

2010-04-05 McCauley Propeller Systems: Amendment 39-16198. Docket No. FAA-2010-0093; Directorate Identifier 97-ANE-06-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective March 10, 2010.

Affected ADs

(b) This AD supersedes AD 2003-12-05, Amendment 39-13190.

Applicability

(c) This AD applies to McCauley Propeller Systems 1A103/TCM series propellers, all serial numbers. These propellers are installed on, but not limited to Cessna 152, Cessna A152, Reims F152, and Reims FA152 series airplanes, and on airplanes with Lycoming O-235-L2C reciprocating engines modified by Supplemental Type Certificates SA1763SO, SA5695NM, SA1000NW, and SA432NE.

Unsafe Condition

(d) This AD results from 16 reports received of propeller hubs found cracked since AD 2003-12-05 was issued. We are issuing this AD to prevent propeller separation due to hub fatigue cracking, which can result in loss of control of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Initial Inspection of Propellers Not Previously Inspected

(f) For propellers not previously inspected using McCauley Service Bulletin (Alert) No. 221C, dated September 7, 1999, or McCauley Alert Service Bulletin (ASB) No. ASB221D, dated January 28, 2008, do the following:

(1) For propellers with more than 1,500 operating hours time- since-new (TSN) or unknown operating hours TSN on the effective date of this AD, within the next 50 operating hours time-in-service (TIS), do the actions specified in paragraphs (h) through (m) of this AD.

(2) For propellers with 1,500 or fewer operating hours TSN on the effective date of this AD, upon reaching 1,500 operating hours TSN or within the next 50 operating hours TIS, whichever is later, do the actions specified in paragraphs (h) through (m) of this AD.

Initial Inspection of Propellers Previously Inspected

(g) For propellers previously inspected using McCauley Service Bulletin (Alert) No. 221C, dated September 7, 1999, or McCauley ASB No. ASB221D, dated January 28, 2008, do the following:

(1) For propellers with more than 1,500 operating hours TSN on the effective date of this AD, and with 750 or more operating hours time-since-last-inspection (TSLI), within the next 50 operating hours TIS, do the actions specified in paragraphs (h) through (m) of this AD.

(2) For propellers with more than 1,500 operating hours TSN on the effective date of this AD, and with fewer than 750 operating hours TSLI, before reaching 750 operating hours TSLI or within the next 50 operating hours TIS, whichever occurs later, do the actions specified in paragraphs (h) through (m) of this AD.

(h) Visual- and dye-penetrant-inspect for cracks in the propeller hub.

(i) Inspect the bolt holes and ream the holes if necessary.

(j) Inspect the steel reinforcement plates and gaskets.

(k) Remove propellers that are not within the bolt hole inspection limits or have cracks that are not within the rework limits.

(l) Rework propellers that have cracks that meet acceptable rework limits.

(m) Use the Accomplishment Instructions of McCauley ASB No. ASB221E, dated January 28, 2010, to do the inspections, rework, and removals from service.

Repetitive Propeller Inspections

(n) Thereafter, for all propellers, within every additional 750 operating hours TIS, perform the actions in paragraphs (h) through (m) of this AD.

Alternative Methods of Compliance

(o) The Manager, Wichita Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Special Flight Permits

(p) Under 39.23, we are limiting the availability of special flight permits for this AD. Special flight permits are available only if:

(1) The operator has not observed abnormal propeller vibration or abnormal engine vibration.

(2) The operator has not made earlier reports of abnormal propeller vibration, abnormal engine vibration, or other abnormal propeller operations that have not been addressed.

Related Information

(q) Contact Thomas Teplik, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, Small Airplane Directorate, 1801 Airport Road, Room 100, Wichita, KS 67209; e-mail: thomas.teplik@faa.gov; telephone: (316) 946-4196; fax: (316) 946-4107, for more information about this AD.

Material Incorporated by Reference

(r) You must use McCauley Propeller Systems Alert Service Bulletin No. ASB221E, dated January 28, 2010, to perform the inspections, rework, and removals from service required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact McCauley Propeller Systems, 5800 E. Pawnee, Wichita, KS 67218, telephone: (800) 621-7767; e-mail: productsupport@mccauley.textron.com; Web: <http://www.mccauley.textron.com>, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.