



N959JA
C172S

7/1/2023

AIR SPEEDS (KIAS)

V _G	68
V _{S0}	40
V _{S1}	48
V _X	62
V _Y	74
V _{FE}	85
V _{FE} (10° Only).....	110
V _A (1900lbs-2550lbs).....	90-105
V _{NO}	129
V _{NE}	163

WEIGHT & BALANCE

EMPTY WT.....	1693 LBS
GROSS WT.....	2550 LBS

CAPACITIES

TOTAL FUEL.....	56 GALLONS
USABLE FUEL.....	53 GALLONS
MINIMUM OIL.....	6 QUARTS

CONTACT INFORMATION

VFA.....	(123.3) 802-863-5988
BTV AIRPORT POLICE.....	802-658-7663
ATIS.....	(123.8) 802-657-4490
CLEARANCE.....	(119.15)
GROUND.....	(126.3)
TOWER.....	(118.3) 802-657-4402
APPROACH.....	(121.1) 802-657-4401

LIGHT USAGE

START / SHUTDOWN.....	BCN / NAV
RAMP.....	BCN / NAV / TXI*
RUNUP.....	BCN / NAV
TAXI.....	BCN / NAV / TXI*
CROSS RWY.....	ALL LGTS ON
TAKEOFF / CLIMB.....	ALL LGTS ON
PRAC. AREA.....	ALL LGTS ON
CRUISE.....	BCN / NAV / STRB
DESCENT / LANDING.....	ALL LGTS ON

* TAXI LIGHT SHALL BE ON WHENEVER AIRCRAFT IS IN MOTION AND OFF WHEN AIRCRAFT IS STOPPED.

NOTE

IF ENVIRONMENTAL CONDITIONS EXIST IN WHICH THE EXTERNAL LIGHTS CREATE A DISTRACTION TO FLIGHT, TURN THE EXTERNAL LIGHTS OFF AS APPROPRIATE.

PREFLIGHT

AIRCRAFT LOGBOOK.....	CHECK
AIRCRAFT / PILOT DOCS.....	CHECK
CONTROL LOCK.....	REMOVE
COVERS.....	REMOVE
IGNITION SWITCH.....	OFF
AVIONICS SWITCH.....	OFF
MASTER SWITCH.....	ON
FLAPS.....	CLEAR / DOWN
FUEL GAUGES.....	CHECK
LIGHTS.....	CHECK / OFF
PITOT HEAT.....	CHECK / OFF
MASTER SWITCH.....	OFF
FUEL SHUTOFF VALVE.....	ON
FUEL SELECTOR.....	BOTH
FIRE EXTINGUISHER.....	GREEN ARC

INTERIOR CHECKS COMPLETE

FUEL QUANTITY.....	CHECKED
FUEL SUMPS/STRAINER.....	CHECKED
FUEL TANKS / CAPS.....	CHECKED
AIRCRAFT EXTERIOR.....	CHECKED
CONTROL SURFACES.....	CHECKED
ENGINE OIL LEVEL.....	CHECKED
LANDING GEAR.....	CHECKED
ALL TIEDOWNS.....	REMOVED
ALL COVERS.....	REMOVED
CARGO DOOR.....	SECURED
PREHEAT.....	DISCONNECTED
TOWBAR.....	REMOVED
CHOCKS.....	REMOVED

EXTERNAL CHECKS COMPLETE

PREFLIGHT.....COMPLETE

BEFORE START

PASSENGER BRIEF.....	SEAT BELTS
DOORS, EMERGENCIES	
STERILE COCKPIT	
ALL COVERS.....	PRESENT IN AIRCRAFT
SEATS / BELTS.....	LOCK / ON
BRAKES.....	CHECK / SET
CIRCUIT BREAKERS.....	IN
FUEL SELECTOR.....	BOTH
THROTTLE.....	¼ INCH OPEN
MIXTURE.....	IDLE CUTOFF
STBY BATT SWITCH.....	ARM
MASTER SWITCH.....	ON
LIGHTS.....	SET
AVIONICS SWITCH.....	OFF

IF ENGINE COLD

ELECTRIC FUEL PUMP.....	ON
MIXTURE.....	PRIME
ELECTRIC FUEL PUMP.....	OFF

ENGINE START

PROP AREA.....	CLEAR
IGNITION SWITCH.....	START / BOTH
ENGINE STARTED	
MIXTURE.....	ADVANCE
THROTTLE.....	1000 RPM

BEFORE TAXI

ENGINE INSTRUMENTS.....	CHECK
AMPS / VOLTS.....	CHECK
MIXTURE.....	LEAN
AVIONICS SWITCH.....	ON
FLAPS.....	RETRACT
LIGHTS.....	SET
BRAKE CHECK.....	COMPLETE

RUN UP

BRAKES.....	SET
RADIOS / GPS.....	SET
ATIS / WEATHER.....	CHECK
FUEL QUANTITY.....	GAL REM SET
FLT INSTRUMENTS.....	CHECK
FLT CONTROLS.....	FREE / CORRECT
FUEL SELECTOR.....	BOTH
TRIM.....	SET FOR TAKEOFF
MIXTURE.....	FULL RICH
ENGINE INSTRUMENTS.....	GREEN
THROTTLE.....	1800 RPM
AMPS/VOLTS.....	CHECK
MAGNETOS.....	(<150 RPM) CHECK
ENGINE INSTRUMENTS.....	CHECK
IDLE.....	CHECK
THROTTLE.....	1000 RPM
MIXTURE.....	LEAN
THROTTLE FRICTION LOCK.....	SET
ALTERNATE STATIC.....	CHECK
STBY BATT SWITCH.....	TEST
ALTIMETERS.....	SET
TRANSPONDER.....	ASSIGNED / SET
TAXI ROUTE.....	BRIEF

BEFORE TAKEOFF

SEATS / BELTS.....	LOCK / ON
PRE-TAKEOFF BRIEF.....	COMPLETE
FLAPS.....	SET
MIXTURE.....	FULL RICH
DOORS.....	LATCH
BEFORE CROSSING HOLDSHORT LINE	
LIGHTS.....	SET
PITOT HEAT.....	AS REQUIRED

TAKEOFF

RUNWAY.....	VERIFY
X-WIND CORRECTION.....	APPLY
THROTTLE.....	FULL OPEN
ROTATE.....	55 KIAS
CLIMB SPEED.....	V _Y

CLIMB

FLAPS.....	RETRACT
AIR SPEED.....	70-85 KIAS
THROTTLE.....	FULL OPEN
MIXTURE.....	LEAN AS REQUIRED

CRUISE

POWER.....	SET
MIXTURE.....	LEAN
LIGHTS.....	SET

DESCENT BEFORE LANDING

ATIS / WEATHER.....	CHECK
ALTIMETERS.....	SET
APPROACH BRIEFING.....	COMPLETE
SEATS / BELTS.....	SECURE

LANDING

FUEL SELECTOR.....	BOTH
LIGHTS.....	SET
MIXTURE.....	FULL RICH
LANDING CLEARANCE.....	VERIFY
FINAL APPROACH SPEED	
FLAPS UP.....	65-75 KIAS
FULL FLAPS (30°).....	60-70 KIAS

GO AROUND

THROTTLE.....	FULL OPEN
FLAPS.....	20° IMMEDIATELY
CLIMB SPEED.....	60 KIAS
FLAPS (POSITIVE RATE).....	10°
AIR SPEED.....	V _Y
FLAPS.....	RETRACT

AFTER LANDING

TRIM.....	SET FOR TAKEOFF
FLAPS.....	RETRACT
MIXTURE.....	LEAN
LIGHTS / PITOT HEAT.....	SET

SHUTDOWN

BRAKES SET
 THROTTLE 1000 RPM
 AVIONICS SWITCH OFF
 MIXTURE IDLE CUTOFF
 MAGNETOS OFF
 KEY REMOVE
 LIGHTS SET
 MASTER SWITCH OFF
 STBY BATT SWITCH OFF
 FUEL SELECTOR RIGHT
 SECURING AIRCRAFT

CHOCKS INSTALL
 TOWBAR REMOVE
 CONTROL LOCK INSTALL
 ALL TIEDOWNS SECURE
 ALL COVERS INSTALL
 AIRCRAFT TIMES RECORD
 360° WALK AROUND COMPLETE

SOFT FIELD TAKEOFF

FLAPS 10°
 THROTTLE FULL OPEN
 ELEVATOR LIFT NOSEWHEEL
 CLIMB SPEED V_x or V_y
 AT A SAFE ALTITUDE & AIRSPEED: CLIMBING
 AIRSPEED V_x or V_y
 FLAPS RETRACT

SOFT FIELD LANDING

FLAPS 30°
 APPROACH AIRSPEED 61 KIAS
 IN THE FLARE

ADD POWER TO SOFTEN LANDING**SHORT FIELD TAKEOFF**

FLAPS 10°
 BRAKES SET
 THROTTLE FULL OPEN
 ENGINE INSTRUMENTS GREEN
 BRAKES RELEASE
 LIFT NOSEWHEEL 55 KIAS
 CLIMB SPEED 56 KIAS
 AT A SAFE ALTITUDE & AIRSPEED: CLIMBING
 AIRSPEED V_x or V_y
 FLAPS RETRACT

SHORT FIELD LANDING

FLAPS 30°
 APPROACH SPEED 61 KIAS
 AFTER TOUCHDOWN
 BRAKES APPLY HEAVILY
 FLAPS RETRACT
 YOKE APPLY BACK PRESSURE

ENGINE FAILURE

AIRSPEED BEST GLIDE (68 KIAS)
 LANDING SITE SELECT
 FUEL SELECTOR BOTH
 FUEL SHUT-OFF VALVE ON
 MIXTURE RICH
 ELECTRIC FUEL PUMP ON
 IGNITION SWITCH BOTH

REFER TO POH 3-5

NO RESTART - FORCED LANDING

AIRSPEED 65-70 KIAS
 ELECTRIC FUEL PUMP OFF
 MIXTURE IDLE CUTOFF
 MAGNETOS OFF
 FUEL SHUT-OFF VALVE OFF
 TRANSPONDER CODE 7700
 COMMUNICATIONS .. AS POSSIBLE
 PASSENGERS BRIEF
 TIGHTEN BELTS/HARNESSES
 WHEN LANDING IS ASSURED:
 FLAPS AS REQUIRED
 MASTER OFF
 STBY BATT SWITCH OFF
 DOORS UNLATCH
 BRAKES APPLY HEAVILY

REFER TO POH 3-5

ENGINE FIRE (DURING START)

CRANKING CONTINUE
 IF ENGINE STARTS:
 POWER 1800 RPM
 WAIT FOR 2 MINUTES
 MIXTURE IDLE CUTOFF
 IF ENGINE DOES NOT START:
 CRANKING CONTINUE
 THROTTLE FULL OPEN
 MIXTURE IDLE CUTOFF

ELECTRIC FUEL PUMP OFF
 FIRE EXTINGUISHER READY
 IGNITION SWITCH OFF
 MASTER SWITCH OFF
 STBY BATT SWITCH OFF
 FUEL SHUT-OFF VALVE OFF
 FIRE EXTINGUISHER ... DISCHARGE

REFER TO POH 3-7

ENGINE FIRE (IN FLIGHT)

FUEL SHUT-OFF VALVE OFF
 MIXTURE IDLE CUTOFF
 ELECTRIC FUEL PUMP OFF
 MASTER SWITCH OFF
 CABIN HEAT / AIR OFF

REFER TO NO RESTART - FORCED LANDING CHECKLIST

CABIN FIRE (IN FLIGHT)

MASTER SWITCH OFF
 CABIN HEAT / AIR CLOSED
 FIRE EXTINGUISHER .. DISCHARGE

LAND IMMEDIATELY
 REFER TO NO RESTART - FORCED LANDING CHECKLIST

EMERGENCY DESCENT

THROTTLE IDLE
 BANK 30-45
 AIRSPEED 124 KIAS

LAND IMMEDIATELY
 REFER TO NO RESTART - FORCED LANDING CHECKLIST

WING FIRE

EXTERIOR LIGHTS OFF
 PITOT HEAT OFF
 SIDESLIP ESTABLISH

NOTE

PERFORM A SIDESLIP TO KEEP FLAMES AWAY FROM THE FUEL TANK AND CABIN. LAND AS SOON AS POSSIBLE USING WING FLAPS ONLY AS REQUIRED FOR FINAL APPROACH AND TOUCHDOWN.

LOW VOLTS

ALT SWITCH OFF
 ALT FIELD CB RESET
 ALT SWITCH ON
 LOW VOLTS ANN CHECK OFF
 M BUS VOLTS 27.5 MIN
 M BATT AMPS ... CHECK CHARGING
 IF LOW VOLTS ANN. REMAINS ON:

ALT SWITCH OFF
 AVIONICS SWITCH BUS - #1 OFF
 LIGHTS / PITOT HEAT OFF
 CABIN PWR 12V OFF
 COM / NAV 1 TUNE / ACTIVE
 AVIONICS SWITCH BUS - #2 OFF
 LAND AS SOON AS PRACTICAL

REFER TO POH 3-11