OPERATING LIMITATIONS

Normal Gross Takeoff Weight Extended Range Takeoff Weight Landing Weight	800 830 750	1bs
Design Limit Load Factors at Normal (800 lbs) Gross Weight	+6G	-3G

AIRSPEEDS	IAS
Maneuvering Speed (Va) Demonstrated Dive Speed (Vd) Never Exceed Speed (Vne) Stall Speeds	165 mph 225 mph 210 mph
0 ⁰ Flaps (Vs1) 50 ⁰ Flaps (Vs0) Flap Extended/Extension Speeds	70 mph 57 mph (Vfo/Vfe)
15 ⁰ Flap 50 ⁰ Flap	130 mph 110 mph
Approach Speeds 0° Flap	·
15 ⁰ Flap	95 mph 90 mph
50 ⁰ Flap Climb Speeds	80-85 mph
Takeoff Climb (15 ⁰ Flap) Best Rate (0 ⁰ Flap) Balked Landing (50 ⁰ Flap) Cruise Climb (0 ⁰ Flap)	90 mph 105 mph 85 mph
orarise orimb (o rrap)	120 mph

Demonstrated Crosswind Component

21 Knots

LOADING LIMITS

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Most Aft Center of Gravity 35% MAC (F.S. 50.46) Most Fwd C.G. - Gross Weight (800 lbs) 18% MAC (F.S. 46.15) Most Fwd C.G. - Regardless of Weight (700 lbs and less) 15% MAC (F.S. 45.50)
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Externally Verifiable Reference Dimension. (Datum for all other locations, gear reactions, etc.)

Wing Leading Edge at BL 12.5 (root) F.S. 39.50

OPERATING LIMITATIONS (Continued)

MANEUVERS

INTENTIONAL SPINNING PROHIBITED
Spin recovery technique -- forward stick and rudder against rotation, ailerons neutral.

Aileron Rolls: Entry speeds 150 to 180 mph raise the nose 20° to 30° above horizon and use full aileron travel with rudder to coordinate. Relax back pressure while inverted.

LOOPS: Entry speed 180 mph and 3.5G pull

NORMAL OPERATIONS

 $\overline{\text{TAKE OFF}}$: Use brakes for directional control until rudder becomes effective. Raise nosewheel at 60 mph (IAS) and allow mains to fly off as speed increases. Use 150 flap for take off and initial climb segment. Take off climb at 90 mph.

APPROACH: Slow to 130 mph and deploy 15^{0} flap. Carburetor heat on. Slow to 110 and deploy 50^{0} flaps. Approach at 80 to 85 mph and idle power. Flare to nose high touch down at about 60 to 65 mph.