## 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 39–9965 (62 FR 12531, March 17, 1997), and by adding a new airworthiness directive (AD), to read as follows:

**De Havilland Inc.:** Docket 98–NM–143–AD. Supersedes AD 97–06–08, Amendment 39–9965.

*Applicability:* All Model DHC–7 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 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 (f) 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 ensure the continued structural integrity of these airplanes, accomplish the following:

**Restatement of Requirements of AD 97–06–08, Amendment 39–9965**

(a) Within 6 months after April 21, 1997 (the effective date of AD 97–06–08, amendment 39–9965), incorporate into the FAA-approved maintenance inspection program the inspections and inspection intervals defined in DHC–7 Maintenance Manual (PSM 1–7–2), Chapter 5, Section 5–06–00, Temporary Revision (TR 5–84), dated June 15, 1994; and inspect the significant structural items prior to the thresholds specified in TR 5–84 of PSM 1–7–2. Repeat the inspections thereafter at the intervals specified in TR 5–84 of PSM 1–7–2.

(b) Prior to further flight, repair any discrepancies detected during any inspection required by paragraph (a) of this AD in accordance with one of the following:

(1) The DHC–7 Maintenance Manual; or

(2) The DHC–7 Structural Repair Manual; or

(3) Other data meeting the certification basis of the airplane which is approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate; or

(4) Data meeting the certification basis of the airplane which is approved by Transport Canada Aviation.

**New Requirements of This AD**

(c) Incorporate into the FAA-approved maintenance inspection program the inspections and inspection intervals defined in the DHC–7 Maintenance Manual PSM 1–7–2, Supplementary Inspection Program (SIP), Chapter 5, Section 5–60–00, Temporary Revision (TR 5–99), dated December 22, 1997, at the applicable time specified in paragraph (c)(1) or (c)(2) of this AD; and inspect the significant structural items prior to the thresholds specified in TR 5–99 of PSM 1–7–2. Thereafter, repeat the inspection at the intervals specified in TR 5–99 of PSM 1–7–2.

(1) For airplanes that have accumulated 38,000 or more total flight cycles as of the effective date of this AD: Incorporate within 2,000 flight cycles after the effective date of this AD.

(2) For airplanes that have accumulated less than 38,000 total flight cycles as of the effective date of this AD: Incorporate prior to the accumulation of 40,000 total flight cycles.

(d) Incorporate into the FAA-approved maintenance inspection program the inspections and inspection intervals as defined in the DHC–7 Maintenance Manual, Chapter 5, Section 5–60–00, (PSM 1–7–2), Supplementary Inspection Program (SIP), Temporary Revision TR 5–97, dated December 22, 1997, at the applicable time specified in paragraph (d)(1) or (d)(2) of this AD; and inspect the significant structural items prior to the thresholds specified in TR 5–97 of PSM 1–7–2. Thereafter, repeat the inspection at the intervals specified in TR 5–99 of PSM 1–7–2.

(1) For airplanes that have accumulated 19,000 or more total flight cycles as of the effective date of this AD: Incorporate within 1,000 flight cycles after the effective date of this AD.

(2) For airplanes that have accumulated less than 19,000 total flight cycles as of the effective date of this AD: Incorporate prior to the accumulation of 20,000 total flight cycles.

(e) All inspection results, positive or negative, must be reported to de Havilland in accordance with ''Introduction,'' paragraph 5, of DHC–7 Maintenance Manual (PSM 1–7–2), Chapter 5, Section 5–60–00, Temporary Revision (TR 5–84), dated June 15, 1994. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120–0056.

(f) 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, 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 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

(g) 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.

**Note 3:** The subject of this AD is addressed in Canadian airworthiness directive CF–94–19R1, dated January 26, 1998.

Issued in Renton, Washington, on August 28, 1998.

**Vi L. Lipski,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 98–23743 Filed 9–2–98; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. 98–NM–200–AD]**

**RIN 2120–AA64**

## Airworthiness Directives; Lockheed Model L–1011–385 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 Lockheed Model L–1011–385 series airplanes. Among other things, this proposal would require repetitive leak tests of the lavatory drain systems and repair, if necessary; installation of a lever lock cap, vacuum breaker check valve or flush/fill line ball valve on the flush/fill line; periodic seal changes; and replacement of ''donut'' type waste drain valves installed in the waste drain system. This proposal is prompted by continuing reports of damage to engines, airframes, and to property on the ground, caused by ''blue ice'' that forms from leaking lavatory drain systems on transport category airplanes and subsequently dislodges from the airplane fuselage. The actions specified by this proposed AD are intended to prevent such damage associated with the problems of ''blue ice.''

**DATES:** Comments must be received by October 19, 1998.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 98–NM–

200–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.

This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia.

**FOR FURTHER INFORMATION CONTACT:** Thomas Peters, Program Manager, Systems and Flight Test Branch, ACE–116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30337–2748; telephone (770) 703–6063; fax (770) 703–6097.

**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–200–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–200–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

### Discussion

Over the past several years, the FAA has received numerous reports of leakage from the lavatory service systems on in-service transport category airplanes that resulted in the formation of ''blue ice'' on the fuselage. In some instances, the ''blue ice'' subsequently dislodged from the fuselage and was ingested into an engine. In several of these incidents, the ingestion of ''blue ice'' into an engine resulted in the loss of an engine fan blade, severe engine damage, and the in-flight shutdown of the engine. In two cases, the loads created by the ''blue ice'' being ingested into the engine resulted in the engine being physically torn from the airplane. Damage to an engine, or the separation of an engine from the airplane, could result in reduced controllability of the airplane.

The FAA also has received reports of at least three incidents of damage to the airframes of various models of transport category airplanes that was caused by foreign objects that dislodged from the forward toilet drain valve and flush/fill line. One report was of a dent on the leading edge of the right horizontal stabilizer on a Boeing Model 737 series airplane that was caused by ''blue ice'' that had formed from leakage through a flush/fill line; in this case, the flush/fill cap was missing from the line at the forward service panel. Numerous operators have stated that leakage from the flush/fill line is a significant source of problems associated with ''blue ice.'' Such damage caused by ''blue ice'' could adversely affect the integrity of the fuselage skin or surface structures.

Additionally, there have been numerous reports of ''blue ice'' dislodging from airplanes and striking houses, cars, buildings, and other occupied areas on the ground. Although there have been no reports of any person being struck by ''blue ice,'' the FAA considers that the large number of reported cases of ''blue ice'' falling from lavatory drain systems is sufficient to support the conclusion that ''blue ice'' presents an unsafe condition to people on the ground. Demographic studies have shown that population density has increased around airports, and probably will continue to increase. These are populations that are at greatest risk of damage and injury due to ''blue ice'' dislodging from an airplane during descent. Without actions to ensure that leaks from the lavatory drain systems are detected and corrected in a timely manner, ''blue ice'' incidents could go unchecked and eventually someone may be struck, perhaps fatally, by falling ''blue ice.''

### Current Rules

In response to these incidents, the FAA has issued several AD's applicable to various transport category airplanes, and is currently considering additional rulemaking to address the problems associated with ''blue ice'' on other transport category airplanes.

### Discussion of the Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the FAA is proposing this AD, which would require the following actions:

Paragraph (a) of the proposed AD would require periodic replacement of the valve seals of each lavatory drain system with new valve seals. This paragraph also would require repetitive leak tests of the lavatory dump valve and drain valve (either service panel or in-line drain valve). The leak test of panel valves would be required to be performed with a minimum of 3 pounds per square inch differential pressure (PSID) applied across the valve. Paragraph (b) would require that, if any leak is discovered, operators would be required either to repair the leak and retest for leaks, or drain the lavatory system and placard it inoperative until repairs can be made.

In cases where the panel valve has both an inner seal and an outer cap seal, a visual inspection would be required for damage or wear of the outer cap seal and seal surface. Any damaged parts detected would be required to be repaired or replaced prior to further flight, or the lavatory drained and placarded inoperative until repairs can be made.

Paragraph (a) of the proposed AD also would require replacement of all ''donut'' type drain system valves with another type of FAA-approved valve.

Additionally, the flush/fill line anti-siphon valve would be required to be leak checked. Seals of the anti-siphon (check) valve, flush/fill line cap, or flush/fill line ball valve would be required to be replaced periodically.

Paragraph (c) of the proposed AD would require that all operators install a lever lock cap on the flush/fill lines for all service panels, a flush/fill ball valve, Kaiser Electroprecision part number (P/N) series 0062–0009, on the flush/fill lines for all lavatories; or a vacuum break, Monogram P/N series 3765–190 or Shaw Aero Devices P/N series 301–0009–01, in the flush/fill lines for all lavatories.

Paragraph (d) of the proposed AD would require that, before an operator places an airplane into service, a

schedule for accomplishment of the leak tests required by this AD shall be established. This provision is intended to ensure that transferred airplanes are inspected in accordance with the AD on the same basis as if there were continuity in ownership, and that scheduling of the leak tests for each airplane is not delayed or postponed due to a transfer of ownership. Airplanes that have previously been subject to the AD would have to be checked in accordance with either the previous operator's or the new operator's schedule, whichever would result in the earlier accomplishment date for that leak test. Other airplanes would have to be inspected before an operator could begin operating them, or in accordance with a schedule approved by the FAA Principal Maintenance Inspector (PMI), but within a period not to exceed 200 flight hours.

**Economic Impact**

There are approximately 235 Model L–1011–385 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 117 airplanes of U.S. registry would be affected by this proposed AD.

The proposed leak test of the waste drain system and outer cap inspection would take approximately 6 work hours per airplane to accomplish, at an average labor rate of $60 per work hour. Based on these figures, the cost impact on U.S. operators of the leak test of the waste drain system and outer cap inspection is estimated to be $42,120, or $360 per airplane, per test/inspection.

Certain airplanes (i.e., those that have ''donut'' type drain valves installed) may be required to be leak tested as many as 15 times each year. Certain other airplanes having other valve configurations would be required to be leak tested as few as one time each year. Based on these figures, the annual (recurring) cost impact of the required repetitive leak tests on U.S. operators is estimated to be between $360 and $5,400 per airplane, per year.

With regard to replacement of ''donut'' type drain valves, the cost of a new valve is approximately $1,200. However, the number of leak tests for an airplane that is flown an average of 3,000 flight hours a year is thereby reduced from 15 tests to 3 tests. The cost reduction because of the number of tests required is approximately equal to the cost of the replacement valve. Therefore, no additional cost would be incurred.

The FAA estimates that it would take approximately 1 work hour per airplane lavatory drain to accomplish a visual inspection of the service panel drain valve cap/door seal and seal mating surfaces, at an average labor rate of $60 per work hour. As with leak tests, certain airplanes would be required to be visually inspected as many as 15 times or as few as 3 times each year. Based on these figures, the annual (recurring) cost impact of the proposed repetitive visual inspections on U.S. operators is estimated to be between $180 and $900 per airplane, per year.

The proposed installation of the flush/fill line cap would take approximately 1 work hour per cap to accomplish, at an average labor rate of $60 per work hour. The cost of required parts would be $275 per cap. There are an average of 2 caps per airplane. Based on these figures, the cost impact on U.S. operators of these proposed requirements of this AD is estimated to be $78,390, or $670 per airplane, per replacement cycle.

The seal replacements of the drain valves required by paragraph (a) of this AD would require approximately 2 work hours to accomplish, at an average labor cost of $60 per hour. The cost of required parts would be $200 per each seal change. Based on these figures, the cost impact on U.S. operators of these proposed requirements of this AD is estimated to be $37,440, or approximately $320 per airplane, per replacement cycle.

The number of required work hours, as indicated above, is presented as if the accomplishment of the actions proposed in this AD were to be conducted as ''stand alone'' actions. However, in actual practice, these actions could be accomplished coincidentally or in combination with normally scheduled airplane inspections and other maintenance program tasks. Therefore, the actual number of necessary ''additional'' work hours would be minimal in many instances. Additionally, any costs associated with special airplane scheduling should be minimal.

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.

The FAA recognizes that the obligation to maintain aircraft in an airworthy condition is vital, but sometimes expensive. Because AD's require specific actions to address specific unsafe conditions, they appear to impose costs that would not otherwise be borne by operators. However, because of the general obligation of operators to maintain aircraft in an airworthy condition, this appearance is deceptive. Attributing those costs solely to the issuance of this proposed AD is unrealistic because, in the interest of maintaining safe aircraft, prudent operators would accomplish the required actions even if they were not required to do so by the proposed AD.

A full cost-benefit analysis has not been accomplished for this proposed AD. As a matter of law, in order to be airworthy, an aircraft must conform to its type design and be in a condition for safe operation. The type design is approved only after the FAA makes a determination that it complies with all applicable airworthiness requirements. In adopting and maintaining those requirements, the FAA has already made the determination that they establish a level of safety that is cost-beneficial. When the FAA, as in this proposed AD, makes a finding of an unsafe condition, this means that the original cost-beneficial level of safety is no longer being achieved and that the required actions are necessary to restore that level of safety. Because this level of safety has already been determined to be cost-beneficial, a full cost-benefit analysis for this proposed AD would be redundant and unnecessary.

**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 adding the following new airworthiness directive:

**Lockheed:** Docket 98–NM–200–AD.

*Applicability:* All Model L–1011–385–1, L–1011–385–3, L–1011–385–1–14, and L–1011–385–1–15 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 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 (e) 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 engine damage, airframe damage, and/or hazard to persons or property on the ground as a result of ''blue ice'' that has formed from leakage of the lavatory drain system or flush/fill systems and dislodged from the airplane, accomplish the following:

(a) Accomplish the applicable requirements of paragraphs (a)(1) through (a)(9) of this AD at the time specified in each paragraph. For the waste drain system of any lavatory that incorporates more than one type of valve, only one of the leak tests waste drain system procedures (the one that applies to the equipment with the longest leak test interval) must be conducted at each service panel location. The leak tests of the waste drain system valve specified in this AD shall be performed in accordance with the following requirements: Fluid shall completely cover the upstream end of the valve being tested; the direction of the 3 pounds per square inch differential pressure (PSID) shall be applied across the valve in the same direction as occurs in flight; the other waste drain system valves shall be open; and the minimum time to maintain the differential pressure shall be 5 minutes. Any revision of the seal change intervals or leak test intervals must be approved by the Manager, Atlanta Certification Office (ACO), FAA, Small Airplane Directorate.

**Note 2:** Inclusion of a valve in this AD does not mean that the valve has been certified for installation in Lockheed Model L–1011 series airplanes. Certification of the valve for installation in the airplane must be accomplished by means acceptable to the FAA, if the valve has not been previously certified.

(1) Replace the valve seals with new valve seals in accordance with the applicable schedule specified in paragraphs (a)(1)(i), (a)(1)(ii), (a)(1)(iii), and (a)(1)(iv) of this AD.

(i) For each lavatory drain system that has a Kaiser Electroprecision in-line drain valve installed, part number (P/N) series 2651–278: Replace the seals within 5,000 flight hours after the effective date of this AD, or within 48 months after the last documented seal change, whichever occurs later. Thereafter, replace the seals at intervals not to exceed 48 months.

(ii) For each lavatory drain system that has a Pneudraulics P/N series 9527 valve: Replace the seals within 5,000 flight hours after the effective date of this AD, or within 18 months of the last documented seal change, whichever occurs later. Thereafter, replace the seals at intervals not to exceed 18 months or 6,000 flight hours, whichever occurs later.

(iii) For each lavatory drain system that has an Eaton service drain valve, P/N series 72435: Replace the seals within 5,000 flight hours after the effective date of this AD, or within 18 months of the last documented seal change, whichever occurs later. Thereafter, replace the seals at intervals not to exceed 18 months.

(iv) For each lavatory drain system that has any other type of drain valve: Replace the seals within 5,000 flight hours after the effective date of this AD, or within 18 months after the last documented seal change, whichever occurs later. Thereafter, replace the seals at intervals not to exceed 18 months.

(2) For each lavatory drain system that has an in-line drain valve installed, Kaiser Electroprecision P/N series 2651–278: Within 4,500 flight hours after the effective date of this AD, and thereafter at intervals not to exceed 4,500 flight hours, accomplish the procedures specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this AD.

(i) Conduct a leak test of the toilet tank dump valve (in-tank valve that is spring loaded closed and operable by a T-handle at the service panel) and the in-line drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the in-line drain valve must be performed with a minimum of 3 PSID applied across the valve.

(ii) If a service panel valve or cap is installed, perform a visual inspection to detect wear or damage that may allow leakage of the service panel drain valve outer cap/door seal and the inner seal (if the valve has an inner door with a second positive seal), and the seal mating surfaces.

(3) For each lavatory drain system that has an Eaton service drain valve, P/N series 72435: Within 1,000 flight hours after the effective date of this AD, and thereafter at intervals not to exceed 1,000 flight hours, accomplish the procedures specified in paragraphs (a)(3)(i) and (a)(3)(ii) of this AD.

(i) Conduct a leak test of the toilet tank dump valve (in-tank valve operable by a lever at the service panel) and the in-line drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the in-line drain valve must be performed with a minimum of 3 PSID applied across the valve.

(ii) If a service panel valve or cap is installed, perform a visual inspection of the service panel drain valve outer cap/door seal and the inner seal (if the valve has an inner door with a second positive seal), and the seal mating surfaces for wear or damage that may allow leakage.

(4) For each lavatory drain system that has a service panel drain valve installed, Pneudraulics P/N series 9527: Within 2,000 flight hours after the effective date of this AD, accomplish the requirements of paragraphs (a)(4)(i) and (a)(4)(ii) of this AD. Thereafter, repeat the leak tests at intervals not to exceed 2,000 flight hours.

(i) Conduct leak tests of the toilet tank dump valve and service panel drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the service panel drain valve must be performed with a minimum of 3 PSID applied across the valve inner door/closure device.

(ii) Perform a visual inspection of the outer cap/door and seal mating surface for wear or damage that may cause leakage.

(5) For each lavatory drain system that has a service panel drain valve installed, Kaiser Electroprecision P/N series 0218–0032 or 2651–357, or Shaw Aero P/N's and serial numbers as listed in Table 1 of this AD: Within 1,000 flight hours after the effective date of this AD, and thereafter at intervals not to exceed 1,000 flight hours, accomplish the requirements of paragraphs (a)(5)(i) and (a)(5)(ii) of this AD.

TABLE 1.—SHAW AERO VALVES APPROVED FOR 1,000 FLIGHT HOURS LEAK TEST INTERVAL

| Shaw waste drain valve part number | Serial numbers of P/N valve approved for 1,000-hour leak test interval |
|---|---|
| 331 Series, 332 Series | All. |
| 10101000B–A | None. |
| 10101000B–A–1 | 0207–0212, 0219, 0226 and higher. |
| 10101000BA2 | 0130 and higher. |
| 10101000C–A–1 | 0277 and higher. |
| 10101000C–J | None. |
| 10101000C–J–2 | None. |
| 10101000CN or C–N | 3649 and higher. |
| Certain 10101000B valves | Any of these ''B'' series valves that incorporate the improvements of Shaw Service Bulletin 10101000B–38–1, dated October 7, 1994, and are marked ''SBB38–1–58''. |
| Certain 10101000C valves | Any of these ''C'' series valves that incorporate the improvements of Shaw Service Bulletin 10101000C–38–2 dated October 7, 1994, and are marked ''SBC38–2–58''. |

(i) Conduct a leak test of the toilet tank dump valve and service panel drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the service panel drain valve must be performed with a minimum of 3 PSID applied across the valve inner door/closure device.

(ii) Perform a visual inspection of the outer cap/door and seal mating surface for wear or damage that may cause leakage.

(6) For each lavatory drain system that has a service panel drain valve installed, Kaiser Electroprecision P/N series 0218–0026 or Shaw Aero Devices P/N series 10101000B or 10101000C [except as specified in paragraph (a)(5) of this AD]: Within 600 flight hours after the effective date of this AD, and thereafter at intervals not to exceed 600 flight hours, accomplish the procedures specified in paragraphs (a)(6)(i) and (a)(6)(ii) of this AD.

(i) Conduct a leak test of the toilet tank dump valve and the service panel drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the service panel drain valve must be performed with a minimum of 3 PSID applied across the valve inner door/closure device.

(ii) Perform a visual inspection of the outer cap/door and seal mating surface for wear or damage that may cause leakage.

(7) For each lavatory drain system with a lavatory drain system valve that incorporates ''donut'' plug, Kaiser Electroprecision P/N 4259–20 or 4259–31; Kaiser Roylyn/Kaiser Electroprecision cap/flange P/N 2651–194C, 2651–197C, 2651–216, 2651–219, 2651–235, 2651–256, 2651–258, 2651–259, 2651–260, 2651–275, 2651–282, or 2651–286; Shaw Aero Devices assembly P/N 0008–100; or other FAA-approved equivalent parts; accomplish the requirements of paragraphs (a)(7)(i), (a)(7)(ii), and (a)(7)(iii) of this AD at the times specified in those paragraphs. For the purposes of this paragraph [(a)(7)], ''FAA-approved equivalent part'' means either a ''donut'' plug which mates with the cap/flange P/N's listed above, or a cap/flange which mates with the ''donut'' plug P/N's listed above, such that the cap/flange and ''donut'' plug are used together as an assembled valve.

(i) Within 200 flight hours after the effective date of this AD, and thereafter at intervals not to exceed 200 flight hours, conduct leak tests of the toilet tank dump valve and the service panel drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the service panel drain valve must be performed with a minimum 3 PSID applied across the valve.

(ii) Perform a visual inspection of the outer door/cap and seal mating surface for wear or damage that may cause leakage. This inspection shall be accomplished in conjunction with the leak tests of paragraph (a)(7)(i) of this AD.

(iii) Within 5,000 flight hours after the effective date of this AD, replace all the ''donut'' valves identified in paragraph (a)(7) of this AD with another type of FAA-approved valve. Following installation of the replacement valve, perform the appropriate leak tests and seal replacements at the intervals specified for that replacement valve, as applicable.

(8) For each lavatory drain system not addressed in paragraph (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), or (a)(8), of this AD: Within 200 flight hours after the effective date of this AD, and thereafter at intervals not to exceed 200 flight hours, accomplish the procedures specified in paragraphs (a)(8)(i) and (a)(8)(ii) of this AD.

(i) Conduct a leak test of the toilet tank dump valve and the service panel drain valve. The leak test of the toilet tank dump valve must be performed by filling the toilet tank with a minimum of 10 gallons of water/rinsing fluid and testing for leakage after a period of 5 minutes. Take precautions to avoid overfilling the tank and spilling fluid into the airplane. The leak test of the service panel drain valve must be performed with a minimum of 3 PSID applied across the valve inner door/closure device.

(ii) Perform a visual inspection of the outer cap/door and seal mating surface for wear or damage that may cause leakage.

(9) For flush/fill lines: Within 5,000 flight hours after the effective date of this AD, perform the requirements of paragraph (a)(9)(i) or (a)(9)(ii), as applicable; and paragraph (a)(9)(iii) of this AD. Thereafter, repeat these requirements at intervals not to exceed 5,000 flight hours, or 48 months after the last documented seal change, whichever occurs later.

(i) If a lever lock cap is installed on the flush/fill line of the subject lavatory, replace the seals on the toilet tank anti-siphon (check) valve and the flush/fill line cap with new or serviceable seals and caps. Perform a leak test of the toilet tank anti-siphon (check) valve with a minimum of 3 PSID across the valve, in accordance with the applicable portions of paragraph (a)(10)(ii)(A) of this AD.

(ii) If a vacuum breaker check valve, Monogram P/N series 3765–190, or Shaw Aero Devices P/N series 301–0009–01, is installed on the subject lavatory, replace the seals/o-rings in the valve with a new or serviceable valve. Perform a leak test of the vacuum breaker check valve and verify proper operation of the vent line vacuum breaker, in accordance with paragraphs (a)(9)(ii)(A) and (a)(9)(ii)(B) of this AD.

(A) Leak test the toilet tank anti-siphon (check) valve or the vacuum breaker check valve by filling the toilet tank with water/rinsing fluid to a level such that the bowl is approximately half full (at least 2 inches above the flapper in the bowl). Apply 3 PSID across the valve in the same direction as occurs in flight. The vent line vacuum breaker on vacuum breaker check valves must be pinched closed or plugged for this leak test. If there is a cap/valve at the flush/fill line port, the cap/valve must be removed/open during the test. Check for leakage at the flush/fill line port for a period of 5 minutes.

(B) Verify proper operation of the vent line vacuum breaker by filling the tank and checking at the fill line port for back drainage after disconnecting the fluid source from the flush/fill line port. If back drainage does not occur, replace the vent line vacuum breaker with a new or serviceable breaker or repair the vacuum breaker check valve, in accordance with the component maintenance manual to obtain proper back drainage. As an alternative to the test technique specified above, verify proper operation of the vent line vacuum breaker in accordance with the procedures of the applicable component maintenance manual.

(iii) If a flush/fill ball valve, Kaiser Electroprecision P/N series 0062–0009, is installed on the flush/fill line of the subject lavatory, replace the seals in the flush/fill ball valve and the toilet tank anti-siphon valve with new or serviceable seals and valves. Perform a leak test of the toilet tank anti-siphon valve with a minimum of 3 PSID across the valve, in accordance with paragraph (a)(9)(ii)(A) of this AD.

(b) If leakage is discovered during any leak test or inspection required by paragraph (a) of this AD, or if evidence of leakage is found at any other time, accomplish the requirements of paragraph (a)(10)(i), (a)(10)(ii), (a)(10)(iii), or (a)(10)(iv) of this AD, as applicable.

(1) If leakage is discovered, prior to further flight, repair the leak. Prior to further flight after repair, perform the appropriate leak test as specified in paragraph (a) of this AD, as applicable. Additionally, prior to returning the airplane to service, clean the surfaces adjacent to where the leakage occurred to clear them of any horizontal fluid residue streaks; such cleaning must be to the extent that any future appearance of a horizontal fluid residue streak will be taken to mean that the system is leaking again.

**Note 3:** For purposes of this AD, ''leakage'' is defined as any visible leakage, if observed during a leak test. At any other time (than during a leak test), ''leakage'' is defined as the presence of ice in the service panel, or horizontal fluid residue streaks/ice trails originating at the service panel. The fluid residue is usually, but not necessarily, blue in color.

(2) If any worn or damaged seal is found, or if any damaged seal mating surface is found, prior to further flight, repair or replace it with a new or serviceable seal, in accordance with the valve manufacturer's maintenance manual.

(3) In lieu of performing the requirements of paragraph (b)(1) or (b)(2) of this AD: Prior to further flight, drain the affected lavatory system and placard the affected lavatory inoperative until repairs can be accomplished.

(4) In lieu of performing the requirements of paragraph (b)(1), (b)(2) or (b)(3) of this AD: Prior to further flight, install an FAA-approved ''donut'' plug; perform the leak test required by paragraph (a)(3) or (9) of this AD, as applicable; and repeat that leak test each time the ''donut'' valve is removed for tank servicing. Within 10 days after the installation of the FAA-approved ''donut'' plug, accomplish either paragraph (b)(4)(i) or (b)(4)(ii) of this AD:

(i) Accomplish the requirements of paragraphs (b)(1) and (b)(2) of this AD. Or

(ii) Accomplish the requirements of paragraph (b)(3) of this AD.

(c) For all airplanes: Unless accomplished previously, within 5,000 flight hours after the effective date of this AD, perform the actions specified in either paragraph (c)(1), (c)(2), or (c)(3) of this AD.

(1) Install an FAA-approved lever lock cap on the flush/fill lines for all lavatories. Or

(2) Install a vacuum break, Monogram P/N series 3765–190 or Shaw Aero Devices P/N series 301–0009–01, in the flush/fill lines for all lavatories. Or

(3) Install a flush/fill ball valve, Kaiser Electroprecision P/N series 0062–0009 on the flush/fill lines for all lavatories.

(d) For any affected airplane acquired after the effective date of this AD: Before any operator places into service any airplane subject to the requirements of this AD, a schedule for the accomplishment of the leak tests required by this AD shall be established in accordance with either paragraph (d)(1) or (d)(2) of this AD, as applicable. After each leak test has been performed once, each subsequent leak test must be performed in accordance with the new operator's schedule, in accordance with paragraph (a) of this AD.

(1) For airplanes that have been maintained previously in accordance with this AD, the first leak test to be performed by the new operator must be accomplished in accordance with the previous operator's schedule or with the new operator's schedule, whichever results in the earlier accomplishment date for that leak test.

(2) For airplanes that have not been previously maintained in accordance with this AD, the first leak test to be performed by the new operator must be accomplished prior to further flight, or in accordance with a schedule approved by the FAA Principal Maintenance Inspector (PMI), but within a period not to exceed 200 flight hours.

(e) 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, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA PMI, who may add comments and then send it to the Manager, Atlanta ACO.

**Note 4:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

(f) 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 August 28, 1998.

**Vi L. Lipski,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 98–23741 Filed 9–2–98; 8:45 am]

**BILLING CODE 4910–13–U**

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## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. 98–NM–233–AD]**

**RIN 2120–AA64**

## Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB–120 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 certain EMBRAER Model EMB–120 series airplanes. This proposal would require replacement of the fairlead support assemblies of the aileron control cable located in the nacelle outboard fittings with new, improved assemblies; and replacement of certain attachment screws with new screws. This proposal is prompted by reports of aileron cable wear due to chafing found between the aileron control cables and nylon grommets. The actions specified by the proposed AD are intended to prevent such chafing, which could result in failure of the aileron cables, and consequent reduced controllability of the airplane.

**DATES:** Comments must be received by October 5, 1998.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 98–NM–233–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 Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343—CEP 12.225, Sao Jose dos Campos—SP, Brazil. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia.

**FOR FURTHER INFORMATION CONTACT:** Rob Capezutto, Aerospace Engineer, Systems and Flight Test Branch, ACE–116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703–6071; fax (770) 703–6097.

**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