

A11SO
Revision 6
Gulfstream Aerospace
Model 111
May 1, 1989

This data sheet, which is a part of Type Certificate A11SO, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Engine	Lycoming O-360-A4G or O-360-A1G6	
Fuel	100/130 minimum grade aviation gasoline	
Engine Limits	For all operations, 2700 r.p.m. (180 hp)	
Propeller and Propeller Limits	<p><u>Approved for use with O-360-A4G engine only</u> Sensenich Fixed Pitch, Model 76EM8S24-0-58 Static r.p.m. at maximum permissible throttle Setting, not over 2380, not under 2280 r.p.m. No additional tolerance permitted. Diameter: 76 inches, no cut off permitted Spinner assembly: Aero Commander 46440 is required.</p> <p><u>Approved For use with O-360-A1G6 engine only</u> Hartzell Constant Speed, Model HC-E2YR-1BF or HC-E2YR-1B Blade, Model F7666A or 7666A Pitch: High 28° - 30°, Low 13° at Blade Station 30 inches Diameter: Not over 76", not under 72" Governor: Edo-Aire 34-828-014 Spinner: Hartzell C3533 or C3533P is required</p>	
Airspeed Limits (CAS)	Never exceed	153 Kts (176 m.p.h.) CAS
	Maximum structural cruising	136 Kts (157 m.p.h.) CAS
	Maneuvering (normal)	111 Kts (128 m.p.h.) CAS
	Maneuvering (utility)	108 Kts (124 m.p.h.) CAS
	Flaps extended (40°)	109 Kts (125 m.p.h.) CAS

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C.G. Range

Normal Category

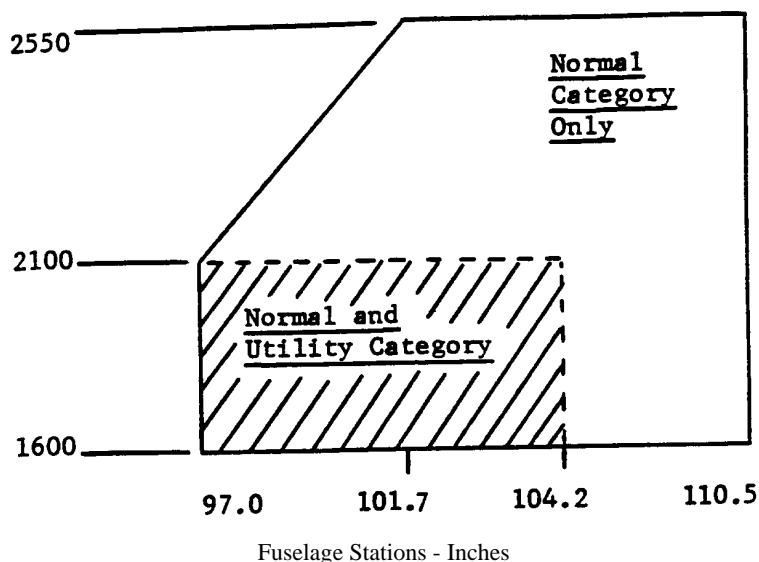
(+97.0) to (+110.5) at 2100 lbs. or less

(+101.7) to (+110.5) at 2550 lbs.

Utility Category

(+97.0) to (+104.2) at 2100 lbs. or less

Straight line variation between points given.



Empty Wt. C.G. Range

None

Datum

62.5 inches forward of firewall (front face)

Leveling means

Bottom of fuselage, outer surface, from F.S. 62.5 to F.S. 97.6

Maximum Weight

2550 lbs. (Normal Category)

2100 lbs. (Utility Category)

No. of Seats

2 occupants at (+99.0)

2 occupants at (+136.0) Normal Category only

Maximum Baggage

200 lbs. (at +164.0)

Fuel Capacity

64 gal. usable. (2 wing tanks) at +108.6

(See Note 1 for unusable fuel)

Oil Capacity

8 qts. at +46.5 (6 qts. usable)

(See Note 1 for undrainable oil)

Control Surface Movements

Wing flaps

Up * 0°

Down 40° ± 2°

Aileron

Up 25° ± 2°

Down 9° ± 2°

Rudder

Left **22° ± 2°

Right 28° ± 2°

Elevator

Up 30° ± 2°

Down 15° ± 2°

Elevator tab

Up 15° ± 2°

Down 25° ± 2°, - 0°

* 0 to be ± 1/8" of trailing edge of aileron

** From vertical stabilizer centerline

Nosewheel movement

Steering ± 15°

Castoring ± 30°

Serial Nos. Eligible	10001 and up
Certification basis	Application for Type Certificate dated 10 December 1969. FAR 23, effective 1 February 1965, including Amendments 1 thru 7, and FAR 21, effective 1 February 1965, including Amendments 1 thru 26. Type Certificate A11SO issued 1 June 1972.
Production basis	None. Prior to original certification of each airplane, an FAA representative must perform a detailed inspection for workmanship, material and conformity with the approved technical data, and a check of the flight characteristics.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the aircraft for certification. FAA approved Equipment List. FAA Approved Airplane Flight Manual dated 1 June 1972.

NOTE 1. Current weight and balance report, including list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity locations must include undrainable engine oil (not included in the oil capacity) and unusable fuel as noted below:

Unusable Fuel	(3 gal. per tank) 36 lbs. at (+112.1)
Undrainable Oil	with O-360-A1G6 engine 5 lbs. at (+48.6) with O-360-A4G engine 4.2 lbs. at (+51.1)

NOTE 2. The following placards must be displayed in front of and in clear view of the pilot.

“This airplane must be operated as a normal or utility category airplane in compliance with operation limitations stated in the Airplane Flight Manual.”

See approved Airplane Flight Manual for additional placards.

“All placards required in the approved Airplane Flight Manual must be installed in the appropriate locations.”

NOTE 3. The service life of the wing and associated structure has been established as 7921 hours maximum.

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