

**DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION**

3G1 Sheet 1 UNIVERSITY OF MINNESOTA UMG-3 January 12, 1950
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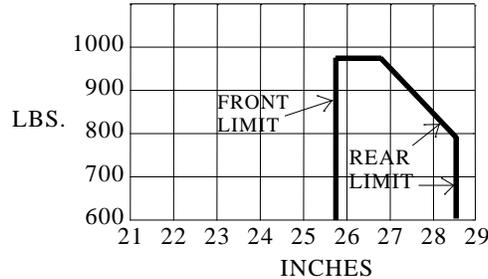
GLIDER SPECIFICATION NO. 3G1

A glider complying with the terms of this specification and conforming with approved data on file with the Civil Aeronautics Administration will be issued an airworthiness certificate when, in the opinion of the Administrator, the glider is in condition for safe operation.

Manufacturer: University of Minnesota
Minneapolis, Minnesota

I - Model UMG-3, 2 PCLM, Approved December 23, 1949

Type	Class I
Airspeed limits	Glide or dive 100 mph True Ind.
	Airplane tow 100 mph True Ind.
	Auto-winch tow 67 True Ind.
C.G. range	Front limit (+25.7) at 970 lbs. Rear limit (+26.8) at 970 lbs. with straight line to (+28.5) at 795 lbs.



Datum	Leading edge of wing at root
Leveling means	Four (4) lugs at fuselage panel points
Maximum weight	970 lbs.
No. of seats	2 (1 at -20), (1 at +22) (Placard: "Solo only from front seat.")
Control surface movements	Elevator 25° Up 25° Down
	Aileron 21° Up 21° Down
	Rudder 15° Right 15° Left
	Adjustable stabilizer 1° Up
Serial Nos. eligible	No. 1 and up
Required equipment	Items 201, 202, 204, 205, 401, 601 and 602

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Specifications Pertinent to All Models

Certification basis	Glider Type Certificate No. 3G1 (CAR 5)		
Production basis	None. Prior to original certification a CAA representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data, and a check of the flight characteristics.		
Equipment:	A plus (+) or minus (-) sign preceding the weight of an item indicates net weight change when that item is installed.		
Landing Gear			
	201.	12x5-3 wheel (Goodyear Airwheel Tail wheel)	10 lbs. (+28)
	202.	12x5-3 4-ply rating tire (SM) and tube	5 lbs. (+28)
	204.	Tail skid, Dwg. No. 3042B	Use Values as Measured
	205.	Nose skid, Dwg. No. 6004A	4 lbs. (-20)
Interior Equipment			
	401.	Airspeed indicator	
	402.	Extra instruments	
		(a) Front instrument panel	4 lbs. (-40)
		(b) Rear instrument panel	4 lbs. (- 2)
Miscellaneous			
	601.	Non-trimming aileron trailing edge strip, Dwg. No. 2024C	
	602.	Ballast-Variable per NOTES 1 and 2	(-20)

NOTE 1. The following placards must be installed in full view of the pilot:

- (1) "Solo only from front seat."
- (2) "Instrument flight prohibited."
- (3) "When flown solo, weight of pilot, parachute and ballast must not be less than 180 lbs. For other loadings, see Loading Schedule."

NOTE 2. The following "Loading Schedule" must be displayed:

DUAL OPERATION		Weight in <u>front</u> seat should be:	
When weight in <u>rear</u> seat is:		Not less than:	Not more than:
120 lbs.		165 lbs.	235 lbs.
130 lbs.		165 lbs.	225 lbs.
140 lbs.		165 lbs.	215 lbs.
150 lbs.		160 lbs.	205 lbs.
160 lbs.		160 lbs.	195 lbs.
170 lbs.		160 lbs.	185 lbs.
180 lbs.		160 lbs.	175 lbs.
190 lbs.		155 lbs.	165 lbs.
200 lbs.		155 lbs.	155 lbs.

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