## **DEPARTMENT OF TRANSPORTATION**

## **Federal Aviation Administration**

14 CFR Part 39

[Docket No. 2003-NM-107-AD]

RIN 2120-AA64

# **Airworthiness Directives: Boeing Model 747 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 Model 747 series airplanes. This proposal would require a repetitive detailed inspection of the aft pressure bulkhead for indications of "oil cans" and previous "oil can" repairs, and corrective actions, if necessary. An "oil can" is an area on a pressure dome web that moves when pushed from the forward side. This action is necessary to detect and correct the propagation of fatigue cracks in the vicinity of "oil cans" on the web of the aft pressure bulkhead, which could result in rapid decompression and overpressurization of the tail section, and consequent loss of control of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by March 22, 2004.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2003-NM-107-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anmnprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2003-NM-107-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 or 2000 or ASCII text.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplanes, PO Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue, SW., Renton, Washington.

# FOR FURTHER INFORMATION CONTACT: Nicholas Kusz, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton,

Washington 98055-4056; telephone (425) 917-6432; fax (425) 917-6590.

## 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 action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (e.g., reasons or data) for each request.

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 action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2003-NM-107-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. 2003-NM-107-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

#### Discussion

The FAA has received a report indicating that a 2.1-inch long crack in the web of the aft pressure bulkhead at the perimeter of an "oil can" was found on a Model 747SR series airplane. An "oil can" is an area on a pressure dome web that moves when pushed from the forward side. The cause of the crack is fatigue. This condition, if not detected and corrected, could result in the propagation of fatigue cracks in the vicinity of "oil cans" on the web of the aft pressure bulkhead, which could result in rapid decompression and overpressurization of the tail section, and consequent loss of control of the airplane.

The subject area on Model 747SR series airplanes is almost identical to that on Model 747-100, -200B, -200F, -200C, -100B, -300, -100B-SUD, -400, -400D, and -400F series airplanes; and Model 747SP series airplanes. Therefore, those airplanes may be subject to the unsafe condition revealed on the Model 747SR series airplanes.

# **Explanation of Relevant Service** Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 747– 53A2482, dated October 3, 2002, which describes procedures for performing a repetitive detailed inspection of the aft pressure bulkhead for indications of "oil cans" and previous "oil can" repairs, and corrective actions, if necessary. The corrective actions include performing a repetitive eddy current inspection of the web around the periphery of the "oil can" for cracks, and repair if necessary; and performing a detailed inspection of the web around previous "oil can" repairs for cracks. Repair of all "oil cans" eliminates the need for the repetitive eddy current inspection of existing "oil cans." Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

# **Explanation of Requirements of 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 proposed AD would require accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

# **Differences Between Proposed Rule and Service Bulletin**

Operators should note that when a previous "oil can" repair is found, section 3.B.9.a. of the service bulletin states that if no cracking is found, no

action on the repaired area is required at this time, and that the repetitive inspections of the aft pressure bulkhead for "oil cans" at 2,000 flight cycle intervals are to continue. The FAA has determined, however, that the actions specified in the service bulletin for "oil cans" found at previous "oil can" repairs are insufficient. It is possible that the "oil can" that was originally repaired within the allowable limits of the service bulletin has since grown to exceed the allowable limits. In accordance with Figure 4 or Figure 5 of the service bulletin, this proposed AD would require an eddy current inspection for cracks if "oil cans" are found at previous "oil can" repairs. In addition, if no cracking is found, this proposed AD would require verification that any "oil cans" at previous "oil can" repairs are within the allowable limits of the service bulletin. For any "oil can" that meets the allowable limits, this proposed AD would require repetitive eddy current inspections at intervals not to exceed 1,000 flight cycles until a repair that terminates the "oil can" is completed. For any "oil can" that does not meet the allowable limits, this proposed AD would require repair of the "oil can" and, if any "oil can' remains after the repair, this proposed AD would require repetitive eddy current inspections at intervals not to exceed 1,000 flight cycles.

Operators should also note that, although the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, this proposed AD would require the repair of those conditions to be accomplished per a method approved by the FAA, or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the FAA to make such findings.

## Cost Impact

There are approximately 1,140 airplanes of the affected design in the worldwide fleet. The FAA estimates that 254 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 6 work hours per airplane to accomplish the proposed inspections, and that the average labor rate is \$65 per work hour. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$99,060, or \$390 per airplane, per inspection cycle.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this proposed AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

# **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 adding the following new airworthiness directive:

Boeing: Docket 2003-NM-107-AD.

Applicability: All Model 747 series airplanes; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

**Note 1:** This AD refers to certain portions of a Boeing service bulletin for inspections and repair information. In addition, this AD specifies requirements beyond those included in the service bulletin. Where the AD and the service bulletin differ, the AD prevails.

To detect and correct the propagation of fatigue cracks in the vicinity of "oil cans" on the web of the aft pressure bulkhead, which could result in rapid decompression and overpressurization of the tail section, and consequent loss of control of the airplane, accomplish the following:

#### Service Bulletin References

(a) The term "service bulletin," as used in this AD, means the Accomplishment Instructions of Boeing Alert Service Bulletin 747–53A2482, dated October 3, 2002.

#### **Initial and Repetitive Inspections**

(b) Prior to the accumulation of 30,000 flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever is later, perform a detailed inspection of the aft pressure bulkhead for indications of "oil cans" and previous "oil can" repairs, in accordance with the service bulletin.

Note 2: For the purposes of this AD, a detailed 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."

(c) If no indication of an "oil can" is found and no indication of a previous "oil can" repair is found, during the detailed inspection required by paragraph (b) of this AD, repeat the detailed inspection thereafter at intervals not to exceed 2,000 flight cycles.

# Indication of "Oil Can"

(d) If any indication of an "oil can" is found during the detailed inspection required by paragraph (b) or (c) of this AD, before further flight, perform an eddy current inspection of the web around the periphery of the "oil can" indication for cracks, as shown in Figure 3 of the service bulletin.

(e) If no crack is found during the eddy current inspection required by paragraphs (d) and (f)(2) of this AD, do the actions specified in paragraph (e)(1) or (e)(2) of this AD, as applicable.

(1) For the "oil can" that meets the allowable limits specified in the service bulletin: Repeat the eddy current inspection specified in paragraph (d) of this AD thereafter at intervals not to exceed 1,000 flight cycles. As an option, repair the "oil can" in accordance with paragraph (e)(2) of this AD.

(2) For the "oil can" that does not meet the allowable limits specified in the service bulletin: Before further flight, repair the "oil can" in accordance with the service bulletin. If the repair eliminates the "oil can," accomplishment of this repair constitutes a terminating action for the repetitive eddy

current inspection requirements of paragraph (e)(1) of this AD for this location only. However, the repetitive detailed inspection required by paragraph (c) of this AD is still required. If any "oil can" remains after the repair, repeat the eddy current inspection thereafter at intervals not to exceed 1,000 flight cycles.

## Indication of Previous "Oil Can" Repairs

- (f) If any previous "oil can" repair is found during the detailed inspection required by paragraph (b) or (c) of this AD, before further flight, do a detailed inspection of the web for cracks and "oil cans," as shown in Figure 4 or Figure 5 of the service bulletin, as applicable.
- (1) If no crack and no "oil can" are found, repeat the detailed inspection in accordance with paragraph (c) of this AD.
- (2) If any "oil can" is found, before further flight, do the eddy current inspection for cracks as shown in Figure 3 of the service bulletin.
- (3) If no crack is found during the eddy current inspection required by paragraph (f)(2) of this AD, do the actions specified in paragraph (e)(1) or (e)(2) of this AD, as applicable.

## Repair of Cracks

(g) If any crack is found during any inspection required by this AD, before further flight, repair in accordance with the service bulletin. If cracks or damage exceeds limits specified in the service bulletin and the service bulletin specifies to contact Boeing for appropriate action: Before further flight, repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved, the approval must specifically reference this AD.

## **Alternative Methods of Compliance**

(h) In accordance with 14 CFR 39.19, the Manager, Seattle ACO, FAA, is authorized to approve alternative methods of compliance for this AD.

Issued in Renton, Washington, on January 29, 2004.

## Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service. [FR Doc. 04–2469 Filed 2–5–04; 8:45 am] BILLING CODE 4910–13–P

## **DEPARTMENT OF TRANSPORTATION**

# **Federal Aviation Administration**

14 CFR Part 39

[Docket No. 2002-NM-227-AD]

RIN 2120-AA64

Airworthiness Directives; Dassault Model Fan Jet Falcon Series Airplanes and Model Mystere-Falcon 20 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 Dassault Model Fan Jet Falcon series airplanes and Model Mystere-Falcon 20 series airplanes. This proposal would require inspecting and testing for fatigue cracking due to stress corrosion in the vertical posts of the window frames in the flight compartment. This action is necessary to prevent fatigue cracking of the window frames, which could result in rapid depressurization of the fuselage and consequent reduced structural integrity of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Comments must be received by March 8, 2004.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-227-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227–1232. Comments may also be sent via the Internet using the following address: 9-anmnprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2002-NM-227-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 or 2000 or ASCII text.

The service information referenced in the proposed rule may be obtained from Dassault Falcon Jet, P.O. Box 2000, South Hackensack, New Jersey 07606. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. FOR FURTHER INFORMATION CONTACT: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1137; fax (425) 227-1149.

#### 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 action may be changed in light of the comments received.

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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.

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## Discussion

The Direction Générale de l'Aviation Civile (DGAC), which is the