DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2005–21410; Directorate Identifier 2005–CE–31–AD; Amendment 39–14272; AD 2005–19–07]

RIN 2120–AA64

Airworthiness Directives; Raytheon Aircraft Company Model 390 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA adopts a new airworthiness directive (AD) for certain Raytheon Aircraft Company (Raytheon) Model 390 airplanes. This AD requires you to replace the rudder pedal arm assemblies used in the rudder control system with parts of improved design. This AD results from reports of cracks found on the rudder pedal arm assemblies. We are issuing this AD to prevent failure of the rudder pedal arm assemblies caused by fatigue cracks. This failure could lead to loss of rudder control, loss of nose gear steering, and loss of toe brakes on the side on which the failure occurs.

DATES: This AD becomes effective on October 31, 2005.

As of October 31, 2005, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

ADDRESSES: To get the service information identified in this AD, contact Raytheon Aircraft Company, 9709 E. Central, Wichita, Kansas 67201–0085; telephone: (800) 429–5372 or (316) 676–3140.

To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–001 or on the Internet at *http://dms.dot.gov.* The docket number is FAA–2005–21410; Directorate Identifier 2005–CE–31-AD.

FOR FURTHER INFORMATION CONTACT: David Ostrodka, Aerospace Engineer, Wichita Aircraft Certification Office (ACO), FAA, 1801 Airport Road, Wichita, Kansas 67209; telephone: (316) 946–4129; facsimile: (316) 946–4107; e-mail: *david.ostrodka@faa.gov.*

SUPPLEMENTARY INFORMATION:

Discussion

What events have caused this AD? Raytheon received a report that, during ground maintenance operations, the pilot's outboard rudder pedal arm assembly cracked at the upper end of the arm.

While maneuvering the aircraft from a right turn to neutral with toe brake applied during an on-ground compass swing, the rudder pedal arm assembly cracked.

Further investigation revealed another airplane with a crack on the copilot's outboard rudder pedal arm assembly.

Raytheon has determined that loading of the rudder pedals off the centerline of the rudder pedal arm assembly results in overload, which causes fatigue cracking of the rudder pedal arm assembly.

What is the potential impact if FAA took no action? If not prevented, cracks in the rudder pedal arm assembly could cause the rudder pedal arm assembly to fail. This failure could lead to loss of rudder control, loss of nose gear steering, and loss of toe brakes on the side on which the failure occurs.

Has FAA taken any action to this point? We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain Raytheon Model 390 airplanes. This proposal was published in the **Federal Register** as a notice of proposed rulemaking (NPRM) on June 20, 2005 (70 FR 35385). The NPRM proposed to require you to replace the rudder pedal arm assemblies, part numbers (P/Ns) 390–524350–0001, 390–524350–0002, 390–524351–0001, and 390–524351–0002 with improved design parts, P/Ns 390–524400–0001, 390–524400–0002, 390–524401–0003, and 390–524401–0004.

Comments

Was the public invited to comment? We provided the public the opportunity to participate in developing this AD. We received no comments on the proposal or on the determination of the cost to the public.

Conclusion

What is FAA's final determination on this issue? We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial corrections. We have determined that these minor corrections:

—Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

—Do not add any additional burden upon the public than was already proposed in the NPRM.

Changes to 14 CFR Part 39—Effect on the AD

How does the revision to 14 CFR part 39 affect this AD? On July 10, 2002, the FAA published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Costs of Compliance

How many airplanes does this AD impact? We estimate that this AD affects 98 airplanes in the U.S. registry.

What is the cost impact of this AD on owners/operators of the affected airplanes? We estimate the following costs to accomplish the modification:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
8 work hours × $65 per hour = $520	$1,165	$1,685	$1,685 × 98 = $165,130.

Raytheon will provide warranty credit for parts and labor to the extent stated in the service information. Therefore, the required actions, if done following the service information, will have little or no cost to the owners/operators of the affected airplanes.

Authority for This Rulemaking

What authority does FAA have for issuing this rulemaking action? 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 AD.

Regulatory Findings

Will this AD impact various entities? 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.

Will this AD involve a significant rule or regulatory action? 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 the 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 summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include ''Docket No. FAA–2005–21410; Directorate Identifier 2005–CE–31–AD'' in your request.

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 Federal Aviation Administration amends 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. FAA amends § 39.13 by adding a new AD to read as follows:

2005–19–07 Raytheon Aircraft Company: Amendment 39–14272; Docket No. FAA–2005–21410; Directorate Identifier 2005–CE–31–AD.

When Does This AD Become Effective?

(a) This AD becomes effective on October 31, 2005.

What Other ADs Are Affected by This Action?

(b) None.

What Airplanes Are Affected by This AD?

(c) This AD affects the following serial-numbered Model 390 airplanes that are certificated in any category:

Serial Numbers

(1) RB–1
(2) RB–4 through RB–36
(3) RB–38 through RB–41
(4) RB–43 through RB–67
(5) RB–69 through RB–80
(6) RB–82 through RB–84
(7) RB–87 through RB–94
(8) RB–96 through RB–101
(9) RB–103 through RB–115
(10) RB–117 through RB–119
(11) RB–121

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of reports of cracks found on the rudder pedal arm assemblies used in the rudder control system. The actions specified in this AD are intended to prevent failure of the rudder pedal arm assemblies caused by fatigue cracks. This failure could lead to loss of rudder control, loss of nose gear steering, and loss of toe brakes on the side on which the failure occurs.

What Must I Do To Address This Problem?

(e) To address this problem, you must do the following:

Actions	Compliance	Procedures
(1) Replace rudder pedal arm assemblies, part numbers (P/Ns) 390–524350–0001, 390–524350–0002, 390–524351–0001, and 390–524351–0002 with improved design parts, P/Ns 390–524400–0001, 390–524400–0002, 390–524401–0003, and 390–524401–0004.	Upon accumulating 300 hours time-in-service (TIS) or within 100 hours TIS after October 31, 2005 (the effective date of this AD), whichever occurs later, unless already done.	Follow Raytheon Aircraft Company Mandatory Service Bulletin, SB 27–3691, Rev. 1, Revised: February, 2005, and the applicable maintenance manual.
(2) Do not install rudder pedal arm assemblies, P/Ns 390–524350–0001, 390–524350–0002, 390–524351–0001, and 390–524351–0002.	As of October 31, 2005 (the effective date of this AD).	Not applicable.

Note: Replacing the rudder pedal arm assemblies following Raytheon Aircraft Company Mandatory Service Bulletin, SB 27–3691, Issued: October 2004, does not comply with this AD.

May I Request an Alternative Method of Compliance?

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. Unless FAA authorizes otherwise, send your request to your principal inspector. The principal inspector may add comments and will send your request to the Manager, Wichita Aircraft Certification Office (ACO), FAA. For information on any already approved alternative methods of compliance, contact David Ostrodka, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Wichita, Kansas 67209; telephone: (316) 946–4129; facsimile: (316) 946–4107; e-mail: *david.ostrodka@faa.gov*.

Does This AD Incorporate Any Material by Reference?

(g) You must do the actions required by this AD following the instructions in Raytheon Aircraft Company Mandatory Service Bulletin, SB 27–3691, Rev. 1, Revised: February, 2005. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Raytheon Aircraft Company, 9709 E. Central, Wichita, Kansas 67201–0085; telephone: (800) 429–5372 or (316) 676–3140. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html* or call (202) 741–6030. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL–401, Washington, DC 20590–001 or on the Internet at *http://dms.dot.gov*. The docket number is FAA–2005–21410; Directorate Identifier 2005–CE–31–AD.

Issued in Kansas City, Missouri, on September 8, 2005.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05–18199 Filed 9–14–05; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2005–22413; Directorate Identifier 2005–NM–167–AD; Amendment 39–14271; AD 2005–19–06]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747SR, and 747SP Series Airplanes

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

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747SR, and 747SP series airplanes. This AD requires repetitive detailed and ultrasonic inspections of the thrust links of the rear engine mounts for any crack or fracture and corrective actions if necessary. This AD results from the finding of a fractured forward lug of the rear engine mount thrust link on the number one strut. We are issuing this AD to detect and correct cracked or fractured thrust links that could lead to the loss of the load path for the rear engine mount bulkhead and damage to other primary engine mount structure, which could result in the in-flight separation of the engine from the airplane and consequent loss of control of the airplane.

DATES: This AD becomes effective September 30, 2005.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of September 30, 2005.

We must receive comments on this AD by November 14, 2005.

ADDRESSES: Use one of the following addresses to submit comments on this AD.

- DOT Docket Web site: Go to *http://dms.dot.gov* and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, room PL–401, Washington, DC 20590.
- Fax: (202) 493–2251.
- Hand Delivery: Room PL–401 on the plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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

FOR FURTHER INFORMATION CONTACT: Ivan Li, Aerospace Engineer, Airframe Branch, ANM–120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 917–6437; fax (425) 917–6590.

SUPPLEMENTARY INFORMATION:

Discussion

We have received a report indicating that one operator found a fractured forward lug of the rear engine mount thrust link on the number one strut. The fractured thrust link was found on a Model 747–200B series airplane equipped with Pratt & Whitney JT9D–7Q engines. The fractured thrust link had accumulated 91,173 total flight hours (and 27,931 total flight cycles). The fracture occurred about 65,000 flight hours (and 14,000 flight cycles) after the thrust link had been overhauled to replace a worn spherical bearing. The same operator also reported finding a cracked thrust link on the number one strut of a Model 747–200B series airplane equipped with Pratt & Whitney JT9D–7Q engines. That cracked thrust link had accumulated about 66,000 total flight hours (and about 19,000 total flight cycles) and about 55,700 flight hours (and about 11,100 flight cycles) since it was last overhauled. Metallurgical analysis by the airplane manufacturer indicates that cracking of the high-strength steel thrust links resulted from fatigue. In both of the reported incidents, cracking could have occurred before the overhaul. Continued airplane operation with a cracked or fractured thrust link could lead to the loss of the load path for the rear engine mount bulkhead and damage to other primary engine mount structure. This condition, if not detected and corrected, could result in the in-flight separation of the engine from the airplane and consequent loss of control of the airplane.

The rear engine mount thrust links on the Model 747–200B series airplanes equipped with Pratt & Whitney JT9D–7Q engines are similar to those on the affected Model 747–100, 747–100B, 747–100B SUD, 747–200C, 747–200F, 747–300, 747SR, and 747SP series airplanes, equipped with Pratt & Whitney JT9D–3 and –7 series engines, except JT9D–70 engines. Therefore, all of these models may be subject to the same unsafe condition.

Other Related Rulemaking

On July 19, 2001, we issued AD 2001–15–15, amendment 39–12349 (66 FR 39425, dated July 31, 2001), applicable to certain Boeing Model 747 airplanes powered by Pratt & Whitney JT9D–7 series engines. That AD requires detailed visual inspections of the lugs on the bulkhead fitting of the rear engine mounts, and corrective action if necessary. That AD also requires ultrasonic inspections and, for certain airplanes, rework of the bulkhead fitting of the rear engine mounts. Reworking the lugs on the bulkhead fitting of the rear engine mounts (in accordance with ''Part 5—Rework'' of the Accomplishment Instructions of Boeing Service Bulletin 747–54A2200, Revision 1, dated February 15, 2001) as specified in paragraphs (b)(2), (e), and (f) of AD 2001–15–15 is acceptable for compliance with ''Part 3—Rear Engine Mount Bulkhead Inspection and Lug Overhaul and Upper Fitting Overhaul and Bolt Replacement'' of the Accomplishment Instructions of Boeing Alert Service Bulletin 747–71A2309, dated August 18, 2005 (which is referenced as the appropriate source of service information for doing the actions required by this AD).

On March 24, 2004, we issued AD 2004–07–22, amendment 39–13566 (69 FR 18250, April 7, 2004), applicable to all Boeing Model 747 airplanes. (A correction to AD 2004–07–22 was published in the **Federal Register** on May 3, 2004 (69 FR 24063).) That AD requires that the FAA-approved maintenance inspection program be revised to include inspections that will give no less than the required damage tolerance rating for each structural significant item (SSI), and repair of cracked structure. Accomplishing the inspections and repetitive overhaul or replacement specified in paragraphs (g) and (j) of this AD are approved as an alternative method of compliance to paragraphs (c) and (d) of AD 2004–07–22 for the inspections of SSI S–2, for the thrust links only, of the Boeing Supplemental Structural Inspection Document D6–35022, Revision G, dated December 2000.