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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2005-20137; Directorate Identifier 2004-NM-96-AD; Amendment 39-14338; AD 2005-20-41]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Boeing Model 757-200, -200PF, and -300 Series Airplanes, Powered by Pratt & Whitney PW2000 Series Engines**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 757-200, -200PF, and -300 series airplanes, powered by Pratt & Whitney PW2000 series engines. This AD requires repetitive inspections for loose or damaged components of the support brackets and associated fasteners for the hydraulic lines located in the nacelle struts, and any related investigative and corrective actions. This AD results from reports of damage and subsequent failure of the support brackets and associated fasteners for the hydraulic lines located internal to the upper fairing cavity of the nacelle struts. We are issuing this AD to prevent such failure, which, in conjunction with sparking of electrical wires, failure of seals that would allow flammable fluids to migrate to compartments with ignition sources, or overheating of the pneumatic ducts beyond auto-ignition temperatures, could result in an uncontained fire.

**DATES:** This AD becomes effective November 17, 2005.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of November 17, 2005.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, Room PL-401, Washington, DC.

Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for service information identified in this AD.

**FOR FURTHER INFORMATION CONTACT:** Tom Thorson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6508; fax (425) 917-6590.

## **SUPPLEMENTARY INFORMATION:**

### **Examining the Docket**

You may examine the AD docket in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section. This docket number is FAA-2005-20137; the directorate identifier for this docket is 2004-NM-96-AD.

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain Boeing Model 757 series airplanes. That NPRM was published in the Federal Register on January 28, 2005 (70 FR 4052). That NPRM proposed to require repetitive inspections for loose or damaged components of the support brackets and associated fasteners for the hydraulic lines located in the nacelle struts, and any related investigative and corrective actions.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We have considered the comments on the NPRM that have been received.

### **Support for Proposed AD**

Two commenters concur with the proposed AD as written.

### **Requests To Extend Compliance Time**

Two commenters ask that the compliance time for the initial and repetitive inspections specified in the proposed AD be extended.

One commenter asks that the compliance time for the initial and repetitive inspections be extended to 6,000 flight hours or 24 months, whichever is first. The proposed AD specifies initial and repetitive inspections at intervals not to exceed 6,000 flight hours or 18 months. The commenter adds that, based on access, labor hour requirements, and the nature of the detailed inspections, this type of work aligns with the airline's heavy maintenance program, which is calendar-based and FAA-approved at 24-month intervals. The commenter states that, because the proposed inspections are fatigue-related, an equivalent level of safety is maintained by extending the proposed calendar compliance time.

A second commenter asks that the compliance time for the repetitive inspections be changed to 7,500 flight hours or 24 months. The commenter states that the proposed AD requires the initial inspection to be accomplished within 18 months or 6,000 flight hours, regardless of total flight cycles/hours on the airplane. The commenter adds that the safety concern addressed by the proposed AD appears to be age-related. Additionally, consideration should be given to whether or not, and when, the work described in Boeing Service Bulletin 757-29-0043, dated June 21, 1990 (the concurrent service bulletin referenced in the proposed AD) was accomplished. The commenter also states that the initial and repetitive inspection interval in the proposed AD coincides with the published Material Review Board's most conservative periodic check (PCK) interval; several operators, including the commenter, have escalated that PCK interval to 24 months. The commenter concludes that attempting to accomplish the proposed actions within the proposed compliance time would be expensive; extending the compliance time would allow operators who have escalated the PCK interval to accomplish the inspections during maintenance checks.

We agree to extend the compliance time for the initial and repetitive inspections to 6,000 flight hours or 24 months, whichever is first. The fatigue-related failures are a function of airplane flight hours and flight cycles, not a direct function of calendar time. Extending the compliance time will continue to provide an equivalent level of safety, as noted by the commenter. However, we do not agree to extend the compliance time to 7,500 flight hours or 24 months; the 6,000-flight-hour compliance time was based on service history of part failures and an engineering fatigue analysis by the original equipment manufacturer (OEM). We have changed paragraph (f) of this AD to reflect the revised compliance time.

### **Request To Change Costs of Compliance Section**

Two commenters ask for changes to the Costs of Compliance section.

One commenter states that the estimate in the cost section in the proposed AD specifies that it would take 35 work hours to accomplish the inspection required by paragraph (f) of the proposed AD, but the commenter estimates that it would take 47 work hours to accomplish that inspection. The commenter adds that the proposed AD also requires accomplishing the concurrent actions specified in paragraph (g) of the proposed AD and referenced in Boeing Service Bulletin 757-29-0043, dated June 21, 1990; however, the cost for those actions is not included in the Costs of Compliance section. The commenter concludes that the cost for the inspections was underestimated and the cost for the concurrent actions was omitted.

A second commenter asks that we change the Costs of Compliance section in the proposed AD to specify that the number of work hours necessary to accomplish the proposed inspection and the concurrent actions would be determined by operators on a case-by-case basis.

We do not agree to change the work hours in this AD or specify that operators will determine the number of work hours necessary for accomplishing the actions. The number of work hours represent the time necessary to perform only the actions actually required by the AD. The actions in an AD normally reflect only the costs of the specific required action (inspection) based on the best data available from the manufacturer; however, this AD also includes the time required to gain access and close up. The cost analysis in AD rulemaking actions typically does not include incidental costs such as the time necessary for planning, or time necessitated by other administrative actions. Those incidental costs, which may vary significantly among operators, are almost impossible to calculate. We have made no change to the AD in this regard.

We do agree to add the cost for the concurrent actions since those actions were inadvertently omitted from the NPRM. We have added a new paragraph to the Costs of Compliance section which estimates the work hours and cost per airplane for accomplishing the concurrent actions.

### **Request To Change Statement of Unsafe Condition**

One commenter, the OEM, asks that we change the statement of unsafe condition specified in the proposed AD. The statement of unsafe condition is as follows: "We are proposing this AD to prevent flammable fluids from leaking into the interior compartment of the nacelle struts where ignition sources exist, which could result in the ignition of flammable fluids and an uncontained fire." The commenter states that the damage to the Pratt & Whitney strut has not caused any damage to barriers between the upper strut compartment and any other compartment; the hydraulic tube is clamped to frames, not to a vapor barrier. The commenter adds that the upper strut compartment is designated as a flammable leakage zone, and therefore, to the greatest extent possible, all ignition sources have been eliminated. The commenter notes that the unsafe condition addressed by the referenced service information does not result in any zone barriers being damaged. The commenter concludes that any leakage of flammable fluids will not come in contact with ignition sources; additionally, the upper strut compartment has drainage provisions to prevent the accumulation of flammable fluids.

We agree to change the description of the unsafe condition. The commenter is accurate in the statement that any leakage of flammable fluids will not come in contact with ignition sources because the upper strut compartment has drainage provisions to prevent the accumulation of flammable fluids. Due to the design of the system installations in the strut compartments, an additional failure would have to occur to result in the ignition of flammable fluids. Additional failures include shorting and sparking of electrical wires in either the strut upper fairing cavity or torque box, failure of seals that would allow flammable fluids to migrate to compartments with ignition sources, or overheating of the pneumatic ducts beyond auto-ignition temperatures. The description of the unsafe condition has been changed throughout the AD.

### **Request To Clarify Acceptable Part Numbers**

One commenter states that the proposed AD requires accomplishing the actions specified in two different service bulletins, which are referenced in paragraphs (f) and (g) of the proposed AD. The commenter is concerned because the part numbers specified in those two bulletins are different. The commenter recommends that the proposed AD be revised to specify that the part numbers listed in either service bulletin are acceptable configurations and fully comply with the actions specified in the proposed AD.

We acknowledge and provide clarification for the commenter's concern. The OEM verified with us that the different part numbers specified in the referenced service bulletins are due to one series of parts having pilot holes and the other series not having pilot holes. Therefore, the part numbers identified in either service bulletin are acceptable configurations and fully comply with the AD requirements for the modifications. We have added a note to the AD for clarification. In addition, once a revision to the service bulletins has been issued by the manufacturer, and reviewed and accepted by us, we will approve the use of either series of part numbers as an acceptable alternative method of compliance (AMOC) according to paragraph (j) of this AD.

### **Request To Clarify the Repair Approval Specified in Paragraph (i)**

One commenter asks that paragraph (i) of the proposed AD, titled "Repair Information," be clarified concerning the requirement to obtain repair approval per the Manager, Seattle Aircraft Certification Office (ACO). The commenter questions if this approval is required for all Boeing-assisted repairs to the engine strut frames, or if the approval is only required for Boeing-assisted repairs found during the inspections required by the proposed AD.

We interpret the commenter's question to be whether damage found inside the strut that is not found during the inspection required by the AD requires Seattle ACO approval of the repair method. Our response is that only repairs of hardware damage found during the inspection required by the AD for which the service bulletin specifies a Boeing-assisted repair per the referenced service information need be submitted to the Seattle ACO for approval. If specific cases develop and the repair method is not apparent to the operator, contact the Seattle ACO for guidance. We have not changed the AD in this regard.

### **Request To Resolve Parts Issues**

One commenter states that the following parts issues represent an undue burden on operators by needlessly restricting operator action, and asks that these issues be resolved. Those issues and our responses are as follows:

1. The commenter asks that the proposed AD be changed to allow dimensional drawings or provisions for operators to fabricate acceptable substitute brackets. The commenter states that, since parts are not available from the OEM, operators must fabricate the brackets and re-use the fasteners and rubber blocks, as necessary.

We do not agree that operators can be allowed to fabricate their own parts. Operators would be required to fabricate parts by using an approved design, and we cannot authorize this without reviewing the operators' design data. The manufacturer has indicated that the parts required are readily available; therefore, obtaining them should not be a problem. However, should parts not be available in a timely manner, operators may provide the design data to us and request approval of an AMOC per paragraph (j) of this AD.

2. The commenter asks that we revise Section II of Boeing Service Bulletin 757-29-0064 (referenced in the proposed AD as the appropriate source of service information for accomplishing the inspections for Model 757-200 and -200PF series airplanes) to add a provision for providing brackets and hardware for all stations. The commenter states that Section II of the service bulletin contains material information that is inadequate. The commenter has found that only parts necessary for station 149.5 are included in that section; however, the service bulletin specifies inspecting and replacing parts at stations 102.1, 128.0, 149.5, 161.35, and 180.0 on the left and right sides of the airplane. In addition, the commenter found damaged/worn parts at other stations.

3. The commenter asks that we require brackets and hardware to be stocked and provided by Boeing until terminating action is developed. The commenter states that parts for all stations are not readily available from the OEM or other suppliers.

We do not agree to advise Boeing to revise Section II of the referenced service bulletin, or to require that Boeing provide parts until terminating action is developed. The technical content of the referenced service bulletin is correct and contains adequate information and procedures to accomplish the repetitive inspections. Therefore, we have determined that it is not necessary for the manufacturer to revise the service bulletin before issuance of this AD. In addition, we have no regulatory basis to require the type certificate holder to provide the parts necessary to comply with the corrective action specified in the AD. The manufacturer has indicated that the parts required are readily available; therefore, obtaining them should not be a problem. However, under the provisions of paragraph (j) of this AD, affected operators may request approval of an AMOC.

### **Request To Approve Future Service Information**

One commenter, the OEM, asks that the appropriate sections in the proposed AD be changed to reference Revision 1 of Boeing Service Bulletins 757-29-0064 and 757-29-0065. (Boeing Service Bulletins 757-29-0064 and 757-29-0065, both dated February 29, 2004, are referenced in the NPRM as the appropriate sources of service information for accomplishing the repetitive inspections.) The commenter states that those service bulletins are currently being revised and are expected to be released soon.

We cannot accept as-yet unpublished service documents for compliance with the requirements of an AD. Referring to an unavailable service bulletin in an AD violates Office of the Federal Register regulations for approving materials that are incorporated by reference. We have not changed the AD regarding this issue because the service bulletins have not been revised and we cannot delay the final rule to wait for revisions to be issued. However, under the provisions of paragraph (j) of this AD, affected operators may request approval to use a later revision of the referenced service bulletin as an AMOC.

### **Clarification of Alternative Method of Compliance (AMOC) Paragraph**

We have changed this AD to clarify the appropriate procedure for notifying the principal inspector before using any approved AMOC on any airplane to which the AMOC applies.

## **Conclusion**

We have carefully reviewed the available data, including the comments that we received, and determined that air safety and the public interest require adopting the AD with the changes described previously. These changes will neither increase the economic burden on any operator nor increase the scope of the AD.

## **Costs of Compliance**

This AD affects about 432 airplanes worldwide and 377 airplanes of U.S. registry.

The inspection/test takes about 35 work hours per airplane (including access and close-up), at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the inspection/test for U.S. operators is \$857,675, or \$2,275 per airplane, per inspection/test cycle.

The concurrent actions would take about 38 work hours per airplane, at an average labor rate of \$65 per work hour. Required parts cost is minimal. Based on these figures, the estimated cost of the concurrent actions is \$2,470 per airplane.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39–AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at [www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2005-20-41 Boeing:** Amendment 39-14338. Docket No. FAA-2005-20137; Directorate Identifier 2004-NM-96-AD.

## Effective Date

- (a) This AD becomes effective November 17, 2005.

## Affected ADs

- (b) None.

## Applicability

(c) This AD applies to Boeing Model 757-200, -200PF, and -300 series airplanes; certificated in any category; powered by Pratt & Whitney PW2000 series engines.

## Unsafe Condition

(d) This AD was prompted by reports of damage and subsequent failure of the support brackets and associated fasteners for the hydraulic lines located internal to the upper fairing cavity of the nacelle struts. We are issuing this AD to prevent such failure, which, in conjunction with sparking of electrical wires, failure of seals that would allow flammable fluids to migrate to compartments with ignition sources, or overheating of the pneumatic ducts beyond auto-ignition temperatures, could result in an uncontained fire.

## Compliance

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

## Repetitive Inspections

(f) Within 6,000 flight hours or 24 months after the effective date of this AD, whichever is first: Do a detailed inspection for loose or damaged components of the support brackets and associated fasteners for the hydraulic lines located in the nacelle struts by accomplishing all of the actions specified in Part 1, Part 2, and Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 757-29-0064 (for Model 757-200 and -200PF series airplanes) or Boeing Service Bulletin 757-29-0065 (for Model 757-300 series airplanes), both dated February 29, 2004; as applicable. Repeat the inspection thereafter at intervals not to exceed 6,000 flight hours or 24 months, whichever is first.

**Note 1:** 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."

### **Concurrent Service Bulletin**

(g) Prior to or concurrently with the accomplishment of paragraph (f) of this AD: Accomplish all of the actions specified in the Accomplishment Instructions of Boeing Service Bulletin 757-29-0043, dated June 21, 1990.

**Note 2:** The part numbers identified in Boeing Service Bulletins 757-29-0064 or 757-29-0065, both dated February 29, 2004; or Boeing Service Bulletin 757-29-0043, dated June 21, 1990; are acceptable configurations and fully comply with the AD requirements for the actions required by paragraphs (f) and (g) of this AD.

### **Related Investigative and Corrective Actions**

(h) Except as required by paragraph (i) of this AD: If any loose or damaged part is found during any inspection required by paragraph (f) of this AD, before further flight, do all of the related investigative and corrective actions specified in Part 1 and Part 2 of the Accomplishment Instructions of Boeing Service Bulletin 757-29-0064, or Boeing Service Bulletin 757-29-0065, both dated February 29, 2004; as applicable.

### **Repair Information**

(i) If any damage is found during any inspection required by this AD, and the service bulletin specifies contacting Boeing for appropriate action: Before further flight, repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. For a repair method to be approved, the approval letter must specifically refer to this AD.

**Note 3:** There is no terminating action currently available for the repetitive inspections required by paragraph (f) of this AD.

### **Alternative Methods of Compliance (AMOCs)**

(j)(1) The Manager, Seattle ACO, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

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

### **Material Incorporated by Reference**

(k) You must use Boeing Service Bulletin 757-29-0064, dated February 29, 2004, or Boeing Service Bulletin 757-29-0065, dated February 29, 2004; and Boeing Service Bulletin 757-29-0043, dated June 21, 1990; as applicable, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information.

You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on September 30, 2005.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-20264 Filed 10-12-05; 8:45 am]

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