

**AIRSPEED LIMITATIONS**

Airspeed limitations and their operational significance are shown in Figure 2-1. This calibration assumes zero instrument error.

V / SPEED		KCAS/KIAS	REMARKS
V <sub>NE</sub>	Never Exceed Speed	195/195	Do not exceed this speed in any operation.
V <sub>NO</sub>	Maximum Structural Cruising Speed	174/174	Do not exceed this speed except in smooth air, and then only with caution.
V <sub>A</sub>	Maneuvering Speed at:		
	lbs. /Kg.		
	2600/1179	111/111	Do not make full or abrupt control movement above this speed.
	2900/1315	117/117	
	3200/1452	123/123	
	3368/1528	126/127	
V <sub>FE</sub>	Maximum Flap Extended Speed	109/110	Do not exceed this speed with flaps in full down position.
V <sub>LE</sub>	Maximum Landing Gear Extended Speed	165/165	Maximum speed at which the aircraft can be safely flown with the landing gear extended.
V <sub>LO</sub> (EXT)	Max. Speed for Gear Extension	139/140	Max. speed at which the landing gear can be safely extended.
V <sub>LO</sub> (RET)	Max. Speed for Gear Retraction	104/106	Maximum speed at which the landing gear can be safely retracted.
	Maximum Pilot Window Open Speed	133/132 * *Some A/C may show lower speeds	Do not exceed this speed with pilot window open.

FIGURE 2-1 AIRSPEED LIMITATIONS

**CENTER OF GRAVITY LIMITS (GEAR DOWN)**

Most Forward . . . . .	Fus. Sta. 41.0 IN. (104.1 cm) @ 2430 LB. (1102 Kg)	16.79% MAC
Intermediate Forward . . . . .	Fus. Sta. 44 IN.(111.7 cm) @ 3300 lb. (1497 Kg)	21.7% MAC
Forward Gross . . . . .	Fus. Sta. 46.0 IN. (116.8 cm) @ 3368 lb (1528 Kg)	24.98% MAC
Aft Gross . . . . .	Fus. Sta. 51.0 IN(129.5 cm) @ 3368 lb. (1528 Kg)	33.18% MAC
MAC (at Wing Sta. 94.85) (241 cm)		61.00 in.

Datum(station zero) is 13 inches (32.5 cm) aft of the center line of the nose gear trunion at-  
tach/pivot bolts.

**MANEUVER LIMITS**

This airplane must be operated as a Normal Category airplane. Aerobatic maneuvers, includ-  
ing spins, are prohibited.

**| NOTE |**

Up to 500 foot altitude loss may occur during stalls at maximum weight.

**FLIGHT LOAD FACTOR LIMITS**

Maximum Positive Load Factor	
Flaps Up . . . . .	+3.8 g.
Flaps Down (33 Degrees) . . . . .	+2.0 g.
Maximum Negative Load Factor	
Flaps Up . . . . .	-1.5 g.
Flaps Down . . . . .	.0.0 g.

**FLIGHT CREW**

Pilot . . . . .	One
Maximum passenger seating configuration . . . . .	Three

**OPERATING LIMITATIONS**

- Maximum operating altitude is 25,000 feet MSL.
- Takeoffs with the cowl flaps inoperative are prohibited.
- Enginerestarts should not be conducted above 23,000 ft. altitude.
- When operating above 22,000 feet and at manifold pressures above 32 IN. Hg., only best power mixture (1650° F (898° C) TIT) or richer is permitted

**OXYGEN SYSTEM LIMITATIONS**

**| NOTE |**

Only masks which have end fittings marked with a green band are acceptable for use  
with this system.