

Frequency	Field strength (volts per meter)	
	Peak	Average
700 MHz–1 GHz	700	100
1 GHz–2 GHz	2000	200
2 GHz–4 GHz	3000	200
4 GHz–6 GHz	3000	200
6 GHz–8 GHz	1000	200
8 GHz–12 GHz	3000	300
12 GHz–18 GHz	2000	200
18 GHz–40 GHz	600	200

The field strengths are expressed in terms of peak root-mean-square (rms) values.

or,

(2) The applicant may demonstrate by a system test and analysis that the electrical and electronic systems that perform critical functions can withstand a minimum threat of 100 volts per meter, electrical field strength, from 10 kHz to 18 GHz. When using this test to show compliance with the HIRF requirements, no credit is given for signal attenuation due to installation.

A preliminary hazard analysis must be performed by the applicant for approval by the FAA to identify either electrical or electronic systems that perform critical functions. The term "critical" means those functions, whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the airplane. The systems identified by the hazard analysis that perform critical functions are candidates for the application of HIRF requirements. A system may perform both critical and non-critical functions. Primary electronic flight display systems, and their associated components, perform critical functions such as attitude, altitude, and airspeed indication. The HIRF requirements apply only to critical functions.

Compliance with HIRF requirements may be demonstrated by tests, analysis, models, similarity with existing systems, or any combination of these. Service experience alone is not acceptable since normal flight operations may not include an exposure to the HIRF environment. Reliance on a system with similar design features for redundancy as a means of protection against the effects of external HIRF is generally insufficient since all elements of a redundant system are likely to be exposed to the fields concurrently.

Applicability

As discussed above, these special conditions are applicable to the Mooney M20M and M20R. Should Garmin AT, Inc. apply at a later date for a supplemental type certificate to modify any other model on the same type

certificate to incorporate the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. For this reason, and because a delay would significantly affect the certification of the airplane, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

Citation

■ The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113 and 44701; 14 CFR 21.16 and 21.101; and 14 CFR 11.38 and 11.19.

PART 23—AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES

The Special Conditions

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for the Mooney M20M and M20R airplanes modified by Garmin AT, Inc. to add the G1000 EFIS system.

1. *Protection of Electrical and Electronic Systems from High Intensity Radiated Fields (HIRF).* Each system that performs critical functions must be designed and installed to ensure that the operations, and operational capabilities of these systems to perform critical functions, are not adversely affected when the airplane is exposed to high

intensity radiated electromagnetic fields external to the airplane.

2. For the purpose of these special conditions, the following definition applies:

Critical Functions: Functions whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Kansas City, Missouri on November 3, 2005.

William J. Timberlake,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05–23481 Filed 11–29–05; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2005–22731; Directorate Identifier 2005–NE–36–AD; Amendment 39–14389; AD 2005–24–09]

RIN 2120–AA64

Airworthiness Directives; McCauley Propeller Systems Propeller Assemblies Models 2D34C53/74E–X; D2A34C58/90AT–X; 3AF32C87/82NC–X; D3AF32C87/82NC–X; D3A32C88/82NC–X; D3A32C90/82NC–X; and 3AF34C92/90LF–X.

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for McCauley Propeller Systems propeller assemblies, models 2D34C53/74E–X; D2A34C58/90AT–X; 3AF32C87/82NC–X; D3AF32C87/82NC–X; D3A32C88/82NC–X; D3A32C90/82NC–X; and 3AF34C92/90LF–X. This AD requires, within 10 flight hours or 10 days after the effective date of this AD, whichever occurs first, removing certain serial number propeller hubs from service. This AD results from a report by the manufacturer that they manufactured and released 40 propeller hubs with improperly machined socket retention threads. We are issuing this AD to prevent cracked propeller hubs, which could cause failure of the propeller hub, blade separation, and loss of control of the airplane.

DATES: This AD becomes effective December 15, 2005.

We must receive any comments on this AD by January 30, 2006.

ADDRESSES: Use one of the following addresses to comment on this AD:

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.

- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact McCauley Propeller Systems, P.O. Box 7704, Wichita, KS 67277-7704, U.S.A.; telephone (800) 621-7767, for the service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Jeff Janusz, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, Small Airplane Directorate, 1801 Airport Road, Wichita, KS 67209, telephone: (316) 946-4148; fax: (316) 946-4107.

SUPPLEMENTARY INFORMATION: In August of 2005, McCauley Propeller Systems reported to the FAA that a repair facility found a single, new, unused propeller hub with improperly machined socket retention threads. Further investigation revealed that McCauley Propeller Systems improperly machined socket retention threads on 40 propeller hubs, manufactured in 2004 and 2005. Using a propeller hub with improperly machined socket retention threads could cause concentrated loading on the threads, resulting in cracking of the hub and blade separation. This condition, if not corrected, could result in failure of the propeller hub, blade separation, and loss of control of the airplane.

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other McCauley Propeller Systems propeller assemblies, models 2D34C53/74E-X; D2A34C58/90AT-X; 3AF32C87/82NC-X; D3AF32C87/82NC-X; D3A32C88/82NC-X; D3A32C90/82NC-X; and 3AF34C92/90LF-X of the same type design. For that reason, we are issuing this AD to prevent cracked hubs, which could cause failure of the propeller hub, blade separation, and loss of control of the airplane. This AD requires, within 10 flight hours or 10 days after the effective date of this AD,

whichever occurs first, removing affected propeller hubs from service, and sending those propeller hubs to a McCauley Service Center. This AD also requires, before assembly into a replacement propeller hub, visually inspecting the retention nut threads with a 10-power magnifier, and replacing the nut if necessary.

FAA's Determination of the Effective Date

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable. Good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. We invite you however, to send us any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under **ADDRESSES**. Include "AD Docket No. FAA-2005-22731; Directorate Identifier 2005-NE-36-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the DMS web site, anyone can find and read the comments in any of our dockets. The dockets include the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78) or you may visit <http://dms.dot.gov>.

Examining the AD Docket

You may examine the docket that contains the AD, any comments received, and any final disposition in person at the Docket Management Facility Docket Offices between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in

ADDRESSES. Comments will be available in the AD docket shortly after the DMS receives them.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect 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.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. 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.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

■ Under 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.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2005-24-09 McCauley Propeller Systems:
Amendment 39-14389. Docket No. FAA-2005-22731; Directorate Identifier 2005-NE-36-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 15, 2005.

Affected ADs

(b) None.

Applicability

(c) This AD applies to McCauley Propeller Systems propeller assemblies, models 2D34C53/74E-X; D2A34C58/90AT-X; 3AF32C87/82NC-X; D3AF32C87/82NC-X; D3A32C88/82NC-X; D3A32C90/82NC-X; and 3AF34C92/90LF-X, with the propeller hubs listed by serial number in the following Table 1:

TABLE 1.—AFFECTED PROPELLER HUBS

Hub model	Hub serial number
C58, C34, C49, C78, C98	030725 030726 030727 030728 030729 030730 030748 030749 030750 030751 030752 030753 030754 030755 030756 030757 030758 030759 030760 050403 050407 050408 050410 050475 050477 C53
C79, C90	050389 042206 042207 042208
C77, C88	042201 042202
C87 blank index, C72, C93	042239 042524 042527 042528

TABLE 1.—AFFECTED PROPELLER HUBS—Continued

Hub model	Hub serial number
C92, C74, C86	042529 050071 050073 050866
C87 D index	050934

(d) Because a propeller hub can be interchanged and re-identified as a different model with the installation of different studs or adapters, any of the affected hubs could have been re-identified as a different model. Each propeller hub model listed in Table 1 of this AD is the original hub configuration when shipped from McCauley.

(e) The propeller hubs listed in Table 1 of this AD are installed on, but not limited to, the airplanes listed in the following Table 2:

TABLE 2.—AIRPLANES INSTALLED ON, BUT NOT LIMITED TO

Airplane	Model
Beagle	B206.
Bellanca	14-19-3A, 17-30, 17-30A. 180 series. 182E thru R. 185, A, B, C, D, E, F. A185, E, F. A188, A188A, A188B. 206 series. P206, A, B, C, D, E. U206A, B, C, D, E, F, G. TP206A, B, C, D, E. TU206A, B, C, D, E, F. U206, A, B, C, D, E, F, G. 207, A, T207. 210-5, 210-5A, 210, A, B, C, D, E, F, G, H, I, J, K, L. T210F, G, H, J, K, L. 310I, 310P, Q, R, T310P, Q, R. 320, A, B, C, D, E, F, 335. 340, A. 401, A, B. 402, A, B, C. 411, A. 414, A. 421, A, B. FA-200-180. GC-1B. HA-31. 200B, C, D. M20C, D, G. A, B, C, D, E, F, G, H. Procaer
Fuji	F15/C.
Globe	PL12.
Hindustan	AC-7
Meyers	
Mooney	
Navion	
Procraer	
Transavia	
Windecker	

Unsafe Condition

(f) This AD results from a report by the manufacturer that they manufactured and

released 40 propeller hubs with improperly machined socket retention threads. We are issuing this AD to prevent cracked propeller hubs, which could cause failure of the propeller hub, blade separation, and loss of control of the airplane.

Compliance

(g) You are responsible for having the affected propeller hubs removed from service within 10 flight hours or 10 days after the effective date of this AD, whichever occurs first, unless the actions have already been done.

Propeller Hub Removal

(h) Remove from service propeller assemblies with affected propeller hubs, listed in Table 1 of this AD.

(i) Send propeller assemblies with affected propeller hubs listed in Table 1 of this AD to a McCauley Service Center for disassembly, inspection, and propeller hub replacement with a serviceable propeller hub.

(j) Send uninstalled propeller hubs listed in Table 1 of this AD to a McCauley Service Center for replacement with a serviceable propeller hub.

Replacement Propeller Hub Pre-Installation Requirements

(k) For retention nuts that were removed from an affected propeller hub, visually inspect the retention nut threads with a 10-power magnifier before assembly into a replacement propeller hub. Reject the nut for any signs of galling, heavy localized loading, thread deformation, or chipped threads that may have been caused by thread interference in the propeller hub.

Reporting Requirements

(l) Report within 10 calendar days of finding affected propeller hubs to:

(1) The FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, KS 67209, Attention: Jeff Janusz, telephone (316) 946-4148; e-mail: jeff.janusz@faa.gov; and

(2) McCauley Propeller Systems, P.O. Box 7704, Wichita, KS 97277-7704.

(3) Reporting requirements have been approved by the Office of Management (OMB) and assigned OMB control number 2120-0056.

McCauley Credit Program

(m) McCauley Alert Service Bulletin No. ASB251A, dated September 28, 2005 contains information on a credit program for affected hubs.

Alternative Methods of Compliance

(n) 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

(o) Under 39.23, we are limiting the special flight permits for this AD by the following conditions:

(1) The propeller must have an oil-filled propeller hub and have no history of hub oil leakage.

(2) You must visually examine the propeller hub, and it must have no evidence of existing cracks.

(3) You are allowed a single-occupant (pilot only), non-revenue flight to a base of maintenance or FAA-approved propeller repair facility only.

(4) Your total flight time must not exceed 10 hours.

Related Information

(p) McCauley Propeller Systems Alert Service Bulletin No. ASB251A, dated September 28, 2005, pertains to the subject of this AD.

Issued in Burlington, Massachusetts, on November 22, 2005.

Peter A. White,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 05-23430 Filed 11-29-05; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-22690; Directorate Identifier 2005-NE-35-AD; Amendment 39-14388; AD 2005-24-08]

RIN 2120-AA64

Airworthiness Directives; McCauley Propeller Systems Five-Blade Propeller Assemblies

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain McCauley Propeller Systems propeller assemblies installed on BAE Systems (Operations) Limited Jetstream model 4100 series airplanes. This AD requires removing certain propeller hubs from service at new reduced life limits and eddy current inspections (ECIs) of the propeller hub. This AD results from three reports of cracked propeller hubs. We are issuing this AD to prevent cracked propeller hubs, which could cause failure of the propeller hub, blade separation, and loss of control of the airplane.

DATES: This AD becomes effective December 15, 2005. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of December 15, 2005.

We must receive any comments on this AD by January 30, 2006.

ADDRESSES: Use one of the following addresses to comment on this AD:

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.

- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact McCauley Propeller Systems, P.O. Box 7704, Wichita, KS 97277-7704, for the service information referenced in this AD.

FOR FURTHER INFORMATION CONTACT: Jeff Janusz, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, Small Airplane Directorate, 1801 Airport Road, Wichita, KS 67209, telephone: (316) 946-4148; fax: (316) 946-4107.

SUPPLEMENTARY INFORMATION: In August 2003, we issued AD 2003-17-10 which requires initial and repetitive fluorescent penetrant inspection or ultrasonic inspection of propeller blade retention areas for cracks, replacement of high time propeller blades, and a onetime inspection of propeller hubs. That AD resulted from four earlier reports of cracks in propeller blade shanks. Since we issued AD 2003-17-10, we received three more reports of cracked hubs. In November 2004, we issued AD 2004-23-16 which requires a onetime ECI of the propeller hub for cracks, and if necessary, replacing the propeller assembly. That AD also captured inspection results for the propeller hubs installed on the Jetstream model 4100 fleet.

We received field reports that during taxi and ground maneuvering, certain airplane operators might be violating the published and placarded propeller ground revolutions-per-minute (rpm) restrictions. Operating in the restricted rpm range during ground operation can excite a natural propeller blade frequency that creates damaging stress loadings on the propeller blades and hub. The stress loadings can cause cracks, leading to propeller structural failure.

Additionally, some operators use a water-methanol assist system to provide more engine power during certain operating conditions. The operating procedures for the water-methanol assist system define an airplane brakes-locked

condition. Testing has shown that using the water-methanol assist system with airplane brakes locked creates propeller loadings exceeding structural fatigue limits of the propeller hub. This condition, if not corrected, could result in cracked hubs, which could cause failure of the propeller hub, blade separation, and loss of control of the airplane.

Relevant Service Information

We reviewed and approved the technical contents of McCauley Alert Service Bulletin (ASB) No. ASB250, dated September 12, 2005. This ASB introduces new lower life limits for the propeller hubs identified in this AD, and describes ECI procedures for them.

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other McCauley propeller assemblies, P/Ns B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0, installed on BAE Systems (Operations) Limited Jetstream model 4100 series airplanes. We are issuing this AD to prevent cracked hubs, which could cause failure of the propeller hub, blade separation, and loss of control of the airplane. This AD requires:

- Removing any propeller hub from service that is currently, or ever was, operated on an engine with a water-methanol assist system, not later than 6,000 hours time-in-service (TIS).
- Removing any other propeller hub from service not later than 18,000 hours TIS.
- Removing any propeller hub from service that exceeds its life limit on the effective date of this AD, within 50 hours TIS after the effective date of this AD.
- That any propeller hub removed from service after exceeding its life limit must not be returned to service on any installation.
- For all installed propeller hubs, performing an ECI within 200 hours TIS or 60 days after the effective date of this AD, whichever occurs first.
- Thereafter, for all installed propeller hubs with 12,000 or more hours TIS, performing repetitive ECIs within 1,800 hours TIS or 12 months, whichever occurs first.

You must use the service information described previously to perform the actions required by this AD. This AD does not require repetitive inspections for propeller hubs that ever operated on, or are currently operating on, engines with a water-methanol assist system,