Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-75-AD; Amendment 39-12686; **AD 2002-06-09**]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A300; A300 B4-600, B4-600R, and F4-600R (Collectively Called A300-600); and A310 Series Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all Airbus Model A300; A300-600; and A310 series airplanes. This action requires certain inspections of the airplane (including the vertical stabilizer, horizontal stabilizer, pylons, wing, and fuselage areas) following an in-flight incident resulting in extreme lateral loading. This action is necessary to detect and correct reduced structural integrity of the airplane following any future event. This action is intended to address the identified unsafe condition.

DATES: Effective April 8, 2002.

Comments for inclusion in the Rules Docket must be received on or before May 21, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-75-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: *9-anm-iarcomment@faa.gov*. Comments sent via fax or the Internet must contain "Docket No. 2000-NM-75-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

Information pertaining to this amendment may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Tim Backman, Aerospace Engineer, ANM-116, International Branch, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2797; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: On November 12, 2001, an Airbus Model A300 B4-600R series airplane was involved in an accident shortly after takeoff from John F. Kennedy Airport, Jamaica, New York. During the accident event, the vertical stabilizer and rudder departed the airplane. The cause of this accident is under investigation by the National Transportation Safety Board (NTSB), and, although the NTSB has not determined the cause of the accident, information to date indicates that the vertical stabilizer was subjected to large aerodynamic structural loading during the accident event.

A recent review of Airbus fleet data indicated that another Airbus Model A300-600 series airplane was involved in an upset event in 1997 that may have subjected the airplane to lateral loads on the vertical stabilizer similar to those experienced on the airplane involved in the November 12, 2001, accident. The vertical stabilizer was recently removed from the airplane involved in the 1997 event, and the composite attachment lugs were subjected to ultrasonic nondestructive inspections (NDIs). The results of the NDI yielded indications consistent with composite delamination of the right-hand aft attachment lug. This type of delamination is characteristic of extreme lateral loading conditions.

Following the event, the operator performed the inspections of the airplane specified in the Airplane Maintenance Manual (AMM) that are deemed necessary by the manufacturer after an in-flight incident. However, the AMM did not include inspections for damage of the vertical stabilizer caused by extreme lateral loading. Extreme lateral load factors can occur as a consequence of severe turbulence, loss of control of the airplane involving yaw and/or roll maneuvers, hazardous system failures or other rare

flight conditions. Review of service history indicates that these events only occur rarely. Such conditions, if not corrected, could result in reduced structural integrity of the airplane.

U.S. Type Certification of the Airplane

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. The FAA has coordinated this action with the Direction Generale de l'Aviation Civile (DGAC), which is the airworthiness authority for France. The DGAC plans to release a recommended bulletin to address this issue.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to detect and correct reduced structural integrity of the airplane following an in-flight incident resulting in extreme lateral loading. This AD requires certain inspections of the airplane (including the vertical stabilizer, horizontal stabilizer, pylons, wing, and fuselage areas), immediately following such an incident.

This AD requires inspections for extreme lateral loads exceeding 0.3g. Because no such inspection methods were defined previously, these inspections must be approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate.

This AD also requires reporting of these inspection results to the manufacturer, including information regarding the extreme lateral loading event. Based on this information, the manufacturer will develop any appropriate additional inspections. Upon FAA approval, these inspections are also required.

Inspections are not required for extreme lateral loading events that occur on the ground (landing, taxiing). On the ground an extreme lateral load would not be transmitted to the airplane through the vertical stabilizer.

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.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

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 2002-NM-75-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

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, 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 adding the following new airworthiness directive:

Regulatory Information

2002-06-09 Airbus Industrie: Amendment 39-12686. Docket 2002-NM-75-AD.

Applicability: All Model A300; A300 B4-600, B4-600R, and F4-600R (collectively called A300-600); and A310 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 (f) 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 detect and correct reduced structural integrity of the airplane following an extreme lateral loading event, accomplish the following:

Lateral Load Factor Determination

(a) As of the effective date of this AD, before further flight following an in-flight incident

that results in extreme lateral loading, determine whether the lateral load factor (Ny) equaled or exceeded 0.3g. Extreme lateral loading can occur as a consequence of severe turbulence, loss of control of the aircraft involving yaw and/or roll maneuvers, hazardous systems failures, or other rare flight conditions. Then do the inspections specified in paragraph (b) or (c) of this AD, as applicable, at the time specified.

Note 2: Acceptable methods for determining if the lateral load factor equaled or exceeded 0.3g include but are not limited to: Aircraft Communication Addressing and Reporting System (ACARS), Digital Flight Data Recorder (DFDR) readout, or Quick Access Recorder (QAR). A pilot report of extreme lateral acceleration in-flight can be used to assess whether one of the previous methods should be used to determine the lateral load factor.

Note 3: The inspections specified in paragraphs (b) and (c) of this AD are not necessary if lateral load factors exceed 0.3g when the airplane is on the ground (landing, taxiing).

Inspections for Certain Lateral Load Factors

(b) For airplanes on which the lateral load factor (Ny) is greater than or equal to 0.3g, but less than 0.35g, accomplish the following actions:

(1) Before further flight, do the detailed inspections specified in paragraph (d) of this AD.

Reporting Requirement

(2) Within 5 days after accomplishing the inspections required by paragraph (b)(1) of this AD: Submit a report to Airbus, including the DFDR recording (or equivalent) of the portion of the flight when the extreme lateral loading event occurred, and other relevant information necessary to fully describe the event and develop the actual loads, including but not limited to, airplane weight, weather, and flight crew report. Submit a report of the inspection results (both positive and negative findings) to Jacques Leborgne, Airbus Industrie Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex France; fax (+33) 5 61 93 36 14. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

Note 4: Following accomplishment of the requirements of paragraphs (b)(1), (b)(2) and, if necessary, (e) of this AD, the airplane may be returned to service before accomplishing the inspections required by paragraph (b)(3) of this AD.

Supplementary Inspections

(3) The manufacturer will develop an airplane loads assessment and recommend, if necessary, supplementary inspections of the applicable areas of the airplane (including the vertical stabilizer, horizontal stabilizer pylons, wing, and fuselage areas). Within 30

days after the extreme lateral loading event, do the supplementary inspections of the airplane according to a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate.

Note 5: The loads assessment, and if necessary, supplementary inspections required by paragraph (b)(3) of this AD, will be developed and proposed by the manufacturer based on the manufacturer's analysis of the report required by paragraph (b)(2) of this AD.

Inspections for Certain Other Lateral Load Factors

(c) For airplanes on which the lateral load factor (Ny) is greater than or equal to 0.35g, accomplish the following:

(1) Before further flight, do the detailed inspections specified in paragraph (d) of this AD.

Reporting Requirement

(2) Before further flight after accomplishing the inspections required by paragraph (c)(1) of this AD: Submit a report to Airbus, including the DFDR recording (or equivalent) of the portion of the flight when the extreme lateral loading event occurred, and other relevant information necessary to fully describe the event and develop the actual loads, including but not limited to, airplane weight, weather, and flight crew report. Submit a report of the inspection results (both positive and negative findings) to Jacques Leborgne, Airbus Industrie Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex France; fax (+33) 5 61 93 36 14. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

Supplementary Inspections

(3) The manufacturer will develop an airplane loads assessment and recommend, if necessary, supplementary inspections of the applicable areas of the airplane (including the vertical stabilizer, horizontal stabilizer pylons, wing, and fuselage areas). Before further flight, do the supplementary inspections of the airplane according to a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate.

Note 6: The loads assessment, and if necessary, supplementary inspections required by paragraph (c)(3) of this AD, will be developed and proposed by the manufacturer based on the manufacturer's analysis of the report required by paragraph (c)(2) of this AD.

Detailed Inspections

(d) Do the following detailed inspections at the time specified in paragraph (b)(1) or (c)(1) of this AD, as applicable.

(1) Do the inspections as specified in and per Chapter 05-51-17 (Inspections After Flight in Excessive Turbulence or In Excess of VMO/MMO) of Airbus A300, A300-600 or A310 Airplane Maintenance Manual (AMM), as applicable. Extend the areas for these inspections as specified in paragraphs (d)(1)(i) and (d)(1)(ii) of this AD.

(i) Extend the wing inspection area to include rib 22 through rib 29.

(ii) Extend the fuselage inspection area from the inside to include frame 84 through 87 above stringer 23, and all areas of frame 91.

(2) Do detailed inspections to find damage of the areas specified in paragraphs (d)(2)(i), (d)(2)(ii), and (d)(2)(iii) of this AD, according to a method approved by the Manager, International Branch, ANM-116.

(i) Inspect the fuselage external surface under the vertical stabilizer to fuselage fairing, including side load fittings and lower surface of rib 1 of the vertical stabilizer.

(ii) Inspect the rudder hinge arms and support fittings 1 through 7, and the actuator support fittings of the vertical stabilizer.

(iii) Inspect the rudder hinge fittings 1 through 7, and the actuator support fittings of the vertical stabilizer.

Note 7: For the purposes of this AD, a detailed 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."

Corrective Actions

(e) If any damage is found during any inspection required by this AD: Before further flight, repair according to the method specified in the Airbus structural repair manual or according to a method approved by the Manager, International Branch, ANM-116, or by the Direction Generale de l'Aviation Civile or its delegated agent.

Alternative Methods of Compliance

(f) 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. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, which may add comments and then send it to the Manager, International Branch, ANM-116.

Note 8: 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

(g) Special flight permits may be issued in accordance with Secs. 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.

Effective Date

(h) The effective date of this amendment is April 8, 2002.

Footer Information

Issued in Renton, Washington, on March 15, 2002.
Vi L. Lipski,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 02-6910 Filed 3-21-02; 8:45 am]
BILLING CODE 4910-13-P

Comments

CORRECTION *[Federal Register: August 8, 2002 (Volume 67, Number 153); Page 51459-51461; www.access.gpo.gov/su_docs/aces/aces140.html]* Go to attached 'pdf' copy for full correction text. This copy reflects the corrections.