-1045

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA2577NM

This certificate, issued to Michael Parfit
1330 San Rafael
Santa Barbara, CA 93109

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.* *for complete certification basis see TCDS A13CE.

Original Product — Type Certificate Number: A13CE

Make: Cessna

Model: 177, S/N 17700985 only, (N29601)

Description of Type Design Change: Installation of Lycoming O-360-F1A6 (modified per STC SE2574NM) and Hartzell HC-C2YK-1BF/F7666A-2 constant speed propeller in accordance with Parfit Report No. A1 dated May 21, 1985.

Limitations and Conditions: Data pertaining to this modification are considered inadequate for duplication in other aircraft. This approval is limited to the installation made in Cessna 177, S/N 17700985 only. No additional modifications of this type are to be approved solely by reference to this Supplemental Type Certificate ~~or~~ to the data submitted therefor. Supplemental Type Certificate Addendum No. SA2577NM is a part of this certificate. A copy of this certificate and Parfit Report No. A1 dated May 21, 1985 shall be maintained as a a part of the permanent records for this 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: May 23, 1985

Date reissued:

Date of issuance: June 7, 1985

Date amended:

By direction of the Administrator

Marvin F. Rammelsberg
(Signature)

FOR CHARLES I. BLOMER, Manager
Western 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.

FAA Form 8110-2 (10-68)

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)

(I) June 7, 1985 *Number* SA2577NM

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA2577NM

The conditions and limitations of Type Certificate Data Sheet No. A13CE apply except as follows:

This Addendum, which is part of Supplemental Type Certificate No. SA2577NM, prescribes conditions and limitations under which the product for which the Supplemental Type Certificate was issued meets the airworthiness requirements of the Civil Air Regulations. A copy of this Addendum shall be maintained as part of the modified aircraft's permanent records.

I - Model 177, (Normal Category Only), as modified per STC SA2577NM

Engine	Lycoming O-360-F1A6, as modified per STC SE2574NM
Fuel	100/100LL Minimum Grade Aviation Gasoline
Engine Limits	For all operations, 2700 rpm. (180 HP)
Propeller and Propeller Limits	Hartzell Constant Speed Hub Model: HC-C2YK-1BF Blade Model: F7666A-2 Diameter: Not over 74 in., Not under 72 in. Pitch setting at 30 in. sta: low 14°± 1°, high 29°± 1° Governor: Hartzell F-3-1A
C.G. Range	Normal Category: (+101.0) to (+114.5) at 2000 lb. or less (+105.5) to (+114.5) at 2350 lb. Straight line variation between points given (Ref.)
Maximum Weight	Normal Category: 2350 lb. (Ref.)
Oil Capacity	8 quarts at (+44) (2 qt. unusable) (Ref.)
Powerplant Instrument Markings	Tachometer: 2700 RPM (red radial) 2200-2700 RPM (green arc) Oil Temperature Gauge: 245°F (red radial) (Ref.) Oil Pressure Gauge: Minimum - 25 psi (red radial) Maximum - 100 psi (red radial) Normal - 60 psi to 90 psi (green arc) (Ref.)

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)

(I) June 7, 1985 *Number* SA2577NM

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA2577NM

Powerplant Instrument Markings (cont.)	Fuel Pressure Gauge:	Minimum -	2.0 psi (red line)
		Maximum -	8.0 psi (red line)
		Normal -	2 psi to 8 psi (green arc) (Ref.)

Serial Nos. Eligible 17700985 only

Required Equipment: In addition to the equipment applicable and required by Type Certificate Data Sheet No. A13CE, the equipment specified by Parfit Report A1 dated May 21, 1985 must be installed as a result of incorporating STC SA2577NM.

NOTE 1. Current Weight and Balance Report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be in the aircraft.

NOTE 2. The following placards must be displayed as indicated in addition to the ones required by Type Certificate Data Sheet No. A13CE (Note 2A).

1. Immediately above propeller control:
   "Prop - push to increase"

2. Around fuel tank cap:

   "100/130 OCTANE - ONLY -"
   Remove existing 80/87 grade placard.

NOTE 3. Under limitations placard which is identified on Type Certificate Data Sheet No. A13CE as Note 2A(1), permanently delete all reference to Utility Category, acrobatic maneuvers, spins and spin recovery.

- 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 8110-2-1 (10-69) *This certificate may be transferred in accordance with FAR 21.47.*