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 a new airworthiness directive to read as follows:

2010–15–03 Eurocopter France:


Applicability: Model EC 130 B4 helicopters that have been modified in accordance with MOD 073774, and have not had MOD 073591 nor the modification specified in Eurocopter Drawing No. 350A085340 incorporated, certified in any category.

Compliance: Required within 10 hours time-in-service (TIS), unless accomplished previously.

To detect interference and prevent damage to an electrical harness by a lower structure fairing attachment screw (attachment screw), which could lead to short-circuiting of various warnings, inflation of the emergency floatation gear (emergency floats) during flight, and subsequent loss of control of the helicopter, accomplish the following:

(a) Remove the lower forward right-hand, left-hand, and center fairings.

(b) Inspect each electrical harness for chaffing, a tear, a hole, or other damage to the harness at the location of each attachment screw as depicted in Details B, C, and D in Figure 1 in Eurocopter Emergency Alert Service Bulletin No. 88A001 R1, dated April 17, 2007 (EASB), and as shown at point (a) in Figure 2 and Figure 3 in the EASB.

1. If there is no chaffing, tear, hole, or other damage to the electrical harness at any attachment screw:

(i) Determine the length of each attachment screw that secures the fairings. Replace any attachment screw that is longer than 14mm with an airworthy attachment screw, part number (P/N) A0164TK050S014X;

(ii) Install the spacer on the electrical harness in accordance with paragraph 2.3.b. of the Accomplishment Instructions of the EASB;

(iii) Relocate the electrical harness on the cable holders in accordance with paragraph 2.3.b. of the Accomplishment Instructions of the EASB; and

(iv) Install the harness clamp blocks in accordance with paragraph 2.6.4. of the Accomplishment Instructions of the EASB.

2. If there is chaffing, a tear, a hole, or other damage to an electrical harness at the location of an attachment screw, remove any protective tape from the electrical harness as shown at point (b) in Figure 2 of the EASB and inspect the insulation on each electrical wire and cable strand for chaffing, a tear, a hole, or other damage at the attachment screw location.

3. If there is no chaffing, tear, hole, or other damage to the insulation on any wire or cable strand, wrap the electrical harness with protective tape and comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

4. If there is chaffing, a tear, a hole, or other damage to the insulation on any wire or cable strand, but the electrical wire or cable strand is not damaged, wrap the electrical wire or cable strand that has damaged insulation with protective tape and wrap the electrical harness with protective tape, then comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

5. If 3 or less electrical wires or cable strands in the same immediate area are damaged:

(a) Repair each damaged electrical wire or cable strand with an extension lead, P/N E0541–10, in accordance with the Appendix to the EASB; test the electrical continuity of the repaired electrical wire or cable strand using an ohmmeter, continuity test light, or equivalent device; and functionally test the system affected by the repair;

(b) Wrap the electrical harness with protective tape.

6. Comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

2010–16–03 Eurocopter France:


Applicability: Model EC 130 B4 helicopters that have been modified in accordance with MOD 073774, and have not had MOD 073591 nor the modification specified in Eurocopter Drawing No. 350A085340 incorporated, certified in any category.

Compliance: Required within 10 hours time-in-service (TIS), unless accomplished previously.

To detect interference and prevent damage to an electrical harness by a lower structure fairing attachment screw (attachment screw), which could lead to short-circuiting of various warnings, inflation of the emergency floatation gear (emergency floats) during flight, and subsequent loss of control of the helicopter, accomplish the following:

(a) Remove the lower forward right-hand, left-hand, and center fairings.

(b) Inspect each electrical harness for chaffing, a tear, a hole, or other damage to the harness at the location of each attachment screw as depicted in Details B, C, and D in Figure 1 in Eurocopter Emergency Alert Service Bulletin No. 88A001 R1, dated April 17, 2007 (EASB), and as shown at point (a) in Figure 2 and Figure 3 in the EASB.

1. If there is no chaffing, tear, hole, or other damage to the electrical harness at any attachment screw:

(i) Determine the length of each attachment screw that secures the fairings. Replace any attachment screw that is longer than 14mm with an airworthy attachment screw, part number (P/N) A0164TK050S014X;

(ii) Install the spacer on the electrical harness in accordance with paragraph 2.3.b. of the Accomplishment Instructions of the EASB;

(iii) Relocate the electrical harness on the cable holders in accordance with paragraph 2.3.b. of the Accomplishment Instructions of the EASB;

(iv) Install the harness clamp blocks in accordance with paragraph 2.6.4. of the Accomplishment Instructions of the EASB.

2. If there is chaffing, a tear, a hole, or other damage to an electrical harness at the location of an attachment screw, remove any protective tape from the electrical harness as shown at point (b) in Figure 2 of the EASB and inspect the insulation on each electrical wire and cable strand for chaffing, a tear, a hole, or other damage at the attachment screw location.

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4. If there is chaffing, a tear, a hole, or other damage to the insulation on any wire or cable strand, but the electrical wire or cable strand is not damaged, wrap the electrical wire or cable strand that has damaged insulation with protective tape and wrap the electrical harness with protective tape, then comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

5. If 3 or less electrical wires or cable strands in the same immediate area are damaged:

(a) Repair each damaged electrical wire or cable strand with an extension lead, P/N E0541–10, in accordance with the Appendix to the EASB; test the electrical continuity of the repaired electrical wire or cable strand using an ohmmeter, continuity test light, or equivalent device; and functionally test the system affected by the repair;

(b) Wrap the electrical harness with protective tape.

6. Comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

7. (i) This amendment becomes effective on August 20, 2010.


Issued in Fort Worth, Texas, on July 8, 2010.

Scott A. Horn,
Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2010–17282 Filed 8–4–10; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; McDonnell Douglas Corporation Model MD–11 and MD–11F Airplanes Equipped With General Electric CF6–80C2 Series Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Model MD–11 and MD–11F airplanes. This AD requires revising the airplane flight manual to advise the flightcrew to use certain procedures during descent in certain icing conditions. This AD results from reports of several in-flight engine flameouts, including multiple dual engine flameout events, in ice-crystal icing conditions. We are issuing this AD to ensure that the flightcrew has the proper procedures to follow in certain icing conditions. These certain icing conditions could cause a multiple engine flameout during flight with the potential inability to restart the engines, and consequent forced landing of the airplane.

DATES: This AD is effective September 9, 2010.

Exercising the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov, or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to certain Model MD–11 and MD–11F airplanes. That NPRM was published in the Federal Register on April 7, 2008 (73 FR 18719). That NPRM proposed to require revising the airplane flight manual (AFM) to advise the flightcrew to use certain procedures during descent in certain icing conditions.

Other Relevant Proposed Rulemaking

NPRM, Docket No. FAA–2008–0402, Directorate Identifier 2007–NM–165–AD (73 FR 18721, April 7, 2008), proposes to require similar actions for Model 747 airplanes and Model 767 airplanes, certified in any category, equipped with General Electric Model CF6–80C2 or CF6–80A series engines. These airplanes have been determined to be susceptible to the accretion of ice crystals on internal engine surfaces. The NTSB notes that the NPRM is intended as interim action, and points out that it has issued Safety Recommendation A–06–59, dated August 25, 2006. In this safety recommendation the NTSB asked the FAA to “* * * work with engine and airplane manufacturers and other industry personnel as well as the appropriate international airworthiness authorities to actively pursue research to develop an ice detector that would alert pilots to internal engine icing and require that it be installed on new production turbojet engines, as well as retrofitted to existing turbojet engines.” Therefore, the NTSB hopes the FAA pursues research in concert with the multinational Aircraft Icing Research Alliance that might develop an ice detector to alert flightcrews to the accretion of ice crystals on internal engine surfaces, so that flightcrews can take the appropriate actions.

We partially agree with the commenter’s request. We agree that the General Electric (GE) CF6–80C2 series engine needs to be modified to mitigate the risk of flameouts caused by ice crystal accretion. However, at this time, we do not agree to pursue research to develop an ice detector that would alert flightcrews to the internal engine icing, or with requiring manufacturers to install ice detectors internal to the engines. In addition, no such designs have been proposed to the FAA. Instead, for future designs, we are developing rulemaking to show acceptable engine operation in an ice crystal environment. For engines that currently demonstrate a susceptibility to ice crystals, we are working with manufacturers to develop engine design changes to make engines more robust during ice crystal accumulation and shedding encounters. We will continue to provide feedback to the NTSB through the established process for addressing safety recommendations. For this AD, if different methods to address the unsafe condition are developed, under the provisions of paragraph (h) of this AD, we will consider requests for approval of an AMOC if sufficient data are submitted to substantiate that the method would provide an acceptable level of safety. No change to the AD is necessary in this regard.

Request To Withdraw the NPRM

GE acknowledges that a small number of incidences of in-flight or significant weather system encounters have resulted in short-duration, multiple engine power loss. GE points out that these few events occurred out of 14 million flights over 20 years of total service experience on the Model CF6–80C2 series engine. GE states that a forced landing resulting from one of these in-flight ice-crystal icing events is extremely improbable (including demonstrated relight performance). Therefore, GE asserts that the proposed condition does not meet the definition of “unsafe condition,” as defined by FAA Advisory Circular 39–8, “Continued Airworthiness Assessments of Powerplant and Auxiliary Power Unit Installations of Transport Category Airplanes,” dated September 8, 2003.

From these statements, we infer that GE requests that we withdraw the NPRM. We do not agree. We have evaluated the unsafe condition and find that sufficient data exist to demonstrate that the environment that causes the engine flameout would likely cause engine damage that potentially would prevent an engine from relighting. The condition could exist on all of an airplane’s engines, resulting in a forced landing. The advisory circular referenced by the commenter merely provides guidance. We have determined that an unsafe condition exists, and the appropriate vehicle for correcting an unsafe condition is an AD. We have not changed the AD regarding this issue.

Request To Revise Wording of the Unsafe Condition

Boeing proposes that we revise the wording of the unsafe condition from, “These certain icing conditions could cause a multiple engine flameout during
Requests To Revise Wording in the Discussion Section of the NPRM

GE suggests that there should be an operational cost of compliance included in the proposed Cost of Compliance provided in the NPRM. GE states that, while increasing engine off-take or bleed does provide additional margin against flameout, doing so requires somewhat increased fuel burn. GE believes the proposed procedure would be required on a significant percentage of flights.

Federal Express (FedEx) believes that the additional fuel consumption to 40 pounds for a descent from flight level (FL) 400 to landing.

From these statements, we infer that GE and FedEx are requesting that we revise the Costs of Compliance section of the NPRM to provide an operational cost for increased fuel burn necessitated by use of the proposed AFM procedure. We do not agree. The cost information in AD actions describes only the direct costs of the specific action required by the AD: an AFM revision in this case. The estimated cost of this action represents the time necessary to perform only the actions actually required by this AD. We recognize that, in doing the actions required by an AD, operators might incur operational costs in addition to the direct costs. The cost analysis in AD rulemaking actions, however, typically does not include incidental or operational costs such as the time required for planning or other administrative actions, and, in this case, possible additional fuel costs. Those costs, which might vary significantly among operators, are almost impossible to calculate. Additionally, we have determined that the additional fuel burn necessitated by the AFM procedure would be insignificant. However, as we explain under “Request To Revise the Proposed AFM Text,” we have revised the procedure to allow the ANTI-ICE switches to be placed in the OFF position when icing conditions are no longer present or anticipated. This allowance will further reduce any additional fuel burn caused by the use of the anti-ice system. We have not changed the Costs of Compliance section of this AD in this regard.

Request To Include Alternative AFM Requirements

FedEx recommends that we revise the NPRM to allow alternative AFM requirements based on the full authority digital engine control (FADEC) electronic control unit (ECU) installed software version. FedEx states that GE has documented six flameout events suspected to be a result of ice-crystal accretion. FedEx points out that GE Service Bulletin 73–21–07, Engine fuel and control—Electronic Control Unit Introduction of Software Version 8.3.K (8322), was introduced to improve the flameout margin in ice-crystal conditions. FedEx explains that this software change will create new engine control configurations with enhanced variable bypass valve (VVB) scheduling logic for inclement weather, and will change the scheduling of the VVBs at high altitude to increase ice extraction from the booster-core flowpath transition to the fan exit stream. FedEx believes there have been no suspected flameout events on airplanes using the combination of engine anti-ice and ECU software version 8.3.K on Model MD–11s, and indicates that it is upgrading its fleet to ECU software version 8.3.K in accordance with AD 2007–22–07 Amendment 39–13243 (72 FR 60227, October 24, 2007), applicable to GE CF6–80C2D1F turbofan engines. Therefore, FedEx proposes that airplanes with ECU software version 8.3.K or previous should follow the AFM requirement proposed in the NPRM, and airplanes with software version 8.3.K or subsequent should be allowed to follow alternative AFM requirements. FedEx provides suggested wording for an alternative AFM requirement.
airplane equipped with CF6–80C2B1F engines and ECU software equivalent to the version 8.3.K, we have determined that ECU software version 8.3.K alone will not necessarily provide an adequate margin of safety against engine flameout in all environments. We note that the nacelle anti-ice had been switched on prior to engine flameout. Increasing the bleed flow and engine idle speed by placing the ENG, WING, and TAIL ANTI-ICE switches in the ON position will provide additional margin for engine flameout. We have not revised the AD in this regard.

**Request To Remove Part of the AFM Requirement**

FedEx requests that additional justification be made available to support the proposed AFM requirement to use wing and tail anti-ice systems. FedEx states that both its flight operations and engineering staffs agree that increasing the flameout margin to buffer against possible core shedding of ice-crystal accretion is an important requirement, and fully support activation of the ENG IGN OVRD switch and engine anti-ice as effective means of reducing flameouts. However, FedEx feels strongly that part of the proposed AFM requirement is of limited value and might not be justifiable. FedEx asserts that selection of wing anti-ice would result in a small or incremental increase in core temperature, while increasing fuel flow and unnecessarily exposing the airplane to additional reliability risks. FedEx further notes that the NTSB, in its comments to the NPRM, made no mention of wing and tail anti-ice systems being part of the successful recommendations on Model 400A airplanes.

We do not agree to remove the requirement to use wing and tail anti-ice. As discussed previously, despite having the nacelle anti-ice switched on, a Model 747–400 airplane experienced a multiple engine flameout. Therefore, the use of nacelle anti-ice alone is not sufficient to prevent a multiple engine flameout. Increasing the bleed flow and engine idle speed by placing the ENG, WING, and TAIL ANTI-ICE switches in the ON position will provide additional margin against engine flameout. We have not revised the AD in this regard.

**Request To Revise the Proposed AFM Text**

Boeing proposes that we revise the proposed AFM text provided in the NPRM as follows:

Prior to reducing thrust for descent, when icing conditions (defined by visible moisture in the air and TAT is 6 Deg C or below) are present, the ENG IGN OVRD switch and the ENG, WING, and TAIL ANTI-ICE switches must be placed in the ON position. When icing conditions are no longer present or anticipated, place the ENG IGN OVRD switch and the ENG, WING, and TAIL ANTI-ICE switches in the OFF position.

Boeing states that this AFM text provides additional procedural information, as noted in the current Interim Operating Procedures for icing conditions that exist or are anticipated prior to descent. We agree that the AFM text changes suggested by Boeing do provide helpful procedural information. We have also determined that there is no additional benefit to having the engine, wing, and tail anti-ice switched on once icing conditions are no longer present or anticipated. Therefore, we have revised the AFM text provided in paragraph (g) of this AD (specified in paragraph (f) of the NPRM) to include the supplemental procedural information provided by Boeing, and to allow engine, wing, and tail anti-ice to be switched off once icing conditions are no longer present or anticipated.

**Explanation of Additional Paragraph in This AD**

We have added a new paragraph (d) to this AD to provide the Air Transport Association (ATA) of America subject code 30: Ice and rain protection. This code is added to make this AD parallel with other new AD actions. We have reidentified subsequent paragraphs accordingly.

**Conclusion**

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

**Interim Action**

We consider this AD interim action. If final action is later identified, we might consider further rulemaking then.

**Explanation of Change to Costs of Compliance**

Since issuance of the original NPRM, we have increased the labor rate used in the Costs of Compliance from $80 per hour to $85 per work-hour. The Costs of Compliance information, below, reflects this increase in the specified hourly labor rate.

**Costs of Compliance**

There are about 118 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for U.S. operators to comply with this AD.

<table>
<thead>
<tr>
<th>Action</th>
<th>Work hours</th>
<th>Average labor rate per hour</th>
<th>Parts</th>
<th>Cost per airplane</th>
<th>Number of U.S.-registered airplanes</th>
<th>Fleet cost</th>
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<td>$85</td>
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</table>

**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**

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 this AD:

1. Is not a “significant regulatory action” under Executive Order 12866,
2. Is not a “significant rule” under 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.

You can find our regulatory evaluation and the estimated costs of compliance in the AD Docket.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, 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**

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 adding the following new AD:


**Effective Date**

(a) This airworthiness directive (AD) is effective September 9, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to McDonnell Douglas Corporation Model MD–11 and MD–11F airplanes, certified in any category, equipped with General Electric CF6–80C2 series engines.

**Subject**

(d) Air Transport Association (ATA) of America Code 30: Ice and rain protection.

**Unsafe Condition**

(e) This AD results from reports of several in-flight engine flameouts, including multiple dual engine flameout events, in ice-crystal icing conditions. We are issuing this AD to ensure that the flightcrew has the proper procedures to follow in certain icing conditions. These certain icing conditions could cause a multiple engine flameout during flight with the potential inability to restart the engines, and consequent forced landing of the airplane.

**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.

**Airplane Flight Manual (AFM) Revision**

(g) Within 14 days after the effective date of this AD, revise the Limitations Section of the McDonnell Douglas MD–11/MD–11F AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

“Prior to reducing thrust for descent when icing conditions (defined by visible moisture in the air and TAT is 6 °C or below) are present, the ENG IGN OV RD switch and the ENG, WING, and TAIL ANTI-ICE switches must be placed in the ON position. When icing conditions are no longer present or anticipated, place the ENG IGN OV RD switch and the ENG, WING, and TAIL ANTI-ICE switches in the OFF position.”

**Note 1:** When a statement identical to that in paragraph (g) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

**Alternative Methods of Compliance (AMOCs)**

(h)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM–140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712–4137; telephone (562) 627–5262; fax (562) 627–5210.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

**Material Incorporated by Reference**

(i) None.


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

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

14 CFR Part 39


**RIN 2120–AA64**

**Airworthiness Directives; Airbus Model A330–200 and –300 Series Airplanes, and Model A340–200, –300, –500 and –600 Series Airplanes**

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

**ACTION:** Final rule; correction.

**SUMMARY:** The FAA is correcting airworthiness directive (AD) 2010–14–19, which published in the Federal Register on July 13, 2010. That AD applies to certain Model A330–200 and –300 series airplanes, and Model A340–200, –300, –500 and –600 series airplanes. A certain service bulletin number in Note 3 of the regulatory section is incorrect. This document corrects that service bulletin number. In all other respects, the original document remains the same.

**DATES:** This correction is effective August 5, 2010. The effective date of AD 2010–14–19 remains August 17, 2010.

**ADDRESSES:** You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD. The regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800–647–5527) is the Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.