DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0138; Project Identifier MCAI-2020-01466-T; Amendment 39-21560; AD 2021-10-27]

RIN 2120-AA64

Airworthiness Directives; BAE Systems (Operations) Limited Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all BAE Systems (Operations) Limited Model BAe 146 and Model Avro 146-RJ series airplanes. This AD was prompted by a report indicating that during a routine battery capacity check on the emergency light power units, the printed circuit boards (PCBs) for certain power units were found to show signs of burning. This AD requires replacing each Honeywell emergency light power unit having a certain part number with a serviceable emergency light power unit. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0138; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is 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: Todd Thompson, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3228; email: Todd.Thompson@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2020-0237, dated October 28, 2020 (EASA AD 2020-0237) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all BAE Systems (Operations) Limited Model BAe 146 and Model Avro 146-RJ series airplanes. You may examine the MCAI in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0138.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all BAE Systems (Operations) Limited Model BAe 146 and Model Avro 146-RJ series airplanes. The NPRM published in the Federal Register on March 15, 2021 (86 FR 14283). The NPRM was prompted by a report indicating that during a routine battery capacity check on the emergency light power units, the PCBs for certain power units were found to show signs of burning. The NPRM proposed to require replacing each Honeywell emergency light power unit having a certain part number with a serviceable emergency light power unit. The FAA is issuing this AD to address heat damage of the PCBs, which could lead to battery discharge and
possibly result in lack of power supply to the emergency light units when needed. See the MCAI for additional background information.

**Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

**Conclusion**

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

**Costs of Compliance**

The FAA estimates that this AD affects 30 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**Estimated costs for required actions**

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 work-hours X $85 per hour = $170</td>
<td>$1,800</td>
<td>$1,970</td>
<td>$59,100</td>
</tr>
</tbody>
</table>

**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.
The FAA is 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) Will not affect intrastate aviation in Alaska, and

(3) 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:

**2021-10-27 BAE Systems (Operations) Limited:** Amendment 39-21560; Docket No. FAA-2021-0138; Project Identifier MCAI-2020-01466-T.

(a) **Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) **Affected ADs**

None.

(c) **Applicability**

This AD applies to all BAE Systems (Operations) Limited airplanes specified in paragraphs (c)(1) and (2) of this AD, certificated in any category.

1. Model BAe 146-100A, -200A, and -300A airplanes.

2. Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes.

(d) **Subject**

Air Transport Association (ATA) of America Code 33, Lights.

(e) **Unsafe Condition**

This AD was prompted by a report indicating that during a routine battery capacity check on the emergency light power units, the printed circuit boards (PCBs) for power units LE 10 and LE 22 (Illustrated Parts Catalog (IPC) 33-50-00) were found to show signs of burning. The FAA is issuing this AD to address heat damage of the PCBs, which could lead to battery discharge and possibly result in lack of power supply to the emergency light units when needed.

(f) **Compliance**

Comply with this AD within the compliance times specified, unless already done.
(g) Definitions

(1) An affected part is defined as a Honeywell emergency light power unit, having part number 60-3550-1, except for those modified and marked using the instructions specified in Honeywell Service Bulletin 60-3550-33-0001, Revision 1, dated September 3, 2013.

(2) A serviceable part is defined as an emergency light power unit that is not an affected part.

(3) Group 1 airplanes are those that have an affected part installed.

(4) Group 2 airplanes are those that do not have an affected part installed.

(h) Replacement

Within two months after the effective date of this AD: Replace each affected part with a serviceable part.

Note 1 to paragraph (h): BAE Systems (Operations) Limited Service Bulletin ISB.33-081, dated November 4, 2019, contains information related to the replacement specified in paragraph (h) of this AD.

(i) Parts Installation Prohibition

As of the applicable compliance times specified in paragraphs (i)(1) or (2) of this AD, do not install an affected part on any airplane.

(1) For Group 1 airplanes: After replacement of each affected part on an airplane as specified in paragraph (h) of this AD.

(2) For Group 2 airplanes: As of the effective date of this AD.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Large Aircraft Section, International Validation Branch, 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 responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) **Contacting the Manufacturer:** For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or the European Union Aviation Safety Agency (EASA); or BAE Systems (Operations) Limited’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(k) **Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2020-0237, dated October 28, 2020, for related information. This MCAI may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0138.

(2) For more information about this AD, contact Todd Thompson, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3228; email Todd.Thompson@faa.gov.

(3) For service information identified in this AD that is not incorporated by reference, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email
Material Incorporated by Reference

None.

Issued on May 7, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-10068 Filed: 5/12/2021 8:45 am; Publication Date: 5/13/2021]