL SELECTOR VALVE ..... OFF  
IGNITION SWITCH ..... OFF  
FLAPS ..... (40°/60 KIAS 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  
CARB HEAT ..... ON

### Go Around / Missed Approach

THROTTLE ..... FULL  
CARB HEAT ..... OFF  
FLAPS ..... (If > 20°) RETRACT 20°  
PITCH ..... EST CLIMB  
FLAPS ..... (> 55 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  
CARB HEAT ..... OFF  
THROTTLE ..... FULL

### Standardized Speeds

80 KIAS ..... FLAPS 10° - 1500 RPM  
70 KIAS ..... FLAPS 20° - TURNING BASE  
SHORT FINAL UNTIL  
65 KIAS ..... 10 to 20' ABOVE RUNWAY  
When landing assured.  
SOFT FIELD ..... 65 KIAS - FLAPS 30°  
SHORT FIELD ..... 62 KIAS - FLAPS 30°

### After Landing (Stopped)

TRIM ..... CENTERED  
CARB HEAT ..... OFF  
FLAPS ..... UP  
LANDING & TAXI LIGHTS ..... AS REQ  
MIXTURE ..... SLIGHTLY LEAN  
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  
LANDING LIGHT ..... ON  
STROBE LIGHT ..... (If installed) ON  
TRANSPONDER ..... ALT



**CESSNA 172N**  
Emergency & Abnormal Checklist

## Top Flight Aviation

### 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 ..... BEST GLIDE / 65-70 KIAS (Flaps Up)  
FLAPS ..... AS REQ.  
POWER ..... AS AVAILABLE  
TIME PERMITTING ..... DECLARE EMERGENCY  
MIXTURE ..... CUTOFF  
FUEL SELECTOR VALVE ..... OFF  
IGNITION SWITCH ..... OFF  
FLAPS ..... (40°/60 KIAS 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 SELECTOR..... OFF  
MASTER SWITCH ..... OFF  
CABIN HEAT & AIR (Except overhead vents) ..... OFF  
AIRSPEED .....  
..... INCREASE AS REQ TO EXTINGUISH FIRE  
REEFER TO "EMERGENCY LANDING NO ENGINE  
POWER" CHECKLIST

## Engine Fire During Start

Continue cranking in an attempt to get the engine started which would suck the flames and accumulated fuel through the carburetor and into the engine.

### IF ENGINE STARTS

THROTTLE..... (For 2 minutes) 1700 RPM  
MIXTURE ..... CUTOFF

### IF ENGINE DOES NOT START

MIXTURE ..... CUTOFF  
THROTTLE..... FULL  
CONTINUE CRANKING FOR A FEW SECONDS  
FUEL SELECTOR..... OFF  
MASTER SWITCH ..... OFF  
IGNITION SWITCH ..... OFF  
EVACUATE AIRCRAFT, OBTAIN FIRE EXTINGUISHER  
& EXTINGUISH FIRE IF PRACTICAL

## 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°.

## Over-Voltage Light Illuminates

MASTER SWITCH ..... OFF (Both sides)  
MASTER SWITCH ..... ON  
OVER VOLTAGE LIGHT ..... CHECK OFF

### IF OVER-VOLTAGE LIGHT ILLUMINATES AGAIN

LAND AS SOON AS POSSIBLE

## 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