DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINSTRATION

A17WE Revision 23 Aerostar PA-60-600 (Aerostar 600) PA-60-601 (Aerostar 601) PA-60-601P (Aerostar 601P) PA-60-602P (Aerostar 602P) PA-60-700P (Aerostar 700P) September 24, 2012

TYPE CERTIFICATE DATA SHEET NO. A17WE

This data sheet, which is a part of Type Certificate A17WE, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the Airworthiness Requirements of the Federal Aviation Regulations.

Holder of Type Certificate: Aerostar Aircraft Corporation

10555 Airport Drive Coeur d'Alene Airport Hayden Lake, ID 83835

I. Aerostar Model PA-60-600 (Aerostar 600) (Normal Category) Approved March 28, 1968

(See Note 2 & 4)

Engines: Two Lycoming IO-540-G1B5, IO-540-K1F5, IO-540-K1J5 (with Bendix fuel injector servos

2524491-); IO-540-S1A5 or IO-540-P1A5 (with Bendix fuel injector servos 2524491-).

NOTE: IO-540-S1A5 or IO-540-P1A5 engines are optional and installed per AAC Option 35.

Fuel: 100/130 and 100LL minimum grade aviation gasoline

Engine Limits: *2575 RPM. 29.5 in. Hg. MAP (290 HP) for all operations

**2575 RPM, 29.5 in. Hg. MAP (290 HP) Maximum Continuous Power for takeoff, obstacle

clearance, and emergency operations only.

(No time limit.)

2520 RPM, 29.5 in. Hg. MAP (284 HP) Maximum Normal Operating Power for noise

certification and for all other operations. (See "Noise Characteristics" paragraph)

*For S/N 60-0001 thru 60-0714-7961221
**For S/N 60-0715-8061222 and subsequent

Propeller Two Hartzell full-feathering propellers - HC-C3YR-2/C8468-8R or HC-C3YR-2UF/FC8468-8R.

Propeller Limits

(a) Pitch setting at 30 in. sta. Low 14° ± 0.1°, High 18° -21°

Feather 82.5° ± 1.0°

Diameter: 78 inches

No cutoff for repairs permitted.

(b) Spinners - Hartzell C-3258P

(c) Propeller Governor - Hartzell F-6-5A, F-6-35, F-6-35Z, F-6-36, F-6-36Z, F-8-35, F-8-35Z, F-8-45, or F-8-45Z.

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NOTE: If modified in accordance with AAC Option 64, Synchrophaser, Governor for right engine is F-8-35 or F- 8-35Z.

If modified in accordance with AAC Option 150, Synchrophaser, Governor for right engine is F-8-45 or F-8-45Z.

Airspeed Limits: (See Note 2)

V _{ne} - Never exceed	243 KCAS (280 MPH)
V _{no} - Max. structural cruising	217 KCAS (250 MPH)
Va- Max. design maneuvering	163 KCAS (188 MPH)
V _{fe} - *Flaps extended	20° 156 KCAS (180 MPH)
10	45° 130 KCAS (150 MPH)
 **Flaps extended 	20° 174 KCAS (200 MPH)
	45° 149 KCAS (172 MPH)
V _{Ie} -Max. gear extended	156 KCAS (180 MPH)
V _{lo} -Max gear retraction	130 KCAS (150 MPH)
-Max gear extension	156 KCAS (180 MPH)

^{*}For S/N 60-0001 thru 60-0014, 60-0015-26 thru 60-0056-128, 60-0130-057 thru 60-0355-127. The flap speeds for these S/N aircraft may be increased from 130 KCAS and 156 KCAS to 149 KCAS and 174 KCAS respectively when modified in accordance with AAC Option No. 131.

AFT (1)

AIRFRAME S/N

FWD (1)

C.G. Range

WEIGHT

LANDING GEAR EXTENDED OR RETRACTED

4600 lbs.	157.66 (12.2% MAC)	166.00 (25.5% MAC) (3) 60-0001 thru
4600	157.66 (12.2% MAC)	167.88 (28.5% MAC) (3) 60-0824-8061236
5500	159.58 (15% MAC)	167.88 (28.5% MAC)
5500	159.58 (15% MAC)	166.00 (25.5% MAC) (2) (3)
	LANDING GEAR E	XTENDED OR RETRACTED
WEIGHT	FWD (1)	AFT (1) AIRFRAME S/N
		7.1. 1 (1) 7.1.1.1.1.1.1.2 S/11
4600	157.66 (12.2% MAC)	166.00 (25.5% MAC) (3) 60-0833-8161237
4600	157.66 (12.2% MAC)	167.88 (28.5% MAC) and subsequent
5500	159.58 (15% MAC)	167.88 (28.5% MAC)
5525	159.63 (15.1% MAC)	167.88 (28.5% MAC)
5500	159.58 (15% MAC)	166.00 (25.5% MAC) (2) (3)
5525	159.63 (15.1% MAC)	166.00 (25.5% MAC) (2) (3)

- (1) Straight line variation between weight points.
- (2) For aircraft equipped for Flight into Known Icing AAC Option No. 196.
- (3) For aircraft with Aerostar Kit 764 969V (ventral rudder) installed.

Empty Weight C.G. Range

NONE

Maximum Weight

5525 lbs. MAX RAMP (60-0833-8161237 and subsequent).

5500 lbs. MAX. TAKEOFF

^{**}For S/N 60-0359-128 and subsequent.

Fuselage

No. or Seats	Passenger	Station		
	2 2 2 2	96 (132 165		
	*When bench seat is fitte the maximum weight of instructions.			
Maximum Baggage	(See Note 2) Rear compartment 240lbs. at (+24	45)		
Fuel Capacity	Wing Total Capacity (65 gals. each) Wing Total Usable (62 gals each) Fuselage Total Capacity Fuselage Total Usable Aircraft Total Capacity (See Note 1 for unusable	······································	130 gals. 124 gals. 43.5 gals. 41.5 gals. 173.5 gals. 165.5 gals.	
Oil Capacity	Total Capacity two engines @ sta Capacity each engine @ sta. +14 Usable each engine(See Note 1 for undraina	5	24 qts. 12 qts. 9 1/4 qts.	
Control Surface Movement	Wing Flaps*		Down 45 ° <u>+</u> 3°	
	Main Surfaces Aileron** Elevator Rudder	Up 25° ± 1° Up 30° ± 1° Right 30° ± 1° ***Right 35° + 1° - 0°	Down 15° ± 1° Down 10° ± 1° Left 30° ± 1°	
	Tabs (Main surface in neutral) Elevator	Up 7° <u>+</u> 1°	Down 37° +9° - 1°	
	Rudder	Right 9° + 4° -1°	Left 37° + 4° - 1°	
	*Flaps must be rigged so that at 2 4.0° above the L.H. flap.	0° flap setting, R.H	. flap must not be more	1.0° lower or
	**Ailerons are rigged 2° down. Mo and rudder movements are mea		-	osition. Elevator

***For aircraft with Aerostar Kit 764 969V (ventral rudder) installed.

60-0001 thru $60\text{-}0014,\,60\text{-}0015\text{-}26$ thru $60\text{-}0056\text{-}128,\,60\text{-}0130\text{-}057$ thru $60\text{-}0933\text{-}8161262,\,60\text{-}8261001}$ and subsequent. (See Note 4)

Crew or

No. of Seats

Serial Numbers Eligible

II Aerostar Model PA-60-601 (AEROSTAR 601) (Normal Category) Approved November 8, 1968.

(See Note 2 and 4)

Engines Two Lycoming IO-540-P1A5, IO-540-S1A5 or IO-540-G1B5 modified to incorporate

turbochargers in accordance with RAJAY STC SE6WE with Bendix fuel injector servos.

2524477 - for S/N 61-0001 thru 61-0334-111* and 2524491 - for S/N 61-0342-112 and subsequent

*These aircraft require P/N 2524491 Bendix fuel injector servos when modified in accordance with AAC Option 93.

Fuel 100/130 and 100LL minimum grade aviation gasoline.

Engine Limits *2575 RPM, 29.5 in. Hg. MAP (290 HP) for all operations.

**2575 RPM, 29.5 in. Hg. MAP (290 HP) Maximum Continuous Power for takeoff, obstacle

clearance, and emergency operations only. (No time limit).

2475 RPM, 29.5 in. Hg. MAP (278 HP) Maximum Normal Operating Power for noise

certification and for all other operations. (See "Noise Characteristics" paragragh).

*For S/N 61-0001 thru 61-0714-7962143 and 62-001

**For S/N 61-0715-8062144 and subsequent.

Propeller Two Hartzell full-feathering propellers - HC-C3YR-2/C8468-8R or HC-C3YR-2UF/FC8468-8R.

Propeller Limits

a.) Pitch settings at 30 in. sta. Low 14°± 0.1°, High 18° -21° Feather 82.5°± 1.0°

Diameter: 78 inches

No cutoff for repairs permitted.

- b.) Spinners Hartzell C-3258P
- c.) Propeller Governor Hartzell F-6-5A, F-6-35, F-6-35Z, F-6-36Z, F-8-35, F-8-35Z, F-8-45, F-8-45Z.

NOTE: If modified in accordance with AAC Option 64, Synchrophaser, Governor for right engine is F-8-35 or F-8-35Z.

If modified in accordance with AAC Option 150, Synchrophaser,

Governor for right engine is F-8-45 or F-8-45Z.

Airspeed Limits (See Note 2)

 V_{ne} - Never exceed 243 KCAS (280 MPH) V_{no} - Max. structural cruising 217 KCAS (250 MPH)

Reduce V_{ne} and V_{no} (5 MPH) 4 knots for each 1,000 feet above 24,000 feet.

V _a - Max. design maneuvering		167 KCAS (192 MPH)
V _{fe} - *Flaps extended	20°	156 KCAS (180 MPH)
10	45°	130 KCAS (150 MPH)
 **Flaps extended 	20°	174 KCAS (200 MPH)
	45°	149 KCAS (172 MPH)
V _{le} -Max. gear extended		156 KCAS (180 MPH)
V _{IO} -Max gear retraction		130 KCAS (150 MPH)
-Max gear extension		156 KCAS (180 MPH)

*For S/N 61-0001 thru 61-0352-114 and 62-001. The flap speeds for these S/N aircraft may be increased from 130 KCAS and 156 KCAS to 149 KCAS and 174 KCAS respectively when modified in accordance with AAC Option No. 131.

C.G. Range

LANDING GEAR EXTENDED OR RETRACTED

WEIGHT	FWD (1)	AFT (1)	AIRFRAME S/N
4600 lbs.	157.66 (12.2% MAC)	166.00 (25.5% MAC)	(6) 61-0001 thru
4600	157.66 (12.2% MAC)	167.88 (28.5% MAC)	61-0334-111 and
5700	160.03 (15.7% MAC)	167.88 (28.5% MAC)	62-001
5700	160.03 (15.7% MAC)	166.00 (25.5% MAC)	(5) (4) (6)
4600	157.66 (12.2% MAC)	166.00 (25.5% MAC)	(6) 61-0342-112 thru
4600	157.66 (12.2% MAC)	167.88 (28.5% MAC)	61-0806-8062151
6000	160.67 (17% MAC)	167.88 (28.5% MAC)	
6000	160.67 (17% MAC)	166.00 (25.5% MAC)	(5) (2) (6)
4600	157.66 (12.2% MAC)	166.00 (25.5% MAC)	(6) 61-0838-8162152
4600	157.66 (12.2% MAC)	167.88 (28.5% MAC)	and subsequent
6000	160.67 (17% MAC)	167.88 (28.5% MAC)	
6025	160.72 (17.1% MAC)	167.88 (28.5% MAC)	
6000	160.67 (17% MAC)	166.00 (25.5% MAC)	(5) (6)
6025	160.72 (17.1% MAC)	166.00 (25.5% MAC)	

- (1) Straight line variation between points.
- (2) These S/N aircraft have AAC Option No. 93 incorporated into the production aircraft.
- (3) AAC Option No. 93 extends each wing tip 15 inches and increases the permissible maximum weight from 5700 lbs. to 6000 lbs.
- (4) The maximum weight of these S/N aircraft may be increased to 6000 lbs. when modified in accordance with AAC Option No. 93.
- (5) For aircraft equipped for Flight into known Icing (AAC Option No. 196).
- (6) For aircraft with Aerostar Kit 764 969V (ventral rudder) installed.

Empty Weight C.G. Range

None

Maximum Weight

6025 lbs. MAX RAMP (S/N 61-0838-8162152 and subsequent) 6000 lbs. MAX TAKEOFF (S/N 61-0342-112 and subsequent)

5700 lbs. MAX TAKEOFF (S/N 61-0001 thru 61-0334-111and 62-001)*

All weight over 5900 lbs. must be fuel in the wing.

*The maximum weight of these S/N aircraft may be increased to 6000 lbs. when modified in accordance with AAC Option No. 93 which extends each wing tip 15 inches

No. of seats

Crew or Passenger	Fuselage Station
2	96 (CREW)
2	132
2	165*

^{*}When bench seat is fitted, three occupants may be accommodated provided the the maximum weight of 380 lbs. is not exceeded. See Flight Manual for loading instructions.

^{**}For S/N 61-0357-115 and subsequent.

Maximum Baggage (See Note 2)

Rear Compartment 240 lbs. at (+245)

Fuel Capacity

Wing Total Capacity (65 gals. each)130 galsWing Total Usable (62 gals. each)124 galsFuselage Total Capacity43.5 galsFuselage Total Usable41.5 galsAircraft Total Capacity173.5 galsAircraft Total Usable165.5 gals

(See Note1 for unusable fuel)

Oil Capacity

(See Note 1 for undrainable oil)

Maximum Operating

Altitude

30,000 feet

Control Surface Movement

Wing Flaps* Down 45 °± 3°

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 $30^{\circ} \pm 1^{\circ}$ ***Right $35^{\circ} + 1^{\circ}$

Tabs (Main surface in neutral)

Elevator Up $7^{\circ}\pm 1^{\circ}$ Down $37^{\circ}\pm 9^{\circ}$ - 1° Rudder Right $9^{\circ}\pm 4^{\circ}$ Left $37^{\circ}\pm 4^{\circ}$

Serial Numbers Eligible

61-0001 thru 61-0002-19 thru 61-0070-129, 61-0132-071 thru 61-0880-8162157,

60-82620001 and subsequent and 62-0001-013.

(See Note 4)

III Aerostar Model PA-60-601P (AEROSTAR 601P) (Normal Category) Approved November 14, 1973

(See Note 2, 3, and 4)

Engines

Two Lycoming IO-540-P1A5, IO-540-S1A5 modified to incorporate automatic controlled turbochargers in accordance with RAJAY STC SE60WE with Bendix fuel injector servos 2524477- for S/N 61P-0157-001 thru 61P-0211-021* and

2524491- for S/N 61P-0213-022 thru S/N 61P-0455-176**

or

Two Lycoming IO-540-P1A5, IO-540-S1A5 modified to incorporate automatic controlled turbochargers in accordance with AEROSTAR STC SE81WE with Bendix fuel injector servos 2524491- for S/N 61P-0456-177 and subsequent.

^{*}Flaps must be rigged so that at 20° flap setting, R.H. flap must not be more than 1.0° lower or 4.0° above the L.H. flap.

^{**}Ailerons are rigged 2° down. Movements are measured from this neutral position. Elevator and rudder movements are measured from a faired neutral position.

^{***}For aircraft with Aerostar Kit 764 969V (ventral rudder) installed.

*These aircraft require P/N 2524491 Bendix fuel injector servos when modified in accordance with AAC Option 93.

**These aircraft incorporate turbochargers per AAC STC SE81WE when modified in accordance with AAC Option 155.

Fuel

100/130 and 100LL minimum grade aviation gasoline

Engine Limits

*2575 RPM, 29.5 in. Hg. MAP (290 HP) for all operations.

**2575 RPM, 29.5 in. Hg. MAP (290 HP) Maximum Continuous Power for takeoff, obstacle clearance, and emergency operations only. (No time limit).

2475 RPM, 29.5 in. Hg. MAP (278 HP) Maximum Normal Operating Power for noise certification and for all other operations. (No time limit) (See "Noise Characteristics" paragraph).

*For S/N 61P-0157-001 thru 61P-0714-7963345
**For S/N 61P-0715-8063346 and subsequent

Propeller

Two Hartzell full-feathering propellers - HC-C3YR-2/C8468-8R or HC-C3YR-2UF/FC8468-8R

Propeller Limits

a.) Pitch settings at 30 in. sta.
 Low 14°± 0.1°, High 18°-21°
 Feather 82.5°± 1.0°

Diameter: 78 inches

No cutoff for repairs permitted

- b.) Spinners Hartzell C-3258P
- c.) Propeller Governor Hartzell F-6-5A, F-6-35, F-6-35Z, F-6-36Z, F-8-35Z, F-8-35Z, F-8-45, F-8-45Z.

NOTE: If modified in accordance with AAC Option 64, Synchrophaser, Governor for right engine is F-8-35 or F-8-35Z.

If modified in accordance with AAC Option 150, Synchrophaser, Governor for right engine is F-8-45 or F-8-45Z.

Airspeed Limits

(See Note 2)

V _{ne} - Never exceed	243 KCAS (280 MPH)
V _{no} - Max. structural cruising	217 KCAS (250 MPH)

Reduce V_{ne} and V_{no} (5 MPH) 4 knots for each 1,000 feet above 24,000 feet.

V _a - Max. design maneuvering		163 KCAS (188 MPH)
V _{fe} - *Flaps extended	20°	156 KCAS (180 MPH)
10	45°	130 KCAS (150 MPH)
- **Flaps extended	20°	174 KCAS (200 MPH)
	45°	149 KCAS (172 MPH)
V _{Ie} -Max. gear extended		156 KCAS (180 MPH)
V _{IO} -Max gear retraction		130 KCAS (150 MPH)
-Max gear extension		156 KCAS (180 MPH)

^{*}For S/N 61P-0157-001 thru 61P-0354-109. The flap speeds for these S/N aircraft may be increased from 150 MPH CAS and 180 MPH CAS to 172 MPH CAS and 200 MPH CAS respectively when modified in accordance with AAC Option No. 131.

^{**}For S/N 61P-0356-128 and subsequent.

C. G. Range

LANDING GEAR EXTENDED OR RETRACTED

WEIGHT	FWD (1)	AFT (1)	AIRFRAME S/N
4600 lbs.	157.66 (12.2% MAC)		AC) (6) 61P-0157-001 thru
4600 5700	157.66 (12.2% MAC) 160.03 (15.7% MAC)	167.88 (28.5% MA 167.88 (28.5% MA	,
5700	160.03 (15.7% MAC)	166.00 (25.5% MA	AC) (5) (4) (6)
4600	157.66 (12.2% MAC)	166.00 (25.5% MA	AC) (6) 61P-0213-022 thru
4600	157.66 (12.2% MAC)	167.88 (28.5% MA	AC) 61P-0825-8063433;

LANDING GEAR EXTENDED OR RETRACTED

WEIGHT	FWD (1)	AFT (1)	AIRFRAME S/N
6000	160.67 (17% MAC)	167.88 (28.5% M	AC)
6000	160.67 (17% MAC)	166.00 (25.5% M	
4600 lbs.	157.66 (12.2% MAC)	166.00 (25.5% M	AC) (6) 61P-0826-8163434
4600	157.66 (12.2% MAC)	167.88 (28.5% M	AC) and subsequent
6000	160.67 (17% MAC)	167.88 (28.5% M	
6025	160.72 (17.1% MAC)	167.88 (28.5% M	AC)
6000	160.67 (17% MAC)	166.00 (25.5% M	•
6025	160.72 (17.1% MAC)	166.00 (25.5% M	

- (1) Straight line variation between points.
- (2) These S/N aircraft have AAC Option No. 93 incorporated into the production aircraft
- (3) AAC Option No. 93 extends each wing tip 15 inches and increases the permissible maximum weight from 5700 lbs. to 6000 lbs.
- (4) The maximum weight of these S/N aircraft may be increased to 6000 lbs. when modified in accordance with AAC Option No. 93.
- (5) For aircraft equipped for Flight Into Known Icing (AAC Option No. 196).
- (6) For aircraft with Aerostar Kit 764 969V (ventral rudder) installed.

Empty Weight C.G. Range

None

Maximum Weight

6025 lbs. MAX RAMP (S/N 61P-0826-8163434 and subsequent) 6000 lbs. MAX TAKEOFF (S/N 61P-0213-022 and subsequent) 5700 lbs. MAX TAKEOFF (S/N 61P-0157-001 thru 61P-0211-021)* All weight over 5900 lbs. must be fuel in the wing.

*The maximum weight may be increased from 5700 lbs. to 6000 lbs. when modified in accordance with AAC Option No. 93 which extends each wing tip 15 inches.

Number of Seats

Crew or Passenger	Fuselage Station
2	96 (crew)
2	132
2	165*

^{*}When bench seat is fitted, three occupants may be accommodated provided that the maximum weight of 380 lbs. is not exceeded.

See Flight Manual for loading instructions.

Maximum Baggage (See Note 2))
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Rear compartment 240 lbs. at (+245).

Fuel Capacity

Oil Capacity

Total Capacity two engines @ sta. +145... 24 qts
Capacity each engine @ sta. +145... 12 qts
Usable each engine...... 9 1/4 qts

(See Note 1 for undrainable oil)

Maximum Operating

Altitude

25,000 feet (30,000 feet when equipped with AAC Option 262, and 264.)

Maximum Cabin

Operating Pressure 4.25 PSI (5.50 PSI when equipped with AAC Option 262.)

Control Surface

Movement Wing Flaps*

Wing Flaps* Down $45 \,^{\circ}\pm 3^{\circ}$ Main Surfaces

Aileron** Up $25^{\circ}\pm 1^{\circ}$ Down $15^{\circ}\pm 1^{\circ}$ Elevator Up $30^{\circ}\pm 1^{\circ}$ Down $10^{\circ}\pm 1^{\circ}$ Right $30^{\circ}\pm 1^{\circ}$ Left $30^{\circ}\pm 1^{\circ}$ ***Right $35^{\circ}+1^{\circ}$

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Tabs (Main surface in neutral)

Elevator Up $7^{\circ} \pm 1^{\circ}$ Down $37^{\circ} \pm 9^{\circ}$ - 1° Rudder Right $9^{\circ} \pm 4^{\circ}$ Left $37^{\circ} \pm 4^{\circ}$

Serial Numbers Eligible

61P-0157-001 thru 61P-0860-8163455, 60-8263001 and subsequent. (See Note 4)

IV - Aerostar Model PA-60-602P (AEROSTAR 602P) (Normal Category) Approved October 30,1980

(See Note 2, 3, & 4)

Engines Two Lycoming IO-540-AA1A5 engines incorporating Bendix fuel injector servos Bendix P/N

2524846-1 and automatically controlled turbochargers Aerostar Kits P/N 300076-515 (LH

engine) and P/N 300076-517 (RH engine).

Fuel 100/130 and 100LL minimum grade aviation gasoline.

Engine Limits 2425 RPM, 37 in. Hg. MAP (290 HP) for all operations.

Propeller Two Hartzell full-feathering propellers - HC-C3YR-2UF/FC8468-8R, or HC-C3YR-2/C8468-8R

^{*}Flaps must be rigged so that at 20° flap setting, the R.H. flap must not be more than 1.0° lower or 4.0° above the L.H. flap.

^{**}Ailerons are rigged 2° down. Movements are measured from this neutral position. Elevator and rudder movements are measured from a faired neutral position.

^{***}For aircraft with Aerostar Kit 764 969V (ventral rudder) installed

Propeller Limits

a.) Pitch settings at 30 in. sta. Low 15.9°+ 0.1°, High 18°-21°

Feather 82.5°± 1.0° Diameter: 78 in.

No cutoffs for repairs permitted

b.) Spinners - Hartzell C-3258P

c.) Propeller Governor - Hartzell F-6-60Z, F-8-60Z.

NOTE: If Modified in accordance with AAC Option #150, Synchrophaser, Governor for right engine is F-8-60Z.

Airspeed Limits (KCAS).

(See Note 2)

 $\begin{array}{c} \rm V_{ne}\text{-}\ Never\ exceed} \\ \rm V_{no}\text{-}\ Max.\ structural\ cruising} \end{array} \hspace{0.2in} 243\ KCAS\ (280\ MPH) \\ 217\ KCAS\ (250\ MPH) \end{array}$

Reduce V_{ne} and V_{no} (5 MPH) 4 knots for each 1,000 feet above 24,000 feet.

C. G. Range

LANDING GEAR EXTENDED OR RETRACTED

WEIGHT	FWD (1)	AFT (1)	AIRFRAME S/N
4600 lbs.	157.66 (12.2% MAC)	166.00 (25.5% MAC)	62P-0750-8165001,
6000	160.67 (17% MAC)	166.00 (25.5% MAC)	62P-0861-8165002
6029	160.72 (17.1% MAC)	166.00 (25.5% MAC)	and subsequent

(1) Straight line variation between points.

Empty Weight C.G. Range

None

Maximum Weight

6029 lbs. MAX RAMP 6000 lbs. MAX TAKEOFF

Number of Seats

Crew or Passenger	Fuselage Station	
2	96 (crew)	
2	132	
2	165*	

^{*}When bench seat is fitted, three occupants may be accommodated provided that the maximum weight of 380 lbs. is not exceeded.

See Flight Manual for loading instructions.

Maximum Baggage

(See Note 2)

Rear compartment 240 lbs. at (+245).

Fuel Capacity	Wing Total Capacity (65 gals. each)	130 gals
i doi oupdoity	wing rotal dapatity (od galo: datil)	roo galo

(See Note 1 for unusable fuel)

Oil Capacity 12 qts. per engine (9.25 qts. per engine usable) (See Note 1 for undrainable oil).

Maximum Operating

Altitude 25,000 feet (30,000 feet when equipped with AAC Options 262, and 264.)

Maximum Cabin

Operating Pressure 4.25 PSI (5.50 PSI when equipped with AAC Option 262.)

Control Surface Movement

Wing Flaps* Down 45 °± 3°

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 $30^{\circ} \pm 1^{\circ}$ ***Right $35^{\circ} + 1^{\circ}$ - 0°

Tabs (Main surface in neutral)

Elevator Up $7^{\circ}\underline{+}\ 1^{\circ}$ Down $37^{\circ}\ +9^{\circ}$ -1° Rudder Right $9^{\circ}\ +4^{\circ}$ Left $37^{\circ}\ +4^{\circ}$ -1° -1°

Serial Numbers Eligible

62P-0750-8165001, 62P-0861-8165002 thru 62P-0932-8165055, 60-8265001

and subsequent. (See Note 4)

V-Model PA-60-700P (AEROSTAR 700P) (Normal Category) Approved May 24, 1983.

(See Notes 2 & 3)

Same as PA-60-602P except engines, propellers, maximum weights, increase zero fuel weight, flight envelope shifted forward, added elevator gap seals, elevator bob weight, cowl flaps, stall warning system, increase span on elevator and rudder trim tabs, and other minor changes.

Engines 1 Lycoming LTIO-540-U2A and 1 TIO-540 U2A engine incorporating Bendix fuel

injector servos Bendix P/N 2549056 and automatically controlled turbochargers Aerostar Kits P/N 300154-1 (LH engine) and P/N 300154-501 (RH engine).

Fuel 100/130 and 100LL minimum aviation gasoline.

Engine Limits 2500 RPM, 42 in. Hg. MAP (350 HP) Sea level to 16,500 feet.

^{*}Flaps must be rigged so that at 20° flap setting R.H. flap must not be more than 1.0° lower or 4.0° above the L.H. flap.

^{**}Ailerons are rigged 2° down. Movements are measured from this neutral position. Elevator and rudder movements are measured from a faired neutral position.

^{***}For aircraft with Aerostar Kit 764 969 V (ventral rudder) installed.

Propeller Two Hartzell full-feathering propellers -

HC-C3YR-2LUF/FJC7451 (b) (Left Side) HC-C3YR-2UF/FC7451 (b) (Right Side)

Propeller Limits

a.) Pitch setting at 30 in. sta. Low 15.9° ± 0.2°

Feather 80° ± 1.0°

Diameter: 76 in. max, 75 in. min.

b.) Spinners - Hartzell D-4816P

c.) Propeller Governor - Hartzell F-6-63LZ (Left)

Hartzell F-6-63Z (Right)

Note: If modified in accordance with AAC Option 220, Synchrophaser, Governor

for right engine is F-8-63Z

Airspeed Limits (KIAS)

(See Note 2)

V_{ne}- Never exceed 244 KIAS (281 MPH) V_{no}- Max. structural cruise 215 KIAS (248 MPH) Reduce V_{ne} and V_{no} 4 knots for each 1,000 feet above 24,000 feet. Va- Max. design maneuvering 160 KIAS (184 MPH) V_{fe}- flaps extended 20° 188 KIAS (217 MPH) 45° 148 KIAS (170 MPH) V_{le}- Max. landing gear extended 153 KIAS (176 MPH) V_{IO}- Max. landing gear operation Extension 153 KIAS (176 MPH) Retraction 140 KIAS (161 MPH)

C.G. Range

LANDING GEAR EXTENDED OR RETRACTED

WEIGHT			
(LBS.)	FWD (1)	AFT (1)	SERIAL NUMBER
4250 lbs	157.00 (11.17% MAC)	165.00 (23.9% MAC)	
5400	157.00 (11.17% MAC)	165.00 (23.9% MAC)	60-8223001,
6000	160.20 (16.3% MAC)	165.00 (23.9% MAC)	60-8423001
6315	161.70 (18.7% MAC)	165.00 (23.9% MAC)	and subsequent

(1) Straight line variation between points. Moment change due to retracting landing gear (-206 in. lbs.).

Empty Weight

C.G. Range None

Maximum weight 6356 lbs. Max. Ramp.

6315 lbs. Max. Takeoff 6000 lbs. Max. Landing

Number of Seats

Crew or Passenger	Fuselage Station
2	96 (crew)
2	132
2	165*

^{*} When bench seat is fitted, three occupants may be accommodated provided that the maximum weight of 380 lbs. is not exceeded. See Flight Manual for loading instructions.

Maximum Baggage (See Note 2 & 6)

Rear compartment 240 lbs. at (+245).

Fuel Capacity Wing Total Capacity (65 gals. each)........... 130 gals

(See Note 1 for unusable fuel)

Oil Capacity 12 qts. per engine (9.25 qts. per engine usable) (See Note 1 for undrainable oil.)

Maximum Operating

Altitude 25,000 feet (30,000 feet when equipped with AAC Options 262, and 264)

Maximum Cabin

Operating Pressure 4.25 PSI (5.50 PSI when equipped with AAC Option 262).

Control Surface Movement

Wing Flaps* Down 45° + 3°

Main Surfaces

 Ailerons**
 Up $25^{\circ} \pm 1^{\circ}$ Down $15^{\circ} \pm 1^{\circ}$

 Elevator
 Up $29^{\circ} + 1^{\circ}$, -0° Down $11^{\circ} + 1^{\circ}$, -0°

 Rudder
 Right $30^{\circ} \pm 1^{\circ}$ Left $30^{\circ} \pm 1^{\circ}$

Tabs (Main Surface in Neutral)

Elevator Up $7^{\circ} \pm 1^{\circ}$ Down $37^{\circ} + 9^{\circ}$, -1° Right $24^{\circ} + 2^{\circ}$, -1° Left $20^{\circ} + 2^{\circ}$, -1°

Serial Numbers Eligible

60-8223001, 60-8423001 and up.

Data Pertinent to All Models

Datum F.S. 0.00 at 150.00 in. forward of wing L.E.

Leveling Means Across and along floor seat tracks (use bubble scale)

Certification Basis

Models PA-60-600, PA-60-601, PA-60-601P, PA-60-602P

FAR Part 23 effective February 1, 1965 with Amendments 23-1 through 23-6 effective August 1, 1967. In addition, aircraft modified with Aerostar Kit 764 969V (ventral rudder) comply with the following paragraphs: 23.207 of Amendment 7 and 23.201, 23.203 and 23.205 of Amendment 14. No exemptions.

Compliance with ice protection requirements has been shown in accordance with FAR 23.1091 of Amendment 23-7 effective August 13, 1969; FAR 23.929 and 23.1419 of Amendment 23-14 effective November 19, 1973; FAR 23.1093 and 23.1193 of Amendment 23-18 effective March 17, 1977; and FAR 23.1416 of Amendment 23-23 effective December 1, 1978 when AAC Option No. 196 is installed.

For Model 602P, compliance with engine cooling requirments has been shown in accordance with FAR 23.1041 of Amendment 23-7 effective August 13, 1969 and 23.1043 of Amendment 23-21 effective January 6, 1978 applied per 21.101 (b).

^{*}Flaps must be rigged so that at 20° flap setting, the right and left flaps agree within + 1° of each other.

^{**}Ailerons are rigged 2° down. Movements are measured from this neutral position. Elevator and rudder movements are measured from a faired neutral position.

SFAR 27 EPA Regulation Part 87, effective February 7, 1973.

Application for Type Certificate dated June 22, 1967.

Reference Engine Lycoming IO-540- Type Certificate Data Sheet No. 1E4.

FAR Part 36 "Noise Standard" Amendments 36-1 through 36-9 effective April 3, 1978.

For Models 601P and 602P Special Condition No. 23-48-WE-15 dated February 7, 1973 (pertaining to doors and exits, and oxygen system).

Model PA-60-700P

FAR Part 23 effective February 1, 1965, as amended by Amendments 23-1 through 23-6, and the following Amendments: FAR 23.75,23.207, 23.909, 23.1041, 23.1091, 23.1563 of Amendment 7; FAR 23.201, 23.203,23.205, 23.1435, of Amendment 14; FAR 23.1143 of Amendment 17; FAR 23.901, 23.959, 23.1093, 23.1193, 23.1305 of Amendment 18; FAR 23.1301, 23.1351, 23.1357, of Amendment 20; FAR 23.1043, 23.1047, 23.1583, and 23.1585, of Amendment 21. In addition, when the aircraft is fitted with optional equipment and approved for flight into known icing, the following regulations apply: FAR 23.929, 23.1419 of Amendment 14; FAR 23.1325 of Amendment 20; and FAR 23.1416 of Amendment 23. No exemptions. No equivalent safety findings.

FAR Part 36 "Noise Standard" Amendments 36-1 through 36-12 effective April 1, 1981.

Special Condition No. 23-48-WE-15 amended February 23, 1983 (Pertaining to doors and exits, and oxygen system).

Production Basis

None. Spare parts only are produced under license.

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.

Airplane Flight Manual

REPORT	<u>MODEL</u>	AIRFRAME SEQUENCE NUMBERS
VB-1201	600	0001 through 0560.
VB-1202	600	0561 through 0714.
VB-1203	600	0715 through 0825.
VB-1204	600	0826 and up.
VB-1205	601	0001 through 0341 when Option 93 (Gross Weight Increase) is not installed.
VB-1206	601	0001 through 0341 when Option 93 (Gross Weight Increase) is installed and 0342 through 0560.
VB-1207	601	0561 through 0714.
VB-1208	601	0715 through 0825.
VB-1209	601	0826 and up.
VB-1210	601P	0157 through 0212 when Option 93 (Gross Weight Increase) or 155 (Higher Altitude Turbo Installation) is not installed.

VB-1211	601P	0157 through 0212 when Option 93 (Gross Weight Increase) is installed and Option 155 (Higher Altitude Turbo Installation) is not installed and 0213 through 0455 when Option 155 (Higher Altitude Turbo Installation) is not installed.
VB-1212	601P	0157 through 0212 when Option 93 (Gross Weight Increase) and 155 (Higher Altitude Turbo Installation) are installed, 0213 through 0455 when Option 155 (Higher Altitude Turbo Installation) is installed and 0456 through 0560.
VB-1213	601P	0561 through 0714.
VB-1214	601P	0715 through 0825.
VB-1215	601P	0826 and up.

Pilot's Operating Handbook/Airplane Flight Manual

VB-1190	602P	Aircraft serial numbers 60-8165001 through 60-8365021.
VB-1220	700P	60-8223001 and 60-8423001 and up.

The approved types of operation were established during the Type Certification and are valid `only when the required equipment specified in the Required Operating Equipment List of the FAA Approved Airplane Manual is installed and operating.

Noise Characteristics:

The corrected noise level of the Models 600/601/601P is 80.0 dBA at the Maximum Normal Operating Power at 2520 RPM (Model 600) and 2475 RPM (Models 601/601P) (top of the green arc on the RPM indicator). A 2.4 dBA (Model 600) and 1.4 dBA (Models 601/601P) credit was also allowed for the takeoff and climb performance at a takeoff gross weight of 5500 pounds (Model 600) and 6000 pounds (Models 601/601P). The corrected noise level of the Model 602P is 79.4 dBA at Maximum continuous Power at 2425 RPM. A 2.5 dBA credit was also allowed for the takeoff and climb performance at a takeoff gross weight of 6000 pounds. The noise level stated above has been verified by and approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model 700P is 78.8 dBA at the Maximum Normal Operating Power at 2500 RPM. A 2.0 dBA credit was also allowed for the takeoff and climb performance at a takeoff gross weight of 6315 pounds. The noise level stated above has been approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

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 certificaton.

The certified empty weight and corresponding center of gravity locations must include undrainable system oil of 7.5 lbs. at (+145) and unusable fuel of 24 lbs. at (+204.4).

The full amount of usable fuel is based on the airplane sitting on a level ramp, laterally level, and longitudinally level (approximately 1 1/2° nose up) with each tank fueled to 0.6 in. below filler neck.

NOTE: The wing tanks are extremely sensitive to attitude and if not level, they cannot be fueled to the full usable capacity.

- Note 2. All required placards listed in the limitations section of the AFM must be installed in the appropriate locations. The following placards must be placed in clear view of the pilot.
 - (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.
 - (2) This airplane approved for day/night VFR/IFR non-icing flight when equipped in accordance with the Airplane Flight Manual. No acrobatic maneuvers, including spins, approved.
 - (3) For airplanes equipped with AAC Option No. 196: This airplane approved for day/night VFR/IFR icing flight when equipped in accordance with the Airplane Flight Manual. No acrobatic maneuvers, including spins, approved.
- Note 3. Life Limitations (Model 601P, 602P and 700P Only).

<u>P/N</u>	<u>Item</u>	Service Life Limits Hours
824007	Cabin Window	16000
210038-501	Windshield	4860
210807	Cabin Windows and Windshield	13,200 when equipped with AAC Option 262
210807	Cabin Windows and Windshield	9,900 when equipped with AAC Options 262 and 264

- Note 4. The change to the model designation and serial number format are shown in (1) and (2) below:
 - (1) For aircraft up to and including 60-0933-8161262, 61-0880-8162157, 61P-0860-8163455 and 62P-0932-8165055, the original Aerostar Model 600 series designation and serial number format is as follows:
 - (a) The first two digits or two digits plus letter indicates the model number:
 - (1) 60 denotes Model 600
 - (2) 61 denotes Model 601
 - (3) 61P denotes Model 601P
 - (4) 62P denotes Model 602P
 - (b) The last dash number of the airplane serial number indicates the factory airframe number, model year and Piper Model Code.
 - (c) The largest number of the second or third set of numbers is always the airframe number. If there are only two sets of numbers, the second set of numbers indicates the model sequence number.
 - (d) If the last numbers are more than four digits, the first digits indicate the model year, the second, two digits indicate a Piper Model Code, and the last three digits indicate the model sequence number.
 - (2) For aircraft subsequent to serial numbers 60-0933-8161262, 61-0880-8162157, 61P-0860-8163455, and 62P-0932-8165055, the model designations have been changed from Ted Smith Aerostar Models 600, 601, 601P, and 602P to Piper Models PA-60-600, PA-60-601, PA-60-601P, and PA-60-602P, repectively. All data relating to the designations 600, 601, 601P, and 602P are also applicable to the new designations. Also effective with this change, the serial number format is as follows:

60-XXYYZZZ

- (a) The first two digits (60) indicate the basic type certificate designations.
- (b) The second two digits (XX) indicate the year model.

The third two digits (YY) indicate the Piper model code: (c)

- (1) 61 denotes PA-60-600 62 denotes PA-60-601
- (2)
- (3)63 denotes PA-60-601P
- 65 denotes PA-60-602P (4)
- (5) 23 denotes PA-60-700P

(d) The final three digits (ZZZ) indicate the model sequence number in the given model year.

NOTE 5. The following aircraft were the last serial numbers manufactured at Santa Maria, California:

<u>S/N</u>
60-0933-8161262
61-0880-8162157
61P-0860-8163455
62P-0932-8165055

NOTE 6. When the optional 40 gallon fuselage fuel tank is installed per AAC STC SA5492SW, the amount of aft baggage that can be carried must be reduced to comply with the baggage placard part No. NAYAK 35049-20.

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