(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact James Gray, Aerospace Engineer, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781–238–7742; fax: 781–238–7199; email: *james.e.gray@faa.gov.*

(2) Pratt & Whitney Service Bulletin (SB) No. PWENG 72–721 and SB No. PW4G–100–72–166, pertain to the subject of this AD.

(3) For service information identified in this AD, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; phone: 860–565–8770; fax: 860–565–4503.

(i) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on August 16, 2012.

Colleen M. D'Alessandro,

Assistant Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2012–21821 Filed 9–5–12; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2011–1229; Directorate Identifier 2011–NM–132–AD; Amendment 39–17181; AD 2012–18–05]

RIN 2120–AA64

Airworthiness Directives; the Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model DC–9–10, DC–9–20, DC–9–30, DC–9–40, and DC–9–50 series airplanes; and Model DC–9–81 (MD–81), DC–9–82 (MD–82), DC–9–83 (MD–83), DC–9–87 (MD–87), MD–88, and MD–90–30 airplanes; equipped with center wing fuel tank and Boeing original equipment manufacturer-installed auxiliary fuel tanks. This AD was prompted by fuel system reviews conducted by the manufacturer. This AD requires adding design features to detect electrical faults and to detect a pump running in an empty fuel tank. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: This AD is effective October 11, 2012.

Examining 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 other information. The address for the Docket Office (phone: 800–647–5527) is 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.

FOR FURTHER INFORMATION CONTACT: Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM–140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712–4137; phone: 562–627–5254; fax: 562–627–5210; email: *serj.harutunian@faa.gov.*

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 published in the **Federal Register** on November 14, 2011 (76 FR 70377). That NPRM proposed to require adding design features to detect electrical faults, to detect a pump running in an empty fuel tank, and to ensure that a fuel pump's operation is not affected by certain conditions.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (76 FR 70377, November 14, 2011) and the FAA's response to each comment.

Request To Revise Applicability

Boeing requested that we revise the applicability of the NPRM (76 FR 70377, November 14, 2011) to exclude airplanes from which auxiliary fuel tanks have been removed, and to add certain airplanes equipped with a center wing fuel tank. Boeing stated that the system safety assessments (SSAs) of Special Federal Aviation Regulation No. 88 (''SFAR 88,'' Amendment 21–78 (66 FR 23086, May 7, 2001) concluded that design changes were required on all auxiliary fuel tanks on Model DC–9, MD–80, and MD–90 airplanes, and on the center wing fuel tank on Model MD–80 and MD–90 airplanes. American Airlines (American) concurred with Boeing's position on this issue.

We agree to limit the applicability of this AD to affected airplanes equipped with center wing fuel tanks and Boeing OEM-installed auxiliary fuel tanks. We also agree that airplanes on which auxiliary fuel tanks have been removed are not subject to the requirements of this AD. We have revised paragraph (c) in this final rule accordingly.

Requests To Remove Criteria for Mean Time Between Failures (MTBF)

Boeing and TDG Aerospace requested that we provide justification for the removal of pump nuisance trip relative to the 100,000-hour MTBF reliability requirements to mitigate the ignition prevention unsafe condition. The commenters asserted that the 100,000-hour MTBF reliability requirement is not a contributing factor to the ignition source unsafe condition for design changes mandated by the NPRM (76 FR 70377, November 14, 2011). American concurred with Boeing's position on this issue.

We agree with the request. The MTBF of the component will be addressed in the design change package provided for certification to satisfy the criteria for compliance with the requirements of this AD. We have accordingly removed paragraph (g)(3) in this final rule.

Request To Redefine Certain Failure Conditions

Boeing claimed that the NPRM (76 FR 70377, November 14, 2011) was too broad in its descriptions of the unsafe failure modes. Boeing requested that we revise paragraph (g) of the NPRM to define the failure modes that would require corrective action as electrical faults that are ''capable of burning through the pump housing's explosion-proof boundaries'' (instead of those that ''can cause arcing and burn through the fuel pump housing,'' as specified in the NPRM). Boeing asserted that this clarification would ensure that the corrective actions would target only the potential fuel tank ignition sources identified during the SSAs, by identifying only those fuel pump electrical faults and fuel pump dry-running conditions capable of developing a fuel tank ignition source. American concurred with Boeing's position on this issue.

We disagree with the request. Narrowing the failure conditions to certain types of failures or certain explosion-proof pump boundaries would limit the application of a broader

array of ignition prevention solutions. We have not changed the final rule regarding this issue.

Request To Remove Certain Restriction

Paragraph (g)(2) of the NPRM (76 FR 70377, November 14, 2011) specified that the new pump shutoff system must shut off each pump no later than 60 seconds after the fuel tank is emptied. Noting that the SFAR 88 SSAs recommended minimizing dry-running time but provided no specific dry-running time limit, Boeing requested that we remove the 60-second restriction. Boeing suggested basing dry-running time limits on the risk of developing a fuel tank ignition source threat by the affected designs, and added that the pump shutoff design feature must balance that risk against adding to crew workload to correct nuisance pump shutoffs in a near-empty fuel tank. Boeing noted that the FAA has approved auto-shutoff timers on other airplane designs that may allow pumps to run longer than 60 seconds after a fuel tank was emptied. American concurred with Boeing's position on this issue.

We do not agree to remove the 60-second pump shutoff restriction. The intent of this AD is to mandate that fuel pumps be shut off after fuel tanks empty to prevent pump dry running. The FAA has mandated a 15-second shutoff time on other applications, and has determined that a 60-second shutoff time is not unreasonable in this case. We have not changed the final rule regarding this issue.

Request To Mandate Airworthiness Limitations

Boeing noted that the NPRM (76 FR 70377, November 14, 2011) would not mandate airworthiness limitations such as critical design configuration control limitations (CDCCLs) and/or repetitive inspections or functional checks for the proposed changes. Boeing requested that we revise Note 1 of the NPRM to require operators to comply with any related airworthiness limitations. American concurred with Boeing's position on this issue.

We disagree with the request to mandate airworthiness limitations. CDCCLs for this design are not defined yet and will be included in the certification approval, as required under paragraph (g) of this AD. We have removed Note 1 in this final rule, but have otherwise not changed the AD regarding this issue.

Request To Delay Issuance of Final Rule

American requested that we delay issuing the final rule pending the release of service information associated with the design features proposed by the NPRM (76 FR 70377, November 14, 2011). American indicated that additional time is necessary to allow operators time for reviewing the modification options, planning, ordering modification parts, and completing the required work during a heavy maintenance check.

We disagree with the request. Delaying issuance of this AD would have adverse safety implications. We anticipate that FAA-approved design solutions will be available in sufficient time for operators to comply with the AD within 60 months. We have not changed the final rule regarding this issue.

Request To Clarify Terminology

TDG Aerospace requested that we clarify the term ''preclude'' as used in the NPRM (76 FR 70377, November 14, 2011) in paragraph (g)(2): ''The pump shutoff system design must preclude undetected running of a fuel pump in an empty tank, after the pump was commanded off manually or automatically.'' TDG Aerospace considered ''undetected running of a fuel pump'' a significant latent failure condition, as defined by FAA Advisory Circular 25.981–1C, ''Fuel Tank Ignition Source Prevention Guidelines,'' dated September 19, 2008 (*http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC%2025_981-1.pdf*). TDG therefore requested that we confirm that use of the word ''preclude'' is done in the context of the allowable period of latency for significant latent failure conditions (i.e., one flight cycle). The commenter did not justify or further explain the request.

We agree that the word ''preclude'' is consistent with failure latency period equal to one flight accommodated in paragraph 10.c.(3) of FAA AC 25.981–1C. We have not changed the final rule regarding this issue.

Request To Approve Modification

American requested that we approve for compliance with the NPRM (76 FR 70377, November 14, 2011) the installation of a certain universal fault interrupter that American alleges will adequately address the unsafe condition. American stated that the functionality of this modification has been demonstrated and approved as equivalent or exceeding the protection provided by that of a standard ground fault interrupter (GFI) relay previously approved for AD 2011–18–03, Amendment 39–16785 (76 FR 53317, August 26, 2011); and AD 2011–20–07, Amendment 39–16818 (76 FR 60710, September 30, 2011).

We disagree with the request. Those parts have not been approved for these airplanes. The referenced ADs apply to airplanes not affected by this AD, and do not address the same unsafe condition identified in this AD. We have not changed the final rule regarding this issue.

Request To Add Flight Crew Notification

The Air Line Pilots Association, International (ALPA) fully supported the proposed requirements of the NPRM (76 FR 70377, November 14, 2011), and requested an additional design feature that would notify the flight crew when the fuel pump has been automatically shut off if an electrical anomaly is detected or if the fuel tank is empty.

We disagree with the request. When the fuel pump is automatically shut off because of an electrical anomaly, the flight crew will be unable to take any further action to start up the pump, so notifications of this condition to the flight crew would serve no purpose. Electrical failures that automatically shut off the pump are logged for maintenance action after landing to safely restart the pump. We have not changed the final rule regarding this issue.

Request To Revise Cost Estimate

Boeing requested that we revise the cost estimates specified in the NPRM (76 FR 70377, November 14, 2011) to reflect updated fleet size information. American concurred with this request.

We have reviewed the fleet information provided by Boeing, and have revised the estimated costs accordingly in this final rule.

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 and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 70377, November 14, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 70377, November 14, 2011).

We also determined that these changes will not increase the economic

burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects 809 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Installing design features—for airplanes with center wing and auxiliary tanks (263 airplanes).	50 work-hours × $85 per hour = $4,250.	$35,000	$39,250	$10,322,750
Installing design features—for airplanes with center wing tank (546 airplanes).	35 work-hours × $85 per hour = $2,975.	17,000	19,975	10,906,350

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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

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

■ 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 airworthiness directive (AD):

2012–18–05 The Boeing Company: Amendment 39–17181; Docket No. FAA–2011–1229; Directorate Identifier 2011–NM–132–AD.

(a) Effective Date

This AD is effective October 11, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company airplanes, certificated in any category, as identified in paragraphs (c)(1) through (c)(8) of this AD, and equipped with center wing fuel tanks and Boeing original equipment manufacturer-installed auxiliary fuel tanks. For airplanes from which the auxiliary fuel tanks have been removed, the actions specified in this AD are not required.

(1) Model DC–9–11, DC–9–12, DC–9–13, DC–9–14, DC–9–15, and DC–9–15F airplanes.

(2) Model DC–9–21 airplanes.

(3) Model DC–9–31, DC–9–32, DC–9–32 (VC–9C), DC–9–32F, DC–9–33F, DC–9–34, DC–9–34F, and DC–9–32F (C–9A, C–9B) airplanes.

(4) Model DC–9–41 airplanes.

(5) Model DC–9–51 airplanes.

(6) Model DC–9–81 (MD–81), DC–9–82 (MD–82), DC–9–83 (MD–83), and DC–9–87 (MD–87) airplanes.

(7) Model MD–88 airplanes.

(8) Model MD–90–30 airplanes.

(d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 28: Fuel.

(e) Unsafe Condition

This AD was prompted by fuel system reviews conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Criteria for Operation

As of 60 months after the effective date of this AD, no person may operate any airplane affected by this AD unless an amended type certificate or supplemental type certificate that incorporates the design features and requirements described in paragraphs (g)(1) and (g)(2) of this AD has been approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, and those design features are installed on the airplane.

(1) Each electrically powered fuel pump installed in the center wing tank or auxiliary fuel tank must have a protective device installed to detect electrical faults that can cause arcing and burn through the fuel pump housing. The same device must shut off the pump by automatically removing electrical power from the pump when such faults are detected. When a fuel pump is shut off as the result of detection of an electrical fault, the device must stay latched off until the fault is cleared through maintenance action and verified that the pump and the electrical power feed is safe for operation.

(2) Additional design features must be installed to detect when any center wing tank or auxiliary fuel tank pump is running in an empty fuel tank. The prospective pump shutoff system must shut off each pump no later than 60 seconds after the fuel tank is emptied. The pump shutoff system design must preclude undetected running of a fuel pump in an empty tank, after the pump was commanded off manually or automatically.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO, 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 manager of the ACO, send it

to the attention of the person identified in the Related Information section of this AD.

(2) 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.

(i) Related Information

For more information about this AD, contact Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM–140L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 90712–4137; phone: 562–627–5254; fax: 562–627–5210; email: *serj.harutunian@faa.gov.*

(j) Material Incorporated by Reference

None.

Issued in Renton, Washington, on August 6, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012–21838 Filed 9–5–12; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2012–0222; Directorate Identifier 2011–SW–007–AD; Amendment 39–17166; AD 2012–17–03]

RIN 2120–AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Eurocopter France Model AS350 helicopters. This AD requires installing protection sleeves over certain forward (pitch) servo-control hydraulic hoses. This AD was prompted by an in-flight fire caused by the ignition of hydraulic fluid leaking from a damaged forward servo-control hydraulic hose. This AD's actions are intended to prevent the forward servo-control hydraulic hoses from becoming damaged and leaking hydraulic fluid that could ignite in flight, which could result in loss of main rotor (M/R) control, power loss, structural damage, propagation of fire, and subsequent loss of control of the helicopter.

DATES: This AD is effective October 11, 2012.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of October 11, 2012.

ADDRESSES: For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052, telephone (972) 641–0000 or (800) 232–0323, fax (972) 641–3775, or at *http://www.eurocopter.com/techpub.* You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

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 this AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800–647–5527) is U.S. Department of Transportation, Docket Operations Office, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Matt Wilbanks, Aerospace Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Boulevard, Fort Worth, Texas 76137; telephone (817) 222–5051; email *matt.wilbanks@faa.gov.*

SUPPLEMENTARY INFORMATION:

Discussion

On March 9, 2012, at 77 FR 14310, the **Federal Register** published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Eurocopter AS350 B, BA, D, B1, B2, and B3 helicopters with a single hydraulic power system and forward (pitch) servo-control hydraulic hoses part number (P/N) 704A34–412–033 (other reference manufacturer's part number (MP/N) 675–102–05–01) or P/N 704A34–412–035 (other reference MP/N 675–102–06–01) installed. That NPRM proposed to require installing protection sleeves over certain forward servo-control hydraulic hoses. The proposed requirements were intended to prevent the forward servo-control hydraulic hoses from becoming damaged and leaking hydraulic fluid that could ignite in flight. Such an ignition could result in loss of M/R control, power loss, propagation of fire, structural damage, and subsequent loss of control of the helicopter.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2011–0033, dated March 1, 2011 (AD 2011–0033), to correct an unsafe condition for the Eurocopter helicopters. EASA advises that an in-flight fire in the main gearbox compartment occurred on an AS350B2 helicopter. The fire was ''caused by ignition of hydraulic fluid leaking from a hydraulic hose, which had been damaged following an electrical fault in a circuit located in the compartment that is not fire protected. An in-flight fire in the main gearbox compartment during a continued flight, when undetected or if a landing could not be performed immediately, can result in loss of hydraulics, shutdown of the engine because of fire effects, and damage to the Main Rotor (MR) control system.'' This condition, if not prevented, could lead to loss of M/R control, power loss, structural damage, propagation of fire into the cabin or other compartments, and subsequent loss of control of the helicopter. For these reasons, AD 2011–0033 requires installation of protection sleeves on the affected hydraulic hoses.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

Eurocopter has issued Alert Service Bulletin No. 29.00.13, dated July 26, 2010, which specifies installing two siliconed glass wool sleeves over both forward main rotor servo-control hydraulic hoses. EASA classified this ASB as mandatory and issued AD 2011–0033 to ensure the continued airworthiness of these helicopters.