

Airworthiness Directive AD No.: 2020-0237

Issued: 28 October 2020

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, 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: BAE SYSTEMS (OPERATIONS) Ltd Type/Model designation(s): BAe 146 and AVRO 146-RJ aeroplanes

Effective Date: 11 November 2020

TCDS Number(s): EASA.A.182

Foreign AD: Not applicable

Supersedure: None

ATA 33 – Lights – Emergency Light Power Units – Replacement

Manufacturer(s):

BAE Systems (Operations) Ltd, British Aerospace plc, British Aerospace (Commercial Aircraft) Ltd, British Aerospace (Operations) Ltd, British Aerospace Regional Aircraft Ltd, British Aerospace Regional Aircraft trading as Avro International Aerospace

Applicability:

BAe 146 and AVRO 146-RJ aeroplanes, all models, all serial numbers.

Definitions:

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

The ISB: BAE Systems (Operations) Ltd Inspection Service Bulletin (ISB) ISB 33-081, which includes reference to the Vendor SB.

The Vendor SB: Honeywell Service Bulletin (SB) 60-3550-33-0001 Revision 1.

Affected part: Honeywell emergency light power units, having Part Number (P/N) 60-3550-1, except those modified and marked in accordance with the instructions of the Vendor SB.

Serviceable part: Any emergency light power unit, eligible for installation, that is not an affected part.



Groups: Group 1 aeroplanes are those that have an affected part installed. Group 2 aeroplanes are those that do not have an affected part installed.

Reason:

During a routine battery capacity check on the emergency light power units, the printed circuit boards (PCB) of power units LE 10 and LE 22 (IPC 33-50-00) were found to show signs of burning. For both PCBs, the heat damage was located on resistor R6, which forms part of the battery charging circuit, and, in case of failure, would prevent the batteries from trickle charging with the switch in either the ARM or OFF position.

This condition, if not corrected, could lead to battery discharge, possibly resulting in lack of power supply to the emergency light units when needed.

To address this potential unsafe condition, BAE Systems (Operations) Ltd issued the ISB to provide instructions for inspection and replacement.

For the reason described above, this AD requires replacement of affected parts with serviceable parts, and prohibits (re-)installation of affected parts.

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

Required as indicated, unless previously accomplished:

Replacement:

(1) Within 2 months after the effective date of this AD, replace each affected part with a serviceable part in accordance with the instructions of the ISB.

Parts Installation:

- (2) Do not install an affected part on any aeroplane, as required by paragraph (2.1) or (2.2) of this AD, as applicable.
 - (2.1) For Group 1 aeroplanes: After replacement of each affected part on an aeroplane as required by paragraph (1) of this AD.
 - (2.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

BAE Systems (Operations) Ltd ISB 33-081 original issue dated 04 November 2019.

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

Honeywell SB 60-3550-33-0001 Revision 1 dated 03 September 2013.

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 Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- 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.
- For any question concerning the technical content of the requirements in this AD, please contact: BAE Systems (Operations) Ltd, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, The United Kingdom; Telephone +44 1292 675207, Facsimile +44 1292 675704; E-mail: <u>RApublications@baesystems.com</u>.

