

(a) Effective Date

This AD is effective December 31, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 777-24A0119, dated November 11, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 2421; AC Generator-Alternator.

(e) Unsafe Condition

This AD was prompted by reports of failure of wire support clamps in the forward section of the aft pressure bulkhead. We are issuing this AD to prevent failure of the clamp, which could result in wire chafing and potential arcing and consequent fire in section 48 (a flammable fluid leakage zone) or heat damage to the auxiliary power unit (APU) power feeder cable, insulation blankets, or pressure bulkhead.

(f) Compliance

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

(g) Detailed Inspection of the Clamps

Within 48 months after the effective date of this AD: Do a detailed inspection of the clamps on the APU power feeder cable to determine if TA027063 clamps are installed, and all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-24A0119, dated November 11, 2011, except as required by paragraphs (h) and (i) of this AD. Do all related investigative and corrective actions before further flight.

(h) Exception to the Service Information

If during any inspection of the fuselage structure required by paragraph (g) of this AD, no primer discoloration or structural deterioration is found, before further flight, repair the APU power feeder cable and insulation blanket and replace the existing clamps, in accordance with steps 3.B.7, 3.B.8, and 3.B.9 of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-24A0119, dated November 11, 2011.

(i) Repair Approval

Where Boeing Alert Service Bulletin 777-24A0119, dated November 11, 2011, specifies to do the repair in accordance with the instruction from Boeing, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) 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 the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) 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.

(3) An AMOC that provides an acceptable level of safety may be used for any structural 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 structural repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Related Information

For more information about this AD, contact Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 917-6482; fax: (425) 917-6590; email: georgios.roussos@faa.gov.

(l) 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 777-24A0119, dated November 11, 2011.

(ii) Reserved.

(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, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

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

(5) 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 November 8, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-27908 Filed 11-23-12; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2012-0591; Directorate Identifier 2012-NM-015-AD; Amendment 39-17264; AD 2012-23-08]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, -700C, -800, and -900 series airplanes. That AD currently requires replacing the drain tube assemblies and support clamps on the aft fairing of the engine struts. This new AD requires replacing the drain tube assembly of the left and right engine strut aft fairings with a new one, which includes an integral support clamp made of nickel alloy 625. This AD also adds airplanes to the applicability. This AD was prompted by a report of a broken drain tube assembly on the left engine strut at the clamp support location under the aft fairing compartment, inside the heat shield cavity of the aft fairing. There have also been reports of tube wear at this clamp location on additional airplanes. We are issuing this AD to prevent failure of the drain tube assemblies and clamps on the aft fairings of the engine struts. Such failure could allow leaked flammable fluids in the drain systems to discharge onto the heat shields of the aft fairings of the engine struts, which could result in an undetected and uncontrollable fire.

DATES: This AD is effective December 31, 2012.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of December 31, 2012.

ADDRESSES: For 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; Internet <https://www.myboeingfleet.com>. You may review copies of the 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.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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 Document 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:

Ansel James, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6497; fax: 425-917-6590; email: ansel.james@faa.gov.

SUPPLEMENTARY INFORMATION:**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008). That AD applies to the specified products. The NPRM published in the **Federal Register** on June 12, 2012 (77 FR 34879). That NPRM proposed to require replacing the drain tube assembly of the left and right engine strut aft fairings with a new one which includes an integral support clamp made of nickel alloy 625. That NPRM also proposed to add airplanes to the applicability.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 34879, June 12, 2012) and the FAA's response to each comment.

Support for the NPRM (77 FR 34879, June 12, 2012)

United Airlines supports the 60-month compliance time specified in the NPRM (77 FR 34879, June 12, 2012).

Clarification of Effect of Winglet Installation

Aviation Partners Boeing stated that accomplishing the supplemental type certificate (STC) ST00830SE does not affect the actions specified in the NPRM (77 FR 34879, June 12, 2012).

We concur. We have added new paragraph (c)(2) to this AD, which states that STC ST00830SE (<http://rgl.faa.gov/>

<http://rgl.faa.gov/>*Regulatory and Guidance Library/rgstc.nsf/0/408E012E008616A7862578880060456C?OpenDocument&Highlight=st00830se*) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17 section 39.17 of the Federal Aviation Regulations. For all other AMOC requests, the operator must request approval for an AMOC in accordance with the procedures specified in paragraph (h) of this AD.

Request To Extend Compliance Time

American Airlines (AAL) requested that the compliance time specified in paragraph (g) of the NPRM (77 FR 34879, June 12, 2012) be extended from 60 to 72 months. AAL stated that the routine maintenance schedule does not allow for accomplishment of the replacements during the proposed compliance time. AAL stated that the compliance time could be extended for all airplanes without jeopardizing aviation safety.

We disagree with the request to change the compliance time. In developing an appropriate compliance time for this AD, we considered not only the safety implications, but the manufacturer's recommendations, the availability of required parts, and the practical aspect of accomplishing the actions within an interval of time that corresponds to typical scheduled maintenance for affected operators. Under the provisions of paragraph (h) of the final rule, however, we may consider requests for adjustments to the compliance time if data are submitted to substantiate that such adjustments would provide an acceptable level of safety. No change has been made to this AD in this regard.

Request To Revise Paragraph (f) of the NPRM (77 FR 34879, June 12, 2012) To Include Terminating Action

AAL requested that we revise paragraph (f) of the NPRM (77 FR 34879, June 12, 2012) to state that accomplishment of Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, constitutes a terminating action for the specified unsafe condition and that no further action is required.

We disagree with the request to revise paragraph (f) of the NPRM (77 FR 34879, June 12, 2012). The action required by paragraph (g) of this AD, which is specified in the Accomplishment

Instructions of Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, is the only action required by this AD. If operators have previously accomplished the actions specified in Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, they are in compliance with the AD, as specified in paragraph (f) of this AD. No change has been made to this AD in this regard.

Request To Clarify Conflicting AMOC Statements

Alaska Airlines (ASA) requested clarification regarding conflicting AMOC statements. ASA stated that paragraph (h)(3) of the NPRM (77 FR 34879, June 12, 2012) does not allow AMOCs approved for AD 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008), to be used for the actions proposed in the NPRM. However, ASA pointed out that Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, states that it is an approved AMOC for paragraphs (f) and (h) of AD 2008-08-24. ASA also requested credit for actions done previously using Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011.

We agree to clarify. Paragraph 1.F., "Approval," of Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, states that the actions specified in that service bulletin are approved as an AMOC for paragraphs (f) and (h) of AD 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008). That AMOC approval allows operators to use Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, to comply with AD 2008-08-24. However, on the effective date of this AD, AD 2008-08-24 will be superseded (i.e., will no longer exist), and the fact that Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011, refers to AD 2008-08-24 will be moot. This AD requires the accomplishment of the actions of that service bulletin as the primary means of compliance with this AD, and not as an AMOC.

The intent of paragraph (h)(3) of this AD is to prevent the use of any AMOC for AD 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008), as an AMOC for this new AD. This new AD requires accomplishment of Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011. No credit is given for Boeing Special Attention Service Bulletin 737-54-1043, Revision 1, dated October 19,

2009; or Boeing Special Attention Service Bulletin 737-54-1043, dated May 2, 2007; because additional work is necessary for airplanes on which Boeing Special Attention Service Bulletin 737-54-1043, Revision 1, dated October 19, 2009; or Boeing Special Attention Service Bulletin 737-54-1043, dated May 2, 2007; was accomplished. No change has been made to this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the 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 NPRM (77 FR

34879, June 12, 2012) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 34879, June 12, 2012).

Costs of Compliance

We estimate that this AD affects 1,098 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
Replacement	14 work-hours × \$85 per hour = \$1,190	\$12,326	\$13,516	\$14,840,568

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),
- (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 removing airworthiness directive (AD) 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008), and adding the following new AD:

2012-23-08 The Boeing Company:
Amendment 39-17264; Docket No. FAA-2012-0591; Directorate Identifier 2012-NM-015-AD.

(a) Effective Date

This airworthiness directive (AD) is effective December 31, 2012.

(b) Affected ADs

This AD supersedes AD 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008).

(c) Applicability

(1) This AD applies to The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011.

(2) Supplemental Type Certificate (STC) ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408E012E008616A7862578880060456C?OpenDocument&Highlight=st00830se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17. For all other AMOC requests, the operator must request approval for an AMOC in accordance with the procedures specified in paragraph (h) of this AD.

(d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Unsafe Condition

This AD was prompted by a report of a broken drain tube assembly on the aft fairing of the left engine strut at the clamp support location under the aft fairing compartment, inside the heat shield cavity of the aft fairing. There have also been reports of tube wear at the clamp location on additional airplanes. We are issuing this AD to prevent failure of the drain tube assemblies and clamps on the aft fairings of the engine struts. Such failure could allow leaked flammable fluids in the drain systems to discharge onto the heat shields of the aft fairings of the engine struts, which could result in an undetected and uncontrollable fire.

(f) Compliance

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

(g) Replacement

Within 60 months after the effective date of this AD, replace the drain tube assemblies and support clamps on the aft fairing of the struts of engines 1 and 2 with new drain tube assemblies and clamps, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011.

(h) Alternative Methods of Compliance (AMOCs)

(1) 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 the Related Information section of this AD. Information may be emailed to: *9-ANM-Seattle-ACO-AMOC-Requests@faa.gov*.

(2) 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.

(3) AMOCs approved previously in accordance with AD 2008-08-24, Amendment 39-15478 (73 FR 21242, April 21, 2008), are not approved as AMOCs with this AD.

(i) Related Information

For more information about this AD, contact Ansel James, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6497; fax: 425-917-6590; email: *ansel.james@faa.gov*.

(j) 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 Special Attention Service Bulletin 737-54-1043, Revision 2, dated November 4, 2011.

(ii) Reserved.

(3) For 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; Internet <https://www.myboeingfleet.com>.

(4) 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.

(5) 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 November 9, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-28029 Filed 11-23-12; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2012-0339; Directorate Identifier 2011-SW-051-AD; Amendment 39-17259; AD 2012-23-03]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Eurocopter France (Eurocopter) Model SA.315B Alouette III, SE.3160 Alouette III, SA.316B Alouette III, SA.316C Alouette III, SA.319B Alouette III, SA 3180-ALOUETTE ASTAZOU, SA 318B-ALOUETTE ASTAZOU, and SA 318 C-ALOUETTE ASTAZOU helicopters. This AD requires inspecting the cage of the free-wheel assembly for the correct alignment of the roller drive pocket recesses and replacing the free-wheel cage with an airworthy free-wheel cage if a defect exists. This AD was prompted by incorrect positioning of the roller drive pocket recesses on the tail rotor drive shaft free-wheel cage, which caused a pilot to experience a heavy jerk in the yaw control during in-flight autorotation training. The requirements of this AD are intended to prevent a loss of tail rotor drive and subsequent loss of control of the helicopter.

DATES: This AD is effective December 31, 2012.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of December 31, 2012.

ADDRESSES: For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052, telephone (972) 641-0000 or (800) 232-0323, fax (972) 641-3775, or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region,

2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Rao Edupuganti, Aerospace Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5110, email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:**Discussion**

On March 29, 2012, at 77 FR 18967, the **Federal Register** published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Eurocopter Model SA.315B Alouette III, SE.3160 Alouette III, SA.316B Alouette III, SA.316C Alouette III, SA.319B Alouette III, SA 3180-ALOUETTE ASTAZOU, SA 318B-ALOUETTE ASTAZOU, and SA 318C-ALOUETTE ASTAZOU helicopters. That NPRM proposed to require inspecting the cage of the free-wheel assembly for the correct alignment of the roller drive pocket recesses and replacing the free-wheel cage with an airworthy free-wheel cage if a defect exists. The proposed requirements were intended to prevent a loss of tail rotor drive and subsequent loss of control of the helicopter.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2011-0143, dated July 26, 2011 (AD 2011-0143), to correct an unsafe condition for Eurocopter helicopters. EASA advises that during in-flight autorotation training, a pilot experienced a heavy jerk in the yaw control at the time of resynchronization. The free-wheel assembly of the helicopter had been replaced shortly before this flight. Internal inspection of the free-wheel assembly revealed incorrect positioning of the roller drive pocket recesses on the free-wheel cage. The subsequent off-