

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A17CE
Revision 5
EVANGEL-AIR
4500-300
4500-300 Series II

February 15, 1975

TYPE CERTIFICATE DATA SHEET NO. A17CE

This data sheet which is a part of type certificate No. A17CE 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 Evangel Mission
 604 Frankfort N. E.
 Orange City, Iowa 51041

I - Model 4500-300, 9 PCLM (Normal Category), Approved July 21, 1970

Engines	2 Lycoming IO-540-K1B5		
Fuel	100/130 minimum grade aviation gasoline		
Engine limits	For all operations, 2700 r.p.m. (300 hp.) at Sea Level		
Propeller and propeller limits	1. (a) 2 Hartzell HC-C2YK-2()/C 8475A-4 per dwg. 4569A1 Diameter: 80 in., no reduction permitted Pitch setting at 30 in. station: low 13.5°, high 80-82° No additional tolerance permitted (b) 2 propeller spinner and bulkhead assemblies, Hartzell 836-29 assembly		
Airspeed limits (CAS)	Never exceed	230 m.p.h.	(200 knots)
	Maximum structural cruising	183 m.p.h.	(159 knots)
	Maneuvering	149 m.p.h.	(129 knots)
	Flaps extended	126 m.p.h.	(109 knots)
	Landing gear extended	200 m.p.h.	(174 knots)
C.G. range	(+102) to (+107.9) at 5500 lb. (+ 99.5) to (+107.9) at 4600 lb. Straight line variation between points given		
Empty weight C.G. range	None		
Maximum weight	5500 lb.		
No. of seats	9 (Reference Weight and Balance Data)		
Maximum baggage	1400 lb. (cargo version)		
Fuel capacity	112 U.S. gal. (two 56 gal. wing tanks, 55.5 gal. usable in each tank) (+101.4) See NOTE 1 for data on system fuel		
Oil capacity	12 qt. each engine (See NOTE 1 for data on system oil)		
Control surface movements	Wing flaps	Takeoff	0° to 20°
		Landing	40° ± 1.0°
	Aileron tab	Fixed	
	Aileron	Up	14° ± 1.5° Down 14° ± 1.5°
	Elevator tab	Up	30° ± 2.0° Down 30° ± 2.0°
	Elevator	Up	30° ± 1.0° Down 22.5° ± 2.0°
	Rudder tab	Right	30° ± 2.0° Left 30° ± 2.0°
	Rudder	Right	30° ± 1.0° Left 30° ± 1.0°
Serial Nos. eligible	001 thru 003		

II - Model 4500-300 Series II, 9 PCLM (Normal Category), Approved August 8, 1972

Page No.	1	2	3
Rev. No.	5	5	5

Engines	2 Lycoming IO-540-K1B5		
Fuel	100/130 minimum grade aviation gasoline		
Engine limits	For all operations, 2700 r.p.m. (300 hp.) at Sea Level		
Propeller and propeller limits	1. (a) 2 Hartzell HC-C2YK-2B/C 8475-4 Diameter: 80 in., no reduction permitted Pitch setting at 30 in. station: low 13.5°, high 80-82° No additional tolerance permitted (b) 2 propeller spinner and bulkhead assemblies, Hartzell 836-29 assembly		
Airspeed limits (CAS)	Never exceed	230 m.p.h. (200 knots)	
	Maximum structural cruising	183 m.p.h. (159 knots)	
	Maneuvering	149 m.p.h. (129 knots)	
	Flaps extended	126 m.p.h. (109 knots)	
	Landing gear extended	200 m.p.h. (174 knots)	
C.G. range	(+102) to (+107.9) at 5500 lb. (+ 99.5) to (+107.9) at 4600 lb. Straight line variation between points given		
Empty weight C.G. range	None		
Maximum weight	5500 lb.		
No. of seats	9 (Reference Weight and Balance Data)		
Maximum baggage	1400 lb. (cargo version)		
Fuel capacity	112 U.S. gal. (two 56 gal. wing tanks, 55.5 gal. usable in each tank) (101.4) See NOTE 1 for data on system fuel		
Oil capacity	12 qt. each engine (See NOTE 1 for data on system oil)		
Control surface movements	Wing flaps	Takeoff	0° to 20°
		Landing	40° ± 1.0°
	Aileron tab	Fixed	
	Aileron	Up	14° ± 1.5°
		Down	14° ± 1.5°
	Elevator tab	Up	20° ± 2.0°
		Down	30° ± 2.0°
	Elevator	Up	30° ± 1.0°
		Down	22.5° ± 2.0°
	Rudder tab	Right	30° ± 2.0°
		Left	30° ± 2.0°
	Rudder	Right	30° ± 1.0°
		Left	30° ± 1.0°
Serial Nos. eligible	004 and up (See NOTE 4)		

DATA PERTINENT TO ALL MODELS

Datum	60 in. forward of aft face of front door post
Leveling means	Cabin rear floor
Certification basis	Part 23 of the Federal Aviation Regulations dated February 1, 1965 as amended by 23-1 thru 23-6 Application for Type Certificate dated September 16, 1968 Type Certificate No. A17CE issued July 21, 1970
Production basis	Production Certificate No. 321
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: <ol style="list-style-type: none"> 1. On Model 4500-300 airplanes use FAA Approved Flight Manual dated July 17, 1970. 2. On Model 4500-300 Series II airplanes use FAA Approved Flight Manual dated May 31, 1972.

-
- NOTE 1. Current weight and balance report, including list of equipment included in 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 location must include undrainable oil of 4.0 lb. at +50 and unusable fuel of 6 lb. at +101.4 with standard wing tanks.
- NOTE 2. The placards specified in the FAA Approved Airplane Flight Manual must be displayed.
- NOTE 3. Reserved.
- NOTE 4. Model 4500-300 airplanes, Serial Nos. 001 through 003, eligible to be modified as Series II with factory installation of Modification 2 as shown on Evangel dwg. MOD 2-01.

....END....