

Supplemental Type Certificate

Number SA1797NM

This Certificate issued to Turboplus Aircraft Systems, Inc.
4117 35th Ave NW
Gig Harbor, WA 98335

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Federal Aviation Regulations.*

Original Product Type Certificate Number: A7SO

Make: Piper

Model: PA-34-200T

Description of Type Design Change: Installation of Continental TSIO-360-KB and LTSIO-360-KB engines or TSIO-360-EB(C) and LTSIO-360-EB(C) (converted)* engines and associated systems in accordance with Allied Eagles, LLC / Turboplus Instructions No. TP-7000, dated February 2, 1983, or later FAA approved revisions, and Pilot's Operating Handbook Supplement No. POHS 1797 dated August 25, 1985 or later FAA approved revisions. The installation may be accomplished concurrently with the installation of an optional induction system intercooler in accordance with Allied Eagles, LLC STC No SA4180NM, including an "IN", "DIFFERENTIAL", and "OUT" air temperature indicator in the cockpit.

NOTES: (1)* Converted in accordance with Allied Eagles, LLC/Turboplus STC SE1796NM

(2) The aircraft models identified above must have pressurized magnetos installed in accordance with Allied Eagles, LLC STC SE4177NM or SE4303NM or equivalent.

Limitations and Conditions. The installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of that aircraft. The approval of this modification applies to the above-noted airplane models only. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission. (CONTINUED on page 3)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: December 23, 1982

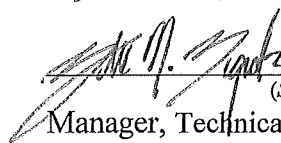
Date of issuance: March 17, 1983

Date reissued: 10/30/1987; 02/24/1992; 10/25/2000;
08/25/2005; 10/15/2007; 4/20/2012; 5/21/12; 2/24/17

Date amended: 12/07/1984; 08/01/1985;
01/14/1986; 10/25/2000; 04/12/2012



By direction of the Administrator



(Signature)

Manager, Technical and Administrative Support Staff,
Los Angeles Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

Supplemental Type Certificate

(Continuation Sheet)

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Limitations and Conditions (continued)

The Conditions and Limitations of Type Certificate Data Sheet No. A7SO apply except where superseded by the following:

MODEL PA34-200T (SENECA II) AS MODIFIED BY STC SA1797NM

Engine: 1 Continental TSIO-360-KB
1 Continental LTSIO-360-KB
or
1 Continental TSIO-360-EB(C)(converted)
1 Continental LTSIO-360-EB(C) (converted)

Fuel: 100/100LL Minimum Grade Aviation Gasoline

Engine Limits: Takeoff, 5 minutes, 2800 RPM and 40 in. Hg Manifold Pressure (220 HP)
Max Continuous, 2600 RPM and 40 in. Hg Manifold Pressure (200HP)

Propeller and

Propeller Limits: Hartzell Propeller P/N:(No Change) – See TCDS. A7SO (Page 3-4)
Low Pitch Setting at 30 in. Station: $12.6^{\circ} \pm 0.2^{\circ}$

Avoid continuous operation between 2000 and 2200
RPM with engine manifold pressure above 32 Hg.
Avoid continuous ground operation in cross and tail
winds of over 10 knots between 1700 and 2100 RPM.

McCauley Propeller P/N:(No Change) – See TCDS. A7SO (Page 4-6)
Low Pitch Setting at 30 in. Station: $11.0^{\circ} \pm 0.2^{\circ}$

Maximum Weight: 4750 lbs. Takeoff
4342 lbs. Landing
4012 lbs. Zero Fuel

Note 1: Current weight and balance report, together with list of equipment included in certificated empty weight and loading instructions, when necessary, must be provided for each aircraft at the time of modification.

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Supplemental Type Certificate

(Continuation Sheet)

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Limitations and Conditions (continued)

Note 2: The following PLACARDS must be displayed as indicated:

- (1) Adjacent to or in close proximity to the aircraft identification plate:

CONTINENTAL ENGINE SUPPLEMENTAL DATA PLATE STC SE1796NM TAKEOFF (5 MIN) 220 HP 2800 RPM, 40 in Hg MP MAX CONT. 200 HP 2600 RPM, 40 in Hg MP

- (2) In full view of the pilots:

POWER SETTINGS USE POHS 1797 SECTION 4
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CAUTION WITH INTERCOOLER INSTALLED USE INDUCTION AIR COOLING GAGE TEMP TO REDUCE MP FOR RATED POWER
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- (3) In full view of the pilots:

MAX T.O. WT 4750 LBS. MAX Ldg WT 4342LBS ALL WTS ABOVE 4012 LBS MUST BE FUEL TAKEOFF (5 MIN) 220 HP 2800 RPM, 40 in Hg MP MAX CONT. 200 HP 2600 RPM, 40 in Hg MP
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END

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