

FEDERAL AVIATION AGENCY

4A31  
Revision 2  
STITS  
SA-9A

June 1, 1992

TYPE CERTIFICATE DATA SHEET NO. 4A31

This data sheet which is a part of type certificate No. 4A31 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder	Stits Aircraft, Inc. P.O. Box 3084 Riverside CA 92519
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I - Model SA-9A, 2 PCLM (Normal Category), Approved December 6, 1961

Engine	Continental O-200-A	
Fuel	80/87 Minimum grade aviation gasoline	
Engine limits	For all operations, 2750 r.p.m. (100 bhp.)	
Propeller and propeller limits	Sensenich M69CK-48 Static r.p.m. at maximum permissible throttle setting: Not over 2525, not under 2425. No additional tolerance permitted. Diameter: Not over 69 in., not under 67.5 in.	
Airspeed limits	Maneuvering	116 m.p.h. (101 knots) CAS Ind.
	Maximum structural cruising	130 m.p.h. (113 knots) CAS Ind.
	Never exceed	166 m.p.h. (144 knots) CAS Ind.
C.G. range	<u>Gross Weight</u>	<u>Forward limit</u> <u>Aft Limit</u>
	1200 lb.	(+69.0)      (+73.0)
	1225 lb.	(+69.0)      (+73.0)
	1525 lb.	(+70.5)      (+73.0)
	Straight line variation between points shown.	
Empty weight C.G. range	None.	
Datum	54 in. fwd. of wing L.E. at fuselage side.	
Leveling means	Use straight edge and bubble level positioned under tab welded on fuselage diagonal tube at top right hand forward corner of cockpit and bottom side of fuselage cross tube between rear spar fittings, right hand side.	
Maximum weight	1525 lb.	
No. of seats	2 (+76.8)	
Maximum baggage	60 lb. (+106.3). For weight and balance information refer to Operator's Manual.	
Fuel capacity	24 gal. (Two 12 gal. wing tanks) (11.25 gal. usable in each wing tank) (+78.7) See NOTE 1 for unusable fuel.	
Oil capacity	6 qt. (+22) See NOTE 1 for unusable oil.	

Control surface movements	Aileron	Up 12 degrees	Down 8 degrees
	Aileron tab	Fixed	
	Elevator	Up 28 degrees	Down 10 degrees
	Elevator tab	None	
	Rudder	Left 10 degrees	Right 10 degrees
	Rudder tab	Fixed	
Serial Nos. eligible	9A-60-101 and up.		
Certification basis	CAR 3 dated May 15, 1956, Amendments 3-1 thru 3-5. Type Certificate No. 4A31 issued December 6, 1961. Date of Application for Type Certificate September 26, 1960.		
Production basis	None. Prior to original certification of each aircraft an FAA representative must perform a detailed inspection for workmanship, materials 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. In addition, the following items of equipment are required.  (1) FAA Approved Airplane Flight Manual. (2) Equipment outlined in the Operator's Manual.		

NOTE 1. Current weight and balance report and operator's manual has a list of equipment included in certificated empty weight and loading instructions. This report must be provided for each aircraft at the time of original certification and at all times thereafter.

The certificated empty weight and corresponding C.G. locations must include system oil and unusable fuel as follows:

System oil	12 lb. (+22)
Unusable fuel	9 lb. (+78.7)

NOTE 2. The following placard must be displayed in front of and in clear view of pilots;

"This airplane must be operated as a normal category airplane in compliance with the approved flight manual. Acrobatic maneuvers including spins prohibited."

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