Possession of the Supplemental Type Certificate (STC) does not constitute rights to the installation of the modification or its design data. The STC and related information (drawings, data, specifications) are the property of the STC holder. The Federal Aviation Administration will not release proprietary data without authorization from the holder. The user must get installation approval or data rights from the STC holder.

United States of America
Department of Transportation Federal Aviation Administration

Supplemental Type Certificate

Number SA777CE

This certificate issued to Robert L. & Barbara V. Williams
117 E. First
Udall, KS 67146

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified herein meets the airworthiness requirements of Part 3 of the Civil Air Regulations.

Original Product Type Certificate Number 3A17

Make Cessna

Model 175, 175A, 175B, 175C and P172D (Landplanes Only) R172E (T-41B)

Description of Type Design Change:

Installation of a Lycoming 150 H.P. engine and a Hartzell HC-C2YK-1A/7666A-2 propeller as indicated on continuation sheet.

Data Required: Avoou Industries, Inc. Drawing List No. 17513 dated April 12, 1971, or 17513-1 dated May 6, 1980, or later FAA approved revisions and a copy of this certificate, including continuation sheet.

Limitations and conditions:

This approval should not be extended to other specific airplanes of these models on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of the airplane. Also, see continuation sheet.

This certificate and the supplemental 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 April 12, 1971 Date reissued August 5, 1981

Date of issuance April 30, 1971 Date amended July 23, 1971; September 8, 1976; May 6, 1980; January 19, 1982

By direction of the Administrator

Original Signed By
Robert A. Gambrill, Jr.
(Signature)

ROBERT A. GAMBRILL, JR., Manager
Wichita 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.

This certificate may be transferred in accordance with FAR 21.47

FAA Form 3110-2 (10-88)

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA777CE

Engines: Lycoming O-360-A1A or IO-360-B1B

*Fuel: 91/96 or 100/130 min. grade aviation gasoline

*Engine Limits: For all operations 2700 r.p.m. (180 hp)

Propeller and
Propeller Limits: (a) Hartzell HC-C2YK-1B/7666A-2 or /7666-2
HC-C2YK-1BF/7666A-2

or

Hartzell HC-C2YK-1A/7666A-2 or /7666-2

Diameter: Not over 74 in., not under 72 in.

Placard: "Avoid continuous operation between 2000 and 2250 r.p.m."

Pitch Settings: At 30 in. station
Low 14° High 29° ± 1°
(No additional tolerance permitted)

(b) Governor: Hartzell F-3-1 or F-3-1A or F-2-8A
F-3-2 or F-3-2Z

(c) Spinner: (Avcon Drawing No. 17015 or P/N 677901)
Required

*Powerplant Instrument Markings:

Tachometer 2700 r.p.m. (red line)
2000-2250 r.p.m. (red arc)

Oil Temperature Gage: 245°F (red line)

Oil Pressure Gage: Minimum - 25 p.s.i. (red line)
Maximum - 100 p.s.i. (red line)
Normal - 60 to 90 p.s.i. (green arc)

Fuel Pressure Gage: Minimum - .5 p.s.i. (red line)
Maximum - 8 p.s.i. (red line)
Normal - 3 to 5 p.s.i. (green arc)

In addition to the placards specified above, the prescribed operation limitation indicated by an asterisk (*) must also be displayed by a permanent marking.
(*) Intentional spins prohibited.

-End-

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

FAA FORM 8110-2 (10-69)
May 6, 1980
Reissued August 5, 1981
Amended January 19, 1982

This certificate may be transferred in accordance with FAR 21.47.

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FAA AC 1-2651