

(f) An indicator means for the fuel strainer or filter required by § 23.997 to indicate the occurrence of contamination of the strainer or filter before it reaches the capacity established in accordance with § 23.997(d).

Alternately, no indicator is required if the engine can operate normally for a specified period with the fuel strainer exposed to the maximum fuel contamination as specified in MIL-5007D and provisions for replacing the fuel filter at this specified period (or a shorter period) are included in the maintenance schedule for the engine installation.

(g) Power setting, in percentage.

(h) Fuel temperature.

(i) Fuel flow (engine fuel consumption).

9. Operating Limitations and Information—Powerplant limitations—Fuel grade or designation (Compliance with § 23.1521(d) requirements):

Instead of compliance with § 23.1521(d), the applicant must comply with the following:

The minimum fuel designation (for diesel engines) must be established so that it is not less than that required for the operation of the engines within the limitations in paragraphs (b) and (c) of § 23.1521.

10. Markings And Placards—Miscellaneous markings and placards—Fuel, oil, and coolant filler openings (Compliance with § 23.1557(c)(1) requirements):

Instead of compliance with § 23.1557(c)(1)(i), the applicant must comply with the following:

Fuel filler openings must be marked at or near the filler cover with—

For diesel engine-powered airplanes—

(a) The words “Jet Fuel”; and

(b) The permissible fuel designations, or references to the Airplane Flight Manual (AFM) for permissible fuel designations.

(c) A warning placard or note that states the following or similar: “Warning—this airplane equipped with an aircraft diesel engine, service with approved fuels only.”

The colors of this warning placard should be black and white.

11. Powerplant—Fuel system—Fuel-Freezing:

If the fuel in the tanks cannot be shown to flow suitably under all possible temperature conditions, then fuel temperature limitations are required. These will be considered as part of the essential operating parameters for the aircraft and must be limitations.

(1) The takeoff temperature limitation must be determined by testing or

analysis to define the minimum cold-soaked temperature of the fuel that the airplane can operate on.

(2) The minimum operating temperature limitation must be determined by testing to define the minimum operating temperature acceptable after takeoff (with minimum takeoff temperature established in (1) above).

12. Powerplant Installation—Vibration levels:

Vibration levels throughout the engine operating range must be evaluated and:

(1) Vibration levels *imposed on the airframe* must be less than or equivalent to those of the gasoline engine; or

(2) Any vibration level that is higher than that imposed on the airframe by the replaced gasoline engine must be considered in the modification and the effects on the technical areas covered by the following paragraphs must be investigated:

14 CFR part 23, §§ 23.251; 23.613; 23.627; CAR 3.159; 23.572; 23.573; 23.574 and 23.901.

Vibration levels imposed on the airframe can be mitigated to an acceptable level by utilization of isolators, dampers, clutches and similar provisions, so that unacceptable vibration levels are not imposed on the previously certificated structure.

13. Powerplant Installation—One cylinder inoperative:

It must be shown by test or analysis, or by a combination of methods, that the airframe can withstand the shaking or vibratory forces imposed by the engine if a cylinder becomes inoperative. Diesel engines of conventional design typically have extremely high levels of vibration when a cylinder becomes inoperative. Data must be provided to the airframe installer/modifier so either appropriate design considerations or operating procedures, or both, can be developed to prevent airframe and propeller damage.

14. Powerplant Installation—High Energy Engine Fragments:

It may be possible for diesel engine cylinders (or portions thereof) to fail and physically separate from the engine at high velocity (due to the high internal pressures). This failure mode will be considered possible in engine designs with removable cylinders or other non-integral block designs. The following is required:

(1) It must be shown that the engine construction type (massive or integral block with non-removable cylinders) is inherently resistant to liberating high energy fragments in the event of a catastrophic engine failure; or,

(2) It must be shown by the design of the engine, that engine cylinders, other

engine components or portions thereof (fragments) cannot be shed or blown off of the engine in the event of a catastrophic engine failure; or

(3) It must be shown that all possible liberated engine parts or components do not have adequate energy to penetrate engine cowlings; or

(4) Assuming infinite fragment energy, and analyzing the trajectory of the probable fragments and components, any hazard due to liberated engine parts or components will be minimized and the possibility of crew injury is eliminated. Minimization must be considered during initial design and not presented as an analysis after design completion.

Issued in Kansas City, Missouri, on July 19, 2006.

John R. Colomy,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E6-11878 Filed 7-25-06; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2004-18850; Directorate Identifier 2004-SW-19-AD; Amendment 39-14694; AD 2004-16-15 R1]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Model AS-365N2, AS 365 N3, EC 155B, EC155B1, SA-365N, N1, and SA-366G1 Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment revises an existing airworthiness directive (AD) for Eurocopter France (Eurocopter) Model AS-365N2, AS 365 N3, EC 155B, EC155B1, SA-365N, N1, and SA-366G1 helicopters that currently requires inspecting the main gearbox (MGB) base plate for a crack and replacing the MGB if a crack is found. This amendment increases the time intervals for inspecting the MGB base plate and includes minor editorial changes throughout the AD. This amendment is prompted by crack growth tests that indicate that the inspection intervals can be increased without affecting safety. The actions specified by this AD are intended to detect a crack in an MGB base plate and prevent failure of one of the MGB attachment points to the frame, which could result in severe vibration and subsequent loss of control of the helicopter.

DATES: Effective August 30, 2006.

ADDRESSES: You may get the service information identified in this AD from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (972) 641-3460, fax (972) 641-3527.

Examining the Docket: You may examine the docket that contains this AD, any comments, and other information on the Internet at <http://dms.dot.gov>, or at the Docket Management System (DMS), U.S. Department of Transportation, 400 Seventh Street, SW., Room PL-401, on the plaza level of the Nassif Building, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Ed Cuevas, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Safety Management Group, Fort Worth, Texas 76193-0111, telephone (817) 222-5355, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: On August 4, 2004, we issued AD 2004-16-15, Amendment 39-13771 (69 FR 51358, August 19, 2004), to require visually inspecting the MGB for a crack in the MGB base plate, part number (P/N) 366A32-1062-03 or P/N 366A32-1062-06, close to the attachment hole using a 10x or higher magnifying glass. Stripping paint from the inspection area is also required, but only before the initial inspection. That action was prompted by the discovery of a crack in the MGB base plate of an MGB installed in a Model AS-365 N2 helicopter. The crack was located very close to the attachment points of one of the laminated pads, and it propagated to the inside of the MGB base plate and then continued into the MGB casing. That condition, if not detected, could result in failure of one of the MGB attachment points to the frame, which could result in severe vibration and subsequent loss of control of the helicopter.

When we issued AD 2004-16-15, the cause of crack in the MGB base plate was still under investigation; therefore, we considered the previously issued AD to be interim action until the cause of the crack could be determined. The cause of the crack is still under investigation. However, since issuing AD 2004-16-15, crack growth tests have shown that the inspection intervals can be increased without affecting safety. We made this determination after Eurocopter conducted crack growth testing in laboratory bench tests. A cracked base plate was loaded with an alternating torque to simulate flight loading and cycles. Crack propagation speed was measured and assessed over a longer duration than the initial inspection interval and this resulted in

extending the inspection intervals. The first inspection interval was determined using crack striations, which was a quick and conservative method used to ensure airworthiness and allow for timely issuance of service information by the manufacturer. Based on this additional information, a proposal to amend 14 CFR part 39 by revising AD 2004-16-15, Amendment 39-13771 (69 FR 51358, August 19, 2004), for the specified Eurocopter model helicopters, was published in the **Federal Register** on May 2, 2006 (71 FR 25789). That action proposed to increase the time intervals between each required inspection and proposed to include minor editorial changes in the AD.

The Direction Générale de L'Aviation Civile (DGAC), the airworthiness authority for France, notified the FAA that an unsafe condition may exist on Eurocopter Model SA 365N, N1, SA 366 G1, AS 365 N2, N3, EC 155 B, and B1 helicopters, all serial numbers. The DGAC advises that a crack was detected in the MGB base plate of an AS 365 N2 helicopter. The crack was detected in the MGB base plate web, very close to the attachment of one of the laminated pads, and runs to the inside of the MGB base plate and then on the MGB casing. In time, the growth of the crack may lead to the loss of the transfer of rotor torque to the rotorcraft structure.

Eurocopter has issued Alert Service Bulletin (ASB) No. 05.00.45 for Model AS365 N, N1, N2, and N3 helicopters; ASB No. 05.29 for Model SA366 G1 helicopters; and ASB No. 05A005 for Model EC155 B and B1 helicopters. All of the ASBs are dated November 8, 2004 and supersede previously issued Eurocopter Alert Telex No. 05.00.45, No. 05.29, and No. 05A005, all dated February 5, 2004. The ASBs specify the same actions as the alert telexes—visually inspecting the MGB base plate for the absence of cracks, using a 10x magnifying glass to facilitate the crack inspection, and, if in doubt about the existence of a crack, inspecting for a crack using a dye-penetrant crack detection inspection. However, for the Eurocopter Model AS365 N, N1, N2, N3, and SA366 G1 helicopters, the 15-flying hour check for the MGB base plate that is specified in the alert telexes is replaced with check intervals not to exceed 55 flying hours. For the EC155 B and B1 helicopters, the check after the last flight of each day and without exceeding a 9-flying hour check interval is replaced with check intervals not to exceed 15 flying hours.

The DGAC classified ASB Nos. 05.00.45, 05.29, and 05A005 as mandatory and issued AD No. F-2004-023 R1, dated November 24, 2004, to

ensure the continued airworthiness of these helicopters in France.

These helicopter models are manufactured in France and are type certificated for operation in the United States under the provisions of 14 CFR 21.29 and the applicable bilateral agreement. Pursuant to the applicable bilateral agreement, the DGAC has kept the FAA informed of the situation described above. We have examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products of these type designs that are certificated for operation in the United States.

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. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed. The actions specified by this AD are still considered to be interim until the cause of the cracking can be determined.

We estimate that this AD will affect 142 helicopters of U.S. registry. The initial inspection will take about 0.5 work hour and each recurring inspection will take about 0.25 work hour. Replacing the MGB, if necessary, will take about 4 work hours. The average labor rate is \$65 per work hour. It will cost approximately \$25,000 to repair a cracked MGB base plate. Based on these figures, the total estimated cost impact of the AD on U.S. operators is \$56,249, assuming that each of the 135 Model AS 365 and SA 366 helicopters are inspected 11 times (the initial inspection plus 10 recurring inspections) and each of the 7 Model EC 155 helicopters are inspected 40 times (the initial inspection plus 39 recurring inspections), and one cracked MGB base plate is found requiring the repair and replacement of one MGB. This estimate also assumes that a replacement MGB will not need to be purchased while a previously-installed MGB is being repaired.

Regulatory Findings

We have 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 an economic evaluation of the estimated costs to comply with this AD. See the DMS to examine the economic evaluation.

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.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, 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.

§ 39.13 [Amended]

■ 2. Section 39.13 is amended by removing Amendment 39–13771 (69 FR 51358, August 19, 2004), and by adding a new airworthiness directive (AD), Amendment 39–14694, to read as follows:

2004–16–15 R1 Eurocopter France:

Amendment 39–14694. Docket No. FAA–2004–18850; Directorate Identifier 2004–SW–19–AD. Revises AD 2004–16–15, Amendment 39–13771.

Applicability

Model AS–365N2, AS 365 N3, EC 155B, EC155B1, SA–365N, N1, and SA–366G1 helicopters with a main gearbox (MGB) base plate, part number (P/N) 366A32–1062–03 or P/N 366A32–1062–06, installed, certificated in any category.

Compliance

Required as indicated in the following compliance table and before installing a replacement main gearbox (MGB).

COMPLIANCE TABLE

For model . . .	If . . .	Or if . . .	Or if . . .
(1) SA–365N, N1 and SA–366G1 helicopters.	An MGB is installed that has less than 9,900 cycles and has never been overhauled or repaired, on or before accumulating 9,900 cycles, unless accomplished previously, and thereafter, at intervals not to exceed 55 hours time-in-service (TIS).	An MGB is installed that has 9,900 or more cycles and has never been overhauled or repaired, before further flight, unless accomplished previously, and thereafter, at intervals not to exceed 55 hours TIS.	An MGB is installed that is overhauled or repaired, before further flight, unless accomplished previously, and thereafter, at intervals not to exceed 55 hours TIS.
(2) AS–365N2 and AS 365 N3 helicopters.	An MGB is installed that has less than 7,300 cycles and has never been overhauled or repaired, on or before accumulating 7,300 cycles, unless accomplished previously, and thereafter, at intervals not to exceed 55 hours TIS.	An MGB is installed that has 7,300 or more cycles and has never been overhauled or repaired, before further flight, and thereafter, at intervals not to exceed 55 hours TIS.	An MGB is installed that has been overhauled or repaired, before further flight, and thereafter, at intervals not to exceed 55 hours TIS.
(3) EC 155B and EC155B1 helicopters.	An MGB base plate is installed that has less than 2,600 cycles, no later than 2,600 cycles, unless accomplished previously, and thereafter, at intervals not to exceed 15 hours TIS.	An MGB base plate is installed that has 2,600 or more cycles, before further flight, unless accomplished previously, and thereafter, at intervals not to exceed 15 hours TIS.	

One cycle equates to one helicopter landing in which a landing gear touches the ground.

To detect a crack in the MGB base plate and prevent failure of a MGB attachment point to the frame, which could result in severe vibration and subsequent loss of

control of the helicopter, accomplish the following.

(a) Before the initial inspection at the time indicated in the compliance table of this AD,

strip the paint from area “D” on both sides (“B” and “C”) of the MGB base plate as depicted in Figure 1 of this AD.

BILLING CODE 4910–13–P

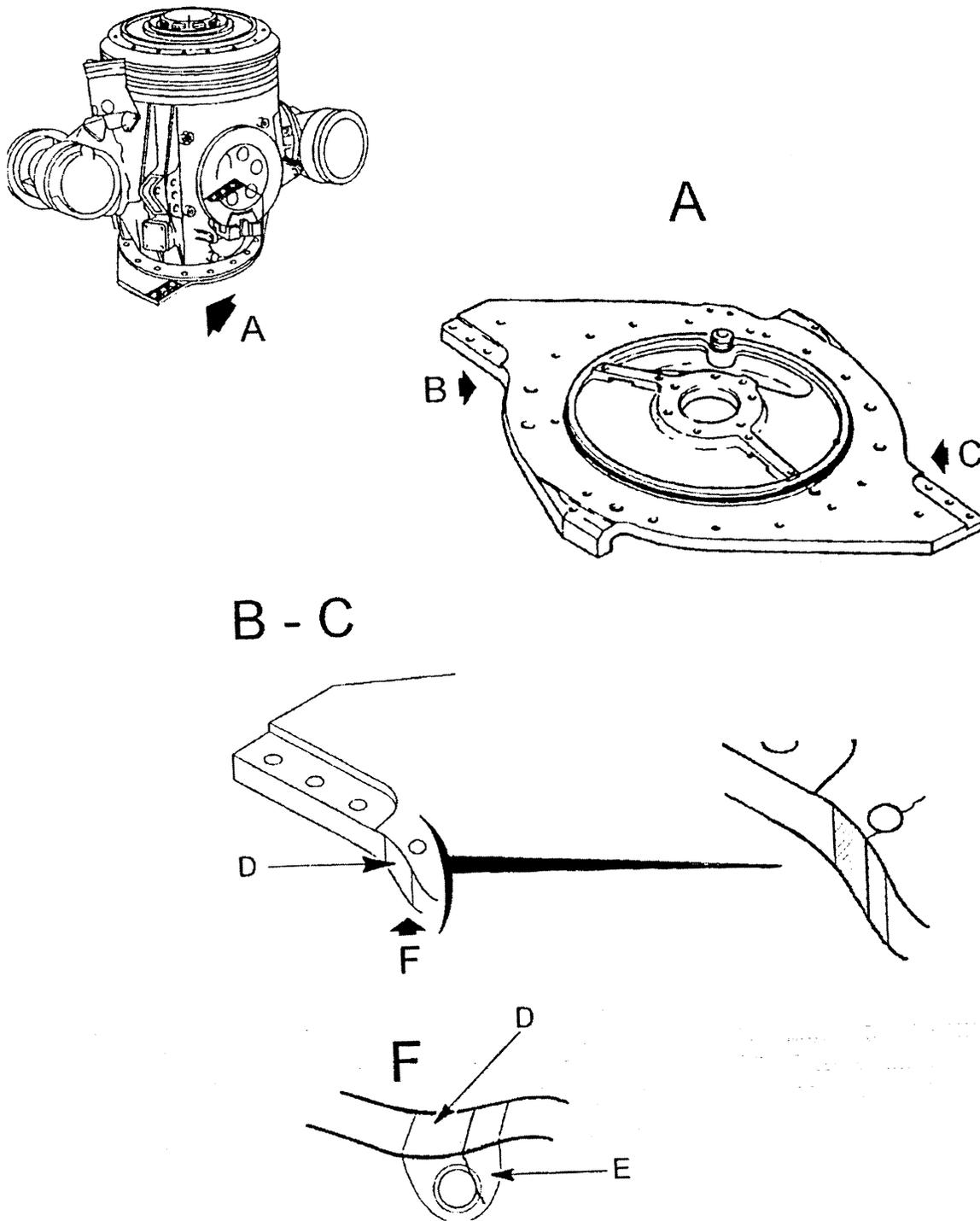


Figure 1

(b) At the times indicated in the compliance table, inspect area "D" of the MGB base plate for a crack using a 10x or higher magnifying glass. Area "D" to be inspected is depicted in Figure 1 of this AD.

Note 1: Eurocopter France Alert Service Bulletin (ASB) No. 05.00.45 for Model AS365 N, N1, N2, and N3 helicopters, ASB No. 05.29 for Model SA366 G1 helicopters, and

ASB No. 05A005 for Model EC155 B and B1 helicopters, pertain to the subject of this AD. All three ASBs are dated November 8, 2004.

(c) If a crack is found in a MGB base plate, remove and replace the MGB with an airworthy MGB before further flight.

(d) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR

39.19. Contact the Manager, Safety Management Group, Rotorcraft Directorate, FAA, ATTN: Ed Cuevas, Fort Worth, Texas 76193-0111, telephone (817) 222-5355, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(e) This amendment becomes effective on August 30, 2006.

Note 2: The subject of this AD is addressed in Direction Générale de L'Aviation Civile (France) AD F-2004-023 R1, dated November 24, 2004.

Issued in Fort Worth, Texas, on July 18, 2006.

Mark R. Schilling,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 06-6472 Filed 7-25-06; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-25173; Directorate Identifier 2006-NE-24-AD; Amendment 39-14693; AD 2006-15-13]

RIN 2120-AA64

Airworthiness Directives; McCauley Propeller Systems Propeller Models B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0

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 models B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0. This AD requires a onetime fluorescent penetrant inspection (FPI) and eddy current inspection (ECI) of propeller blades for cracks, and if any crack indications are found, removing the blade from service. This AD results from a report of two propeller blades on the same propeller assembly, found cracked during propeller overhaul. We are issuing this AD to detect cracks in the propeller blade that could cause failure and separation of the propeller blade and loss of control of the airplane.

DATES: This AD becomes effective August 10, 2006. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of August 10, 2006.

We must receive any comments on this AD by September 25, 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, 7751 East Pawnee, Wichita, KS 67277 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, Room 100, Wichita, KS 67209, telephone: (316) 946-4148; fax: (316) 946-4107.

SUPPLEMENTARY INFORMATION: In May 2006, McCauley Propeller Systems received a report from an operator of two propeller blades found cracked during propeller overhaul. The propeller blades were installed on the same propeller assembly; on a "Jetstream 41" airplane. The cracks were located in the propeller blade retention groove, near the ledge where the split retainers seat and on or near the shot peened surface of the retention groove. To date, no further reports of these cracks have been received, and we know of no propeller blade failures due to these cracks. The FAA is continuing to investigate, however, and we may issue further ADs based on the inspection results reported to us under this AD. In order to assess the extent of any problem, we need to have all the inspection results reported to us, even those showing that no crack indications were found. This condition, if not corrected, could result in a failure and separation of the propeller blade and loss of control of the airplane.

Relevant Service Information

We have reviewed and approved the technical contents of McCauley Propellers Alert Service Bulletin (ASB) ASB252, dated June 6, 2006. That ASB describes procedures for performing a onetime FPI and ECI of propeller blades for cracks.

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 models B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0 of the same type design. For that reason, we are issuing this AD to detect cracks in the propeller blade that could cause failure and separation of the propeller blade and loss of control of the airplane. This AD requires for certain blades, a onetime FPI and ECI of propeller blades for cracks within 100 operating hours time-in-service after the effective date of the AD, and if any crack indications are found, removal from service. You must use the service information described previously to perform the actions required by this AD.

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, and that good cause exists for making this amendment effective in less than 30 days.

Interim Action

These actions are interim actions and we may take further rulemaking actions in the future.

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; however, we invite you 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-2006-25173; Directorate Identifier 2006-NE-24-D" 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, including 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,