applicant must establish by test, analysis, or a combination of both, that each rotor will not burst when operated in the engine for 5 minutes at whichever of the conditions defined in paragraph (b) of this section is the most critical with respect to the integrity of such a rotor.

(1) Test rotors used to demonstrate compliance with this section that do not have the most adverse combination of material properties and dimensional tolerances must be tested at conditions which have been adjusted to ensure the minimum specification rotor possesses the required overspeed capability. This can be accomplished by increasing test speed, temperature, and/or loads.

(2) When an engine test is being used to demonstrate compliance with the overspeed conditions listed in paragraph (b)(3) or (b)(4) of this section and the failure of a component or system is sudden and transient, it may not be possible to operate the engine for 5 minutes after the failure. Under these circumstances, the actual overspeed duration is acceptable if the required maximum overspeed is achieved.

(b) When determining the maximum overspeed condition applicable to each rotor in order to comply with paragraphs (a) and (c) of this section, the applicant must evaluate the following rotor speeds taking into consideration the part’s operating temperatures and temperature gradients throughout the engine’s operating envelope:

(1) 120 percent of the maximum permissible rotor speed associated with any of the engine ratings except one-engine-inoperative (OEI) ratings of less than 2½ minutes.

(2) 115 percent of the maximum permissible rotor speed associated with any OEI ratings of less than 2½ minutes.

(3) 105 percent of the highest rotor speed that would result from either:

(i) The failure of the component or system which, in a representative installation of the engine, is the most critical with respect to overspeed when operating at any OEI rating of less than 2½ minutes.

(ii) The failure of the component or system in a representative installation of the engine, in combination with any other failure of a component or system that would not normally be detected during a routine pre-flight check or during normal flight operation, that is the most critical with respect to overspeed, except as provided by paragraph (c) of this section, when operating at any rating condition except OEI ratings of less than 2½ minutes.

(4) 100 percent of the highest rotor speed that would result from the failure of the component or system which, in a representative installation of the engine, is the most critical with respect to overspeed when operating at any OEI rating of less than 2½ minutes.

(c) The highest overspeed that results from a complete loss of load on a turbine rotor, except as provided by paragraph (f) of this section, must be included in the overspeed conditions considered by paragraphs (b)(3)(i), (b)(3)(ii), and (b)(4) of this section, regardless of whether that overspeed results from a failure within the engine or external to the engine. The overspeed resulting from any other single failure must be considered when selecting the most limiting overspeed conditions applicable to each rotor. Overspeeds resulting from combinations of failures must also be considered unless the applicant can show that the probability of occurrence is not greater than extremely remote (probability range of $10^{-7}$ to $10^{-9}$ per engine flight hour).

(d) In addition, the applicant must demonstrate that each fan, compressor, turbine, and turbosupercharger rotor complies with paragraphs (d)(1) and (d)(2) of this section for the maximum overspeed achieved when subjected to the conditions specified in paragraphs (b)(3) and (b)(4) of this section. The applicant must use the approach in paragraph (a) of this section which specifies the required test conditions.

(1) Rotor Growth must not cause the engine to:

(i) Catch fire,

(ii) Release high-energy debris through the engine casing or result in a hazardous failure of the engine casing,

(iii) Generate loads greater than those ultimate loads specified in §33.23(a), or

(iv) Lose the capability of being shut down.

(2) Following an overspeed event and after continued operation, the rotor may not exhibit conditions such as cracking or distortion which preclude continued safe operation.

(e) The design and functioning of engine control systems, instruments, and other methods not covered under §33.28 must ensure that the engine operating limitations that affect turbine, compressor, fan, and turbosupercharger rotor structural integrity will not be exceeded in service.

(f) Failure of a shaft section may be excluded from consideration in determining the highest overspeed that would result from a complete loss of load on a turbine rotor if the applicant:

(1) Identifies the shaft as an engine life-limited-part and complies with §33.70.

(2) Uses material and design features that are well understood and that can be analyzed by well-established and validated stress analysis techniques.

(3) Determines, based on an assessment of the environment surrounding the shaft section, that environmental influences are unlikely to cause a shaft failure. This assessment must include complexity of design, corrosion, wear, vibration, fire, contact with adjacent components or structure, overheating, and secondary effects from other failures or combination of failures.

(4) Identifies and declares, in accordance with §33.5, any assumptions regarding the engine installation in making the assessment described above in paragraph (f)(3) of this section.

(5) Assesses and considers as appropriate, experience with shaft sections of similar design.

(6) Does not exclude the entire shaft.

(g) If analysis is used to meet the overspeed requirements, then the analytical tool must be validated to prior overspeed test results of a similar rotor. The tool must be validated for each material. The rotor being certified must not exceed the boundaries of the rotors being used to validate the analytical tool in terms of geometric shape, operating stress, and temperature. Validation includes the ability to accurately predict rotor dimensional growth and the burst speed. The predictions must also show that the rotor being certified does not have lower burst and growth margins than rotors used to validate the tool.

Issued in Washington, DC, on June 30, 2011.

J. Randolph Babbitt, Administrator.

[FR Doc. 2011–18002 Filed 7–15–11; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Airbus Model A318, A319, A320, and A321 Series Airplanes

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

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD)
that applies to the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

* * * * *


* * * * *

The unsafe condition is fatigue cracking, accidental damage, or corrosion in principal structural elements and possible failure of certain life limited parts, which could result in reduced structural integrity of the airplane. We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective August 22, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of August 22, 2011.

The Director of the Federal Register previously approved the incorporation by reference of certain other publications, listed in this AD as of November 7, 2007 (72 FR 56262, October 3, 2007).

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC.


SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on March 24, 2011 (76 FR 16582), and proposed to supersede AD 2007–20–05, Amendment 39–15215 (72 FR 56262, October 3, 2007).

Since we issued AD 2007–20–05, we have determined that more restrictive limitations are necessary. We have also added Model A318–121 and –122 airplanes to the applicability. The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2010–0071R1, dated May 28, 2010 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

The airworthiness limitations are currently included in Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS).

The airworthiness limitations applicable to the Damage Tolerant Airworthiness Limitation Items (DT ALI) are currently given in Airbus A318/A319/A320/A321 ALI Document reference AI/SE–M4/95A.0252/96 and Airbus A319 Corporate Jet ALI Document reference AI/SE–M2/95A.1038/99, which are approved by the European Aviation Safety Agency (EASA) and referenced in Airbus Airworthiness Limitations Section (ALS) Part 2.

The issue 10 of Airbus A318/A319/A320/A321 ALI Document and issue 2 of Airbus A319 Corporate Jet ALI Document introduce more restrictive maintenance requirements/airworthiness limitations. Failure to comply with this issue 10 constitutes an unsafe condition.


This [EASA] AD has been revised to clarify the special compliance times defined in Table 1 of this [EASA] AD.

You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Revision to Airworthiness Limitation Items Document

Airbus has issued A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96, Issue 11, dated September 2010. Issue 11 of Airbus A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96 does not add any additional burden on the operator. We have revised paragraphs (j) and (k), table 1, and Note 3, in this final rule to require compliance in accordance with Airbus A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96, Issue 10, dated October 2009; or Issue 11, dated September 2010.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a Note within the AD.

Costs of Compliance

We estimate that this AD will affect about 729 products of U.S. registry.

The actions that are required by AD 2007–20–05 and retained in this AD take about 1 work-hour per product, at an average labor rate of $85 per work hour. Based on these figures, the estimated cost of the currently required actions is $85 per product.

We estimate that it will take about 1 work-hour per product to comply with the new basic requirements of this AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of the AD on U.S. operators to be $61,965, or $85 per product.

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 this AD:

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 regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

§ 39.13 [Amended]

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 removing Amendment 39–15215 (72 FR 56262, October 3, 2007) and adding the following new AD:


Effective Date

(a) This airworthiness directive (AD) becomes effective August 22, 2011.

Affected ADs

(b) This AD supersedes AD 2007–20–05, Amendment 39–15215.

Applicability


Revise ALS To Incorporate Damage-Tolerant ALIs


Grace Period for New or More Restrictive Actions


**New Requirements of This AD: Revise ALS To Incorporate Damage-Tolerant ALIs With Revised Compliance Times**

(j) Within 9 months after the effective date of this AD: Revise the maintenance program by incorporating all maintenance requirements and associated airworthiness limitations specified in the Airbus A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96, Issue 10, dated October 2009; or Issue 11, dated September 2010. Comply with all applicable maintenance requirements and associated airworthiness limitations included in Airbus A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96, Issue 10, dated October 2009; or Issue 11, dated September 2010; except as provided by paragraph (k) of this AD. Doing the actions required by this paragraph terminates the requirements of paragraph (h) of this AD.

**Special Compliance Times for Certain Tasks**

(k) For new and more restrictive tasks introduced with Airbus A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96, Issue 10, dated October 2009; or Issue 11, dated September 2010; as specified in table 1 of this AD: The initial compliance time for doing the tasks is specified in table 1 of this AD.

### Table 1—Compliance Times for New Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Applicability (as specified in the applicability column of the task)</th>
<th>Compliance time, whichever occurs later</th>
</tr>
</thead>
<tbody>
<tr>
<td>545102–01–6</td>
<td>Group 19–1A CFM, Group 19–1B CFM, and Model A320–200 airplanes with CFM Industrial (CFM)/International Aero Engine (IAE) engines.</td>
<td>Within 2,000 flight cycles or 5,500 flight hours, after the effective date of this AD, whichever occurs first.</td>
</tr>
<tr>
<td>545102–01–7</td>
<td>Model A320–100</td>
<td>Within 2,000 flight cycles or 2,000 flight hours, after the effective date of this AD, whichever occurs first.</td>
</tr>
<tr>
<td>572050–01–1 or alternative task 572050–02–1</td>
<td>Group 19–1A and Group 19–1B</td>
<td>Within 6 months after the effective date of this AD.</td>
</tr>
<tr>
<td>572050–01–4 or alternative task 572050–02–4</td>
<td>Model A320–200</td>
<td>Within 6 months after the effective date of this AD.</td>
</tr>
<tr>
<td>572050–01–5 or alternative task 572050–02–5</td>
<td>Group 21–1A</td>
<td>Within 6 months after the effective date of this AD.</td>
</tr>
<tr>
<td>TASK ID</td>
<td>TASK DESCRIPTION</td>
<td>TASK TYPE</td>
</tr>
<tr>
<td>--------</td>
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</tr>
<tr>
<td>572050–01–7 or alternative task 572050–02–7</td>
<td>Model A320–100</td>
<td>Custom Diana</td>
</tr>
<tr>
<td>531118–01–1</td>
<td>Model A318–121 and –122 airplanes</td>
<td>Custom Diana</td>
</tr>
</tbody>
</table>

**Note 2:** New ALI Task 572050 refers to the outer wing dry bay and is comprised of extracts from three ALI Tasks: 572004, 572020 and 572053. The threshold of ALI Task 572050 for the whole dry bay area is that of the lowest threshold of the source ALI tasks, i.e., that of ALI Task 572053.

**No Alternative Life Limits, Inspections, or Inspection Intervals**

(i) After the actions specified in paragraphs (g) and (h) of this AD have been accomplished, no alternative life limits, inspections, or inspection intervals may be used, except as provided by paragraphs (i) and (m) of this AD, and except as required by paragraph (j) of this AD.

(m) After the actions specified in paragraph (j) of this AD have been accomplished, no alternative life limits, inspections, or inspection intervals may be used.

**FAA AD Differences**


**Other FAA AD Provisions**

(n) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to Attn: Tim Dulin, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 227–2141; fax (425) 227–1149. Information may be e-mailed to: 9-AMN-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**Related Information**


**Material Incorporated by Reference**

(p) You must use the service information contained in Table 2 of this AD to do the
actions required by this AD, unless the AD specifies otherwise.

<table>
<thead>
<tr>
<th>Document</th>
<th>Revision</th>
<th>Date</th>
</tr>
</thead>
</table>

The issue level of Airbus A318/A319/A320/A321 Airworthiness Limitation Items, Document AI/SE–M4/95A.0252/96. Issue 10, dated October 2009; and Issue 11, dated September 2010; is indicated only on the title page and in the Record of Revisions of these documents.


(2) The Director of the Federal Register previously approved the incorporation by reference of the service information contained in table 3 of this AD on November 7, 2007 (72 FR 56262, October 3, 2007).

### Table 3—Material Previously Incorporated by Reference

<table>
<thead>
<tr>
<th>Document</th>
<th>Revision</th>
<th>Date</th>
</tr>
</thead>
</table>

(3) For service information identified in this AD, contact Airbus, Airworthiness Office—EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail account.airworth-eas@airbus.com; Internet http://www.airbus.com.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425–227–1221.

(5) You may also review copies of the service information that is incorporated by reference 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 24, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2011–16559 Filed 7–15–11; 8:45 am]

BILLING CODE 4910–13–P

### DEPARTMENT OF TRANSPORTATION

#### Federal Aviation Administration

#### 14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives: Airbus Model A300 B4–600, B4–600R, and F4–600R Series Airplanes, and Model A300 C4–605R Variant F Airplanes (Collectively Called A300–600 Series Airplanes); and Model A310 Series Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

A specific failure case of the THSA [trimmable horizontal stabilizer actuator] upper primary attachment, which may result in a loading of the upper secondary attachment, has been identified by analysis. Primary load path failure can be caused by bearing migration from the upper attachment gimbal by failure or loss of a retention bolt. In case of failure of the THSA upper primary attachment, the THSA upper secondary attachment would engage. Because the upper attachment secondary load path can only withstand the loads for a limited period of time, the condition where it would be engaged could lead, if not detected, to the failure of the secondary load path, which would likely result in loss of control of the aeroplane.

* * * * *

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective August 22, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of August 22, 2011.