

16895 Checklist (172SP G1000)

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 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
STBY BATT SWITCH..... TEST
Hold 10 seconds. Verify green TEST bulb stays on
STBY BATT SWITCH..... ARM
Verify PFD comes on.
ENGINE INDICATING SYSTEM
BUS E Volts - 24 VOLTS Minimum
M BUS Volts - 1.5 or Less
BATT S Amps -Verify Discharge Shown (negative)
STBY BATT Annunciator Listed in Alerts
No Red X's on Engine Indicators.....CHECK
MASTER SWITCH.....ON
BEACON.....ON
POSITION 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
AMPS (M BATT & S BATT)CHECK (positive charge)
LOW VOLTS ANNUNCIATOR CHECK (not visible)
FLAPS.....UP

After Start

AVIONICS MASTER SWITCH.....ON
HEADSETSON
MFD DATABASE.....CHECK/ENT
FUEL REMAINING.....SET (on MFD)
COMS.....SET FREQS (WX/TWR/GND)
WEATHER.....CHECK
ALTIMETER.....(PFD & Stby) SET
FLIGHT INSTRUMENTS.....(PFD & STBY) CHECK
TRANSPONDER..... SET CODE / ALT MODE
GPSENTER WPT / FPL / APR AS REQ
NAVSSET / COURSE
CDI SOFTKEY.....VOR/LOC/GPS

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

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.....CHECK

VAC INDICATOR.....CHECK
AMMETER & VOLTMETER.....CHECK POSITIVE
ANNUNCIATORS.....CHECK (NONE)
THROTTLE.....IDLE / CHECK 600-800 RPM
THROTTLE.....1000 RPM
MIXTURE.....LEAN FOR RPM RISE
S BATT AMPS.....VERIFY LESS THAN 0.4

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

PRE-TAKEOFF BRIEF.....COMPLETE
FLIGHT CONTROLS FREE & CORRECT
FLIGHT INSTRUMENTS PFD.....CHECK & SET
STBY FLIGHT INSTRUMENTS.....CHECK
FUEL SELECTOR.....BOTH
TRIM.....SET T/O
FLAPS..... SET
GPS(As req. for departure) SET
DEPARTURE BRIEF

Initial Altitude & Heading

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

BEFORE TAKEOFF FINAL ITEMS

—————NEXT PAGE—————

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FINAL ITEMS

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

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

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 Component*COMPLETE

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 FOR RPM RISE
TAXI CLEARANCE..... OBTAIN & BRIEF

Shutdown/Terminate

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

V-Speeds

Vso.....40 KIAS
Vs1.....48 KIAS
Vx (50 ft obst.) 56 KIAS
Vx 62 KIAS
Vg 68 KIAS
Vy 74 KIAS
Vfe.....85 KIAS
Va90-105 KIAS
Vno129 KIAS
Vne163 KIAS

-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.....120 KIAS
DECLARE EMERGENCY