



N738PV
C172N

8/14/2025

AIRSPEDS (KIAS)

V _G	65
V _{S0}	41
V _{S1}	47
V _X	59
V _Y	72
V _{FE}	85
V _A	97
V _{NO}	128
V _{NE}	160

WEIGHT & BALANCE

EMPTY WT	1437 LBS
GROSS WT	2400 LBS

CAPACITIES

TOTAL FUEL	43 GALLONS
USABLE FUEL	40 GALLONS
MINIMUM OIL	6 QUARTS

CONTACT INFORMATION

VFA	(123.3) 802-863-5988
BTW 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 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
CARGO DOOR	SECURED
PREHEAT	DISCONNECTED
TOWBAR	REMOVED
CHOCKS	REMOVED

EXTERNAL CHECKS COMPLETE

PREFLIGHT..... COMPLETE

BEFORE START

CFI WALK-AROUND	VERIFIED
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	FULL RICH
MASTER SWITCH	ON
LIGHTS	SET
AVIONICS SWITCH	OFF

IF ENGINE COLD

PRIMER

PRIME / LOCK

ENGINE START

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

BEFORE TAXI

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

RUN UP

BRAKES	SET
RADIOS / GPS	SET
ATIS / WEATHER	CHECK
FLT INSTRUMENTS	CHECK
FLT CONTROLS	FREE / CORRECT
FUEL SELECTOR	BOTH
TRIM	SET FOR TAKEOFF
MIXTURE	FULL RICH
ENGINE INSTRUMENTS	GREEN
THROTTLE	1700 RPM

AMPS	CHECK
MAGNETOS	(<125 RPM) CHECK
CARB HEAT	ON
ENGINE INSTRUMENTS	CHECK
IDLE	CHECK
THROTTLE	1000 RPM

CARB HEAT	OFF
MIXTURE	LEAN
THROTTLE FRICTION LOCK.....	SET
ALTERNATE STATIC	CHECK
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
AIRSPEED	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
CARB HEAT	ON
LANDING CLEARANCE	VERIFY

FINAL APPROACH SPEED

FLAPS UP	65-70 KIAS
FULL FLAPS (30°)	60-70 KIAS

GO AROUND

THROTTLE	FULL OPEN
FLAPS	20° IMMEDIATELY
CLIMB SPEED	55 KIAS
FLAPS (POSITIVE RATE)	10°
AIRSPEED	V _Y
CARB HEAT	OFF
FLAPS	RETRACT

AFTER LANDING

TRIM	SET FOR TAKEOFF
FLAPS	RETRACT
CARB HEAT	OFF
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
 FUEL SELECTOR RIGHT

SECURING AIRCRAFT

CHOCKS INSTALL
 TOWBAR REMOVE
 AIR VENTS CLOSED
 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 60 KIAS
 IN THE FLARE

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

FLAPS UP
 BRAKES SET
 THROTTLE FULL OPEN
 ENGINE INSTRUMENTS GREEN
 BRAKES RELEASE
 LIFT NOSEWHEEL 55 KIAS
 CLIMB SPEED 59 KIAS
 AT A SAFE ALTITUDE & AIRSPEED: CLIMBING
 AIRSPEED V_X or V_Y

SHORT FIELD LANDING

FLAPS 30°
 APPROACH SPEED 60 KIAS
 AFTER TOUCHDOWN
 BRAKES APPLY HEAVILY
 FLAPS RETRACT
 YOKE APPLY BACK PRESSURE

ENGINE FAILURE

AIRSPEED ... BEST GLIDE (65 KIAS)
 LANDING SITE SELECT
 FUEL SELECTOR BOTH
 MIXTURE RICH
 CARB HEAT ON
 PRIMER IN / LOCKED
 IGNITION SWITCH BOTH

REFER TO POH 3-9

NO RESTART - FORCED LANDING

AIRSPEED 60-65 KIAS
 MIXTURE IDLE CUTOFF
 MAGNETOS OFF
 FUEL SELECTOR OFF
 TRANSPONDER CODE 7700
 COMMUNICATIONS ... AS POSSIBLE
 PASSENGERS BRIEF
 TIGHTEN BELTS/HARNESSES
 WHEN LANDING IS ASSURED:
 FLAPS AS REQUIRED
 MASTER OFF
 DOORS UNLATCH
 BRAKES APPLY HEAVILY

REFER TO POH 3-10

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

FIRE EXTINGUISHER READY
 IGNITION SWITCH OFF
 MASTER SWITCH OFF
 FUEL SELECTOR OFF
 FIRE EXTINGUISHER ... DISCHARGE

REFER TO POH 3-5

ENGINE FIRE (IN FLIGHT)

EMERG DESCENT ESTABLISH
 FUEL SELECTOR OFF
 THROTTLE CLOSED
 MIXTURE IDLE CUTOFF
 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 123 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.

AMMETER DISCHARGE

AVIONICS SWITCH OFF
 ALTERNATOR FIELD CB RESET
 ALTERNATOR MASTER CYCLE
 IF AMMETER INDICATES DISCHARGING:

ALTERNATOR MASTER OFF
 LAND AS SOON AS PRACTICAL
 REFER TO POH 3-8