

# MUSTANG II

## Aircraft Design Specifications

Suggested Gross Weight (Aerobatic Category)	1,350 pounds
Suggested Gross Weight (Utility Category)	1,600 pounds
Baggage Capacity	80 pounds
Power Recommendations	150 to 200 hp
Maximum Continuous Power	180 hp
Maximum Takeoff/Climb Power	210 hp
Wing Loading @ 1600 pounds	16.47 lb/ft <sup>2</sup>
Wing Aspect Ratio	6.1
Power Loading (200 to 150hp)	8.0 to 10.7 lb/hp

Wing Span	24' 4"	Height	5' 9"
Fuselage Length	19' 6"	Max. Fuselage Width	40"
Max. Prop Diameter	74"	Wheel Tread	6' 9"

Wing Area	97.1 ft <sup>2</sup>	Fin Area	4.25 ft <sup>2</sup>
Flap Area	8.0 ft <sup>2</sup>	Elevator Area	6.85 ft <sup>2</sup>
Aileron Area	4.8 ft <sup>2</sup>	Rudder Area	3.72 ft <sup>2</sup>
Stabilizer Area	10 ft <sup>2</sup>	Trim Tab Area (elevator)	0.30 ft <sup>2</sup>

Flap Travel	40 deg maximum Down
Aileron Travel	20 deg Up, 15 deg Down
Elevator Travel	20 deg Up, 20 deg Down
Elevator Trim Tab Travel	20 deg Up, 40 deg Down
Rudder Travel	20 deg Right, 20 deg Left
Wing Angle of Incidence	+1.0 deg
Stabilizer Angle of Incidence	-1.5 deg
Wing Wash Out (geometric twist)	+2.5 deg
Wing Dihedral (outer panels)	+5.0 deg
Airfoil (modified)	64A212 (root), 64A210 (tip)
Thrust Line Above Fuselage Center Line	1.25 in

Center of Gravity Limits	16% to 28% MAC
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Never Exceed Speed (V <sub>ne</sub> , smooth air)	230 mph
Max. Structural Cruise Speed (V <sub>no</sub> )	195 mph
Max. Maneuvering Speed (V <sub>A</sub> )	150 mph
Maximum Flap Extension Speed (V <sub>fe</sub> )	100 mph
Stall Speed Clean at 1,600 lbs (V <sub>s</sub> )	62 mph
Stall Speed Full Flap at 1,600 lbs (V <sub>so</sub> )	57 mph

Maximum Structural Loading - Aerobatic Cat. +/- 6 g's yield / 9 g's ultimate