

Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate

Number SA620NW

This certificate, issued to SHERIDAN FLYING SERVICE

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, as Amended by 3-1 Through 3-12.

Original Product — Type Certificate Number: 3A12
 Make: Cessna
 Model: 172K

Description of Type Design Change: Installation of a Lycoming O-360-A3A engine (180 HP @ 2700 rpm), Sensenich M76EMM-0-60 propeller and associated systems in accordance with Sheridan Flying Service photographs 1 through 6.

NOTE: This is a replacement of a O-320-E2D rated at 150 HP @ 2700 rpm.

Limitations and Conditions: Data pertaining to this modification are considered inadequate for duplication on other aircraft. This approval is limited to the installation in Cessna 172K, Serial Number 17259000 only. A copy of this Certificate and Addendum SA620NW 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: May 19, 1978

Date issued:

Date of issuance: June 15, 1978

Date amended:



By direction of the Administrator
Charles C. Schroeder
 (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) JUN 15 1978

Number SA620NW

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA620NW

The conditions and limitations of the original specification apply except as follows:

This Addendum, which is part of the Supplemental Type Certificate No. SA620NW, prescribes the conditions and limitations under which the STC was issued and meets the airworthiness requirements of Civil Air Regulation 3.

SUPPLEMENTAL TYPE CERTIFICATE HOLDER: Sheridan Flying Service

I. CESSNA MODEL 172K, 4PCLM (NORMAL CATEGORY) AS MODIFIED BY STC SA620NW

Engine: Lycoming O-360-A3A
Fuel: 91/96 or 100/130 minimum grade aviation gasoline
Engine Limits: Take Off (5 Min.) 2700 rpm (160 HP) @ Sea Level
Maximum Continuous Power - 2500 rpm
Propeller Limits: Sensenich M76EMM-0-60
Diameter: 76" maximum; 76" minimum
Static Limits: 2300 rpm maximum
2200 rpm minimum
Placards: See NOTE 2: (c)
C. G. Range: (+38.5) to (+47.5) at 2300 lbs.
Maximum Weight: 2300 lbs.
Datum: Lower Front Face of Firewall
Oil Capacity: 8 quarts
Instrument Markings: Oil Temperature:
245 F Oil Inlet (Red Line)
Oil Pressure:
60 - 90 psi (Green Arc)
Cylinder Head Temperature:
500 F Bayonet Thermocouples (Red Line)

Serial Number Eligible: 17259000 only

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NOTE 1: Current weight and balance report including list of equipment in the certified empty weight must be in the aircraft.

NOTE 2: In addition to the Placards and Markings required by Type Certificate Data Sheet 3A12, Note 2, apply the following:

a. Adjacent to the fuel filler cap:

CAUTION - USE 100/130 OCTANE
FUEL OR HIGHER ONLY

b. Adjacent to or in close proximity to the aircraft identification plate:

LYCOMING O-360-A3A ENGINE
INSTALLATION, STC SA620NW

c. The following placard is to be in front and in full view of the pilot:

ENGINE LIMITS
TAKE OFF (5 MIN.) - 2700 RPM
AVOID CONTINUOUS OPERATION
BETWEEN 2150 AND 2350 RPM

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 Cessna 172K airplane.

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