



## Airworthiness Directive

**AD No.:** 2022-0208

**Issued:** 11 October 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 ML.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 ML.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:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

### Type/Model designation(s):

MBB-BK117 D-3 and D-3m helicopters

**Effective Date:** 25 October 2022

**TCDS Number(s):** EASA.R.010

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA – Rotorcraft Flight Manual – Emergency and Malfunction Procedures – Amendment

### Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD); Kawasaki Heavy Industries, Ltd; and Airbus Helicopters Inc.

### Applicability:

MBB-BK117 D-3 and D-3m helicopters, serial numbers 20070, 21016 and up.

### Definitions:

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

**The RFM emergency and malfunction procedure:** Rotorcraft Flight Manual (RFM) emergency and malfunction procedure as identified in Appendix 1 of this AD.

### Reason:

Occurrences were reported of momentary Direct Current (DC) power interruption in flight of both essential busses. The investigation is still ongoing to identify the root cause of this occurrence.

This condition, if not corrected, could lead to further DC power interruption, possibly resulting in loss of control of the helicopter or reduced situational awareness.



To address this potential unsafe condition, AH developed the RFM emergency and malfunction procedure, and issued updated RFM revisions, including the RFM emergency and malfunction procedure.

For the reason described above, this AD requires amendment of the applicable RFM by incorporating the RFM emergency and malfunction procedure.

This AD is considered to be an interim action, and further AD action may follow.

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

Required as indicated, unless accomplished previously:

#### RFM Amendment:

- (1) Within 14 days or 40 flight hours, whichever occurs first after the effective date of this AD, amend the applicable RFM by incorporating the RFM emergency and malfunction procedure, as defined in this AD, inform all flight crews, and, thereafter, operate the helicopter accordingly.
- (2) Amending the applicable RFM of a helicopter by incorporating the RFM revision as listed in Table 1 of this AD, as applicable, or a later RFM Revision, which includes the same content as the RFM emergency and malfunction procedure, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that helicopter.

Table 1 – RFM Revisions

MBB-BK117 Model	RFM Revision
D-3	Basic RFM Revision 17
D-3m	Basic RFM Revision 15

#### Ref. Publications:

AH MBB-BK117 D-3 Basic RFM Revision 17 dated 28 September 2022.

AH MBB-BK117 D-3m Basic RFM Revision 15 dated 28 September 2022.

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](#). 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 Deutschland GmbH, Industriestrasse 4, 86609 Donauwörth, Federal Republic of Germany, Telephone: + 33 (0)4 42 85 97 97;  
Web portal: <https://airbusworld.helicopters.airbus.com>  
E-mail: [customersupport.helicopters@airbus.com](mailto:customersupport.helicopters@airbus.com).



## Appendix 1 – RFM Emergency and Malfunction Procedure



## Battery Discharging

### Page 1/2

### BAT DISCHARGING

and audio tone

#### Conditions/Indications

- Battery is being discharged (typically when the battery is the only power source)

**NOTE** • In the following conditions BAT DISCHARGING may appear on ground before engine start or after engine shut down when BAT MSTR sw is ON and no EPU is connected:

- Battery operation > 18sec and current is low (BAT AMPS < 40A)
- Battery current is high (BAT AMPS > 40A)
- Battery voltage is low (Bus 1/2 voltage < 24,5V)
- Engine ventilation > 20sec

- Normal on ground with EPU connected.

#### Procedure

##### ● ON GROUND, engines OFF and EPU not connected

1. VMS page - Select
  2. Electrical parameters (BAT AMPS and GEN AMPS) - Check, verify electrical drain on battery
  3. EPU - Connect
- or
- 3 Engine start - Perform before voltage is below 23.5 V.

##### ● IN FLIGHT

**NOTE** If BAT DISCHARGING caution appears when GEN1 DISCONNECTED GEN2 is present, proceed in accordance with GEN1 DISCONNECTED GEN2.

1. VMS page - Select
2. Electrical parameters (BAT AMPS and GEN AMPS) - Check
3. Electrical load - Reduce as much as possible. Switch off high consumers.
4. Land within 30 minutes



Battery Discharging  
Page 2/2

**WARNING** IN CASE OF TOTAL ELECTRICAL FAILURE:

- FUEL AVAILABLE WILL BE LIMITED TO QUANTITY CONTAINED IN SUPPLY TANKS AT TIME OF FAILURE AND THUS WILL LIMIT THE RESIDUAL FLIGHT TIME.
- IESI WILL PROVIDE AIRSPEED, ALTITUDE AND ATTITUDE DATA FOR APPROXIMATELY 30 MIN.
- ALL COM/NAV WILL BE LOST.
- ALL MFD INDICATIONS WILL BE LOST.
- ALL AIRCRAFT STABILIZATION WILL BE LOST.

