United States of America

Department of Transportation_Federal Aviation Administration

Supplemental Type Certificate

Number SA2174NM

This certificate, issued to **Precise Flight, Inc.**
63354 Powell Butte Road
Bend, OR 97701

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,* effective November 1, 1949.

Original Product—Type Certificate Number: 2A3
Make: Mooney
Model: M20B, C, E, F, G, J, K, and M

Description of the Type Design Change: Installation of Precise Flight Speedbrake System in accordance with Precise Flight, Inc. DRC Speedbrake Installation Instructions Manual, Report No. 122, or later FAA approved revisions.

NOTE: The Descent Rate Control (DRC) System has been renamed the Speedbrake System (SBS).

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate, Continuation Sheet, and FAA approved Airplane Flight Manual Supplement, dated November 23, 1983, or later FAA approved revisions, must be maintained as part of the permanent records for the modified aircraft.

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.

(See Continuation Sheet Page 3)

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: November 7, 1983
Date of issuance: November 23, 1983
Date reissued:
Date amended: 5/24/84; 7/11/84; 7/24/84; 12/7/84; 9/13/89; 8/15/89, 6/25/91; 11/7/03

By direction of the Administrator

(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.

This certificate may be transferred in accordance with FAR 21.47.

FAA FORM 8110-2(10-68)

Supplemental Type Certificate
(Continuation Sheet)

Number **SA2174NM**

Precise Flight, Inc.
Reissued:
Amended: 5/24/84; 7/11/84; 7/24/84; 12/7/84;
9/13/89; 8/15/89, 6/25/91; 11/703

Limitations and Conditions (cont'd): The conditions and limitations of the original Type Certificate 2A3 apply except as follows:

This Continuation Sheet, which is part of Supplemental Type Certificate No. SA2174NM, prescribes the conditions and limitations under which the STC was issued and meets the airworthiness requirements of the Civil Air Regulations.

I. MOONEY MODELS M20B, C, E, F, G, J, K, and M, 4PLCM (NORMAL CATEGORY AS MODIFIED BY STC SA2174NM.

EQUIPMENT: Mooney Owner's Manual or Pilot's Operating Handbook and AFMS for the DRC/SBS System must be maintained in the airplane at all times.

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 2A3, Note 2, apply the following:

a. The following placard is to be located at the circuit breaker panel:

SPEEDBRAKE

b. The following placard is to be near the Speedbrake Control Switch:

SPEED BRAKE
PUSH
TO DEPLOY

or

SPEEDBRAKE

Supplemental Type Certificate

(Continuation Sheet)

Number **SA2174NM**

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9/13/89; 8/15/89, 6/25/91; 11/7/03

Limitations and Conditions (cont'd):

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

SPEED BRAKE EQUIPPED: FOR OPERATING INSTRUCTIONS AND LIMITATIONS SEE SUPPLEMENT IN OWNER'S MANUAL OR PILOT'S OPERATING HANDBOOK
OR
DESCENT RATE CONTROL FOR OPERATING INSTRUCTIONS AND LIMITATIONS: SEE SUPPLEMENT IN OWNER'S MANUAL OR PILOT'S OPERATING HANDBOOK

d. If the standby vacuum system is installed, the following placard should be placed in front of and in full view of the pilot:

THIS AIRCRAFT IS EQUIPPED WITH PRECISE FLIGHT, INC. STANDBY VACUUM SYSTEM. REFER TO AFM OR PILOT'S OPERATING HANDBOOK FOR OPERATING INSTRUCTIONS.

NOTE 3: With the described DRC/SBS System Installation, performance will be at least equal to or better than that given in the Owner's Manual or Pilot's Operating Handbook for the Mooney airplane.

- END -

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