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 SA424CE

This certificate, issued to Barbara or Bob Williams
Box 431, 213 N. Clark
Udall, Kansas 67146

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 3 *of the* Civil Air *Regulations.*

Original Product — Type Certificate Number 3A17
Make Cessna
Model 175, 175A and 175B (landplane)

Description of Type Design Change: Installation of Lycoming O-360-A1A or O-360-A1D engine and Hartzell HC-C2YK-1A/7666-2, HC-92ZK-8D/8447-12A or McCauley 2D36C14/78KM-4 propeller.

Data Required: Doyn Drawing List No. SA424CE approved September 25, 1969, or later FAA approved revisions and a copy of this certificate; or MASA Drawing List No. 17500 dated January 31, 1978, or later FAA approved revisions and a copy of this certificate.

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 airplanes. (See Continuation Sheets 2 through 4.)

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: January 28, 1966

Date of issuance: May 6, 1966

Date reissued: July 1, 1975; September 5, 1979

Date amended: September 25, 1969; September 3, 1976; January 31, 1978

By direction of the Administrator

Lawrence A. Hesson
(Signature)

for BARRY D. CLEMENTS
Chief, Wichita Engr. & Mfg. District 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 8110-2 (10-68)

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA424CE

The conditions and limitations of Aircraft Type Certificate Data Sheet No. 3A17 apply except as follows:

Engine: Lycoming O-360-A1A or O-360-A1D.

Fuel: 91/96 minimum grade aviation gasoline.

Engine Limits: Model 175 and 175A
For all operations 2700 r.p.m. (180 hp.)

Model 175B
Takeoff (5 minutes) 2700 r.p.m. (180 hp.)
Maximum continuous 2550 r.p.m. (175 hp.)

Propeller and Propeller Limits:

1. (a) Hartzell HC-C2YK-1A/7666A-2 or /7666-2

   (b) Hartzell HC-C2YK-1B/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°

   Governor: Hartzell F-3-1 or F-3-1A

   Spinner Assembly: Hartzell 835-21P (required)

2. Hartzell HC-92ZK-8D/8447-12A

   Diameter: Not over 72 in., not under 70.5 in.

   Placard: None

   Pitch Settings at 30 in. station: Low 13°
   High 27°

   Governor: Hartzell D-1-1 or D-1-5

   Spinner Assembly: Hartzell 835-6 (required)

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 8110-2-1 (10-69)

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)

Number SA424CE

3. McCauley 2D36C14/78KM-4

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

Placard: "Avoid continuous operation while descending between 2250 and 2550 r.p.m. with manifold pressure settings below 15 inches mercury."

Pitch Settings at 30 in. station: Low 12.7°
High 27.5° ±1°

Governor: McCauley C290D3/T18

Spinner: McCauley D-2137 (required)

Powerplant Instrument Markings: Tachometer (red line) 2700 r.p.m.

Cessna 175B (yellow arc) 2550 - 2700 r.p.m.

Hartzell HC-C2YK-1A/7666-2 or HC-C2YK-1B/7666-2 (red arc) 2000 - 2250 r.p.m.

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	0.5 p.s.i.	(red line)
	Maximum	8.0 p.s.i.	(red line)
	Normal	3 to [illegible] p.s.i.	(green arc)

Oil Capacity: 8 qts. @ -22 (unusable 2 qts.) See Note 1 for data on system oil.

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. The certificated unusable fuel and oil are as follows:

Oil	Fuel
4 lbs. @ -22	54 lbs. (+46) Model 175
4 lbs. @ -22	60 lbs. (+46) Model 175A, 175B

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

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA424CE

The following information must be displayed in the form of composite or individual placards.

1. Above the fuel pump switch:
   * "Fuel Pump - Pull On"

2. On the dome light fuse placard:
   * "Fuel Pump"

3. On nav light fuse placard:
   * "Nav and Starter"

4. In close proximity to the tachometer:
   "Avoid continuous operation while descending between 2250 and 2550 r.p.m. with manifold pressure settings below 15 inches mercury."

   (on aircraft equipped with 2D36C14/7666KM-4 McCauley propeller)

5. Tachometer marking 175B only:

   (a) If graduated dial is marked, yellow arc between 2550 and 2700.

   (b) If glass is marked, yellow arc between 2550 and 2700, white slip mark, and placard on glass maximum continuous r.p.m. 2550.

6. In close proximity to the tachometer:
   "Avoid continuous operation between 2000 and 2250 r.p.m."

   (on aircraft equipped with HC-C2YK-[illegible]/7666-2 Hartzell propeller)

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