

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

P-871  
Revision 12  
HAMILTON STANDARD  
43E  
  
January 7, 1971

TYPE CERTIFICATE DATA SHEET NO. P-871

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No 871) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Civil Air Regulations/Federal Aviation Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder	Hamilton Standard Division United Aircraft Corporation Windsor Locks, Connecticut 06036
Type	Constant speed; hydraulic (see Notes 3 and 4)
Engine shaft	SAE No. 50, 51, 60 or X (X indicates special shaft sizes for foreign engines are applicable.)
Hub material	Steel
Blade material	Aluminum alloy
Number of blades	3
Hubs eligible	43E50, 43E51, 43E60 and 43X (see Note 1)

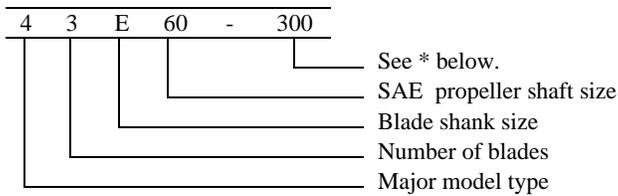
Blades Eligible (See Note 2)	Maximum Continuous		Takeoff		Diameter Limits (See Note 2)	Hub and Blade Weight (Max. Diameter)	NOTES
	HP	RPM	HP	RP M			
6867-0 to 6867-38 6868 is the left-hand version of 6867.	2100	1140	2500	1230	15' 1-1/16" - 11' 11-1/16" (-0 to -38)	534 lbs.	6  5
6869-0 to 6869-38 6870 is the left-hand version of 6869.	2100	1170	2500	1260	15' 1-1/16" - 11' 11-1/16" (-0 to -38)	561 lb.	6  5
6895-8 to 6895-26 6896 is the left-hand version of 6895.	1900	1170	2500	1260	13' 5-1/16" - 11' 11-1/16" (-8 to -26)	551 lbs.	6  5
6901-0 to 6901-26 6902 is the left-hand version of 6901.	2400	1170	2900	1270	15' 1-1/16" - 12' 11-1/16" (-0 to -26)	562 lbs.	6  5
6903-0 to 6903-26 6904 is the left-hand version of 6903.	2650	1140	3500	1270	15' 1-1/16" - 12' 11-1/16" (-0 to -26)	584 lb.	  5
6969-8 to 6969-26 6970 is the left-hand version of 6969.	1900	1170	2500	1260	13' 5-1/16" - 11' 11-1/16" (-8 to -26)	573 lbs.	2 2, 6(*) 5
7041-8 to 7041-26 7042 is the left-hand version of 7041.	1900	1170	2500	1260	13' 5-1/16" - 11' 11-1/16" (-8 to -26)	531 lbs.	  5

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Certification basis                      Type Certificate No. 871 issued 5 January, 1950.

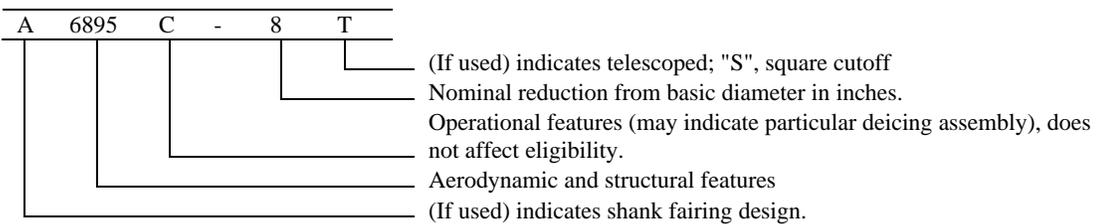
Production basis                         Production Certificate No. 14

NOTE 1. Hub Model Designation



\*A dash number of 300 or lower added to the propeller model designation indicates the suitable type of pitch control (see Note 3) and minor changes which do not affect eligibility. Dash numbers of 301 or above include the complete blade assembly and all of the rotating deicing system components, as well as indicating the suitable type of pitch control (see Note 3) and minor changes.

NOTE 2. Blade Model Designation



The blade model designation suffixed with "T" indicates a diameter reduction by telescoping. Blade models with square cutoffs in accordance with Hamilton Standard blade drawings are suffixed with "S" except the following blades use square cutoffs not designated by "S":

Blade models 6895  
6869 (-0 to -4 have round cutoffs, all other diameters are square)  
6901  
6903

Telescoped blades and blades with a square cutoff are eligible at the same ratings and diameter limits as blades with standard cutoff. Diameter limits shown are nominal diameters of the assembled propeller and do not include the  $\pm 1/8$  inch manufacturing tolerance permissible for propellers with basic diameter less than 14 feet or  $\pm 1/4$  inch permissible for propellers with basic diameter 14 feet or larger. \*Blade model 6969 is nickel plated.

NOTE 3. Pitch Control. Eligible with either Hamilton Standard engine oil control assembly or integral oil control assembly as follows:

- (a) Hubs having dash numbers of 200 or lower, or 301 through 600 must be used only with engine oil control assemblies.
- (b) Hubs having dash numbers of 201 through 300, or 601 or higher must be used only with integral oil control assemblies (approximately 65 pounds additional weight).

NOTE 4. (a) Feathering. Eligible with full feathering control installed in accordance with the propeller manufacturer's instructions.

- (b) Reversing. Eligible with reversing controls installed in accordance with the propeller manufacturer's instructions.

NOTE 5. Left Hand Models. The left-hand version of an approved model propeller is eligible at the same rating and diameter limitations as listed for the right-hand model.

NOTE 6. Interchangeable Blades. Blades with an "S" or "T" suffix (see Note 2) are not interchangeable with each other or with blades having normal round cutoffs. Only blades listed in the same group in (a) or (b) are interchangeable in the same diameter without a flight test.

(a) Interchangeable aerodynamically and vibrationwise; Group (1) 6869 and 6901

(b) Interchangeable aerodynamically only; Group (1) 6895 and 6969 \*(nickel plated version of 6895)

NOTE 7. Accessories.

(a) Propeller Deicing.

(1) Electric. Eligible only with Hamilton Standard Electric deicing equipment installed in accordance with the propeller manufacturer's instructions.\*\*

(2) Fluid. Eligible with Hamilton Standard fluid deicing slinger ring assemblies only.

(b) Propeller Spinner. Eligible with spinner supplied by Hamilton Standard.

\*\*All rubber deicing accessories shall be installed in accordance with Hamilton Standard instructions regarding the cementing sequence for adhering rubber accessories to aluminum alloy blades.

NOTE 8. Shank Fairings. Not applicable.

NOTE 8. Special Limits. Not applicable.

NOTE 10. Special Notes. The word "eligible" as used herein does not signify approval as part of this type certificate. For approval, compliance with the applicable aircraft airworthiness requirements is necessary.

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