

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [61 FR 21071 No. 91, 5/10/96]

Sensenich Propeller
Mfg.

[AD 69-09-03 R3](#)

Amendment 39-9583

Effective June 13, 1996

Revises AD 69-09-03 R2

Recurring: No

[Docket No. 95-ANE-03; Amendment 39-9583; AD 69-09-03 R3]

Airworthiness Directives; Sensenich Propeller Manufacturing Company Inc. Models M76EMM, M76EMMS, 76EM8, and 76EM8S() Metal Propellers

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment revises an existing airworthiness directive (AD), applicable to Sensenich Propeller Manufacturing Company Inc. Models M76EMM, M76EMMS, 76EM8, and 76EM8S() metal propellers, that currently restricts operators from continuously operating the propeller at engine speeds from 2,150 to 2,350 revolutions per minute (RPM) and specifies propeller inspection and rework or replacement. This amendment eliminates the requirement to add tachometer markings on aircraft with certain additional Textron Lycoming O-360 series reciprocating engines with solid crankshafts installed, and updates the referenced Sensenich Propeller Company Inc. service bulletin to the latest revision. Reworking of all affected propeller models remains a requirement of the AD, regardless of engine installation. This amendment is prompted by inquiries concerning tachometer red arc restrictions on certain Textron Lycoming O-360 series reciprocating engines with solid crankshafts. The actions specified by this AD are intended to prevent propeller blade tip fatigue failure, which can result in loss of control of the aircraft.

DATES: Effective June 13, 1996.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 13, 1996.

ADDRESSES: The service information referenced in this AD may be obtained from Sensenich Propeller Manufacturing Company Inc., 519 Airport Road, Lititz, PA 17543; telephone (717) 569-0435, fax (717) 560-3725. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., 7th Floor, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Raymond J. O'Neill, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine and Propeller Directorate, 10 Fifth St., Valley Stream, NY 11581; telephone (516) 256-7505, fax (516) 568-2716.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by revising AD 69-09-03, Amendment 39-761 (34 FR 7371, May 7, 1969); Revision 1, Amendment 39-808 (34 FR 12563, August 1, 1969); Revision 2, Amendment 39-1102 (35 FR 17030, November 5, 1970), was published in the Federal Register on December 7, 1995 (60 FR 62772). The action, applicable to Sensenich Propeller Manufacturing Company Inc. Models M76EMM, M76EMMS, 76EM8, and 76EM8S() metal propellers, proposed to eliminate the requirement to add tachometer markings on aircraft with certain additional Textron Lycoming O-360 series reciprocating engines with solid crankshafts installed that restrict continuous operation between engine speeds from 2,150 to 2,350 revolutions per minute (RPM). In addition, that action proposed to update the referenced Sensenich Propeller Company Inc. service bulletin (SB) to the latest revision.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public.

In the NPRM, propeller model M76EMMS was erroneously listed as M7EMMS. This final rule lists the correct propeller model, M76EMMS.

In addition, since issuance of the NPRM, the manufacturer has advised the FAA that correct date of SB No. R-14A is July 28, 1995. This final rule shows the correct revision date.

The FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

There are approximately 100 propellers of the affected design that may not have been modified to the "K" standard in the worldwide fleet. The FAA estimates that 50 propellers installed on aircraft of U.S. registry will be affected by this AD, that it will take approximately 2.5 work hours per propeller to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$7,500. However, since this rule further restricts the applicability by exempting propellers installed on certain Textron Lycoming engine models from the tachometer restriction, there is a potential overall cost savings of \$4,395,000, if all the affected Sensenich propellers are installed on the newly exempted engines.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action
is not a "significant regulatory action" under Executive Order 12866;
is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034,

February 26, 1979); and
will not have a significant economic impact, positive or negative, on a substantial number of
small entities under the criteria of the Regulatory Flexibility Act.

A final evaluation has been prepared for this action and it is contained in the Rules Docket. A
copy of it may be obtained from the Rules Docket at the location provided under the caption
ADDRESSES.

List of Subjects in 14 CFR Part 39

Air Transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the
Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR
part 39) as follows:

PART 39--AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by removing Amendment 39-1102 (35 FR 17030, November
5, 1970) and by adding a new airworthiness directive, Amendment 39-9583, to read as
follows:

69-09-03 R3 SENSENICH PROPELLER MANUFACTURING COMPANY INC.:
Amendment 39-9583. Docket 95-ANE-03. **Revises AD 69-09-03 R2, Amendment 39-1102.**

Applicability: Sensenich Propeller Manufacturing Company Inc. Models M76EMM,
M76EMMS, 76EM8, and 76EM8S() metal propellers. Paragraphs (a) and (b) of this
airworthiness directive (AD) do not apply to those propellers installed on the following solid
crankshaft Textron Lycoming O-360 series reciprocating engines: O-360-A4A, -A4D, -A4G, -
A4J, -A4K, -A4M, -A4N, -A4P, and -A5AD, or additional engines identified by suffixes
having a digit "4" or higher in the second position. These propellers are installed on but not
limited to the following aircraft: Piper PA-28-180, PA-28-181, American General Aircraft
Holding Co. Inc. (formerly Gulfstream American) AA-5 series, Beech B23 and C23, Cessna
172Q, Avions Pierre Robin R-3000/160, and aircraft modified under various Supplemental
Type Certificates (STC's).

Note: This AD applies to each propeller identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For propellers that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (f) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any propeller from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent propeller blade tip fatigue failure, which can result in loss of control of the aircraft, accomplish the following:

- (a) Commencing with the next flight after the effective date of this AD, do not operate the engine in continuous operation between 2,150 and 2,350 RPM.
- (b) Within the next 25 hours time in service (TIS) after the effective date of this AD, mark engine tachometer with a red arc from 2150 RPM to 2350 RPM.
- (c) For propellers with 500 or more total hours TIS, or unknown TIS on the effective date of this AD, inspect and rework, within the next 50 hours TIS after the effective date of this AD, in accordance with **Sensenich Propeller SB No. R-14A**, dated July 28, 1995. Remove from service those propellers that do not meet the inspection and rework requirements of **Sensenich Propeller SB No. R-14A**, dated July 28, 1995.
- (d) For propellers with less than 500 total hours TIS on the effective date of this AD, inspect, and rework or replace, as necessary, prior to accumulating 550 total hours TIS, in accordance with **Sensenich Propeller SB No. R-14A**, dated July 28, 1995. Remove from service those propellers that do not meet the inspection and rework requirements of **Sensenich Propeller SB No. R-14A**, dated July 28, 1995.
- (e) Mark with a suffix letter "K" propellers that have been inspected and, reworked in accordance with **Sensenich Propeller SB No. R-14A**, dated July 28, 1995, and found satisfactory.
- (f) An alternative method of compliance or adjustment of the initial compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office. The request should be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, New York Aircraft Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York Aircraft Certification Office.

- (g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.
- (h) The actions required by this AD shall be done in accordance with the following Sensenich Propeller SB's:

Document No.	Pages	Revision	Date
No. R-13 Total pages: 1	A7	Original	April 11, 1969.
No. R-14A Total pages: 1.	1	Original	July 28, 1995.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Sensenich Propeller Manufacturing Company Inc., 519 Airport Road, Lititz, PA 17543; telephone (717) 569-0435, fax (717) 560- 3725. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

- (i) This amendment becomes effective on June 13, 1996.

Issued in Burlington, Massachusetts, on April 22, 1996.

Jay J. Pardee, Manager, Engine and Propeller Directorate, Aircraft Certification Service.

FOR FURTHER INFORMATION CONTACT: Raymond J. O'Neill, Aerospace Engineer,
New York Aircraft Certification Office, FAA, Engine and Propeller Directorate, 10 Fifth St., Valley Stream, NY 11581; telephone (516) 256-7505, fax (516) 568-2716.

Manufacturer's Service Information:

[Sensenich Propeller SB No. R-14A](#)

[Sensenich Propeller SB No. R-13](#)

Copies of service information identified in this AD may be obtained from Sensenich Propeller Manufacturing Company Inc., 519 Airport Road, Lititz, PA 17543; telephone (717) 569-0435, fax (717) 560- 3725.