

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

A11WE  
Revision 4  
Aerostar  
360  
400

October 22, 1992

TYPE CERTIFICATE DATA SHEET NO. A11WE

This data sheet which is a part of type certificate No. A11WE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder                      Aerostar Aircraft Corporation  
South 3608 Davison Blvd  
Spokane, Washington 99204-5799

**I - Model 360 (Normal Category) Approved May 1, 1967**

Engine	2 Lycoming IO-360-E1A	
Fuel	100/130 minimum grade aviation gasoline	
Engine limits	2700 r.p.m. (180 hp) for all operations	
Propeller and propeller limits	1. Two Hartzell full-feathering propeller installations: (a) Propellers - Hartzell HC-92WK-2B/W8447-12R Pitch setting at 30 in. station: Low 14°, High 84° Diameter: not over 72 in., not under 71 in. (b) Spinners - Hartzell 835-30 (c) Propeller Governor - Woodward #210485 (d) Unfeathering Accumulator installation - Woodward #986250	
Airspeed limits	Vne - Never exceed	280 mph (243 knots) EAS
	Vno - Maximum structural cruising	250 mph (217 knots) EAS
	Vp - Maneuvering	162 mph (141 knots) EAS
	Vfe - Flaps extended	150 mph (130 knots) EAS
	Vle = Vlo = Max. Landing Gear Operation	180 mph (156 knots) EAS
C.G. range	+162.1 to +167.9 (19% MAC to 28% MAC)	
Empty weight C.G. range	None	
Datum	F.S. 0.00 @ 150.00 in. forward of wing L.E.	
Leveling means	Across cabin floor seat tracks. (Use bubble scale)	
Maximum weight	4100 lbs.	
No. of seats	5 (2 @ +98, 1 @ +132, 2 @ +165)	
Maximum baggage	Rear compartment 240 lbs. @ +245	
Fuel capacity	111 gal. total (one center fuselage tank +214) (109 gal. usable) See Note 1 for data on system fuel	

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## I - Model 360 (cont'd)

Oil capacity	8 qt. each engine (+141), usable 6 qt. ea. engine; total capacity 16 qt. See Note 1 for data on system oil			
Control surface movements	Wing Flaps		Down	$42^{\circ} \pm 1^{\circ}$
	Main surfaces			
	Aileron	Up	$25^{\circ} \pm 1^{\circ}$	Down $15^{\circ} \pm 1^{\circ}$
	Elevator	Up	$30^{\circ} \pm 1^{\circ}$	Down $10^{\circ} \pm 1^{\circ}$
	Rudder	Right	$30^{\circ} \pm 1^{\circ}$	Left $30^{\circ} \pm 1^{\circ}$
	Tabs (main surface in neutral)			
	Elevator	Up	$5^{\circ} \pm 1^{\circ}$	Down $25^{\circ} \pm 1^{\circ}$
	Rudder	Right	$15^{\circ} \pm 1^{\circ}$	Left $15^{\circ} \pm 1^{\circ}$
Serial Nos. eligible	36-0002 and subsequent			

## II - Model 400 (Normal Category) Approved October 4, 1967

Engines	2 Lycoming IO-360-D1A	
Fuel	100/130 minimum grade aviation gasoline	
Engine limits	2700 r.p.m. (200 hp) for all operations	
Propeller and propeller limits	<div>1. Two Hartzell full-feathering propeller installations:</div> <div><div>(a) Propellers - Hartzell HC-C3YR-2/C7663-6</div><div>Pitch setting at 30 in. station:</div><div>Low 10.5°, High 79°</div><div>Diameter: not over 72 in., not under 71 in.</div></div> <div>(b) Spinners - Hartzell C-3258</div> <div>(c) Propeller Governor - Woodward #210485</div> <div>(d) Unfeathering Accumulator installation - Woodward #986250</div>	
Airspeed limits	<div>Vne - Never exceed</div> <div>Vno - Maximum structural cruising</div> <div>Vp - Maneuvering</div> <div>Vfe - Flaps extended</div> <div>Vle = Vlo = Max. Landing Gear Operation</div>	<div>280 mph (243 knots) EAS</div> <div>250 mph (217 knots) EAS</div> <div>169 mph (147 knots) EAS</div> <div>150 mph (130 knots) EAS</div> <div>180 mph (156 knots) EAS</div>
C.G. range	<div>At 4500 lbs. 16% MAC to 28% MAC (+160.2 to +167.9)</div> <div>At 4100 lbs. 13% MAC to 28% MAC (+158.3 to +167.9)</div>	
Empty weight C.G. range	None	
Datum	F.S. 0.00 @ 150.00 in. forward of wing L.E.	
Leveling means	Across cabin floor seat tracks. (Use bubble scale)	
Maximum weight	4500 lbs.	
No. of seats	5 (2 @ +98, 1 @ +132, 2 @ +165)	
Maximum baggage	Rear compartment 240 lbs. @ +245	
Fuel capacity	<div>111 gal. total (one center fuselage tank +214) (109 gal. usable)</div> <div>See Note 1 for data on system fuel</div>	

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**II - Model 400 (cont'd)**


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Oil capacity	8 qt. each engine (+141), usable 6 qt. ea. engine; total capacity 16 qt. See Note 1 for data on system oil		
Control surface movements	Wing Flaps	Down $42^{\circ} \pm 1^{\circ}$	
	Main surfaces		
	Aileron	Up $25^{\circ} \pm 1^{\circ}$	Down $15^{\circ} \pm 1^{\circ}$
	Elevator	Up $30^{\circ} \pm 1^{\circ}$	Down $10^{\circ} \pm 1^{\circ}$
	Rudder	Right $30^{\circ} \pm 1^{\circ}$	Left $30^{\circ} \pm 1^{\circ}$
	Tabs (main surface in neutral)		
	Elevator	Up $5^{\circ} \pm 1^{\circ}$	Down $30^{\circ} \pm 1^{\circ}$
	Rudder	Right $15^{\circ} \pm 1^{\circ}$	Left $15^{\circ} \pm 1^{\circ}$
Serial Nos. eligible	40-0001 and subsequent		

**DATA PERTINENT TO ALL MODELS**

Certification basis	FAR 23 effective February 1, 1965 and Amendments 23-1, 23-2 and 23-3. No exceptions  Type Certificate No. A11WE issued May 1, 1967  Application for Type Certificate dated December 6, 1965.
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.
Export eligibility	Aircraft will be eligible for issuance of an Export Certificate of Airworthiness subject to compliance with Federal Aviation Regulation Part 21, Subpart L, Sections 21.321 thru 21.339. The applicable procedures are contained in Advisor Circular 21-2.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. Additional required items of equipment are listed in the FAA Approved Equipment List No. 360-1 for Model 360 and Equipment List No. 400-2 for Model 400.

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

The certificated empty weight and corresponding center of gravity locations must include system oil of 7.5 lb. at (+141) and unusable fuel of 12 lb. at (+214) for Model 360 and Model 400.

NOTE 2. The following placards must be displayed:

(a) L. H. side adjacent to pilots:

- (1) "This airplane must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers, including spins, approved."
- (2) "This aircraft is limited to day and night VFR non-icing flight." for Model 360 and "This aircraft approved for day/night VFR/IFR non-icing flight when equipped in accordance with the airplane flight manual" for the Model 400.

- (b) On instrument panel above Airspeed Indicator:
  - (1) "Maximum gear down and operating speed 180 mph"
  - (2) "Design maneuvering speed 162 mph" for Model 360 and "Design maneuvering speed 169 mph" for the Model 400.
  - (3) "Demonstrated cross-wind velocity 17 mph" for Model 360 and Model 400.
- (c) Above upper door handle on inside:

"Shut off left engine before entering or leaving cabin."
- (d) In the center above emergency exit quick release mechanism:
  - (1) "Emergency exit"
  - (2) "Pull to release"
- (e) On aft baggage floor near lower door jam:
  - (1) "Maximum capacity 240 lbs."
  - (2) "Load in accordance with flight manual"
- (f) On center line of airplane on contoured (facing aft) edge of glare shield in full view of occupants and on right side of cabin between +111.0 and +118.5 on window molding, lower edge:

"No Smoking"
- (g) On + 176 bulkhead behind electrical equipment cover:

"Notice: Electrical system has been substantiated for a maximum load of 50 amps only."

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