United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SE4157NM

This certificate, issued to Merlyn Products, Inc.

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 13 *of the* Civil Air *Regulations*, as amended by 13-1, 13-2, and 13-3.

Original Product—Type Certificate Number: IE4-12

Make: Lycoming

Model: IO-540-AA1A5

Description of Type Design Change: Installation of Merlyn Products, Inc. modified turbochargers (Rotomaster 600846-01/-02 or 600803-01/-02), controller (Rotomaster 250002-03/-05/-06), wastegate actuator (Rotomaster 250001-04) and link, scavenge pump (Rotomaster 101633-01/-02/-31/-32) and manifold pressure relief valves on Lycoming engines in accordance with FAA sealed Merlyn Products, Inc. Top Drawing List No. 12-TDL-1, Revision G, dated May 4, 1990, and the Samurai 350 Installation Instructions, Report No. 12-1, Revision F, dated May 7, 1990, or later FAA approved revision. This modification includes a change in the engine ratings as delineated on the Continuation Sheet.

Limitations and Conditions: Data is suitable for reproduction and incorporation on all Lycoming IO-540-AA1A5 engines installed to support airplane STC No. SA4156NM only. This approval should not be extended to any other engine. This approval should not be extended to engines of this model 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 engine.

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 27, 1987

Date reissued:

Date of issuance: January 4, 1988

Date amended: March 29, 1988; August 16, 1989
May 8, 1990

By direction of the Administrator

Stewart R. Miller
(Signature)

Assistant 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)

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Supplemental Type Certificate

(Continuation Sheet)

Number SE4157NM

New Engine Ratings: a) 330 Hp @ 42 in. hg. MAP and 2500 RPM (SLS/ISA)
b) 350 Hp @ 42 in. hg. MAP and 2500 RPM (23,000 ft. critical altitude/ISA)

LIMITATIONS AND CONDITIONS: (continued)

A copy of this Certificate and Continuation Sheet in combination with documentation delineated in STC No. SA4156NM, shall be maintained as part of the permanent records for each modified aircraft.

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