

United States of America
Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate

Scott Martin
N 7177L
Aircraft S/N AA5-0677
Eng. S/N L-39370-27A
STC S/N 637

Number SA683NE

This certificate issued to
Precision Engine
2200 Airport Road
Owensboro, KY 42301

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part 31.23 of the Civil Air Federal Aviation Regulations

Original Product -- Type Certificate Number: A16EA
Make: Gulfstream Aerospace
Model: AA5A, AA5

Description of Type Design Change

Installation of Lycoming Model O-320-E2G engine that has been converted to high compression in accordance with STC SE682NE amended October 27, 1989.

Limitations and Conditions: 1) Precision Engine Airplane Flight Manual Supplement No. 1 FAA approved November 1, 1989, required with installation for AA5A or AA5 aircraft.
2) Tachometer Red Line Limit is changed to 2650 RPM maximum. Fuel Tank Fillers placarded for 100-130 Min. Fuel Octane.
3) If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.
4) Compatibility of this design change with previously approved modifications must be determined by the installer.
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: April 18, 1989

Date issued: August 7, 1998

Date of issuance: September 1, 1989

Date amended: November 1, 1989



By direction of the Administrator

Vito A. Pulera
(Signature)

Vito A. Pulera
Manager,
New York 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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Number SE682NE

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2200 Airport Road
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certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part 135.33 of the Civil Air Federal Aviation Regulations

Original Product -- Type Certificate Number: E-274
Make: Textron Lycoming
Model: O-320-E2G

Description of Type Design Change Conversion of Model O-320-E2G engine to high compression in accordance with the following:

Precision Engine "Parts Manual Supplement" dated 10/27/89.
RPM rating is reduced to 2650, shaft horsepower is unchanged, and compression ratio is increased to 8.5:1.
Minimum octane is 100-130.

Limitations and Conditions:

1. This converted engine is similar to Lycoming Model O-320-D2G. All Lycoming service publications and FAA Airworthiness Directives and Alerts applicable to the O-320-D2G must be reviewed for applicability to this converted engine. Data plate, per Precision Engine, "Data Plate Description" must be attached to the engine.
2. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.
3. Compatibility of this design change with previously approved modifications must be determined by the installer.

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: April 18, 1989

Date reissued: August 7, 1998

Date of issuance: September 1, 1989

Date amended: November 1, 1989



By direction of the Administrator

Vito A. Pulera
(Signature)

Vito A. Pulera
Manager,
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