

Airworthiness Directive

AD No.: 2022-0261

Issued: 20 December 2022

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 is 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, or Annex Vb Part M.A.301, as applicable, 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 Annex Vb Part M.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

Type/Model designation(s):

AIRBUS HELICOPTERS

AS 365 and EC 155 helicopters

Effective Date: 03 January 2023

TCDS Number(s): EASA.R.105

Foreign AD: Not applicable

Supersedure: None

ATA 26 - Fire Protection - Fire Detectors - Replacement

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aérospatiale

Applicability:

AS 365 N3, EC 155 B and EC 155 B1 helicopters, all serial numbers (s/n).

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) AS365-26.00.12 and ASB EC155-26A009, as applicable, which refers to SAFRAN Helicopter Engines, S.A. (SAFRAN) Mandatory Service Bulletin (SB) A292 26 2881 Version A.

Affected part: Fire detectors, having a Part Number (P/N) and an s/n as listed in Appendix 1 of this AD.

Serviceable part: Any fire detector that is not an affected part.

Affected engine: An engine that has at least one affected part installed.

Affected helicopter: A helicopter that has two affected engines installed.



Reason:

Some occurrences were reported of spurious engine fire warnings. The subsequent investigation results identified a manufacturing non-compliance on the fire detectors, which caused a shift of the detection threshold towards temperature values that are lower than specified, potentially leading to a spurious engine fire warning. When two engines on a helicopter are fitted with an affected part, an engine fire warning could occur on both engines during the same flight.

This condition, if not corrected, could lead to commanded engine in-flight shut-down, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, as defined in this AD, to provide instructions to identify and replace the affected parts.

For the reasons described above, this AD requires replacement, and prohibits (re)installation, of the affected parts.

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

Required as indicated, unless accomplished previously:

Replacement:

(1) For affected helicopters: Within 30 flight hours or 60 days, whichever occurs first after the effective date of this AD, replace the affected parts installed on one of the affected engines with serviceable parts, as defined in this AD, in accordance with the instructions of section 3 of the ASB.

Part(s) Installation:

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

Ref. Publications:

AH ASB AS365-26.00.12 and ASB EC155-26A009 original issue dated 19 December 2022.

The use of later approved revisions of the above-mentioned document 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.
- 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 <u>EU aviation safety</u> reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support)
Web portal: https://keycopter.airbushelicopters.com > Technical Requests Management, or E-mail: TechnicalSupport.Helicopters@airbus.com.

Appendix 1 – Affected Parts

Fire	e Detector Type		200°C						
Supplier P/N SAFRAN P/N			H243-1						
			9550177130						
s/n									
BD21501	BD21547	BD21673	BD21768	BD21868					
BD21503	BD21548	BD21676	BD21769	BD21869					
BD21504	BD21551	BD21678	BD21772	BD21871					
BD21505	BD21553	BD21686	BD21774	BD21874					
BD21506	BD21560	BD21689	BD21777	BD21877					
BD21507	BD21561	BD21691	BD21779	BD21880					
BD21508	BD21562	BD21694	BD21780	BD21884					
BD21509	BD21569	BD21695	BD21781	BD21889					
BD21510	BD21572	BD21699	BD21782	BD21915					
BD21511	BD21578	BD21700	BD21784	BD21952					
BD21512	BD21588	BD21701	BD21785	BD21956					
BD21513	BD21594	BD21702	BD21796						
BD21514	BD21601	BD21704	BD21799						
BD21515	BD21604	BD21705	BD21800						
BD21516	BD21607	BD21706	BD21804						
BD21517	BD21608	BD21707	BD21805						
BD21518	BD21610	BD21713	BD21808						
BD21519	BD21611	BD21717	BD21811						
BD21520	BD21612	BD21721	BD21812						
BD21521	BD21613	BD21723	BD21813						
BD21522	BD21623	BD21724	BD21816						
BD21523	BD21636	BD21728	BD21818						
BD21524	BD21638	BD21729	BD21820						
BD21525	BD21639	BD21730	BD21821						
BD21526	BD21641	BD21731	BD21822						
BD21527	BD21646	BD21735	BD21824						
BD21529	BD21648	BD21738	BD21827						
BD21530	BD21651	BD21740	BD21832						
BD21531	BD21653	BD21742	BD21837						
BD21538	BD21657	BD21743	BD21839						
BD21539	BD21659	BD21745	BD21841						
BD21540	BD21662	BD21746	BD21842						
BD21541	BD21663	BD21748	BD21846						
BD21542	BD21664	BD21750	BD21849						
BD21543	BD21666	BD21754	BD21851						
BD21544	BD21667	BD21763	BD21855						
BD21545	BD21670	BD21766	BD21858						
BD21546	BD21671	BD21767	BD21859						

Appendix 1 – Affected Parts (continued)

Fire Detector Type				400°C					
Supplier P/N			H443-1						
SAFRAN P/N			9550177160						
s/n									
BN15881	BN15948	BN16046		BN16119	BN16169				
BN15883	BN15949	BN16049		BN16120	BN16170				
BN15885	BN15950	BN16052		BN16122	BN16172				
BN15888	BN15951	BN16053		BN16123	BN16174				
BN15889	BN15953	BN16054		BN16124	BN16177				
BN15890	BN15956	BN16055		BN16126	BN16178				
BN15891	BN15959	BN16060		BN16127	BN16179				
BN15895	BN15963	BN16061		BN16129	BN16182				
BN15896	BN15965	BN16063		BN16133	BN16183				
BN15898	BN15967	BN16065		BN16135	BN16185				
BN15900	BN15976	BN16066		BN16136	BN16189				
BN15901	BN15978	BN16072		BN16137	BN16190				
BN15906	BN15980	BN16073		BN16138	BN16194				
BN15908	BN15983	BN16075		BN16139	BN16195				
BN15911	BN15986	BN16076		BN16140	BN16225				
BN15913	BN15988	BN16077		BN16141					
BN15916	BN15990	BN16078		BN16142					
BN15917	BN16004	BN16080		BN16143					
BN15918	BN16006	BN16081		BN16145					
BN15920	BN16008	BN16082		BN16146					
BN15921	BN16009	BN16083		BN16148					
BN15922	BN16010	BN16084		BN16149					
BN15923	BN16011	BN16085		BN16150					
BN15924	BN16012	BN16086		BN16151					
BN15925	BN16015	BN16087		BN16152					
BN15926	BN16017	BN16089		BN16154					
BN15927	BN16018	BN16097		BN16156					
BN15928	BN16019	BN16099		BN16157					
BN15929	BN16023	BN16100		BN16159					
BN15930	BN16025	BN16102		BN16160					
BN15931	BN16027	BN16107		BN16161					
BN15933	BN16028	BN16109		BN16162					
BN15936	BN16029	BN16110		BN16163					
BN15937	BN16030	BN16112		BN16164					
BN15940	BN16031	BN16115		BN16165					
BN15942	BN16038	BN16116		BN16166					
BN15944	BN16040	BN16117		BN16167					
BN15945	BN16045	BN16118		BN16168					