

Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-27756; Directorate Identifier 2006-NM-255-AD]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-8-62, DC-8-62F, DC-8-63, DC-8-63F, DC-8-72, DC-8-72F, and DC-8-73F Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all McDonnell Douglas Model DC-8-62, DC-8-62F, DC-8-63, DC-8-63F, DC-8-72, DC-8-72F, and DC-8-73F airplanes. This proposed AD would require deactivating certain components (the sump heater, scavenge valve, and scavenge pump) of the center wing fuel tank. This proposed AD results from fuel system reviews conducted by the manufacturer. We are proposing this AD to prevent certain conditions related to these components, which could lead to a possible ignition source in the fuel tank and a potential fire or explosion.

DATES: We must receive comments on this proposed AD by May 21, 2007.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD.

- *DOT Docket Web site:* Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- *Government-wide rulemaking Web site:* Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- *Mail:* Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, room PL-401, Washington, DC 20590.

- *Fax:* (202) 493-2251.

- *Hand Delivery:* Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024), for the service information identified in this proposed AD.

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; telephone (562) 627-5254; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number "FAA-2007-27756; Directorate Identifier 2006-NM-255-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management

Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

Discussion

The FAA has examined the underlying safety issues involved in fuel tank explosions on several large transport airplanes, including the adequacy of existing regulations, the service history of airplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, we issued a regulation titled "Transport Airplane Fuel Tank System Design Review, Flammability Reduction and Maintenance and Inspection Requirements" (66 FR 23086, May 7, 2001). In addition to new airworthiness standards for transport airplanes and new maintenance requirements, this rule included Special Federal Aviation Regulation No. 88 ("SFAR 88," Amendment 21-78, and subsequent Amendments 21-82 and 21-83).

Among other actions, SFAR 88 requires certain type design (i.e., type certificate (TC) and supplemental type certificate (STC)) holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport airplanes and for subsequent modifications to those airplanes. It requires them to perform design reviews and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. As explained in the preamble to the rule, we intended to adopt airworthiness directives to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these design reviews, we have established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address

the failure types under evaluation: Single failures, single failures in combination with a latent condition(s), and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

We have determined that the actions identified in this proposed AD are necessary 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.

We have received a report of an overheated and damaged sump heater on a center wing fuel tank. Investigation revealed that several incidents of this kind had occurred in the past and that damage was caused by fatigue failure of the sump heater thermostat.

Additionally, SFAR 88 analysis has identified certain lightning protection issues with the center wing crossfeed and scavenge valves, as well as frictional heating and sparking issues with the scavenge pump. Deactivating the sump heater, the scavenge valve and the scavenge pump will address all three issues. If not corrected, operation with a damaged sump heater thermostat or scavenge pump, or operation of the crossfeed and scavenge valves during lightning conditions could lead to a possible ignition source in the fuel tank and a potential fire or explosion.

Relevant Service Information

We have reviewed Boeing Alert Service Bulletin DC8-28A089, dated November 1, 2006. The service bulletin describes procedures for deactivating the sump heater, scavenge valve, and scavenge pump of the center wing fuel

tank. Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. For this reason, we are proposing this AD, which would require accomplishing the actions specified in the service information described previously.

Costs of Compliance

There are about 119 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for U.S. operators to comply with this proposed AD.

ESTIMATED COSTS

Work hours	Average labor rate per hour	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
6	\$80	\$480	84	\$40,320

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 have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

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 proposed AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

McDonnell Douglas: Docket No. FAA-2007-27756; Directorate Identifier 2006-NM-255-AD.

Comments Due Date

- (a) The FAA must receive comments on this AD action by May 21, 2007.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to all McDonnell Douglas Model DC-8-62, DC-8-62F, DC-8-63, DC-8-63F, DC-8-72, DC-8-72F, and DC-8-73F airplanes, certificated in any category.

Unsafe Condition

- (d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent certain conditions related to the sump heater, scavenge valve, and scavenge pump of the center wing fuel tank, which could lead to a possible ignition source in the fuel tank and a potential fire or explosion.

Compliance

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

Deactivation

- (f) Within 24 months after the effective date of this AD, deactivate the sump heater,

scavenge valve, and scavenge pump of the center wing fuel tank, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC8-28A089, dated November 1, 2006.

Alternative Methods of Compliance (AMOCs)

(g)(1) The Manager, Los Angeles Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Issued in Renton, Washington, on March 26, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-6269 Filed 4-3-07; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-27755; Directorate Identifier 2006-NM-289-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-8-400 Series Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Bombardier Model DHC-8-400 series airplanes. This proposed AD would require revising the Limitations section of the airplane flight manual to include procedures for pulling the "HYD PWR XFER" circuit breaker in the event of the loss of all hydraulic fluid in the No. 1 or No. 2 hydraulic system. This proposed AD results from reports of fluid loss in the No. 2 hydraulic system, causing the power transfer unit to overspeed, increasing the fluid flow within the No. 1 hydraulic system. We are proposing this AD to prevent possible loss of both the No. 1 and No. 2 hydraulic systems, resulting in the potential loss of several functions essential for safe flight and landing of the airplane.

DATES: We must receive comments on this proposed AD by May 4, 2007.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

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- *Fax:* (202) 493-2251.

- *Hand Delivery:* Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada, for service information identified in this proposed AD.

FOR FURTHER INFORMATION CONTACT: Ezra Sasson, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7320; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number "FAA-2007-27755; Directorate Identifier 2006-NM-289-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register**

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Examining the Docket

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Discussion

Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, notified us that an unsafe condition may exist on certain Bombardier Model DHC-8-400 series airplanes. TCCA advises that it has received several reports of fluid loss in the No. 2 hydraulic system, causing the power transfer unit (PTU) to overspeed. This resulted in pressure fluctuations and increased fluid flow within the No. 1 hydraulic system. In one case, the hydraulic system control logic did not shut down the PTU, and the overspeed condition persisted, resulting in the illumination of the No. 1 "HYD FLUID HOT" caution light. This caution light indicated that the hydraulic fluid temperature had exceeded 225 degrees Fahrenheit. Had the temperature of the hydraulic fluid continued to increase to 275 degrees Fahrenheit, the No. 1 system hydraulic firewall shutoff would have closed, leaving only the standby power unit (SPU) available. The SPU is not capable of meeting the increased flow demands of the PTU and other No. 1 hydraulic system services. Therefore, the No. 1 hydraulic system would have also been lost, leaving only the No. 3 hydraulic system available. Inoperative systems would include flaps, brakes and emergency brakes, nose wheel steering, and all primary flight controls other than elevator control and degraded aileron control.

This condition, if not corrected, could result in the potential loss of several functions essential for safe flight and landing of the airplane.

Relevant Service Information

Bombardier has issued the following airplane flight manual (AFM) temporary amendments: