DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Model A330–200 and −300 series airplanes, Model A340–200 and −300 series airplanes, and Model A340–500 and −600 series airplanes. 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:

During a pre-flight test before delivery of an aeroplane from the Airbus production line, a fault message was triggered on FDU1 [fire detection unit]. Investigations by the supplier on the faulty FDU have identified a soldering quality issue on one of the internal cards. This quality issue resulted from a specific repair process that was applied to some FDU Part Number [P/N] 3711–00 during manufacturing.

The FDU monitors the engine, Auxiliary Power Unit (APU) and Main Landing Gear (MLG) bay fire detection systems. This condition, if not corrected, may adversely affect the fire detection system performance in case of a fire in the area that is monitored by the faulty FDU, potentially resulting in an unsafe condition.

For the reasons described above, this [EASA] AD requires the identification and replacement of the affected FDU.

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 (76 FR 56680, September 14, 2011) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed.

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 58 products of U.S. registry. We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour. Required parts will cost about $0 per product. Replacement parts may be provided free of charge by the manufacturer. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be $4,930, 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 28, 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 the Internet at http://www.regulations.gov; 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 (76 FR 56680, September 14, 2011), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647–5527) is in the AD docket 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]

§ 39.13 [Amended] by adding the following new AD:


Effective Date

(a) This airworthiness directive (AD) becomes effective January 23, 2012.

Subject

Air Transport Association (ATA) of America Code 26: Fire Protection.

Reason

The mandatory continuing airworthiness information (MCAI) states:

During a pre-flight test before delivery of an aeroplane from the Airbus production line, a fault message was triggered on FDU1 [fire detection unit]. Investigations by the supplier on the faulty FDU have identified a soldering quality issue on one of the internal cards. This quality issue resulted from a specific repair process that was applied to some FDU * * * during manufacturing.

The FDU monitors the engine, Auxiliary Power Unit (APU) and Main Landing Gear (MLG) bay fire detection systems.

This condition, if not corrected, may adversely affect the fire detection system performance in case of a fire in the area that is monitored by the faulty FDU, potentially resulting in an unsafe condition.

* * * * *

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Actions

(g) Within 1,000 flight hours after the effective date of this AD: Do an inspection to identify the fire detection unit (FDU) part number (P/N) and serial number (S/N) of each engine, auxiliary power unit (APU), and MLG bay (for Model A340–500 and –600 series airplanes only), as applicable, in accordance with the instructions of Airbus All Operators Telex (AOT) A330–62A3502, dated April 19, 2011 (for Model A330–200 and –300 series airplanes); Airbus AOT A340–200/300–26A4044, dated April 19, 2011 (for Model A340–200 and –300 series airplanes); or Airbus AOT A340–500/600–26A5024, dated April 19, 2011 (for Model A340–500 and –600 series airplanes). A review of maintenance records is acceptable in lieu of this inspection if the part number and serial number of the installed FDU can be conclusively determined from that review.

(h) If during the inspection required by paragraph (g) of this AD, an FDU with P/N 3711–00 is found installed and the serial number of the FDU is listed in table 1 of this AD: Before further flight, replace the FDU with a serviceable FDU, in accordance with the instructions of Airbus AOT A330–26A3502, dated April 19, 2011 (for Model A330–200 and –300 series airplanes); Airbus AOT A340–200/300–26A4044, dated April 19, 2011 (for Model A340–200 and –300 series airplanes); or Airbus AOT A340–500/600–26A5024, dated April 19, 2011 (for Model A340–500 and –600 series airplanes).

Note 1: Some of the affected P/N 3711–00 FDU have been installed in production on certain airplanes, as indicated in table 2 of this AD.

TABLE 1—AFFECTED P/N 3711–00 FDUS

<table>
<thead>
<tr>
<th>Serial numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZL0683</td>
</tr>
<tr>
<td>ZL0718</td>
</tr>
<tr>
<td>ZL0721 through ZL0725 inclusive</td>
</tr>
<tr>
<td>ZL0727</td>
</tr>
<tr>
<td>ZL0729 through ZL0731 inclusive</td>
</tr>
<tr>
<td>ZL0736</td>
</tr>
<tr>
<td>ZL0738</td>
</tr>
<tr>
<td>ZL0740</td>
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<tr>
<td>ZL0742</td>
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<td>ZL0743</td>
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<td>ZL0745</td>
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<td>ZL0747</td>
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</tr>
<tr>
<td>ZL0788</td>
</tr>
<tr>
<td>ZL0804</td>
</tr>
</tbody>
</table>

**TABLE 2—FDUS INSTALLED IN PRODUCTION**

<table>
<thead>
<tr>
<th>Model A330–200 and –300 airplanes manufacturer serial numbers</th>
<th>Position</th>
<th>S/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1177</td>
<td>ENG2 FDU (1WD2)</td>
<td>ZL0683</td>
</tr>
<tr>
<td>1191</td>
<td>ENG2 FDU (1WD2)</td>
<td>ZL0718</td>
</tr>
<tr>
<td>1192</td>
<td>ENG1 FDU (1WD1)</td>
<td>ZL0722</td>
</tr>
<tr>
<td>1193</td>
<td>ENG2 FDU (1WD2)</td>
<td>ZL0727</td>
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<tr>
<td>1195</td>
<td>ENG1 FDU (1WD1)</td>
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<tr>
<td>1196</td>
<td>ENG1 FDU (1WD1)</td>
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<td>1198</td>
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<td>ZL0736</td>
</tr>
<tr>
<td>1199</td>
<td>APU FDU (13WG)</td>
<td>ZL0738</td>
</tr>
<tr>
<td>1200</td>
<td>ENG1 FDU (1WD1)</td>
<td>ZL0742</td>
</tr>
</tbody>
</table>

**Note 1:** Some of the affected P/N 3711–00 FDUs have been installed in production on certain airplanes, as indicated in table 2 of this AD.
Parts Installation

(i) As of the effective date of this AD, no manufacturer may install any engine, any P/N 3711–00 FDU with a serial number listed in table 1 of this AD, unless the FDU has been reworked and re-identified by L’Hotellier as specified in the instructions in Airbus AOT A330–26A3052, dated April 19, 2011 (for Model A330–200 and –300 series airplanes); Airbus AOT A340–400/500/600–26A4044, dated April 19, 2011 (for Model A340–200 and –300 series airplanes); or Airbus AOT A340–500/600–26A5024, dated April 19, 2011 (for Model A340–500 and –600 series airplanes).

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(j) 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: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057–3356; telephone (425) 227–1138; fax (425) 227–1149. Information may be emailed to: 9-ANM-116-AMOC-REQUEST@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) Airworthiness 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