

United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SA00310BO

This Certificate issued to Avidyne Corporation
55 Old Bedford Road
Lincoln, Massachusetts 01773

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 : A25SO
Make : Piper Aircraft, Inc.
Model : PA-46-350P, PA-46R-350T

Description of Type Design Change:

Installation of:

- Model DFC90, p/n 700-00170-002, loaded with Release 2 software (or later FAA approved release)
OR
- Model DFC100, p/n 700-00170-003, loaded with Release 2 software (or later FAA approved release)

Avidyne Corporation Autopilot as a replacement for the S-TEC System 55X Autopilot, p/n 1192-()-(), in accordance with the Avidyne Corporation Master Document List, Document AVDFC-077, Rev 02, dated November 16, 2011, or later FAA-approved revisions.

Limitations and Conditions:

1. Operation must be in accordance with Avidyne Corporation Aircraft Flight Manual Supplement (AFMS) as follows:
For DCF90: Document 600-00285-000, Rev 00, FAA approved on November 17, 2011, or later FAA-approved revision.
For DFC100: Document 600-00288-000, Rev 00, FAA approved on November 17, 2011, or later FAA-approved revision.

The AFMS must be carried in the aircraft during all flights.

(Limitations and Conditions continued on Page 3 of 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

Date of application : March 27, 2011

Date reissued :

Date of issuance : November 17, 2011

Date amended :



*Federal
Aviation
Administration.*

By direction of the Administrator

(Signature)

Robert G. Mann
Manager
Boston Aircraft Certification Office

(Title)

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Supplemental Type Certificate

(Continuation Sheet)

Number SA00310BO

November 17, 2011

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional Office of the transfer of the Supplemental Type Certificate.

The FAA will reissue the certificate in the name of the transferee and forward it to him.

TRANSFER ENDORSEMENT

Transfer the ownership of Supplemental Type Certificate Number _____

to (*Name of transferee*) _____

(*Address of transferee*) _____

(*Number and street*)

(*City, State, and ZIP code*)

from (*Name of grantor*) (*Print or type*) _____

(*Address of grantor*) _____

(*Number & street*)

(*City, State, and ZIP code*)

Extent of Authority (if licensing agreement): _____

Date of Transfer: _____

Signature of grantor (*In ink*): _____

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Supplemental Type Certificate

(Continuation Sheet)

Number SA00310BO

November 17, 2011

Limitations and Conditions: (continued from Page 1 of 3)

2. Maintenance must be in accordance with Instructions for Continued Airworthiness (ICA), Document AVDFC-083, Rev 02, dated November 15, 2011 or later FAA accepted revision.
The ICA must be made available to the operator at the time of installation.
3. Aircraft must be configured with an existing S-TEC 55X (or 55SR) Autopilot and with an existing Avidyne Flight Display System as follows in order to accomplish this STC:
For DCF90: Avidyne Primary Flight Display, p/n 700-00006-(), loaded with Release 8.0.4 software (or later FAA approved release) with Modification 55 installed.
For DFC100: Avidyne Integrated Flight Display, p/n 700-00083-() loaded with Release 9.2.1 software (or later FAA approved release). See STC SA00282BO.
4. Compatibility of this design with previously approved modifications must be determined by the installer.

Certification Basis:

Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for the Piper Aircraft, Inc. PA-46-350P and PA-46R-350T aircraft is as follows:

- a. The type certification basis for Piper Aircraft, Inc. PA-46-350P and PA-46R-350T is shown on TCDS A25SO for parts **not changed or not affected** by the change.
- b. The certification for parts **changed or affected** by the change since the reference application date, March 27, 2011, is based upon part 23 as amended by Amendment 23-59. Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for this modification was determined to be:

Regulations at the latest amendment 23-0 through 23-57

23.301, 23.303, 23.305, 23.307(a), 23.337(a)(1)(b)(1), 23.561(a)(b)(3)(e), 23.601 - 23.613, 23.619, 23.625, 23.771(a), 23.773(a)(2), 23.777(a)(b), 23.867(a)(b), 23.1301, 23.1308(b), 23.1309(a)(1)(2)(b)(e), 23.1311(a)(2)(3)(4)(6), 23.1322, 23.1329, 23.1335, 23.1351(a)(1)(2)(i)(b)(1)(e), 23.1357(a)(2)(b)(c)(d), 23.1359(c), 23.1365(a)(b)(d)(e)(f), 23.1367, 23.1381(a)(b), 23.1431(a)(b)(e), 23.1501, 23.1523, 23.1525, 23.1529, 23.1541(a), 23.1555(a)(b), 23.1581(a)(b)(2)(3)(f), 23.1583(m), 23.1585(j)

Regulations at an intermediate amendment

None

Regulations at the amendment level in TCDS A25SO

23.25

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.

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