

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. 98-NM-326-AD]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-9-80 Series Airplanes and Model MD-88 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Supplemental notice of proposed rulemaking; reopening of comment period.

SUMMARY: This document revises an earlier proposed airworthiness directive (AD), applicable to all McDonnell Douglas Model DC-9-80 series airplanes and Model MD-88 airplanes, that would have superseded an existing AD that currently requires revisions to the Airplane Flight Manual (AFM) and installation of tufts and triangular decals on the wing upper surfaces. The proposed AD would have required installation of an overwing heater blanket system or a primary wing ice detection system and a new AFM revision. For certain airplanes, this action proposes new repetitive tests and a one-time inspection, as applicable, to ensure the integrity of the electrical installation of the overwing heater blanket, and corrective action, if necessary. This new action also proposes installation of a heater protection panel or an equipment protection device on certain overwing heater blanket systems, which would constitute terminating action for the new repetitive tests for affected airplanes. The actions specified by this proposed AD are intended to prevent ice accumulation on the wing upper surfaces, which could result in ingestion of ice into one or both engines and consequent loss of thrust from one or both engines.

DATES: Comments must be received by June 12, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-326-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from The Boeing Company, Douglas Products Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT:

Albert Lam, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5346; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this

proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-NM-326-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-326-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to add an airworthiness directive (AD), applicable to all McDonnell Douglas Model DC-9-80 series airplanes and Model MD-88 airplanes, was published as a notice of proposed rulemaking (NPRM) in the **Federal Register** on March 8, 1999 (64 FR 10959). That NPRM proposed to supersede AD 92-03-02, amendment 39-8156 (57 FR 2014, January 17, 1992), which is applicable to all McDonnell Douglas Model DC-9-80 series airplanes and Model MD-88 airplanes. That proposal would have continued to require a revision to the Airplane Flight Manual (AFM) to specify restrictions on operations during icing conditions, installation of tufts and triangular decals on the inboard side of the wing upper surfaces, and a revision to the AFM to specify restrictions on operations when such tufts or decals are missing. That proposal would have added a requirement for installation of an overwing heater blanket system or a primary wing ice detection system, and a new revision to the AFM to advise the flightcrew of the hazards associated with ice accumulation on wing surfaces. That NPRM was prompted by incidents in which ice accumulation on the wing upper surfaces shed into the engines during takeoff. That condition, if not corrected, could result in consequent loss of thrust from one or both engines.

Actions Since Issuance of Previous Proposal

Since the issuance of that NPRM, the FAA has received several reports of

arc of overwing heater blankets installed on the wing upper surfaces. Investigation revealed that the arcing was caused by damaged wiring in an overwing heater blanket. Investigation further revealed that the arcing current was too low for the circuit breaker of the overwing heater blanket system to disconnect power to the heater blanket. This condition, if not corrected, could result in a fire on the overwing heater blanket.

Explanation of Relevant Service Information

The FAA has reviewed and approved McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997. For airplanes on which an overwing heater blanket system has been installed in accordance with certain service bulletins or supplemental type certificates (STC), that service bulletin describes procedures for repetitive dielectric withstanding voltage and resistance tests of overwing heater blankets to ensure the integrity of the electrical installation of the overwing heater blanket and to ensure that there is no damage to the heater blanket. For airplanes on which the overwing heater blanket system was installed in accordance with TDG Aerospace, Inc., STC SA6042NM, the service bulletin also describes procedures for a one-time detailed visual inspection to detect discrepancies of the overwing heater blanket, including mechanical damage or punctures in the upper skin of the blanket, prying damage on the panel, and fuel leakage. McDonnell Douglas Alert Service Bulletin MD80-30A087 references TDG Aerospace Document E95-451, Revision B, dated January 31, 1996, as an additional source of service information for accomplishment of corrective actions, including repair or replacement of the overwing heater blanket, if any discrepancy is detected.

The FAA also has reviewed and approved McDonnell Douglas Service Bulletin MD80-30-090, dated October 19, 1999. For airplanes on which the overwing heater blanket system was installed in accordance with certain service bulletins or STC's, that service bulletin describes procedures for installation of a heater protection panel (HPP) and associated wiring on the overwing heater blanket system, or modification of the existing HPP, if one is installed. Installation of an HPP is intended to protect the overwing heater blanket from damage by detecting abnormal current flow, and interrupting and shutting off power to the heater blanket. Accomplishment of the installation or modification of the HPP,

as applicable, eliminates the need for the repetitive tests described in McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997.

Accomplishment of the actions described in these service bulletins is intended to adequately address the new identified unsafe condition (arc of overwing heater blankets, which could result in a fire on the overwing heater blanket).

Comments

Due consideration has been given to the comments received in response to the NPRM, and two comments have resulted in a change to this proposed rule.

Request To Incorporate Ground Fault Protection System

One commenter, the airplane manufacturer, requests that the proposed AD be revised to add a requirement for installation of ground fault protection for the overwing heater blanket system. The commenter states no justification for its request in its comment. However, as stated previously, there have been several incidents of arcing of overwing heater blankets due to damaged wiring, and the manufacturer has issued McDonnell Douglas Service Bulletin MD80-30-090, described previously, which describes procedures for installation of ground fault protection.

The FAA partially concurs with the commenter's request. The FAA concurs that it is necessary to require installation of ground fault protection for the overwing heater blanket systems installed in accordance with certain service bulletins or STC's. Therefore, paragraphs (f)(1)(i) and (f)(1)(ii) of this supplemental NPRM would require installation or modification, as applicable, of an HPP on any overwing heater blanket system installed in accordance with McDonnell Douglas Service Bulletin MD80-30-071, Revision 02, dated February 6, 1996; or McDonnell Douglas Service Bulletin MD80-30-078, Revision 01, dated April 8, 1997. Similarly, paragraph (f)(1)(iii) of this supplemental NPRM proposes to require installation of an equipment protection device (EPD) approved by the Manager, Los Angeles Aircraft Certification Office, to provide ground fault protection for the overwing heater blanket system installed in accordance with TDG Aerospace, Inc., Supplemental Type Certificate (STC) SA6042NM. In addition, for airplanes on which overwing heater blankets are already installed, this supplemental NPRM proposes to require

accomplishment of the previously described repetitive dielectric withstanding voltage and resistance tests of overwing heater blankets.

However, the FAA finds that it is not necessary to require installation of ground fault protection for airplanes on which overwing heater blankets are installed in accordance with AlliedSignal STC SA6061NM, because a ground fault protection circuit is integrated as part of the system.

Request To Reference Holders of STC's

One commenter states that, although the McDonnell Douglas service bulletins are quoted repeatedly in the NPRM by both name and service bulletin numbers, the NPRM makes no mention of the holders of the STC's referenced in paragraph (d)(1) of the NPRM. The commenter requests that the holders of the STC's be identified in the AD.

The FAA concurs with the commenter's request. Therefore, paragraph (f)(1)(iii)(B) identifies TDG Aerospace, Inc., as the holder of STC 6042NM, and paragraph (f)(1)(iii)(C) of this supplemental NPRM identifies AlliedSignal as the holder of STC SA6061NM.

Request To Revise Cost Impact Information

One commenter, the airplane manufacturer, requests revisions to the cost impact estimates for installation of the wing heater system and primary wing ice detector system. Certain changes suggested by the commenter are related to the incorporation of the ground fault protection system along with the wing heater system; various other changes relate to the estimate of work hours and costs for installation of the primary wing ice detection system. The commenter provides no justification for its requests, but does indicate that the cost of parts will vary depending on factors such as parts suppliers, airplane fleet size, and airplane configuration.

The FAA partially concurs with the commenter's requests. The FAA finds that it is appropriate to update the cost estimate in this supplemental NPRM to reflect the work hours and parts costs associated with installation of the HPP or EPD along with the wing heater system. Therefore, this supplemental NPRM has been revised to update the cost of installation of the overwing heater blankets to reflect the figures provided by the commenter. The FAA has also determined that it is appropriate to revise the estimated costs for installation of the primary wing ice detection system; however, the cost estimates have been updated to reflect

the most recent information provided by the manufacturer and do not necessarily reflect the figures provided by the commenter in its written comment.

Explanation of New Requirements of Proposal

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would continue to require a revision to the Airplane Flight Manual (AFM) to specify restrictions on operations during icing conditions, installation of tufts and triangular decals on the inboard side of the wing upper surfaces, and a revision to the AFM to specify restrictions on operations when such tufts or decals are missing. The proposed AD would also require installation of an overwing heater blanket system or a primary wing ice detection system, and a new revision to the AFM to advise the flightcrew of the hazards associated with ice accumulation on wing surfaces. Installation of an overwing heater blanket system, if accomplished, would be required to be accomplished in accordance with the applicable service bulletin described in the NPRM, except as discussed in the "Differences Between Proposed Rule and Service Bulletins" section of the original NPRM; or in accordance with certain STC's. Installation of a primary wing ice detection system, if accomplished, would be required to be accomplished in accordance with a method approved by the FAA.

For certain airplanes on which an overwing heater blanket system has already been installed prior to the effective date of the AD, the proposed AD also would require repetitive tests to ensure the integrity of the electrical installation of the overwing heater blanket; a one-time inspection to detect discrepancies in repaired areas of the overwing heater blanket system, as applicable; and corrective action, if necessary. The proposed AD also would require installation or modification of an HPP, as applicable, or installation of an EPD, to provide circuit protection to the overwing heater blanket system. Such installation or modification, as applicable, would constitute terminating action for the new proposed repetitive tests for affected airplanes. The repetitive inspections and installation or modification of an HPP, as applicable, would be required to be accomplished in accordance with the service bulletins described previously, except as discussed below. Installation of an EPD would be required to be

accomplished in accordance with a method approved by the FAA.

Explanation of Differences Between Service Bulletins and Supplemental NPRM

Operators should note that, although McDonnell Douglas Service Bulletin MD80-30-090 recommends that an HPP be installed in conjunction with installation of an overwing heater blanket within 18 months after receipt of that service bulletin, this supplemental NPRM proposes to require installation of an HPP (or an EPD) within 3 years after the effective date of this AD. The FAA finds that it is appropriate for the HPP (or EPD) to be installed in conjunction with the overwing heater blanket system, and the compliance time for installation of the overwing heater blanket system specified in this proposed AD is 3 years after the effective date of this AD. Therefore, the FAA finds that it is appropriate to require installation of both the overwing heater blanket system and an HPP or EPD within 3 years after the effective date of this AD. However, for overwing heater blankets installed prior to the effective date of this AD without an HPP or EPD, this proposed AD would require repetitive tests, described previously, to ensure the integrity of the electrical installation of the overwing heater blanket (and a one-time detailed visual inspection to detect discrepancies in repaired areas of the overwing heater blanket system, if applicable) until an HPP or EPD is installed.

Conclusion

Since these changes expand the scope of the originally proposed rule, the FAA has determined that it is necessary to reopen the comment period to provide additional opportunity for public comment.

Cost Impact

There are approximately 1,153 airplanes of the affected design in the worldwide fleet. The FAA estimates that 643 airplanes of U.S. registry would be affected by this proposed AD.

The AFM revision that is currently required by AD 92-03-02 takes approximately 1 work hour per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required AFM revision on U.S. operators is estimated to be \$38,580, or \$60 per airplane.

The revision of the CDL that is currently required by AD 92-03-02 takes approximately 1 work hour per airplane to accomplish, at an average

labor rate of \$60 per work hour. Based on these figures, the cost impact of the CDL revision on U.S. operators is estimated to be \$38,580, or \$60 per airplane.

The installation of tufts and decals that is currently required by AD 92-03-02 takes approximately 3 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts cost approximately \$25 per airplane. Based on these figures, the cost impact of the currently required installation of tufts and decals on U.S. operators is estimated to be \$131,815, or \$205 per airplane.

The installation of the wing heater system that is proposed as one option for compliance with this AD action would take approximately 200 to 350 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$76,000 to \$130,000 per airplane, depending on suppliers, airplane fleet size, and configuration. Based on these figures, the cost impact of the installation proposed by this AD on U.S. operators is estimated to range from \$88,000 to \$151,000 per airplane.

In lieu of installation of a wing heater system, this proposed AD provides for installation of a primary wing ice detector system. Because the manufacturer has not issued service information that describes the procedures for such an installation, the FAA is unable at this time to provide specific information as to the number of work hours or cost of parts that would be required to accomplish that proposed installation. However, based on estimated costs provided by the manufacturer, the FAA can reasonably estimate that the proposed installation would require 290 work hours to accomplish, at an average labor rate of \$60 per work hour. The cost of required parts is estimated to range from \$30,000 to \$70,000 per airplane, depending on fleet size and airplane configuration. Based on these figures, the cost impact of the installation of a primary wing ice detector system proposed by this AD on U.S. operators is estimated to range from \$47,400 to \$87,400 per airplane.

The new AFM revision that is proposed in this AD action would take approximately 1 work hour per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the new AFM revision proposed by this AD on U.S. operators is estimated to be \$38,580, or \$60 per airplane.

For affected airplanes, the new repetitive tests proposed in this AD action would take approximately 3 work hours per airplane to accomplish, at an

average labor rate of \$60 per work hour. Based on these figures, the cost impact of the repetitive tests proposed by this AD on U.S. operators is estimated to be \$180 per airplane, per test cycle.

For affected airplanes, the one-time detailed visual inspection proposed in this AD action would take approximately 3 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the detailed visual inspection proposed by this AD on U.S. operators is estimated to be \$180 per airplane.

For airplanes listed in Group 1 of McDonnell Douglas Alert Service Bulletin MD80-30-090, the modification of the existing HPP would take approximately 5 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. The manufacturer has committed previously to its customers that it will bear the cost of necessary parts. As a result, the cost of those parts is not attributable to this proposed AD. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$300 per airplane.

For airplanes listed in Group 2 of McDonnell Douglas Alert Service Bulletin MD80-30-090, the installation of the HPP and associated wiring would take approximately 3 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. The manufacturer has committed previously to its customers that it will bear the cost of necessary parts. As a result, the cost of those parts is not attributable to this proposed AD. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$180 per airplane.

Because no service information that describes procedures for installation of an EPD has been issued, such installation for affected airplanes would be required to be accomplished in accordance with a method approved by the FAA, and the FAA is unable at this time to provide specific information as to the number of work hours that would be required to accomplish the proposed installation. However, based on the information available for installation of an HPP, the FAA estimates that the proposed installation of an EPD would require approximately 3 hours per airplane, at an average labor rate of \$60 per work hour. Based on information from the supplier on parts cost for the EPD, the cost of required parts is estimated to be \$5,475 per airplane. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$5,655 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the current or proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. However, the FAA has been advised that the terminating modification has already been installed on a number of airplanes that are subject to this AD. Therefore, the future economic cost impact of this rule on U.S. operators is expected to be less than the cost impact figures indicated above.

Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this 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) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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 removing amendment 39-8156 (57 FR 2014, January 17, 1992), and by adding

a new airworthiness directive (AD), to read as follows:

McDonnell Douglas: Docket 98-NM-326-AD. Supersedes AD 92-03-02, Amendment 39-8156.

Applicability: All Model DC-9-81, -82, -83, and -87 series airplanes; and Model MD-88 airplanes; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent ice accumulation on the wing upper surfaces, which could result in ingestion of ice into one or both engines and consequent loss of thrust from one or both engines, accomplish the following:

Restatement of Requirements of AD 92-03-02

Airplane Flight Manual Revision

(a) Within 10 days after January 17, 1992 (the effective date of AD 92-03-02, amendment 39-8156), revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following. This may be accomplished by inserting a copy of this AD in the AFM.

"Ice on Wing Upper Surfaces

Caution

Ice shedding from the wing upper surface during takeoff can cause severe damage to one or both engines, leading to surge, vibration, and complete thrust loss. The formation of ice can occur on wing surfaces during exposure of the airplane to normal icing conditions. Clear ice can also occur on the wing upper surfaces when cold-soaked fuel is in the main wing fuel tanks, and the airplane is exposed to conditions of high humidity, rain, drizzle, or fog at ambient temperatures well above freezing. Often, the ice accumulation is clear and difficult to detect visually. The ice forms most frequently on the inboard, aft corner of the main wing tanks. [END OF CAUTIONARY NOTE]

The wing upper surfaces must be physically checked for ice when the airplane has been exposed to conditions conducive to ice formation. Takeoff may not be initiated unless the flight crew verifies that a visual check and a physical (hands-on) check of the wing upper surfaces have been accomplished, and that the wing is clear of ice accumulation when any of the following conditions occur:

(1) When the ambient temperature is less than 50 degrees F and high humidity or visible moisture (rain, drizzle, sleet, snow, fog, etc.) is present;

(2) When frost or ice is present on the lower surface of either wing;

(3) After completion of de-icing.

When tufts and triangular decals are installed in accordance with McDonnell Douglas MD-80 Service Bulletin 30-59, the physical check may be made by assuring that all installed tufts move freely.

Note

This limitation does not relieve the requirement that aircraft surfaces are free of frost, snow, and ice accumulation, as required by Federal Aviation Regulations Sections 91.527 and 121.629. [END OF NOTE]"

AFM Configuration Deviation List Revision

(b) Within 10 days after January 17, 1992, revise the Configuration Deviation List (CDL) Appendix of the FAA-approved AFM to include the following. This may be accomplished by inserting a copy of this AD in the AFM.

"30-80-01 Triangular Decal and Tuft Assemblies

Up to two (2) decals or tufts per side may be missing, provided:

(a) At least one decal and tuft on each side is located along the aft spar line; and

(b) The tufts are used for performing the physical check to determine that the upper wing is free of ice by observing that the tufts move freely.

Up to eight (8) decals and/or tufts may be missing, provided:

(a) Takeoff may not be initiated unless the flight crew verifies that a physical (hands-on) check is made of the upper wing in the location of the missing decals and/or tufts to assure that there is no ice on the wing when icing conditions exist;

OR

(b) When the ambient temperature is more than 50 degrees F."

Installation of Tufts and Triangular Decals

(c) Within 30 days after January 17, 1992, install tufts and triangular decals on the inboard side of the wings' upper surfaces, in accordance with McDonnell Douglas Service Bulletin 30-59, dated September 18, 1989; Revision 1, dated January 5, 1990; or Revision 2, dated August 15, 1990.

New Requirements of This AD

Repetitive Tests and One-Time Inspection

(d) For airplanes on which an overwing heater blanket system was installed without installation of a heater protection panel (HPP) or an equipment protection device (EPD) prior to the effective date of this AD: Within 60 days after the effective date of this AD, accomplish the actions specified in paragraph (d)(1) or (d)(2) of this AD, as applicable.

(1) For airplanes on which the overwing heater blanket system was installed in accordance with McDonnell Douglas Service Bulletin MD80-30-071, Revision 02, dated February 6, 1996; or McDonnell Douglas

Service Bulletin MD80-30-078, Revision 01, dated April 8, 1997: Accomplish paragraphs (d)(1)(i) and (d)(1)(ii) of this AD.

(i) Remove secondary access covers, and perform a one-time detailed visual inspection to detect discrepancies (mechanical damage or punctures in the upper skin of the blanket, prying damage on the panel, and fuel leakage) of the overwing heater blanket, in accordance with McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997. And,

(ii) Accomplish paragraph (d)(1)(ii)(A) or (d)(1)(ii)(B) of this AD.

(A) Perform dielectric withstanding voltage and resistance tests in accordance with McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997. Repeat the tests thereafter at intervals not to exceed 150 days, until installation of an HPP in accordance with paragraph (f)(1)(i) or (f)(1)(ii) of this AD, as applicable.

(B) Deactivate the overwing heater blanket system until accomplishment of dielectric withstanding voltage and resistance tests specified in paragraph (1)(2)(ii)(A). If the overwing heater blanket system is deactivated as provided by this paragraph, continue to accomplish the requirements of paragraphs (a), (b), and (c) of this AD.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(2) For airplanes on which the overwing heater blanket system was installed in accordance with TDG Aerospace, Inc., STC SA6042NM: Accomplish paragraphs (d)(2)(i) and (d)(2)(ii) of this AD.

(i) Remove secondary access covers, and perform a one-time detailed visual inspection to detect discrepancies (mechanical damage or punctures in the upper skin of the blanket, prying damage on the panel, and fuel leakage) of the overwing heater blanket, in accordance with McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997. And,

(ii) Accomplish paragraph (d)(2)(ii)(A) or (d)(2)(ii)(B) of this AD.

(A) Perform dielectric withstanding voltage and resistance tests in accordance with McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997. Repeat the tests thereafter at intervals not to exceed 150 days, until installation of an EPD in accordance with paragraph (f)(1)(iii)(B) of this AD.

(B) Deactivate overwing heater blanket system until accomplishment of dielectric withstanding voltage and resistance tests specified in paragraph (d)(2)(ii)(A). If the overwing heater blanket system is deactivated as provided by this paragraph, continue to accomplish the requirements of paragraphs (a), (b), and (c) of this AD.

Corrective Action

(e) If any discrepancy is detected during any inspection or test performed in accordance with paragraph (d) of this AD, prior to further flight, repair or replace the affected heater blanket, in accordance with McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997.

Note 3: McDonnell Douglas Alert Service Bulletin MD80-30A087, dated September 22, 1997, references TDG Aerospace Document E95-451, Revision B, dated January 31, 1996, as an additional source of service information for accomplishment of repair or replacement of the overwing heater blanket.

Installation of Overwing Heater Blanket or Primary Wing Ice Detection System

(f) Within 3 years after the effective date of this AD, accomplish the requirements of either paragraph (f)(1) or (f)(2) of this AD.

(1) Accomplish the actions specified in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this AD, as applicable.

(i) For airplanes listed in Group 1 in McDonnell Douglas Service Bulletin MD80-30-090, dated October 19, 1999: Install an overwing heater blanket system in accordance with McDonnell Douglas Service Bulletin MD80-30-071, Revision 02, dated February 6, 1996; and modify and reidentify the existing HPP in accordance with McDonnell Douglas Service Bulletin MD80-30-090. Modification of the existing HPP in accordance with this paragraph constitutes terminating action for the repetitive inspections required by (d)(1)(ii)(A) of this AD.

(ii) For airplanes listed in Group 2 in McDonnell Douglas Service Bulletin MD80-30-090, dated October 19, 1999: Install an overwing heater blanket system in accordance with McDonnell Douglas Service Bulletin MD80-30-078, Revision 01, dated April 8, 1997; and install an HPP and associated wiring in accordance with McDonnell Douglas Service Bulletin MD80-30-090. Installation of an HPP and associated wiring in accordance with this paragraph constitutes terminating action for the repetitive inspections required by (d)(1)(ii)(A) of this AD.

(iii) For airplanes other than those identified in paragraph (f)(1)(i) or (f)(1)(ii) of this AD: Accomplish the requirements of paragraph (f)(1)(iii)(A), (f)(1)(iii)(B), or (f)(1)(iii)(C) of this AD.

(A) Accomplish the actions specified in either paragraph (f)(1)(i) or (f)(1)(ii) of this AD.

(B) Install an overwing heater blanket system in accordance with TDG Aerospace, Inc., Supplemental Type Certificate (STC) SA6042NM, and install an EPD that provides a circuit protection function to the overwing heater blanket, in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Installation of an EPD in accordance with this paragraph constitutes terminating action for the repetitive inspections required by (d)(2)(ii)(A) of this AD.

(C) Install an overwing heater blanket system in accordance with AlliedSignal STC SA6061NM.

(2) Install an FAA-approved primary wing ice detection system in accordance with a method approved by the Manager, Los Angeles ACO.

Note 4: McDonnell Douglas has received FAA approval of an acceptable primary wing ice detection system. This modification has been assigned a McDonnell Douglas service bulletin number but, at this time, no service bulletin is available.

AFM Revision

(g) Prior to further flight after accomplishment of the installation required by paragraph (f)(1) or (f)(2) of this AD, revise the Limitations Section of the FAA-approved AFM to include the following. This may be accomplished by inserting a copy of this AD in the AFM. After accomplishment of the installation required by paragraph (f) of this AD and this AFM revision, the AFM revisions required by paragraphs (a) and (b) of this AD may be removed from the AFM, and the tufts and triangular decals required by paragraph (c) of this AD may be removed from the airplane.

"Ice on Wing Upper Surfaces

Caution

Ice shedding from the wing upper surface during takeoff can cause severe damage to one or both engines, leading to surge, vibration, and complete thrust loss. The formation of ice can occur on wing surfaces during exposure of the airplane to normal icing conditions. Clear ice can also occur on the wing upper surfaces when cold-soaked fuel is in the main wing fuel tanks, and the airplane is exposed to conditions of high humidity, rain, drizzle, or fog at ambient temperatures well above freezing. Often, the ice accumulation is clear and difficult to detect visually. The ice forms most frequently on the inboard, aft corner of the main wing tanks. [END OF CAUTIONARY NOTE]"

Alternative Methods of Compliance

(h)(1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 92-03-02, amendment 39-8156, are NOT approved as alternative methods of compliance with this AD.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on April 24, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00-10672 Filed 4-27-00; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-NM-90-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-7-100, and DHC-8-100, -200, and -300 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all Bombardier Model DHC-7-100, and DHC-8-100, -200, and -300 series airplanes. This proposal would require a one-time inspection of maintenance records to determine the method used during the most recent weight and balance check of the airplane and, if necessary, accomplishment of a weight and balance check. This proposal is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by the proposed AD are intended to prevent unusual handling characteristics and consequent reduced controllability during ground operations due to incorrect methods of weighing and balancing the airplane.

DATES: Comments must be received by May 30, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-90-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Centre-ville, Montreal, Quebec H3C 3G9, Canada. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW.,

Renton, Washington; or at the FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York.

FOR FURTHER INFORMATION CONTACT:

James E. Delisio, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7521; fax (516) 568-2716.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule.

The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000-NM-90-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-90-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on all Bombardier Model DHC-7-100, and all Model DHC-8-100, -200, and -300