

European Aviation Safety Agency

Explanatory Note to Decision 2016/005/R

Helicopter height-velocity limitations

RELATED CRD 2014-19 — RMT.0132 & RMT.0515 (27&29.027) — 23.2.2016

EXECUTIVE SUMMARY

This Decision proposes that rulemaking task RMT.0132 and RMT.0515 (27&29.027) be closed by an Executive Director decision.

RMT.0132 and RMT.0515 (27&29.027) were addressing an operational problem related to commercial air transport (CAT) with large helicopters (certified according to CS-29 or equivalent standards with 10 or more passengers) performing performance class 2 (PC2) operations.

PC2 allows helicopters to momentarily penetrate the height-velocity (H-V) envelope during take-off and landing, when operationally necessary. For the helicopters mentioned above, the H-V envelope is contained in the limitations section of the approved aircraft flight manual (AFM). Paragraph 4.a. of Annex IV to Regulation (EC) No 216/2008 (the Basic Regulation) requires operators to comply with all AFM limitations. PC2, therefore, conflicts with the Basic Regulation.

The aim is to allow helicopter offshore operations to continue, and to terminate the current exemptions. This requires to legalise the current PC2 operations with large helicopters that were permitted under JAR-OPS 3, and were meant to be permitted under the implementing rules (IRs), but contradict the Basic Regulation.

Based on specific comments on NPA 2014-19 and subsequent EASA deliberations, EASA decided to approach the H-V limitation problem by way of a proposed change to the Basic Regulation.

EASA, therefore, considers that pending the approval of the proposed change to the Basic Regulation, the amendments to the IRs, certification specifications (CSs), acceptable means of compliance (AMC) and guidance material (GM), that were contained in NPA 2014-19, are no longer required.

This Decision proposes that RMT.0132 and RMT.0515 (27&29.027) be closed unless the proposed change to the Basic Regulation is rejected, in which case either RMT.0132 and RMT.0515 (27&29.027) will resume or a new rulemaking task will be launched.

The exemption process will remain unchanged. The current exemptions, being valid 'until revoked', may remain in use until they are no longer required.

This Decision is expected to maintain safety while avoiding the need to recertify existing helicopters according to a new standard.

Applicability		Process map	
Affected regulations and decisions: Affected stakeholders:	N/A Operators of CS-29 certified helicopters performing PC2 operations, especially to offshore locations	Concept paper: Rulemaking group: Terms of reference: RIA type: Technical consultation during NPA drafting: Publication date of the NPA:	N/A Yes 7.1.2013 Light Yes 25.7.2014
Driver/origin: Reference:	Level playing field N/A	Duration of NPA consultation: Review group: Focused consultation: Publication date of the Opinion:	3 months N/A N/A N/A

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1. Procedural information

1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed ED Decision 2016/005/R in line with the Basic Regulation¹ and the Rulemaking Procedure².

This rulemaking activity is included in the Agency's <u>4-year Rulemaking Programme</u> under RMT.0132 & RMT.0515 (27&29.027). The scope and timescale of the task were defined in the related terms of reference (see process map on the title page).

All interested parties were consulted through NPA 2014-19³, which was published on 25 July 2014.

The Agency has reviewed the comments received on the NPA. The comments received and the Agency's responses thereto are presented in Comment-Response Document (CRD) 2014-19⁴.

The final text of this Decision has been developed by the Agency based on the input received during the NPA public consultation phase.

The process map on the title page summarises the major milestones of this rulemaking activity.

1.2. Structure of the related documents

Chapter 1 contains the procedural information related to this task. Chapter 2 explains the core technical content.

http://easa.europa.eu/document-library/comment-response-documents



Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1).

The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision 01-2012 of 13 March 2012 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure).

http://easa.europa.eu/system/files/dfu/NPA%202014-19.pdf

2. Explanatory Note

2.1. Overview of the issues to be addressed

The H-V envelope graphically defines the combination of helicopter height, velocity, mass and density altitudes under which a safe landing cannot be performed in case of an engine failure.

For large helicopters with 10 or more passenger seats, the H-V envelope is an AFM limitation according to CS-29. For other helicopters, the H-V envelope is not a limitation.

Helicopters have traditionally flown momentarily through the H-V envelope during take-off and landing phases, especially in offshore operations, as this is considered the safest operational concept.

With the introduction of JAR-OPS 3 (Appendix 1 to JAR-OPS 3.005(c)) this became a justified alleviation for PC2 provided that operations without an assured safe-forced landing capability had been approved by the competent authority.

When transferring the requirements of JAR-OPS 3 into the IRs for Air Operations, the aforementioned alleviation was not transposed for all helicopters. For helicopters having the H-V envelope contained in the limitations section of the approved AFM, the alleviation conflicts with paragraph 4.a. of Annex IV to the Basic Regulation, which requires that any aircraft be operated in accordance with its approved flight manual.

2.2. Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2. The specific objective of this proposal is, therefore, to continue allowing flights with helicopters mentioned above to momentarily penetrate the H-V envelope during take-off and landing, when operationally necessary.

2.3. Outcome of the consultation

The outcome of the consultation is described in Chapter 2 'Summary of comments and responses' of CRD 2014-19.

Following deliberations within the Agency, it was decided that a change to the Basic Regulation should be proposed for approval by the European Parliament and the Council.

2.4. Overview of the amendments

The Agency considers that the amendments to the IRs, CSs, AMC and GM are no longer required.

3. References

3.1. Related regulations

Regulation (EC) No 216/2008 or the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1)

3.2. Affected decisions

Not applicable.

3.3. Reference documents

Not applicable.