

Proposed Rules

Federal Register

Vol. 62, No. 52

Tuesday, March 18, 1997

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. 96-NM-73-AD]

RIN 2120-AA64

Airworthiness Directives; de Havilland Model DHC-8-100 and -300 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the superseding of an existing airworthiness directive (AD), applicable to all de Havilland Model DHC-8-100 and -300 series airplanes, that currently requires an inspection to detect discrepancies and damage of the low fuel pressure switch adapter/snubber (located on each engine fuel heater), and replacement, if necessary. That AD also requires an inspection to detect gaps or openings in each nacelle and engine-mounted firewall area, and in certain weather seals in the nacelles; and correction of discrepancies. The proposed AD would require certain new modifications to the nacelles that will minimize the passage of flammable fluid through the zones of the nacelle of each engine. The actions specified by the proposed AD are intended to prevent the spread of fire through these zones in the event of an explosion during flight, and consequent structural damage to the airplane.

DATES: Comments must be received by April 25, 1997.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-73-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., Bombardier Regional Aircraft Division, Garratt Boulevard, Downsview, Ontario, Canada M3K 1Y5. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Richard Fiesel, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, Engine and Propeller Directorate, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7504; 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 96-NM-73-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-103, Attention: Rules Docket No.

96-NM-73-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

On July 15, 1992, the FAA issued AD 92-13-11, amendment 39-8281 (57 FR 37872, August 21, 1992), applicable to all de Havilland Model DHC-8-100 and -300 series airplanes, which requires repetitive inspections to detect discrepancies of the low fuel pressure switch adapter/snubber (located on each engine fuel heater), and replacement of discrepant parts. The installation of de Havilland Modification 8/1208 is provided as an optional terminating action for these repetitive inspections. AD 92-13-11 also requires an inspection for gaps and openings that could allow flammable fluids to pass through the firewall areas of each engine nacelle; an inspection of the presence and condition of weather seals around certain access panels to each nacelle; and the application or reapplication of sealant to discrepant areas. The requirements of that AD are intended to prevent an in-flight explosion and fire within the zones of the nacelle.

Actions Since Issuance of Previous AD

Since the issuance of that AD, the manufacturer has developed several modifications that are intended to correct discrepancies within the nacelle so that an engine fire can be contained within this area. These additional modifications will further minimize the spread of fire through these zones which, if not contained, could cause structural damage to the airplane.

Explanation of Relevant Service Information

Bombardier, the manufacturer of this airplane model, has issued 5 de Havilland Dash 8 service bulletins pertaining to modifications that are intended to prevent the spread of fire through the zones of the nacelle.

1. Service Bulletin S/B No. 8-54-12, dated January 27, 1989, describes procedures for modifying the firewalls of the lower cowlings by installing new angle-gasket assemblies; and applying sealant to gaps and openings in this area. This modification seals areas where latch fittings penetrate the firewalls of the lower cowlings; these areas are potential paths for flammable fluid to travel within the nacelle.

2. Service Bulletin S.B. 8-54-25, Revision 'A,' dated July 29, 1994,

describes procedures for conducting an inspection of the upper access panels of each nacelle for the presence and condition of weather sealing, and application or reapplication of sealant, if necessary. It also describes procedures for conducting an inspection of the firewall areas of each nacelle for gaps and openings at lap joints, between bolts, and at carry-through fittings and grommets; and the application of sealant, if necessary. Furthermore, this service bulletin describes procedures for applying exterior labels on these access panels so that maintenance personnel will be notified of the requirement to apply sealant whenever these panels are re-installed.

3. Service Bulletin S.B. 8-54-30, Revision 'B,' dated February 5, 1993, describes procedures for modifying each nacelle by replacing Camloc receptacles made of silicon bronze with receptacles of stainless steel. The replacement receptacles are able to withstand higher temperatures than those now being used.

4. Service Bulletin S.B. 8-54-31, dated March 8, 1994, describes procedures for conducting another inspection of the firewall areas of each nacelle for gaps and openings after the modification described in Service Bulletin S.B. 8-54-30 has been installed. This service bulletin also describes procedures for applying additional sealant to these areas.

5. Service Bulletin S.B. 8-71-19, Revision 'B,' dated February 24, 1995, describes procedures for replacing the door seals of the cowlings with improved seals.

Transport Canada Aviation classified these service bulletins as mandatory and issued Canadian airworthiness directive CF-94-10R1, dated March 7, 1995, in order to assure the continued airworthiness of these airplanes in Canada.

FAA's Conclusions

This airplane model is manufactured in Canada and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, Transport Canada Aviation has kept the FAA informed of the situation described above. The FAA has examined the findings of Transport Canada Aviation, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would supersede AD 92-13-11. It would continue to require the actions currently required by that AD, and would add a requirement that the following actions be performed on each engine nacelle:

- Installation of new angle-gasket assemblies on the firewalls of the lower cowlings, and application of sealant to gaps and openings in these areas;
- Inspection of the upper access panels of each nacelle for the presence and condition of weather sealing, and application or reapplication of sealant, if necessary;
- Inspection of the firewall areas for gaps and openings at lap joints, between bolts, and at carry-through fittings and grommets; and the application of sealant, if necessary;
- Modification of the nacelle by replacing Camloc receptacles made of silicon bronze with receptacles of stainless steel;
- Application of additional sealant to the firewall areas after the Camloc receptacles have been replaced; and
- Replacement of the seals on the cowl doors with improved seals.

These actions would be required to be accomplished in accordance with the applicable service bulletins described previously.

Cost Impact

There are approximately 100 de Havilland Model DHC-8-100 and -300 series airplanes of U.S. registry that would be affected by this proposed AD.

Each inspection of the low fuel pressure switch adapter/snubber that is currently required by AD 92-13-11 takes approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of this currently required inspection on U.S. operators is estimated to be \$24,000, or \$240 per airplane, per inspection.

The inspection for gaps or openings in each nacelle, engine-mounted firewall area, and certain nacelle weather seals that is currently required by AD 92-13-11 takes approximately 12 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of this currently required inspection on U.S. operators is estimated to be \$72,000, or \$720 per airplane.

The installation of new angle-gasket assemblies that is proposed in this new

AD would take approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would be provided by the manufacturer at no cost to operators. Based on these figures, the cost impact of this proposed action on U.S. operators is estimated to be \$12,000, or \$120 per airplane.

The inspection of the upper access panels and firewalls of both nacelles, and the application of labels, that is proposed in this new AD would take approximately 7 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$43 per airplane. Based on these figures, the cost impact of these proposed actions on U.S. operators is estimated to be \$46,300, or \$463 per airplane.

The replacement of the Camloc receptacles with improved receptacles that is proposed in this new AD would take approximately 8 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$15 per airplane. Based on these figures, the cost impact of this proposed action on U.S. operators is estimated to be \$49,500, or \$495 per airplane.

The inspection and application of additional sealant to the firewalls of the nacelles that is proposed in this new AD would take approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. The cost of required parts is estimated to be minimal. Based on these figures, the cost impact of these proposed actions on U.S. operators is estimated to be \$24,000, or \$240 per airplane.

The replacement of the seals on the cowl doors that is proposed in this new AD would take approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would be provided at no cost to operators or would cost \$1,270, depending on the kit required. Based on these figures, the cost impact on U.S. operators of this proposed action is estimated to be between \$24,000 and \$151,000, or between \$240 and \$1,510 per airplane, depending on the kit required.

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.

Regulatory Impact

The regulations proposed herein would not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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 39-8281 (57 FR 37872, August 21, 1992), and by adding a new airworthiness directive (AD), to read as follows:

De Havilland, Inc.: Docket 96-NM-73-AD. Supersedes AD 92-13-11, Amendment 39-8281.

Applicability: All Model DHC-8-100 and 300 series 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 otherwise 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) 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 the spread of fire through the zones of each nacelle, in the event of an explosion during flight, and consequent structural damage to the airplane, accomplish the following:

Note 2: The requirements of paragraphs (a) and (b) of this AD are restatements of the same paragraphs that appeared in AD 92-13-11, amendment 39-8281. These paragraphs require no additional action by operators who have already completed the specified actions.

(a) For airplanes having serial numbers 3 through 248, inclusive, on which Modification No. 8/1208 has not yet been accomplished, accomplish the following:

(1) Within 30 days after September 8, 1992 (the effective date of AD 92-13-11, amendment 39-8281), remove and inspect the low fuel pressure switch adapter/snubber located on each engine fuel heater for damage to threads, indication of over-torque, and for proper seating, in accordance with the accomplishment instructions of de Havilland Alert Service Bulletin A8-73-14, Revision B, dated April 24, 1992. If the adapter/snubber is damaged or if evidence of over-torque is present, prior to further flight, replace the adapter/snubber with a serviceable part, in accordance with that service bulletin.

(2) Thereafter, at any time in which the low fuel pressure switch adapter/snubber assembly is removed, accomplish the inspection of the assembly as described in paragraph (a)(1) of this AD.

(3) Installation of Modification 8/1208, in accordance with de Havilland Service Bulletin 8-28-15, Revision A, dated April 17, 1992, constitutes terminating action for the inspections required by paragraphs (a)(1) and (a)(2) of this AD.

(b) For all Model DHC-8-100 and -300 series airplanes: Within 30 days after September 8, 1992 (the effective date of AD 92-13-11, amendment 39-8281), accomplish the procedures specified in paragraphs (b)(1) and (b)(2) of this AD.

(1) Inspect the nacelle vertical firewall section, firewall extension, and engine mounted firewall (reference: Maintenance Manual section 71-30-00) for gaps and openings that could permit flammable fluid to pass through. Gaps and openings may be found at lap joints, between bolts, and at carry-through fittings and grommets. If gaps are found, prior to further flight, seal the gaps using PR812, Pro-Seal 700, or other approved firewall sealants (reference: Maintenance Manual section 20-21-20). Allow the sealant to cure for at least 4 hours prior to further flight.

(2) Inspect access panels 419AT and 429AT as specified in DHC-8 Maintenance

Manual [section 40-10, pages 12 and 14] (reference: Illustrated Parts Catalog 54-30-00, Figure 5, Items 410 and 420) for the presence and condition of the weather seal in the gap between the panels and the adjacent structure. If the gap is not sealed, prior to further flight, seal the panels using PR1422, PR1435, or other sealant specified in the DHC-8 Maintenance Manual, section 20-21-16. A release agent, applied prior to sealing, also may be used as specified in DHC-8 Maintenance Manual, section 20-21-19. Allow the sealant or release agent to cure for at least 4 hours, prior to further flight.

(c) For airplanes having serial numbers 3 through 137, inclusive, on which Modification No. 8/1126 has not been installed: Within 1 year after the effective date of this AD, seal the firewall of the lower cowl of each engine by installing angle-gasket assemblies and applying sealant, in accordance with de Havilland Service Bulletin S/B No. 8-54-12, dated January 27, 1989.

(d) For airplanes having serial numbers 003 through 331, inclusive, on which Modification No. 8/1885 has not been installed: Within 1 year after the effective date of this AD, accomplish the procedures specified in paragraphs (d)(1), (d)(2), and (d)(3) of this AD in accordance with de Havilland Service Bulletin S.B. 8-54-25, Revision 'A,' dated July 29, 1994.

(1) Inspect the vertical firewall section, firewall extension, and engine-mounted firewall of the upper structure of each nacelle, including the lap joints between bolts and at carry-through fittings and grommets, to detect gaps and openings through which flammable fluid could pass, in accordance with the service bulletin. If any gap or opening is detected, prior to further flight, seal the gap or opening, in accordance with the service bulletin.

(2) Inspect the upper access panels of each nacelle to detect the presence and condition of sealant in any gap between each panel and its adjacent structure, in accordance with the service bulletin. If there is no sealant or the sealant is discrepant, prior to further flight, apply or replace sealant, as applicable, in accordance with the service bulletin.

(3) Apply exterior labels and protective coatings to each access panel of the left and right nacelle in accordance with the service bulletin.

(e) For airplanes having serial numbers 003 through 332, inclusive, on which Modification No. 8/1887 has not been installed: Within 1 year after the effective date of this AD, replace the Camloc receptacles in each nacelle with stainless steel receptacles, and apply additional sealant to the firewall of each nacelle, in accordance with de Havilland Service Bulletin S.B. 8-54-30, Revision 'B,' dated February 5, 1993.

(f) For airplanes having serial numbers 003 through 357, inclusive, on which Modification No. 8/1996 has not been installed: Within 1 year after the effective date of this AD, inspect the forward and rearward faces of the firewall, firewall extension, and engine mounted firewall of the lower structure of each nacelle for any gap or opening at lap joints, between bolts,

and at carry-through fittings and grommets through which flammable fluid could pass, in accordance with de Havilland Service Bulletin S.B. 8-54-31, dated March 8, 1994. If any gap or opening is detected, prior to further flight, apply sealant in accordance with the service bulletin.

(g) For airplanes having serial numbers 003 through 369, inclusive, on which Modification No. 8/2001 has not been installed: Within 1 year after the effective date of this AD, replace the existing seals on the cowl doors of each nacelle with improved seals, in accordance with de Havilland Service Bulletin S.B. 8-71-19, Revision 'B,' dated February 24, 1995.

(h) 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 New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

(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 March 11, 1997.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 97-6718 Filed 3-17-97; 8:45 am]

BILLING CODE 4910-13-U

14 CFR Part 39

[Docket No. 95-CE-53-AD]

RIN 2120-AA64

Airworthiness Directives; Jetstream Aircraft Limited HP137 Mk1, Jetstream Series 200, and Jetstream Model 3101 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes to supersede Airworthiness Directive (AD) 82-20-04 R1, which currently requires repetitively inspecting the main landing gear (MLG) hinge fitting, support angles, and attachment bolts on British Aerospace (currently known as Jetstream Aircraft Limited (JAL)) HP137 Mk1 and Jetstream series 200 airplanes, and repairing or replacing any part that is cracked beyond certain limits. The Federal Aviation Administration's

policy on aging commuter-class aircraft is to eliminate or, in certain instances, reduce the number of certain repetitive short-interval inspections when improved parts or modifications are available. The proposed action would require installing improved design MLG fittings, as terminating action for the repetitive inspections that are currently required by AD 82-20-04 R1, and would incorporate the Jetstream Model 3101 airplanes into the Applicability of the AD. The actions specified in the proposed AD are intended to prevent structural failure of the MLG caused by fatigue cracking, which could result in loss of control of the airplane during landing operations.

DATES: Comments must be received on or before June 6, 1997.

ADDRESSES: Submit comments in triplicate to the FAA, Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 95-CE-53-AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106. Comments may be inspected at this location between 8 a.m. and 4 p.m., Monday through Friday, holidays excepted.

Service information that applies to the proposed AD may be obtained from Jetstream Aircraft Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland; telephone (44-292) 79888; facsimile (44-292) 79703; or Jetstream Aircraft Inc., Librarian, P.O. Box 16029, Dulles International Airport, Washington, D.C. 20041-6029; telephone (703) 406-1161; facsimile (703) 406-1469. This information also may be examined at the Rules Docket at the address above.

FOR FURTHER INFORMATION CONTACT: Mr. Tom Rodriguez, Program Manager, Brussels Aircraft Certification Division, FAA, Europe, Africa, and Middle East Office, c/o American Embassy, B-1000 Brussels, Belgium; telephone (32 2) 508.2715; facsimile (32 2) 230.6899; or Mr. S.M. Nagarajan, Project Officer, Small Airplane Directorate, Aircraft Certification Service, FAA, 1201 Walnut, suite 900, Kansas City, Missouri 64106; telephone (816) 426-6932; facsimile (816) 426-2169.

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 should 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 that summarizes 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 No. 95-CE-53-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, Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 95-CE-53-AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

Discussion

The FAA has determined that reliance on critical repetitive inspections on aging commuter-class airplanes carries an unnecessary safety risk when a design change exists that could eliminate or, in certain instances, reduce the number of those critical inspections. In determining what inspections are critical, the FAA considers (1) the safety consequences if the known problem is not detected during the inspection; (2) the probability of the problem not being detected during the inspection; (3) whether the inspection area is difficult to access; and (4) the possibility of damage to an adjacent structure as a result of the problem.

These factors have led the FAA to establish an aging commuter-class aircraft policy that requires incorporating a known design change when it could replace a critical repetitive inspection. With this policy in mind, the FAA conducted a review of existing AD's that apply to JAL HP137 Mk1, Jetstream series 200, and Jetstream Models 3101 airplanes. Assisting the FAA in this review were (1) Jetstream Aircraft Limited (JAL); (2) the Regional Airlines Association (RAA); (3) the Civil Aviation Authority