

Airworthiness DirectiveAD No.:2021-0174Issued:21 July 2021

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: AIRBUS HELICOPTERS

Type/Model designation(s): AS 332 L2 and EC 225 LP helicopters

Effective Date: 04 August 2021

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Supersedure: None

ATA – Rotorcraft Flight Manual – Supplements / One-Engine Inoperative Performance Limitations – Amendment

Manufacturer(s):

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

Applicability:

AS 332 L2 and EC 225 LP helicopters, all manufacturer serial numbers.

Definitions:

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

The RFM NR: AS 332 L2 Rotorcraft Flight Manual (RFM) Normal Revision (NR) 22 (date code 19-30) or RFM NR 23 (date code 19-40), as applicable; EC 225 LP Standard RFM NR 34 (date code 20-50) and EC 225 LP Multi-Purpose Air Intakes RFM NR 48 (date code 20-50), as applicable.

Reason:

A discrepancy was identified in the RFM of the AS 332 L2 and EC 225 LP helicopters which has existed for many years, where rotorcraft stay-up flying capabilities for Category B operation were provided through performance data only, but not as airworthiness limitations depending on the number of passengers on board. Although it was argued that a stay-up flying capability restriction should be enforced only as possible operational limitation under operational rules, when locally required, EASA determined that the missing information in the RFM Limitations section was not compliant with the



Federal Aviation Regulation (FAR) 29.1 (on AS 332 L2) and Joint Aviation Requirements (JAR) 29.1 (on EC 225 LP), which are the applicable airworthiness standards of the type-certification basis of the affected helicopters.

This condition, if not corrected in the RFM, could lead to incorrect determination of the stay-up flying capabilities of the rotorcraft, possibly resulting in reduced control of the helicopter.

Consequently, AH issued the RFM NR, as defined in this AD. However, EASA identified the need to amend them to better address the RFM limitations originated from FAR/JAR 29.1, in order to provide adequate rotorcraft stay-up flying capabilities, as required by FAR/JAR 29.1.

For the reason described above, this AD requires amendment of the RFM of the helicopter.

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

Required as indicated, unless accomplished previously:

Amendment:

(1) Within 30 days after the effective date of this AD, amend the Limitation Section of the RFM NR of the helicopter, as defined in this AD, by inserting a copy of Appendix 1, 2, 3 or 4 of this AD (or its text), as applicable, and as specified in Table 1 of this AD, inform all flight crew and, thereafter, operate the helicopter accordingly.

Helicopter Model / RFM	Appendix
AS332 L2 Basic RFM	1
AS332 L2 RFM SUP.10 (equipped with Electric Multi-Purpose Air Intakes)	2
EC225 LP Standard RFM (equipped with grid-type Air Intakes)	3
EC225 LP MPAI RFM (equipped with Multi-Purpose Air Intakes)	4

Table 1 – Applicable RFM Appendices

(2) Amending the RFM NR of a helicopter, as defined in this AD, to incorporate a later approved RFM normal revision, which includes information of equal effect to that presented in the Appendix 1, 2, 3 or 4 of this AD, as applicable, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that helicopter.

Ref. Publications:

None.



Remarks:

- 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- 2. This AD was initially posted on 03 March 2021 as PAD 21-034 for consultation until 31 March 2021, and republished on 06 July 2021 as PAD 21-034R1 for additional consultation until 20 July 2021. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, in the compressed (zipped) file attached to the record for this AD.
- 3. Enquiries regarding this AD should be referred to the EASA Safety 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: Airbus Helicopters (Technical Support), Aéroport de Marseille Provence 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66, Web portal: <u>https://airbusworld.helicopters.airbus.com</u> Technical Requests Management, E-mail: <u>TechnicalSupport.Helicopters@airbus.com</u>.



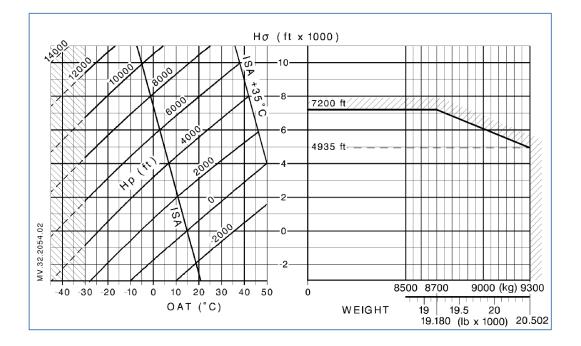
Appendix 1 - AS332 L2 Basic RFM - Section 2.1

7 WEIGHT AND BALANCE LIMITS

7.1 Weight Limits

- Minimum weight in flight......6000 kg (13228 lb).
- The maximum permissible take-off and landing weight with internal load shall be (whichever is lower):
 - . 9300 kg (20502 lb), or

Configuration with	Configuration with
9 passenger seats or less	10 passenger seats or more
Weight determined from the chart below.	Weight limited by the chart below and MTOW permitting climb at 150ft/min, 1000 ft above take-off surface with OEI at Vy (Refer to Section 5.1, Figure 12).



CAUTION

THIS PAGE MUST NOT BE REMOVED FROM THE FLIGHT MANUAL (RFM) UNTIL AN ALTERNATIVE RFM REVISION IS APPROVED AND INCORPORATED IN THE FLIGHT MANUAL



Appendix 2 - AS332 L2 RFM SUP.10 - Section 2

(AS332 L2 equipped with Multi-Purpose Air Intakes)

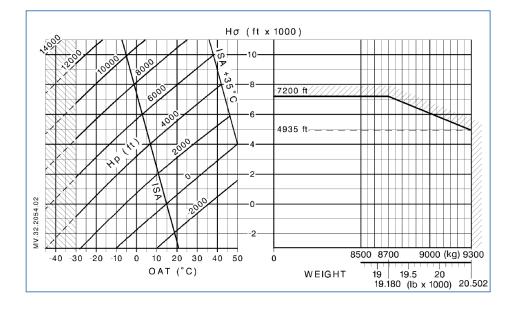
3. <u>LIMITATIONS</u>

The limitations specified in the Basic Flight Manual and in the Supplements used remain applicable and are supplemented or modified by the following limitations:

CAUTION: INSTALLATION OF THE MULTIPURPOSE AIR INTAKE ALONE DOES NOT PERMIT THE AIRCRAFT TO BE FLOWN IN ICING CONDITIONS

2.1 Weight Limits

- The maximum permissible take-off and landing weight with internal load shall be (whichever is lower):
 9300 kg (20502 lb), or
 - Configuration with
9 passenger seats or lessConfiguration with
10 passenger seats or moreWeight determined from the
chart below.Weight limited by the chart below and MTOW
permitting climb at 150ft/min, 1000ft above
take-off surface with OEI at Vy
(Refer to Section 5 of SUP.10, Figure 6a or 6b).



CAUTION THIS PAGE MUST NOT BE REMOVED FROM THE FLIGHT MANUAL (RFM) UNTIL AN ALTERNATIVE RFM REVISION IS APPROVED AND INCORPORATED IN THE FLIGHT MANUAL



TE.CAP.00110-010 © European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Appendix 3 - EC225 LP Standard RFM - Section 2.2

(EC225 LP equipped with grid-type Air Intakes)

SECTION 2.2 WEIGHT AND BALANCE LIMITS

1 WEIGHT LIMITS

1.1 Minimum weight

Minimum weight in flight......6 000 kg (13 228 lb).

1.2 Maximum weight

The maximum permissible take-off and landing weight with internal load shall be:

11 000 kg (24 251 lb)

or

Configuration with	Configuration with
9 passenger seats or less	10 passenger seats or more
Weight limited by IGE Hover (Refer to section 5.1 or 5.1.A1, Figure 5).	Weight limited by IGE Hover and MTOW permitting climb at 150ft/min, 1000ft above take-off surface with OEI at Vy (Refer to section 5.1 or 5.1.A1, Figure 13).

CAUTION

THIS PAGE MUST NOT BE REMOVED FROM THE FLIGHT MANUAL (RFM) UNTIL AN ALTERNATIVE RFM REVISION IS APPROVED AND INCORPORATED IN THE FLIGHT MANUAL

* * * * * * * * An agency of the European Union

TE.CAP.00110-010 © European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Appendix 4 - EC225 LP MPAI RFM - Section 2.2

(EC225 LP equipped with Multi-Purpose Air Intakes)

SECTION 2.2 WEIGHT AND BALANCE LIMITS

1 WEIGHT LIMITS

1.1 Minimum weight

Minimum weight in flight......6 000 kg (13 228 lb).

1.2 Maximum weight

The maximum permissible take-off and landing weight with internal load shall be:

11 000 kg (24 251 lb)

or

Configuration with	Configuration with
9 passenger seats or less	10 passenger seats or more
Weight limited by IGE Hover (Refer to section 5.1 or 5.1.A1, Figure 5a or 5b).	Weight limited by IGE Hover and MTOW permitting climb at 150ft/min, 1000ft above take-off surface with OEI at Vy (Refer to section 5.1 or 5.1.A1, Figure 13a or 13b).

CAUTION

THIS PAGE MUST NOT BE REMOVED FROM THE FLIGHT MANUAL (RFM) UNTIL AN ALTERNATIVE RFM REVISION IS APPROVED AND INCORPORATED IN THE FLIGHT MANUAL

