

Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA372NW

*This certificate, issued to* ROBERT S. HARBORD

*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 7A of the Aero Bulletin Regulations, Effective January 17, 1935.*

*Original Product—Type Certificate Number:* 603

*Make:* Fairchild

*Model:* F-45

*Description of Type Design Change:* Installation of a Wright R-975-30 engine; a Hamilton Standard 2D30/6167A-15 propeller; a 7 inch Harrison oil cooler with ducting; and a modified Twin Beech (AT-11) cowl in accordance with Robert S. Harbord photographs 1 through 28.

*Limitations and Conditions:* Data pertaining to this modification are considered inadequate for duplication on other aircraft. This approval is limited to the installation in Fairchild Model F-45, Serial Number 4014 only. A copy of this Certificate and Addendum Number SA372NW shall be maintained as part of the permanent records for the modified aircraft.

*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:* September 4, 1975

*Date issued:*

*Date of issuance:* November 1, 1976

*Date amended:*



*By direction of the Administrator*  
*Charles C. Schneider*  
 (Signature)

Chief, Engineering and Manufacturing Branch  
 (Title)

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

*This certificate may be transferred in accordance with FAR 21.47.*

United States of America  
Department of Transportation—Federal Aviation Administration  
**Supplemental Type Certificate**  
(Continuation Sheet)

NOV 1 1975 *Number* SA372NW

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA372NW

The conditions and limitations of Type Certificate Data Sheet Number 603 apply except where superseded by the following:

This Supplemental Type Certificate Data Sheet, which is part of STC SA372NW prescribes the conditions under which the product for which the STC was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Supplemental Type Certificate Holder: Robert S. Harbord

I. FAIRCHILD F-45 (LANDPLANE - NORMAL CATEGORY) AS MODIFIED BY STC SA372NW

Engine: Wright R-975-30  
Fuel: 80 octane minimum grade aviation gasoline  
Engine Limits: Takeoff - 450 HP at 2250 rpm & 36.5" HG - 5 min. Maximum continuous - 420 HP 2200 rpm & 34.8" HG @ sea level  
Propeller: Hamilton Standard 2D30/6267A-15  
Propeller Limits: 550 HP at 2400 maximum continuous  
Serial Number Eligible: 4014 only  
Airspeed Limits: Same as specified in Data Sheet # 603  
Maximum Weight: 4000 pounds  
Powerplant Instrument Markings: Cylinder Head Temp. - 500<sup>o</sup>F - Red Radial  
Oil Inlet Temp - 200<sup>o</sup>F - Red Radial

NOISE CERTIFICATION PROCEDURE:

Compliance with FAR 36, Appendix F, was shown with the following procedures: Level flyover at 1000 AGL at 2200 engine rpm and full throttle manifold pressure. The certificated noise level is 74.7 dB(A). This noise level reflects correction of as-measured data to a standard 70<sup>o</sup>F, 77% R.H. acoustic day as well as a -4.9 dB(A) credit resulting from aircraft takeoff and climb characteristics. Maximum allowable: 82 dB(A).

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