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United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA2362NM

This certificate, issued to Dennis L. Rootvik

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*, dated November 1, 1949, as amended by 3-1 through 3-12.

Original Product—Type Certificate Number: A-799

Make: Cessna

Model: 170B

Description of Type Design Change:

Installation of a Lycoming O-360-A1F6D engine, McCauley B2D34C207/78TCA-0 propeller, flap gap seals and aileron gap seals and associated systems in accordance with Dennis L. Rootvik photographs (1) through (5).

NOTE: Associated systems required are as per STC SA421CE, such as: engine mount, cowl(mod), carburetor intake system, engine baffles, electric auxiliary fuel pump and exhaust system.

Limitations and Conditions:

Data pertaining to this modification are considered inadequate for duplication in other aircraft. This approval is limited to the installation in Cessna 170B, Serial Number 25972 only. A copy of this certificate and addendum 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: February 15, 1984

Date of issuance: March 27, 1984

Date reissued:

Date amended:

By direction of the Administrator

Thomas F. Curran

(Signature)

Acting Manager, Seattle 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.

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(Continuation Sheet)

March 27, 1984 *Number* SA2362NM

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA2362NM

The conditions and limitations of Type Certificate Data Sheet No. A-799 apply except as follows:

The Supplemental Type Certificate Addendum, which is part of STC SA2362NM prescribes the conditions and limitations under which the product for which the STC was issued meets the airworthiness requirements of the Civil Air Regulations. A copy of this STC Addendum is required to be maintained as part of the permanent records for the modified aircraft.

SUPPLEMENTAL TYPE CERTIFICATE HOLDER: Dennis L. Rootvik

I. MODEL CESSNA 170B, 4PCLM (NORMAL CATEGORY) AS MODIFIED BY STC SA2362NM

Engine:	Lycoming O-360-A1F6D
Fuel:	100/130 Minimum Grade Aviation Gasoline
Engine Limits:	Takeoff (5 min) 2700 rpm (180 HP) at sea level Maximum continuous power - 2600 rpm, full throttle
Propeller and Propeller Limits:	McCauley B2D34C207/78TCA-0 Diameter - 78" maximum; 76.5 minimum Pitch Setting @ 30" station: Low - 11.6 ± 0.2 High - 26° ± 0.5 Placard - See Note 2(2) Governor - McCauley C290D3/T12 Spinner - McCauley D-2137
Powerplant Instrument Markings:	Tachometer: 2700 rpm (red line) 1700 - 1900 (red arc) Oil Temperature Gauge: 245°F (red line) Oil Pressure Gauge: Minimum - 25 psi (red line) Maximum - 100 psi (red line) Normal - 60 to 90 psi (green arc)

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

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SUPPLMENTAL TYPE CERTIFICATE ADDENDUM NO. SA2362NM

Powerplant Instrument Markings (Continued):	Fuel Pressure Gauge: Minimum - .5 psi (red line) Maximum - 8 psi (red line) Normal - .3 to 5 psi (green arc)
C. G. Range:	See Type Certificate Data Sheet 3A12
Maximum Weight:	See Type Certificate Data Sheet 3A12
Serial Number:	25972
Certification Basis:	Same as prescribed by Type Certificate Data Sheet A-799.
NOTE 1.	Current weight and balance report, together with a list of equipment included in certificated empty weight and loading instructions, when necessary, must be provided for each aircraft at the time of modification.
NOTE 2.	The following placard must be displayed as indicated:

(1) Adjacent to or in close proximity to the aircraft identification plate:

> DENNIS L. ROOTVIK
> STC SA2362NM
> LYCOMING O-360-A1F6D ENGINE INSTALLATION
> DATE INSTALLED: MARCH 19, 1984

(2) When using McCauley B2D34C207/78TCA-0 propeller:

> WITH LESS THAN 10 INCHES MANIFOLD PRESSURE AVOID CONTINUOUS OPERATION BETWEEN 1400 - 1700 RPM

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NOTE 2 (Contined): (3) The following placard is to be in front of and in full view of the pilot:

ENGINE LIMITS TAKEOFF (5 MIN) - 2700 RPM. MAXIMUM CONTINUOUS POWER - 2600 RPM - FULL THROTTLE

NOTE 3. With the described engine and propeller installation, performance will be at least equal to or better than, that given in the original FAA Approved Flight Manuals for the 170B Cessna airplane.

Noise Certification Procedure:

Compliance with FAR 36, Appendix F, was shown with the following procedures: Level flyover at 1000 feet AGL at 2600 engine rpm and full throttle manifold pressure. The certificated noise level is 69.72 dB(A). This noise level reflects correction of as measured data to a standard 70°F, 77% R.H. acoustic day as well as a -5 dB(A) credit resulting from aircraft takeoff and climb characteristics.

- END -

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