



Before Start

NOSE-TIPS-TAIL-CHOCKS-AREA..... CLEAR
 PREFLIGHT INSPECTION.....COMPLETE
 PASSENGER BRIEF.....COMPLETE
 Seats & Seatbelts, Air Vents, Fire Extinguisher, Exits &
 Emergency, Traffic Scanning & Talking, Your questions?
 SEAT & SEAT BELTS ADJUST AND LOCK
 CIRCUIT BREAKERSCHECK 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 SWITCH.....ON
 BEACON.....ON
 NAV LIGHT.....(night only) ON
 FUEL GAUGE.....CHECK

Starting Engine

WARM ENGINE

MIXTURE.....CUTOFF
 THROTTLE.....1/4" OPEN

COLD ENGINE

MIXTURE.....RICH
 THROTTLE.....OPEN
 FUEL PUMP.....ON (Check P-Alt, 3-6 seconds)
 FUEL PUMP.....OFF
 MIXTURE.....CUTOFF

WAIT 60 SECONDS

STARTING

THROTTLE.....1/4" OPEN
 BRAKES HOLD
 PROP AREA..... CLEAR
 IGNITION.....START
 MIXTURE..... (Advance smoothly as engine starts) RICH

WHEN ENGINE STARTS

THROTTLE..... 1000 RPM
 OIL PRESSURE.....CHECK GREEN
 MIXTURE.....LEAN
 THROTTLE..... 1000 RPM
 FLAPS.....UP

After Start

AVIONICS MASTER SWITCH.....ON
 HEADSETSON
 COMS.....SET FREQS (WX/TWR/GND)
 WEATHER.....CHECK
 ALTIMETER..... SET
 FLIGHT INSTRUMENTS.....CHECK
 TRANSPONDER..... SET CODE / ALT MODE
 GPS ENTER WPT / FPL / APR AS REQ
 NAVSSET / COURSE

Taxi

AIRPORT DIAGRAM.....OUT / AVAILABLE
 LANDING & TAXI LIGHTS.....(Night/IFR)ON
 TAXI AREA..... CLEAR
 BRAKESCHECK
 TAXI CLEARANCE.....OBTAIN / BRIEF
 FLIGHT INSTRUMENTS...(TC/HI/MC)Check in turns.
 MAINTAIN STERILE COCKPIT

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
 SUCTION GAUGECHECK
 THROTTLE.....IDLE / CHECK 600-800 RPM
 THROTTLE..... 1000 RPM
 MIXTURE.....LEAN

EMERGENCY BRIEF

ENGINE FAILURE DURING TAKEOFF ROLL:

THROTTLE.....IDLE
 BRAKES.....APPLY
 FLAPS.....UP
 MIXTURE.....IDLE CUTOFF
 FUEL SHUTOFF VALVE..... OFF
 IGNITION SWITCH.....OFF
 STBY & MASTER BATT.....OFF

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF:

AIRSPEED.....LOWER NOSE & PITCH FOR BEST GLIDE
 MIXTURE.....IDLE CUTOFF
 FUEL SHUTOFF VALVE..... OFF
 IGNITION.....OFF
 FLAPS.....AS NECESSARY
 TIME PERMITTINGDECLARE AN EMERGENCY
 STBY & MASTER BATT.....OFF
 DO NOT ATTEMPT 180° TURN BELOW 1000AGL

Before Takeoff

FLIGHT CONTROLS FREE & CORRECT
 FLIGHT INSTRUMENTSCHECK & SET
 AUTOPILOT (If Installed).....OFF
 FUEL SELECTOR.....BOTH
 TRIM.....SET T/O
 FLAPS..... SET
 GPS(As req. for departure) SET
 CDI SOFTKEY.....SET NAV SOURCE
 HEADING INDICATOR..... SET

DEPARTURE BRIEF

Initial Altitude & Heading
Brief Departure Procedure.....COMPLETE
 ENGINE INSTRUMENTSCHECK
 SEAT BACKS..... MOST UPRIGHT POSITION
 SEAT BELT & SHOULDER HARNESS...FASTENED

FINAL ITEMS

DOORS & WINDOWSCLOSED & LOCKED
 STROBE & LANDING LIGHT.....ON
 TRAFFICCHECK
 MIXTURE.....FULL FWD
 SET FRQ / CONTACT TWR.....CHECK

172RK / 212BS (C172SP)

After Takeoff (1000 AGL)

AIRSPEED.....85 KIAS
FLAPS.....UP
THROTTLE..... FULL
MIXTURE..... RICH BELOW 3000' MSL
LANDING LIGHT.....OFF

Cruise

POWER.....SET
ENGINE INSTRUMENTSCHECK
MIXTURE.....LEAN
MAG COMPASS / HI..... CHECK / SET

In-Range / Descent

WEATHER.....CHECK
ALTIMETER..... SET
IFR PRELIMINARY APPROACH BRIEF

- *Type of Approach / Airport Name / Frequencies*
- *Runway length / Lighting*
- *Field Elevation / Sector Altitude*
- *Highest Obstacle / Terrain Review*
- *NAV / Course / Minimums / Missed*
- *Crosswind ComponentCOMPLETE*

HEADING INDICATOR TO COMPASS SET
FUEL SELECTOR.....BOTH
PARKING BRAKE.....CHECK RELEASED
LANDING LIGHTON
AIRPORT DIAGRAM (Keep available).....CHECK
SEAT BELTS FASTENED
CALL TWR / CTAF.....10-15NM OUT

—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.....RICH
POWER.....SET
FLAPS.....AS REQ

After Landing

TRIM.....CENTERED
FLAPS.....UP
MIXTURE.....LEAN
TAXI CLEARANCE..... OBTAIN & BRIEF

Shutdown/Terminate

TRANSPONDER.....1200
AVIONICS MASTEROFF
THROTTLE.....1000 RPM
MIXTURE.....CUTOFF
IGNITION SWITCH.....OFF
MASTER SWITCH.....OFF
ELECTRICAL SWITCHES.....OFF
RECORD TIMES.....COMPLETE
FLIGHT CONTROLSSECURE
TIEDOWN / CHOCKSECURE
PITOT GATOR.....INSTALL

V-Speeds

Vso.....40 KIAS
Vs1.....48 KIAS
Vr.....55 KIAS
Vx (50 ft obst.) 56 KIAS
Vx62 KIAS
Vg68 KIAS
Vy74 KIAS
Vfe.....85 KIAS
Va90-105 KIAS
Vno129 KIAS
Vne163 KIAS

Local Frequencies

CLL ATIS126.85
CLL Ground128.70
CLL Tower118.50
HOU Departure.....134.30
Flight Service122.65
CFD123.00
RWV, LHB, 60R..... 122.90
11R.....123.07

-Engine Failure During Flight-

AIRSPEED..... Vg 68 KIAS
FUEL SHUTOFF VALVE.....ON/IN
FUEL SELECTOR VALVE.....BOTH
FUEL PUMP.....ON
FLAPS.....UP
MIXTURE.....RICH
MAGNETOSCHECK ALL

IF PROP NOT WINDMILLING

IGNITION SWITCH.....START
MAGNETOSCHECK ALL
DECLARE EMERGENCY

-Engine Fire In Flight-

DECLARE EMERGENCY

MIXTURE.....IDLE CUT OFF
FUEL SHUTOFF VALVE.....OFF
FUEL PUMP.....OFF
MASTER SWITCH.....OFF
AIRSPEED..... 100 KIAS glide
CABIN HEAT & AIR.....OFF
IF FIRE PERSISTS.....INCREASE SPEED
DO NOT ATTEMPT ENGINE RESTART

-Emergency Landing No Engine Power-

LANDING AREASELECT & INSPECT
AIRSPEED.....Vg 68 KIAS
MIXTURE.....CUTOFF
FUEL SHUTOFF VALVE.....OFF
IGNITION & ELECTRICAL SWITCH.....OFF
FLAPS..... AS REQ
MASTER SWITCH.....OFF
DOORS(Prior to touchdown) UNLATCH
BRAKES APPLY HEAVILY

-Emergency Descent-

THROTTLE.....IDLE
DESCENDING TURNS.....30° 45° BANK
AIRSPEED.....100 KIAS
DECLARE EMERGENCY