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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [64 FR 68620 12/08/99]

Docket No. 99-NM-341-AD; Amendment 39-11450; AD 99-25-07

RIN 2120-AA64

Airworthiness Directives; BFGoodrich Main Brake Assemblies as Installed on Airbus Model A319 and A320 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain BFGoodrich main brake assemblies as installed on Airbus Model A319 and A320 series airplanes. This action requires a one time inspection of the wear indicator pins to determine the level of wear of the main brake assemblies of the main landing gear (MLG), and corrective actions, if necessary. This action also requires modification of the main brake assemblies of the MLG, and incorporation of specified wear limits into the maintenance inspection program. This amendment is prompted by in-service reports of brake deterioration caused by thermal oxidation of the carbon disks of certain BFGoodrich main brake assemblies. The actions specified in this AD are intended to prevent thermal oxidation of the main brake assemblies, which could result in deterioration of the MLG brakes, and consequent reduced braking performance.

DATES: Effective December 23, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 23, 1999. Comments for inclusion in the Rules Docket must be received on or before January 7, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-341-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

The service information referenced in this AD may be obtained from BFGoodrich Aircraft Wheels and Brakes, P.O. Box 340, Troy, Ohio, 45373. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager,

International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: The FAA has received in-service reports of brake deterioration of certain BFGoodrich main brake assemblies installed on Airbus Model A319 and A320 series airplanes. Investigation revealed that the deterioration of these BFGoodrich brakes was caused by thermal oxidation of the carbon material due to exposure to elevated temperatures for prolonged periods of time. Further investigation revealed that the oxidation inhibitor process used by BFGoodrich does not completely prevent oxidation of the carbon brake material. BFGoodrich advises that these carbon brakes, which are susceptible to this oxidation condition, are only used on Airbus Model A319 and A320 series airplanes. This condition, if not corrected, could result in deterioration of the MLG brakes, and consequent reduced braking performance.

Explanation of Relevant Service Information

BFGoodrich has issued Service Bulletins 2-1598-32-1, and 2-1600-32-2, both dated November 5, 1999, which describe procedures for removal of main brake assemblies with wear indicator pins having a length of 0.20 inch or less, and modification of the main brake assemblies of the MLG. The modification involves reducing the length of the wear indicator pins, and re-identifying the piston housings and identification plates of the main brake assemblies.

FAA's Determination

The FAA has determined that a direct correlation exists between the amount of wear and the degree of thermal oxidation. Therefore, by limiting the wear of the carbon brake assemblies, as required by this AD, thermal oxidation is controlled to an acceptable level.

FAA's Conclusions

These airplane models are manufactured in France and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement.

Explanation of Requirements of Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, this AD is being issued to prevent thermal oxidation of the main brake assemblies, which could result in deterioration of the MLG brakes, and consequent reduced braking performance. This AD requires one-time detailed visual inspection of the wear indicator pins to determine the level of wear of the main brake assemblies of the main landing gear (MLG), and corrective actions, if necessary.

This AD also requires modification of the main brake assemblies of the MLG, and incorporation of specified wear limits into the FAA-approved maintenance inspection program. Certain actions are required to be accomplished in accordance with the service bulletins described previously, except as discussed below.

Interim Action

This is considered to be interim action. The brake manufacturer has advised that it currently is developing a modification that will positively address the unsafe condition addressed by this AD. Once this modification is developed, approved, and available, the FAA may consider additional rulemaking.

Differences Between AD and Service Information

Operators should note that the BFGoodrich service bulletins allow an option of either replacement of any main brake assembly with 0.20 inch or less remaining on the wear indicator pins, or modification of the brake assembly by reducing the wear indicator pins. Additionally, the BFGoodrich service bulletins do not recommend a compliance time for either action. However, this AD requires a one-time inspection of the wear indicator pins within 10 days, and replacement of the brake assembly if the remaining length of the wear indicator pin is equal to or less than 0.20 inch. This AD also requires modification of the brake assembly to reduce the length of the wear indicator pins within 30 days, and re-identification of the piston housings and identification plates no later than the next brake removal. The FAA finds that in view of in-service reports of main brake assembly deterioration, the requirements specified in this AD are appropriate to maintain a consistent main brake assembly configuration for all airplanes that are affected by the subject unsafe condition.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NM-341-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION P.O. BOX 26460 OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department of Transportation Federal Aviation Administration

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

99-25-07 BFGoodrich: Amendment 39-11450. Docket 99-NM-341-AD. Issued November 24, 1999.

Applicability: BFGoodrich main brake assemblies having part number (P/N) 2-1598 or 2-1600, as installed on Airbus Model A319 and A320 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane 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 airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent thermal oxidation of the main brake assemblies of the main landing gear (MLG), which could result in deterioration of the MLG brakes, and consequent reduced braking performance, accomplish the following:

Detailed Visual Inspection

(a) Within 10 days after the effective date of this AD, perform a one-time detailed visual inspection of the wear indicator pins to determine the level of wear of the main brake assemblies of the MLG, as specified in BFGoodrich Service Bulletin 2-1598-32-1, or 2-1600-32-2, both dated November 5, 1999, as applicable.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

(1) If the remaining length of any wear indicator pin is less than or equal to 0.20 inch (5.1 mm) with the brake pressurized, prior to further flight, replace the brake assembly with a new or serviceable brake assembly, in accordance with Chapter 32-42-27 of the applicable Airplane Maintenance Manual (AMM).

(2) If the remaining length of all wear indicator pins is greater than 0.20 inch (5.1 mm) with the brake pressurized, no further action is required by this paragraph.

Modification

(b) Within 30 days after the effective date of this AD, modify the main brake assemblies of the MLG by reducing the length of the wear indicator pins, in accordance with BFGoodrich Service Bulletin 2-1598-32-1, or 2-1600-32-2, both dated November 5, 1999, as applicable; and incorporate the new wear limits for the main brake assemblies specified in the applicable service bulletin into the FAA-approved maintenance program and comply with those limits thereafter. After accomplishing the modification, but no later than the next brake removal, re-identify the brake assemblies in accordance with the applicable service bulletin.

NOTE 3: Once an operator has complied with the requirements of paragraph (b) of this AD, that paragraph does not require that operators subsequently record accomplishment of the requirements each time a brake is inspected or overhauled in accordance with that operator's FAA-approved maintenance inspection program.

Spares

(c) As of the effective date of this AD, no person shall install on any airplane a BFGoodrich main brake assembly having P/N 2-1598 or 2-1600, unless that assembly has been modified in accordance with this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) 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 airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with BFGoodrich Service Bulletin 2-1598-32-1, dated November 5, 1999, or BFGoodrich Service Bulletin 2-1600-32-2, dated November 5, 1999, as applicable. 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 BFGoodrich Aircraft Wheels and Brakes, P.O. Box 340, Troy, Ohio, 45373. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective on December 23, 1999.