



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2015-3658; Directorate Identifier 2014-SW-039-AD;**

**Amendment 39-18427; AD 2016-05-09]**

**RIN 2120-AA64**

**Airworthiness Directives; MD Helicopters, Inc. (MDHI) Helicopters**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain MDHI Model 369A (Army OH-6A), 369H, 369HE, 369HM, 369HS, 369D, 369E, 369F, 369FF, and 500N helicopters. This AD requires inspecting the auxiliary fuel pump (fuel pump) wire routing in the left-hand fuel cell and corrective action, if necessary. This AD also requires installing a warning decal on the left-hand fuel cell access cover. This AD was prompted by accidents resulting from incorrectly positioned fuel pump wiring within the fuel tank interfering with the operation of the fuel quantity sensor float, which caused an erroneous fuel quantity indication in the cockpit. The actions are intended to detect and correct routing of the fuel pump wiring to prevent interference with the fuel quantity sensor float, an erroneous fuel quantity indication in the cockpit, and subsequent fuel exhaustion and emergency landing.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; or at <http://www.mdhelicopters.com>. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-3658.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-3658; 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:** Danny Nguyen, Aerospace Engineer, Los Angeles Aircraft Certification Office, Transport Airplane Directorate, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5247; email [danny.nguyen@faa.gov](mailto:danny.nguyen@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On September 2, 2015, at 80 FR 53030, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to certain MDHI Model 369A (Army OH-6A), 369H, 369HE, 369HM, 369HS, 369D, 369E, 369F, 369FF, and 500N helicopters. The NPRM proposed to require inspecting the routing of the fuel pump wiring to determine whether the fuel pump wire is properly wrapped around the fuel inlet hose and correcting the routing of the wiring if it is not. The NPRM also proposed to require installing a decal regarding correct installation of the fuel pump wiring. The NPRM was prompted by two accidents and one incident that occurred on Model 369D helicopters resulting from an incorrectly positioned fuel pump wire within the fuel tank interfering with the operation of the fuel quantity sensor float, which caused an erroneous fuel quantity reading in the cockpit. Because the fuel pump is installed on all the affected model helicopters, we are including them in the applicability. According to MDHI, because maintenance personnel caused the incorrect wire routing by failing to follow procedures for installing the fuel pump, it is also necessary to install a decal on the left-hand fuel cell access cover to refer maintenance personnel to the appropriate manual procedures. The proposed requirements were intended to detect and correct routing of the fuel pump wiring to prevent interference with the fuel quantity sensor float, an erroneous fuel quantity indication in the cockpit, and subsequent fuel exhaustion and emergency landing.

## **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (80 FR 53030, September 2, 2015).

## **FAA's Determination**

We have reviewed the relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of the same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

## **Related Service Information Under 1 CFR part 51**

MD Helicopters issued one service bulletin on April 30, 2014, with five different numbers: SB369H-255, SB369E-111, SB500N-049, SB369D-213, and SB369F-098. The service bulletin specifies a one-time inspection of the routing of the fuel pump wire in the left-hand fuel cell and corrective action, if necessary. The service bulletin also specifies installing a warning decal on the left-hand fuel cell access cover that refers personnel to the procedures for routing the fuel pump wire that is contained in the appropriate maintenance manual. The service bulletin states that recent field incidents have occurred where maintenance personnel have not followed the procedures for installation of the fuel pump. Also, the service bulletin states that an incorrectly installed fuel pump wire can interfere with the fuel quantity sensor float, which can result in erroneous fuel quantity indications. To prevent this situation, the service information states that the fuel pump wire must be wrapped around the fuel inlet hose as shown in the applicable maintenance manual.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

We estimate that this AD will affect 833 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour. Inspecting the fuel pump wire routing and installing a decal will take 3 work-hours, and parts will cost \$20 for a total cost of \$275 per helicopter and \$229,075 for the U.S. fleet. If required, rerouting the wiring will require 1 work-hour for a total cost of \$85 per helicopter.

### **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 to the extent that it justifies making a regulatory distinction; 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.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## **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):

2016-05-09 **MD Helicopters, Inc.:** Amendment 39-18427; Docket No. FAA-2015-3658; Directorate Identifier 2014-SW-039-AD.

**(a) Applicability**

This AD applies to the following helicopters, certificated in any category:

(1) Model 369A (Army OH-6A), 369H, 369HE, 369HM, 369HS, and 369D;

(2) Model 369E with a serial number (S/N) 0001E through 0620E;

(3) Model 369F and 369FF with a S/N 0001FF through 0212FF, 0600FF, 0601FF, 0602FF, and 0700FF through 0711FF and with an auxiliary fuel pump part number (P/N) 369A8143-3 installed; and

(4) Model 500N with a S/N LN001 through LN0111.

**(b) Unsafe Condition**

This AD defines the unsafe condition as incorrect routing of the auxiliary fuel pump (fuel pump) wiring. This condition could result in an erroneous fuel quantity indication in the cockpit and subsequent fuel exhaustion and emergency landing.

**(c) Effective Date**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 100 hours time-in-service:

(1) Remove the fuel quantity sensor by following the Accomplishment Instructions, paragraph 2.B., of MD Helicopters Service Bulletin SB369H-255, SB369E-111, SB500N-049, SB369D-213, or SB369F-098, dated April 30, 2014, as applicable to your model helicopter. Using a mirror and light, inspect the routing of the fuel pump wire in the area depicted in Figure 2 of MD Helicopters Service Bulletin SB369H-255, SB369E-111, SB500N-049, SB369D-213, or SB369F-098, dated April 30, 2014, as applicable to your model helicopter, and determine whether the fuel pump wire is wrapped around the left-hand fuel cell fuel inlet hose assembly a minimum of one revolution.

(i) If the fuel pump wire is wrapped around the left-hand fuel cell fuel inlet hose a minimum of one revolution, install the fuel quantity sensor and perform a fuel quantity sensor functional test for proper fuel float arm function.

(ii) If the fuel pump wire is not wrapped around the left-hand fuel cell fuel inlet hose a minimum of one revolution, install the fuel quantity sensor, route the fuel pump wire around the left-hand fuel cell fuel inlet hose by following paragraphs 2.E.(1) through 2.E.(8) of MD Helicopters Service Bulletin SB369H-255, SB369E-111, SB500N-049, SB369D-213, or SB369F-098, dated April 30, 2014 as applicable to your model helicopter, and perform a fuel quantity sensor functional test for proper fuel float arm function.

(2) Install start pump warning decal, P/N MHS5861-66 or equivalent, on the left-hand fuel cell cover by following paragraph 2.G. of MD Helicopters Service Bulletin SB369H-255, SB369E-111, SB500N-049, SB369D-213, or SB369F-098, dated April 30, 2014 as applicable to your model helicopter.

**(f) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Danny Nguyen, Aerospace Engineer Transport Airplane Directorate, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5247; email 9-ANM-LAACO-AMOC-REQUESTS@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Subject**

Joint Aircraft Service Component (JASC) Code: 2840 Fuel Quantity Indicating System.

**(h) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) MD Helicopters Service Bulletin SB369D-213, dated April 30, 2014.

(ii) MD Helicopters Service Bulletin SB369E-111, dated April 30, 2014.

(iii) MD Helicopters Service Bulletin SB369F-098, dated April 30, 2014.

(iv) MD Helicopters Service Bulletin SB369H-255, dated April 30, 2014.

(v) MD Helicopters Service Bulletin SB500N-049, dated April 30, 2014.

Note 1 to paragraph (h)(2): MD Helicopters Service Bulletin SB369D-213, SB369E-111, SB369F-098, SB369H-255, and SB500N-049, dated April 30, 2014, are co-published as one document.

(3) For MD Helicopters service information identified in this final rule, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; or at <http://www.mdhelicopters.com>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this 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/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on March 1, 2016.

Scott A. Horn,

Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

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