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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0561; Directorate Identifier 2007-NM-223-AD; Amendment 39-18111; AD 2015-05-01]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes; and Model 767-200, -300, -300F, and -400ER series airplanes. This AD was prompted by reports indicating that the counterweights in some hub assemblies of the ram air turbine (RAT) could be understrength and fracture when the RAT is rotating, and that some RAT hub assemblies were delivered with balance washer retention screws that were incorrectly heat-treated, and therefore, susceptible to fracture and cracking. This AD requires a part number and serial number inspection to determine if certain RAT hub assemblies are installed; and, for affected RAT hub assemblies, doing an inspection for missing and fractured balance washer screws, and replacement or rework if necessary. We are issuing this AD to prevent an inoperative RAT, which, following a dual engine shutdown in flight, will cause loss of all hydraulic power to the primary flight controls, resulting in subsequent loss of control of the airplane.

DATES: This AD is effective April 20, 2015.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of April 20, 2015.

ADDRESSES: For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; email me.boecom@boeing.com; Internet https://www.myboeingfleet.com. For Hamilton Sundstrand service information identified in this AD, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; phone: 860-654-3575; fax: 860-998-4564; email: tech.solutions@hs.utc.com; Internet: http://www.hamiltonsundstrand.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is

also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2008-0561.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2008-0561; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Douglas Tsuji, Senior Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-917-6546; fax: 425-917-6590; Douglas.Tsuji@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 by adding an AD that would apply to all The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes; and Model 767-200, -300, -300F, and -400ER series airplanes. The SNPRM published in the Federal Register on April 24, 2014 (79 FR 22777). We preceded the SNPRM with a notice of proposed rulemaking (NPRM) that published in the Federal Register on May 20, 2008 (73 FR 29087). The NPRM proposed to require doing an inspection to determine the part number and serial number of the RAT hub assembly, and replacing the RAT hub assembly with a new, serviceable, or reworked and re-identified RAT hub assembly if necessary. The NPRM was prompted by reports indicating that the counterweights in some hub assemblies of the RATs could be understrength and fracture when the RAT is rotating. The SNPRM proposed to add airplanes to the applicability; add an additional part number and serial number inspection to determine if certain RAT hub assemblies are installed; and, for affected RAT hub assemblies, doing an inspection for missing and fractured balance washer screws, and replacement if necessary to address an additional defect identified within the RAT hub assembly. We are issuing this AD to prevent an inoperative RAT, which, following a dual engine shutdown in flight, will cause loss of all hydraulic power to the primary flight controls, resulting in subsequent loss of control of the airplane.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the SNPRM (79 FR 22777, April 24, 2014) and the FAA's response to each comment.

Request To Perform a Records Review in Lieu of an Inspection

FedEx requested an option to perform a records review in lieu of an inspection to determine if any suspect RAT hub assemblies are installed. FedEx stated that this is to prevent unnecessary inspections on future Model 767 airplanes delivered from Boeing.

We agree with the commenter's request. The serial number applicability relates to a subassembly of the RAT (the turbine hub assembly serial number, and not the RAT serial number). Consequently, many operators might not have such detailed records. However, if an operator has records indicating the serial number of the turbine hub assembly that is currently installed on the RAT of a particular airplane, there is no need to deploy the RAT for inspection to determine if this AD is applicable. Therefore, a review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the RAT hub assembly can be conclusively determined from that review. We have revised paragraphs (g) and (h) of this AD accordingly.

Request for Additional Removal Options (Screw Replacement Information)

United Airlines (UAL) requested that the SNPRM (79 FR 22777, April 24, 2014) be updated to include an additional scenario in which an operator finds all balance washers in place, but one or more screws fractured. UAL stated that paragraph 2.B.(5)(d) of Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); and paragraph 2.B.(5)(d) of Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); provide on-wing (or off-wing) procedures for the situation where all balance washers are present, but one or more screws are fractured. UAL stated that the operator has the option to remove the screw shank still in the hole with vice grips or a screw extractor in lieu of RAT or RAT hub replacement.

We disagree with the commenter's request to not replace the RAT or RAT hub assembly if all washers are in place, but one or more screws are found fractured during the inspection required by paragraph (h)(1) of this AD. In this scenario, since any fractured screw is found, the RAT or RAT hub assembly needs to be replaced with a new, serviceable, reworked, and re-identified RAT or RAT hub assembly.

Multiple balance washers (of different weights) could be installed in a location; therefore, depending on how the screw fractures, it may be possible to lose one, but not all, balance washers. However, it is most likely that the screw head and all balance washer(s) for that location will be missing.

However, it is also possible that a screw could fracture during its removal (i.e., the screw was not found fractured during the inspection required by paragraph (h)(1) of this AD). This scenario has been reported on numerous occasions. In this case, it is not necessary to remove the RAT hub assembly (or RAT) if removal of the fractured screw is successful (i.e., successful removal of a screw that fractures during its removal).

The preamble of the SNPRM (79 FR 22777, April 24, 2014) included the paragraph, "Screw Replacement Information," to provide additional clarification that if a screw fractures during any screw replacement and the weight is still available, the balance weight can be installed with the replacement screw. We further emphasize that screws should only be replaced one at a time to prevent any potential for a removed balance washer to be installed in a different location.

We also provide the following additional information. The attempted removal of a fractured screw can be done without replacement of the RAT or RAT hub assembly only if the screw fractures during removal, and if all balance washers originally installed at that location can be positively accounted for and can be assembled back into that location. We also note that there could be more than one washer installed at each location. We have not changed this final rule in this regard.

Request To Not Require Returning Screws to Hamilton Sundstrand

UAL requested the procedure to return all screws or remnants of fractured screws to Hamilton Sundstrand for further investigation, as specified in paragraph 2.E., "Return Balance Washer Screws to Hamilton Sundstrand," of Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); and in Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); not be required. UAL stated that this is an unnecessary requirement and will only burden the maintenance personnel with additional logistical procedures that do not add value. UAL also stated that the balance screw failure issue and root cause are well

understood by Hamilton Sundstrand and that returning failed screws will not provide additional information.

We agree with the commenter's request. Returning the screws or fractured screws is not required since the issue is now well understood. We have added new paragraph (h)(2)(iii) to this AD to specifically exclude this requirement.

Request To Add New Paragraph To Clarify Compliance for Airplanes in Production

Boeing requested that a new paragraph be added to paragraph (i) of the proposed AD (79 FR 22777, April 24, 2014), to read, "New OEM RAT hub assemblies not listed in (i)(1) or (i)(2) installed prior to airplane delivery meet the requirements of paragraph (i). After delivery, airline operators are responsible for maintaining paragraph (i) compliance." Boeing stated that this language clarifies compliance for Model 767 airplanes in production.

We partially agree. We do not agree with the commenter's request to add a new paragraph. However, we agree that clarification is necessary. For airplanes on which new OEM RAT hub assemblies not listed in paragraphs (i)(1) and (i)(2) of this AD are installed during production, it is possible for suspect hub assemblies to be installed, i.e., a suspect hub assembly might be removed from one airplane and installed on another airplane. Therefore, an airplane delivered with conforming parts may no longer have conforming parts due to the interchangeability of parts in service. All airplanes must comply with the requirements of paragraph (i) of this AD. We have not changed this AD in this regard.

Request To Revise Paragraph (i) of the Proposed AD (79 FR 22777, April 24, 2014)

Boeing requested that paragraph (i)(3) of the proposed AD (79 FR 22777, April 24, 2014) be revised to read as follows: "As of the effective date of this AD, no person may install a balance washer screw having part number (P/N) MS24667-14, on the RAT hub assembly of any airplane unless a records review can positively determine that the screws did not come from Northeast Fasteners, lots 24057 and 30533." Boeing stated that this language would clarify that the P/N MS24667-14 screw is prohibited only for installation on RAT hub assemblies.

We agree with the commenter's request. Screws having P/N MS24667-14 should not be installed on the RAT hub assembly unless operators can guarantee the screws did not come from Northeast Fasteners, lots 24057 and 30533. Hamilton Sundstrand was the only company to receive screws from lot 30533, so no other inventory should be contaminated with them. Several organizations received screws from lot 24057. All customers who received the defective screws have been advised of the non-conformance in lot 24057. There was also a government-industry data exchange program alert issued to notify other organizations of the potential for the inventories to be contaminated.

We have determined that balance washer screws with P/N MS24667-14 from Northeast Fasteners, lots 24057 and 30533, are non-conforming and are unacceptable for use on the RAT hub assembly. The unsafe condition of this AD is applicable to RAT balance washer screws; therefore, it is appropriate to limit the required actions to balance washer screws installed on RAT hub assemblies. We have changed paragraph (i)(3) of this AD accordingly.

Request for Clarification of Previous Actions

FedEx requested clarification concerning whether credit is given for accomplishment of previous actions using Boeing Alert Service Bulletin 757-29A0066, dated January 2, 2007 (for Model 757-200 and -200PF series airplanes). FedEx stated that it has issued engineering orders to inspect and replace the RAT hub assemblies, if required, for possible fractured hub assembly counterweights using Boeing Alert Service Bulletin 757-29A0066, dated January 2, 2007.

We agree to provide clarification. Paragraph (k) of this AD provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this

AD using the service information specified in Boeing Alert Service Bulletin 757-29A0066, dated January 2, 2007 (for Model 757-200 and -200PF series airplanes). Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010 (for Model 757 airplanes), expanded the airplane effectivity to include all Model 757 airplanes; no additional work is specified in this revision of the service information. We have not changed this AD in this regard.

Request To Revise the Costs of Compliance Paragraph

Delta Air Lines (DAL) requested that the manpower and cost for materials specified in Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010, be added to the "Costs of Compliance" paragraph in the SNPRM (79 FR 22777, April 24, 2014). DAL stated that after reviewing the service information and comparing the costs to the SNPRM, two discrepancies were noted. DAL stated that in Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010, it states, "For a turbine assembly or RAT with a missing balance washer, or with a balance washer screw that cannot be removed in its entirety, a maximum of 9.0 man-hours will be required to disassemble the unit as necessary to remove the fractured screw and balance washer, balance the turbine assembly, assemble the unit, and test the unit." DAL stated that the 9 man-hour requirement and the cost for materials are not specified in the SNPRM's "Costs of Compliance" paragraph.

We agree that the labor costs specified in Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010, were not included in the "Cost of Compliance" paragraph in the SNPRM (79 FR 22777, April 24, 2014). We have revised the "Costs of Compliance" paragraph in this final rule to include 9 work-hours for the replacement of balance washer screws. However, Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010, does not specify material costs and we have received no definitive data on replacement costs.

In addition, UTC Aerospace Systems has stated it will continue to cover certain costs associated with the service information free of charge for 24 months after the effective date of this final rule, extending the expiration dates in the service information. We have also added a warranty statement to the "Costs of Compliance" paragraph of this final rule.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the SNPRM (79 FR 22777, April 24, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the SNPRM (79 FR 22777, April 24, 2014).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information Under 1 CFR Part 51

We reviewed the following service information. The service information describes procedures for an inspection to determine the part number and serial number of the RAT hub assembly and replacement of the RAT or RAT hub assembly.

- Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010.
- Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010.
- Boeing Special Attention Service Bulletin 757-29-0069, dated June 24, 2010.
- Boeing Special Attention Service Bulletin 767-29-0112, dated June 24, 2010.

We have also reviewed Hamilton Sundstrand Service Bulletin 729548-29-15, dated November 30, 2005; and Hamilton Sundstrand Service Bulletin 730814-29-12, dated November 30, 2005. The service information describes procedures for rework and re-identification of RAT hub assemblies.

In addition, we have also reviewed Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010; and Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010. The service information describes procedures for a general visual inspection for missing washers and fractured screws of the rotor assembly and replacement of balance washer screws; and inspection, rework, and re-identification of RAT hub assemblies.

This service information is reasonably available; see ADDRESSES for ways to access this service information.

Costs of Compliance

We estimate that this AD affects 1,132 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour × \$85 per hour = \$85	\$0	\$85	\$96,220

We estimate the following costs to do any necessary replacements that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need these replacements:

Action	Labor cost	Parts cost	Cost per product
Replacement of balance washer screws	Up to 9 work-hours × \$85 per hour = Up to \$765	¹ \$0	Up to \$765.
Removal and installation of RAT assembly	5 work-hours \times \$85 per hour = \$425	0	\$425.
Removal and installation of RAT hub assembly	2 work-hours \times \$85 per hour = \$170	0	\$170.

On-Condition Costs

¹We have received no definitive data on replacement costs.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all labor costs in our cost estimate. However, we have received no definitive data that would enable us to provide cost estimates for the on-condition parts cost specified in this AD.

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

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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

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 FAA amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aviation Safety

www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

2015-05-01 The Boeing Company: Amendment 39-18111; Docket No. FAA-2008-0561; Directorate Identifier 2007-NM-223-AD.

(a) Effective Date

This AD is effective April 20, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes; and Model 767-200, -300, -300F, and -400ER series airplanes; certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic Power.

(e) Unsafe Condition

This AD was prompted by reports indicating that the counterweights in some hub assemblies of the ram air turbine (RAT) could be understrength and fracture when the RAT is rotating, and that some RAT hub assemblies were delivered with balance washer retention screws that were incorrectly heat-treated, and therefore, susceptible to fracture and cracking. We are issuing this AD to prevent an inoperative RAT, which, following a dual engine shutdown in flight, will cause loss of all hydraulic power to the primary flight controls, resulting in subsequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Replacement of Parts With a Counterweight Defect

Prior to the next RAT backdrive test, or within 24 months after the effective date of this AD, whichever occurs first: Do an inspection to determine the part number and serial number of the RAT hub assembly, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010 (for Model 757 airplanes); or Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010 (for Model 767 airplanes). A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the RAT hub assembly can be conclusively determined from that review.

(1) If the part number or serial number of the RAT hub assembly is missing, or if the part number and serial number are specified in paragraphs (g)(1)(i) and (g)(1)(i) of this AD, and the hub assembly has not been reworked and re-identified as specified in Hamilton Sundstrand Service

Bulletin 730814-29-12, dated November 30, 2005 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-15, dated November 30, 2005 (for Model 767 airplanes): Prior to the next RAT backdrive test or within 24 months after the effective date of this AD, whichever occurs first, replace the RAT or RAT hub assembly with a new, serviceable, or reworked and re-identified RAT or RAT hub assembly, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010 (for Model 757 airplanes); or Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010 (for Model 767 airplanes); except as provided by paragraphs (g)(2) and (g)(3) of this AD.

(i) Model 757-200, -200PF, -200CB, and -300 series airplanes having part number (P/N) 733785A or 733785B, and serial number (S/N) 0410 through 0413 inclusive, 0415, 0417 through 0430 inclusive, 0432, or 0434.

(ii) Model 767-200, -300, -300F, and -400ER series airplanes having P/N 734350A, 734350B, 734350C, or 734350D; and S/N 0666, 0673 through 0684 inclusive, 0686, 0687, or 0689.

(2) Where Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010 (for Model 757 airplanes); or Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010 (for Model 767 airplanes); specifies to contact Hamilton Sundstrand for a replacement unit, this AD does not require that action.

(3) Where Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010 (for Model 757 airplanes); or Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010 (for Model 767 airplanes); specifies to return all RAT hub assemblies to Hamilton Sundstrand for rework and test, operators may return the RAT or RAT hub assembly to Hamilton Sundstrand or to an FAA-approved repair facility that has the capability to disassemble, repair, balance, and test the RAT or RAT hub assembly.

(h) Inspection and Replacement of Parts With a Balance Washer Screw Defect

Prior to the next RAT backdrive test, or within 24 months after the effective date of this AD, whichever occurs first: Do an inspection to determine the part number and serial number on the RAT hub assembly, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-29-0069, dated June 24, 2010 (for Model 757 airplanes); or Boeing Special Attention Service Bulletin 767-29-0112, dated June 24, 2010 (for Model 767 airplanes). A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the RAT hub assembly can be conclusively determined from that review.

(1) If the part number or serial number of the RAT hub assembly is missing or if the part number and serial number is listed in paragraph 1.A., "Effectivity," of Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); and the RAT hub assembly has not been reworked and re-identified, as specified in Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); Prior to the next RAT backdrive test or within 24 months after the effective date of this AD, whichever occurs first, do a general visual inspection of the 12 balance washer screws installed around the perimeter of the rotor assembly for missing washers and fractured screws, in accordance with the Accomplishment Instructions of Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes).

(2) If, during any inspection required by paragraph (h)(1) of this AD, any balance washer is missing or any fractured screw is found, prior to the next RAT backdrive test or within 24 months after the effective date of this AD, whichever occurs first: Replace the RAT or RAT hub assembly with a new, serviceable, or reworked and re-identified RAT or RAT hub assembly, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-29-0069, dated June 24, 2010 (for Model 757 airplanes); or Boeing Special Attention Service Bulletin 767-29-

0112, dated June 24, 2010 (for Model 767 airplanes); except as provided by paragraphs (h)(2)(i), (h)(2)(ii), and (h)(2)(iii) of this AD.

(i) Where Boeing Special Attention Service Bulletin 757-29-0069, dated June 24, 2010 (for Model 757 airplanes); and Boeing Special Attention Service Bulletin 767-29-0112, dated June 24, 2010 (for Model 767 airplanes); specify to contact Hamilton Sundstrand for a replacement unit, this AD does not require that action.

(ii) Where Boeing Special Attention Service Bulletin 757-29-0069, dated June 24, 2010 (for Model 757 airplanes); and Boeing Special Attention Service Bulletin 767-29-0112, dated June 24, 2010 (for Model 767 airplanes); instruct operators to return all RAT or RAT hub assemblies to Hamilton Sundstrand for rework and test, operators may return the RAT or RAT hub assembly to Hamilton Sundstrand or an FAA-approved repair facility that has the capability to disassemble, repair, balance, and test the RAT or RAT hub assembly.

(iii) Where Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes); instructs operators to return all of the removed screws (including the remnants of the fractured screws) to Hamilton Sundstrand for further investigation, this AD does not include that requirement.

(3) If, during any inspection required by paragraph (h)(1) of this AD, there are no missing balance washers and no fractured screws: Prior to the next RAT backdrive test or within 24 months after the effective date of this AD, whichever occurs first, replace the balance washer screws, one at a time, in accordance with Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes).

(i) Parts Installation Limitations

(1) As of the effective date of this AD, no person may install a RAT hub assembly having any part number and serial number specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this AD, on any airplane, unless it has been reworked and re-identified in accordance with Hamilton Sundstrand Service Bulletin 730814-29-12, dated November 30, 2005 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-15, dated November 30, 2005 (for Model 767 airplanes).

(i) Model 757-200, -200PF, -200CB, and -300 series airplanes having P/N 733785A or 733785B; and S/N 0410 through 0413 inclusive, 0415, 0417 through 0430 inclusive, 0432, or 0434.

(ii) Model 767-200, -300, -300F, and -400ER series airplanes having P/N 734350A, 734350B, 734350C, or 734350D, and S/N 0666, 0673 through 0684 inclusive, 0686, 0687, or 0689.

(2) As of the effective date of this AD, no person may install a RAT hub assembly having any applicable part number and serial number specified in paragraphs (i)(2)(i) and (i)(2)(ii) of this AD, on any airplane, unless it has been inspected, reworked, and re-identified in accordance with Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010 (for Model 757 airplanes); or Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010 (for Model 767 airplanes).

(i) Model 757-200, -200PF, -200CB, and -300 series airplanes having P/N 733785AB Series, and S/N 0107, 0105, 0121, 0151, 0179, 0204, 0282, 0289, 0296, 0315, 0319, 0337, 0390, 0403, 0412, 0421, 0424, 0426, 0429, 0430, 0439, 0445, 0450, 0477, 0503, 0510, 0512, 0584, 0585, 0591, 0599, 0609, 0617, 0624, 0656, 0673, 0685, 0789, 0822, 0841, 0854, 0911, 0912, 0936, 0957, 0961, 0971, 1061, 1064, 1096, 1101, 1102, 1105, 1113, 1117, 1170, 1172, 1173, or X2069.

(ii) Model 767-200, -300, -300F, and -400ER series airplanes having P/N 734350 Series, and S/N 0042, 0074, 0170, 0183, 0207, 0311, 0312, 0324, 0336, 0337, 0347, 0367, 0372, 0379, 0381, 0391, 0427, 0431, 0469, 0495, 0500, 0530, 0531, 0533, 0538, 0539, 0550, 0551, 0575, 0584, 0619, 0626, 0666, 0670, 0676, 0690, 0700, 0701, 0734, 0750, 0800, 0801, 0813, 0835, 0836, 0908, 0923, 0958, 0968, 0980, 1009, 1012, 1019, 1046, 1052, 1054, 1102, 1127, 1167, 1264, 1285, 1300, 1317,

1322, 1362, 1372, 1394, 1398, 1436, 1594, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, or X2063.

(3) As of the effective date of this AD, no person may install a balance washer screw having P/N MS24667-14, on the RAT hub assembly of any airplane unless it can be positively determined from a records review that the screws did not come from Northeast Fasteners, lots 24057 and 30533.

(j) No Information Submission

Although Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010 (for Model 757 airplanes); and Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010 (for Model 767 airplanes); specify to submit information to the manufacturer, this AD does not include that requirement.

(k) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (k)(1) or (k)(2) of this AD, as applicable. These documents are not incorporated by reference in this AD.

(1) Boeing Alert Service Bulletin 757-29A0066, dated January 2, 2007 (for Model 757-200 and - 200PF series airplanes).

(2) Boeing Alert Service Bulletin 767-29A0110, dated January 2, 2007 (for Model 767-200 and - 300 series airplanes).

(I) Alternative Methods of Compliance (AMOCs)

(1) For Boeing Model 757-200, -200PF, -200CB, and -300 series airplanes: The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (m)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-REQUESTS@faa.gov.

(2) For Boeing Model 767-200, -300, -300F, and -400ER series airplanes: The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (m)(2) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(3) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(4) For Boeing Model 757-200, -200PF, -200CB, and -300 series airplanes: An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and the approval must specifically refer to this AD.

(5) For Boeing Model 767-200, -300, -300F, and -400ER series airplanes: An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been

authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and the approval must specifically refer to this AD.

(m) Related Information

(1) For more information about Boeing Model 757-200, -200PF, -200CB, and -300 series airplanes in this AD, contact: Jerry Ramos, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5296; fax: 562-627-5210; email: Jerry.Ramos@faa.gov.

(2) For more information about Boeing Model 767-200, -300, -300F, and -400ER series airplanes in this AD, contact Douglas Tsuji, Senior Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-917-6546; fax: 425-917-6590; Douglas.Tsuji@faa.gov.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (n)(3) and (n)(5) of this AD.

(n) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 757-29A0066, Revision 1, dated March 8, 2010.

(ii) Boeing Alert Service Bulletin 767-29A0110, Revision 1, dated March 8, 2010.

(iii) Boeing Special Attention Service Bulletin 757-29-0069, dated June 24, 2010.

(iv) Boeing Special Attention Service Bulletin 767-29-0112, dated June 24, 2010.

(v) Hamilton Sundstrand Service Bulletin 729548-29-15, dated November 30, 2005.

(vi) Hamilton Sundstrand Service Bulletin 729548-29-18, dated February 10, 2010.

(vii) Hamilton Sundstrand Service Bulletin 730814-29-12, dated November 30, 2005.

(viii) Hamilton Sundstrand Service Bulletin 730814-29-15, dated February 10, 2010.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; email me.boecom@boeing.com; Internet https://www.myboeingfleet.com.

(4) For Hamilton Sundstrand service information identified in this AD, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; phone: 860-654-3575; fax: 860-998-4564; email: tech.solutions@hs.utc.com; Internet: http://www.hamiltonsundstrand.com.

(5) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on February 23, 2015. Jeffrey E. Duven, Manager, Transport Airplane Directorate, Aircraft Certification Service.