



## 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-02-005 修訂	發布日期 Date issued	2019/2/11
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	AB139 and AW139 helicopters, all serial numbers (s/n). AW169 helicopters, all s/n. AW189 helicopters, all s/n.		
主旨摘要	Tail Rotor - Duplex Bearings - Replacement		
民航局 CAA <input type="checkbox"/> 本國產品 Native products  <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> FAA  <input checked="" type="checkbox"/> EASA  <input type="checkbox"/> Brazil  <input type="checkbox"/> Transport Canada Civil Aviation  <input type="checkbox"/> DGAC             </div> <div> <input type="checkbox"/> Germany LBA  <input type="checkbox"/> CAA-NL  <input type="checkbox"/> UK CAA  <input type="checkbox"/> Japan CAB  <input type="checkbox"/> CAA of Israel  <input type="checkbox"/> Other _____             </div> </div>		
	設計國 AD 編號 Original AD number	2019-0022Correction	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 64. This AD revises EASA AD 2018-0022(CAA-2019-2-005) dated 01 February 2019.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.:** 2019-0022

**Issued:** 01 February 2019

**[Correction: 04 February 2019]**

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

**Design Approval Holder's Name:**

LEONARDO S.p.A.

**Type/Model designation(s):**

AB139, AW139, AW169 and AW189 helicopters

**Effective Date:** 05 February 2019

**TCDS Number(s):** EASA.R.006, EASA.R.509 and EASA.R.510

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 64 – Tail Rotor – Duplex Bearings – Replacement

#### Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A.

#### Applicability:

AB139 and AW139 helicopters, all serial numbers (s/n).

AW169 helicopters, all s/n.

AW189 helicopters, all s/n.

#### Definitions:

For the purpose of this AD, the following definitions apply:

#### Affected part:

For AB139 and AW139 helicopters: Tail Rotor (TR) Duplex bearings, having Part Number (P/N) 3G6430V00153 and s/n 16181 to 16225 inclusive, s/n 16237 to 16259 inclusive, s/n 17101 to 17110 inclusive, s/n 17182 to 17194 inclusive, s/n 17204 to 17217 inclusive and s/n 17251 to S/N 17260 inclusive.

For AW169 and AW189 helicopters: TR Duplex bearings, having P/N 4F6430V00551 and s/n 17101 to 17121 inclusive, s/n 16165 to 16169 inclusive and s/n 16171.



**Serviceable part:** A TR duplex bearing that is not an affected part.

**The applicable ASB:** Leonardo Alert Service Bulletin (ASB) 139-571, ASB 169-134 and ASB 189-221, as applicable.

**Reason:**

A report was received of failed roughness check of TR duplex bearing. The investigation identified a quality non-conformity in one of the 18 balls installed in the bearing. A batch of TR duplex bearings was identified that may be similarly affected.

This condition, if not corrected, could possibly result, depending on the flight condition, in loss of control of the helicopter.

To address this potential unsafe condition, Leonardo issued the applicable ASB, providing instructions for replacement of affected parts.

For the reasons described above, this AD requires replacement of each affected part with a serviceable part. This AD also prohibits installation of an affected part on a helicopter.

This AD has been republished to correct the AD number on page 1.

**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Replacement:**

- (1) Within the 30 flight hours or 30 days, whichever occurs first after the effective date of this AD, replace the affected part with a serviceable part in accordance with the instructions of the applicable ASB.

**Part Installation:**

- (2) From the effective date of this AD, do not install an affected part on any helicopter.

**Ref. Publications:**

Leonardo S.p.A. Helicopters SB 139-571 original issue dated 01 February 2019.

Leonardo S.p.A. Helicopters SB 169-134 original issue dated 01 February 2019.

Leonardo S.p.A. Helicopters SB 189-221 original issue dated 01 February 2019.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.



2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters.  
E-mail: [cse.aw139.AW@leonardocompany.com](mailto:cse.aw139.AW@leonardocompany.com).  
E-mail: [PSE\\_AW169.MBX.AW@leonardocompany.com](mailto:PSE_AW169.MBX.AW@leonardocompany.com), or  
E-mail: [PSE\\_AW189.MBX.AW@leonardocompany.com](mailto:PSE_AW189.MBX.AW@leonardocompany.com).

