European Union Aviation Safety Agency

Comment-Response Document (CRD) 2024-01

RELATED NPA: 2024-01 — RELATED OPINION: NO 03/2023

RELATED ED DECISIONS: 2025/010/R, 2025/011/R & 2025/012/R

RMT.0230 — SUBTASK C#3

Introduction of a regulatory framework for the operation of drones

Enabling innovative air mobility with manned VTOL-capable aircraft

7.7.2025

Table of contents

1. Summary of the outcome of the consultation

Please refer to **Section 2.4. What are the stakeholders' views** of the Explanatory Note to ED Decisions 2025/010/R, 2025/011/R and 2025/012/R.

2. Individual comments (without EASA responses)

In responding to comments, EASA states its position as follows:

(a) **Accepted** — EASA agrees with the comment and any proposed change is incorporated into the text.

(b) **Partially accepted** — EASA either partially agrees with the comment or agrees with it but the proposed change is partially incorporated into the text.

(c) **Noted** — EASA acknowledges the comment, but no change to the text is considered necessary.

(d) **Not accepted** — EASA does not agree with the comment or proposed change.

(General Comments)	-

comment *3* comment by: *Skyports*

1. The publication is a positive step by EASA to provide further guidance on how piloted IAM operations may be carried out safely under its new regulatory framework.
2. While it is not directly applicable to vertiport operators like Skyports, the provisions help us understand what a VCA operator will need to consider and comply with in selecting a site as a vertiport.
3. EASA should continue its outcome-based and risk-based approach in developing regulatory frameworks and guidance, that will provide the industry with greater flexibility in achieving EASA's desired regulatory outcomes.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *11* comment by: *Europe Air Sports*

General Comments by Europe Air Sports
Version 6/5/2024

Europe Air Sports (EAS) is the organisation for General, Sports and Recreational aviation in Europe and represents approx. 700 000 pilots and aircraft owners.

As a general comment, EAS finds the present NPA a good and comprehensive starting point for the AMC/GM level of regulation of the first few years of operation of VCA* aircraft in the IAM* mode.

Recalling that EASA has already produced Opinion 03/2023 with the draft high-level implementation regulations for VCA and IAM, and EAS has participated in the NPA consultations leading to that Opinion, EAS has only a few comments at this stage, please see our individual comments.

However,
EAS maintains its demand that the IAM/VCA regulation shall at the earliest possible time consistent with safe operations, be amended in order to enable also private pilots (PPL or LAPL) to fly VCA aircraft in non-commercial (NCO) operations with a minimum of additional training.

*VCA: VTOL-capable aircraft (for example eVTOL)
VTOL: Vertical Take-Off and Landing
*IAM: Innovative Air Mobility

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *20* comment by: *Joby Aviation*

Joby Aviation appreciates the opportunity to provide comments on NPA 2024-01.

We welcome EASA's focus on providing the appropriate level of detail to facilitate the launch of advanced air mobility and to further the dialogue on the proportionate regulatory framework to enable these new services.

Overall, we support the pragmatic approach to operations and licensing, and the rapid development of the essential guidance necessary to facilitate planning and regulatory dialogue with the industry.

Our more specific input is reflected in the industry position submitted by the the General Aviation Manufacturers Association (GAMA). We remain at the Agency's disposal to discuss any of the comments provided.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *58* comment by: *Danish Civil Aviation and Railway Authority*

*There seems to be a missing connection to the existing IR set forth in (EU) 1178/2011 '**FCL.720.PL** Experience requirements and prerequisites for the issue of type ratings – powered-lift aircraft'*

Section 4 - Specific Requirements for the powered-Lift Aircraft Category
FCL.720.PL Experience requirements and prerequisites for the issue of type ratinogs - powered-lift aircraft.

Notwithstanding the VTOL-differences between the 'LTV XC-142' and the 'Airbus Vahana'.

AMC1 Article 4f(2) and (3) Type ratings for VCA:
TYPE RATING COURSES — VTOL-CAPABLE AIRCRAFT

The regulation is contradicting the rationale. VTOL-capable aircraft contains a lot of diversity, with much to be decided by the respective OSD. As such, a helicopter base isn't necessarily always the best option in every case. By opening for a choice based

on the OSD, the AMC can find fulfil the article with the optimum solution for the respective VTOL. Suggestion:

(b) Theoretical knowledge instruction and examination
The theoretical knowledge instruction and examination should be based on the best suited syllabus set out in AMC1 FCL.725(a), taking the OSD into consideration. The syllabus should contain amendments and complements, as applicable for the relevant type of VTOL capable aircraft. Particularly, all the following should be appropriately addressed:

AMC1 Article 4f(8)(a) Type ratings for VCA:
INSTRUCTOR REFRESHER TRAINING FOR VTOL-CAPABLE AIRCRAFT TYPE RATING INSTRUCTIONAL
PRIVILEGES
No comments
No comments

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *95* | comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Dear Madam/Sir, The Swedish Transport Agency appreciate the opportunity to comment on this NPA.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *96* | comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

General
STA has a concern that this new type of air mobility will create some disturbance in densely populated areas, possibly creating adverse reactions among local residents. Local authorities might need to act with regard to selection of vertiports and operating procedures. We note that the originally proposed recitals (6) and (7) 03/2023 were removed at the EASA Committee in February 2024, which contained texts on how to build public acceptance. We will probably have to come back to these issues later. Can you confirm that this issue can be handled at a local level within their mandate for now, since we strongly believe that public acceptance is crucial to a successful development of IAM and UAM.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *97* | comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

General
According to opinion 03/2023, Article 5(5)(c) in the cover regulation to Commission Regulation (EU) 965/2012, training organisations shall when **conducting flight training** comply with the requirements specified in Annex IX (Part-IAM).

The proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. We have also noted that in one suggested AMC you must hold an AOC certificate, which the training organisations do not hold. Are the training flights for VCA under the scope of an ATO included in the design and making of Annex IX (Part-IAM) to Commission Regulation (EU) 965/2012?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *189* comment by: *ESSP*

NPA 2022-06 included a requirement for VTOL-capable aircraft in relation to PBN operations (SPA.PBN.100 PBN operations). Nevertheless, this requirement was removed in Opinion 03/2023 and explained in CRD 2022-06 that "PBN requirements are removed from this Opinion. A future NPA will address potential inconsistencies in relation to PBN 0.3".

NPA 2024-01 have not adressed requirements for VTOL-capable aircraft in relation to PBN operations. When does EASA plan to address those requirements because within EASA EPAS 2024 does not contain any specific reference to this definition?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *194* comment by: *FOCA (Switzerland)*

Thank you for the opportunity to comment. I am pleased to inform you from our side we support the NPA to a large part.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *197* comment by: *DGAC FR (Mireille Chabroux)*

DGAC-FR suggests to make clear in the whole NPA that a vertiport is an aerodrome: Thus, vertiport should be link to aerdrome.
Instead of writing "aerodrome, vertiport," or "aerodrome/vertiport" it could be written "aerodrome including vertiport".

Another general comment regarding the harmonization of the wording in the NPA deals with the reference to CAT operations with aeroplanes and helicopters: as CAT is only with aeroplanes and helicopters (as sted in the cover regulation) it may be not necessary to add "with aeroplanes and helicopters" each time a reference to CAT oepartions is made.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *203* comment by: *Austro Control*

General

Comment:
Clarity of the status of qualification of the operator.
The requirement of an AOC, which means a certification process, for non-commercial VCA operations is a safety related comprehensive approach in this initial phase of VCA operation.
However, it is not possible to distinguish easily and without further investigation (during e.g. inspections) if flights are conducted within commercial operation or not, although this might have impacts on aviation issues, but also on other subjects (as for example insurance and liability aspects for passengers etc).
Therefore it is suggested to distinguish clearly, if the operator is a commercial one or not. Especially from the aspect that the issuance of an AOC for non-commercial operations is a new and non-systematic approach in the established rules of Regulation 965/2012, it is considered to be useful to mention this fact on the AOC itself. (Comparable idea to the rules with sailplanes, where commercial and non-commercial operators apply the same operational rules, but commercial operators have to declare their operation to clearly distinguish their nature and corresponding responsibilities as commercial operator).

Propposed Change:
We propose to add a statement on AOC - EASA Form 138 by inserting a box whether "commercial" and "non-commercial" in the field of "types of operations" for clarification and adopt footnote 1 accordingly (if not yet foreseen).
In addition to that we strongly recommend adding appropriate GM.

Classification:
Minor

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *219* comment by: *Airbus Helicopters*

Airbus Helicopters supports the comments submitted by GAMA and ASD and also submitted additional comments that could not be consolidated at associations level due to planning constraints.
We would like to thank EASA for having the opportunity to contribute into the shaping of the regulatory package enabling VCA operations. The comment period for this NPA has provided the opportunity to review the details of this significant regulatory update and evidence some remaining areas of improvement. We remain at EASA disposal to provide any further clarification on the content of our comments.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *238* comment by: *EHA*

EHA View

The EHA supports the development and publication of the draft AMC and GM and notes that the proposed amendments do not favour IAM over conventional helicopter operations.

	The cautious approach to introduction through day, VFR operations with in-flight visibility limited to 1,500 metres, is welcomed, with an acknowledgement that these limits will develop over time in light of operational experience. It is important that development of these limits, in light of early operating experience, is not restricted by being set in hard law or by being over bureaucratic in subsequent change.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*241* comment by: *Eve Air Mobility* Eve Air Mobility appreciates the opportunity to comment on the proposed NPA 2024-01. Eve Air Mobility would also like to inform that supports the comments submitted by GAMA (in coordination with industry).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*242* comment by: *Embraer S.A.* Embraer appreciates the opportunity to comment on the proposed NPA 2024-01. Embraer also would like to inform that we support the comments submitted by GAMA (in coordination with industry) and Eve Air Mobility.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*243* comment by: *Civil Aviation Authority the Netherlands* The Netherlands civil aviation authorities have no comments on this NPA.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*265* comment by: *Air Traffic Control the Netherlands* LVNL advises to have a standard minimum 1500m visibility for manned VTOL-capable aircraft.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*289* comment by: *DGAC FR (Mireille Chabroux)* DGAC-FR thanks EASA for this consultation and for the work which was done to publish this NPA. DGAC wants to draw EASA's attention on the subject of the final energy reserve which still need to be investigated and discussed. As already expressed by DGAC, the opportunity to require a minimum amount of Final Reserve in terms of a fixed flying time should be analysed. DGAC-FR considers that it could be a safety issue if the performance based approach ends up with a very low final energy reserve. Taking into account:

	- if the ground speed of the eVTOL is low, a slight increase of headwind in regards with the value of wind entered in the flight preparation, could easily lead to use the contingency energy before arrival, then endangering the flight or making it unrealistic to add a number of alternates in the vicinity of the destination just for energy matters, - the fact that, at the beginning of the operations, the eVTOL will not be equipped with a fuel/energy measuring and displaying equipment as required by UAM.IDE.MVCA.140 and that the monitoring is going to be done by the pilot; -the fact that the first eVTOL may have a limited autonomy; It is crucial to ensure that the final reserve is not too low. DGAC-FR suggests AMCs directly linked to UAM.OP.VCA.191 and to UAM.OP.MVCA .107 and is at EASA's disposal to work on this subject (see proposal in comment to AMC 4 to UAM.OP.VCA.191).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*292* comment by: *General Aviation Manufacturers Association (GAMA)* General Comment The General Aviation Manufacturers Association (GAMA) greatly appreciates the opportunity to provide comments to NPA 2024-01 introducing AMCs/GMs to Part-IAM. The comments below were developed and agreed by the GAMA Electric and Hybrid Propulsion Innovation Committee (EPIC), comprising all the major eVTOL OEMs from Brazil, the EU and USA. In particular, Joby, Eve Air Mobility, Lilium, Piasecki and Volocopter have actively participated in the drafting of this consolidated position. GAMA Staff remain at the Agency's disposal at any time if there are any questions regarding any of the comments provided below.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*293* comment by: *General Aviation Manufacturers Association (GAMA)* General Comment GAMA welcomes EASA's focus on providing the appropriate level of detail to facilitate the launch of advanced air mobility and to further the dialogue on the proportionate regulatory framework to enable these new services. Through the AMCs and GMs, EASA has provided much needed clarity to the VTOL industry to operationalize the rules prescribed through Opinion O3/2023. While the initial phase (VFR day ops) comes to a close with the final publication of these AMCs/GMs, it remains important to continue the work onto the next phases of enabling VFR night and IFR operations. GAMA is committed to support EASA in this endeavour. Overall, GAMA supports the pragmatic approach to operations and licensing, and the rapid development of the essential guidance necessary to facilitate planning and regulatory dialogue with the industry. We nonetheless encourage the Agency to keep

	Part-IAM, including its AMCs and GM, continuously open and allow agile improvements/amendments based on operational experience of initial VTOL operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*324* comment by: *Volocopter GmbH* Volocopter welcomes EASA's great work on the AMC/GM, which are a crucial part of the overall regulatory package enabling the operations of VTOLs and provide the needed clarity to the rules prescribed through Opinion O3/2023. With that, we concur with the consolidated industry position which is submitted by the General Aviation Manufacturers Association (GAMA). We remain ready to support any further rulemaking steps held by EASA to enable the full scope of VCA capabilities.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*331* comment by: *Federal Aviation Administration* FAA comment: Regarding EASA Opinion No. 03/2023, the creation of the VCA definition to capture certain aircraft that are capable of performing vertical takeoff and landing, and the subsequent modification to the rotorcraft and helicopter definitions, is a departure from the harmonized definitions utilized between the FAA and EASA and also a departure from the ICAO definitions. This change in definition will result in certain aircraft being classified differently between Civil Aviation Authorities, resulting in different airworthiness standards being applied and potentially significant validation differences. This approach also departs from the use of the powered-lift definition recognized by the FAA and ICAO. The FAA recommends considering refraining from creating a new VCA definition and leveraging the already established definitions for rotorcraft, helicopter, and powered-lift recognized by FAA and ICAO.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*332* comment by: *Federal Aviation Administration* FAA comment: Regarding EASA Opinion No. 03/2023, the modification to the helicopter definition dropped the requirement for the horizontal motion to be dependent upon the engine driven rotors. This distinction is what made it unique within rotorcraft and excluded other types of rotorcraft like gyroplanes. The proposed definition does not include this distinction and causes the helicopter definition to now capture additional rotorcraft. The FAA recommends considering restoring the original performance/design requirements to ensure proper distinction between helicopter and rotorcraft.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *333* comment by: *Federal Aviation Administration*

FAA comment:

Regarding EASA Opinion No. 03/2023, establishing the term "innovative air mobility (IAM)" needlessly deviates from the well-established "advanced air mobility (AAM)" including the ICAO AAM Study Group (SG) and other global working groups. The term "IAM" is the same as "AAM" with little to no difference and also does not account for the possibility of unmanned operations. The FAA recommends considering defining the term IAM, but continuing to use AAM along with the possibility of unmanned operations.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

1. About this NPA p. 12

comment | *294* comment by: *General Aviation Manufacturers Association (GAMA)*

RATIONALE / REASON / JUSTIFICATION

Article 8 to Reg. (EU) 965/2012 indicates:

"Any operation with VCA shall, as regards flight time limitations, comply with the requirements specified in the national law of the Member State in which the operator has its principal place of business, or, where the operator has no principal place of business, the place where the operator is established or resides."

This provision requires operators to apply nationale rules regarding flight time limitations, which particularly in cross-border situations might complicate operators' organisational set-up considering that rules might differ from one State to another.

PROPOSED TEXT
EASA is asked to consider harmonising rules on flight time limitations across the EU in future regulatory work.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

2.1.1. Description of the issue p. 14

comment | *2* comment by: *ACI EUROPE*

Final bullet point: ACI EUROPE fully agree that more needs to be done to support the adoption of IAM. This goes beyond just raising awareness. More should be done to support the industry and local administrations to carry out demonstrators and actual trials. This will not only help the development of the technology - it will also make

IAM more visible and more tangible for the general public and local decision-makers who can be a major hurdle in giving approvals for the development of vertiports and supporting the definition of flight routes over populated areas.

The development of a pre-regulatory framework aimed at forstering demonstrators and pre-commercial operations at the European level with a support infrastructure at the national and local level would be an important step to support both industry and the regulatory process.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *21* comment by: *Darío Ares*

In paragraph: "VCA will typically operate from vertiports located outside aerodromes, and for such new structures there is a need to identify appropriate and proportionate measures, such as security checks of the passengers or scanning of luggage, in order to mitigate the risk associated with the malicious use of VCA." we consider *the aerodromes are a key existing infrastructure for deployment of IAM operations, in the airside also*.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *72* comment by: *EUROCONTROL*

Inadequate protection against air safety risks (mid-air collision risk, aircraft proximity (AIRPROX), accidents and incidents with manned and unmanned aircraft.
Non-cooperative airspace users (e.g. birds) should be added.

Proposed change:
"Inadequate protection against air safety risks (mid-air collision risk, aircraft proximity (AIRPROX), accidents and incidents with manned and unmanned aircraft and non-cooperative airspace users (wildlife)"

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

2.1. Why we need to act p. 14

comment | *69* comment by: *EUROCONTROL*

Compared to existing manned aircraft and ground vehicle operations, operations with aircraft with VTOL capability (other than helicopters) create new opportunities as they open the field of possibilities in terms of a multitude of aerial services, as well as different types of air mobility, for the transportation of passengers or cargo in different geographical scales ranging from urban environments to intercontinental routes

Proposed change:

Change "manned" to "crewed" or "piloted" in the entire NPA

e.g. Compared to existing crewed aircraft and ground vehicle operations, operations with aircraft with VTOL capability (other than helicopters) create new opportunities as they open the field of possibilities in terms of a multitude of aerial services, as well as different types of air mobility, for the transportation of passengers or cargo in different geographical scales ranging from urban environments to intercontinental routes.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *70* comment by: *EUROCONTROL*

The need to enable IAM as one element of the future 'smart, green and digital' cities;

Recommend to include "multimodality" as objective, since the success of VCA operations inside urban environment is very much dependent on multimodality.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *71* comment by: *EUROCONTROL*

New operational concepts enabled by innovative, manned VCA typically powered by electrical engines;

Why is it only referring to"manned" and not also to "uncrewed". Especially in cargo operations, uncrewed VCAs will play a crucial role already in the short-term.

Proposed chnage:
"New operational concepts enabled by innovative, crewed and uncrewed VCA typically powered by electrical engines;"

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

2.2. What we want to achieve - objectives p. 16

comment | *4* comment by: *ACI EUROPE*

The Objectives of NPA 2024-01 listed in 2.2. are full supported by ACI EUROPE. We suggest that a further objective should be added:

l) support the early adoption of IAM technology, products and services for commercial and pre-commercial operations thus fostering technological and regulatory development in Europe.

Rationale: We believe that carrying our realistic demonstrators and test still faces considerable hurdles from regulators at the national and local level. This NPA should help in facilitating potentially commercially viable development trials - as these will not only provide important data on the performance of eVTOLs and operational procedures but also ensure greater visibility of these developments by the general public.

response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

2.3.1. Air operations (AIR OPS) p. 17

comment	*5* comment by: *ACI EUROPE* ACI EUROPE strongly believe that including operations to and from aerodromes should be explicitly covered in the rulemaking. Rationale: Airports are natural and commercially viable origin/destination markets for air taxi operations. The infrastructure often allows for operations and/or the establishment of dedicated vertiports. What is required is to ensure approaches and departure routes, especially to capacity constraint airports, must be independent of those for commercial aircraft. Including airports into the operational framework of this NPA would provide immediate commercial viability to eVTOL OEMs.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*73* comment by: *EUROCONTROL* The main concerns regarding IAM operations relate to the pre-flight preparation, selection of vertiports and diversion locations as well as fuel/energy management. Therefore, the main efforts focused on the development of the means to demonstrate compliance with important operational requirements such as: Why is the selection of vertiports and diversion locations defined as main concern for IAM operations? The context is not clear.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

Appendix - Quality of the NPA p. 24

comment	*8* comment by: *ACI EUROPE* Q1: Agree Q2: Agree Q3: Agree Q4: Agree - however, many of the AMC/GM could be substantially shortened or even be omitted whithout losing clarifty. For instance, several requirements (e.g. on battery management) would be covered in the manufaturers' handbook and do not need to be explicitly and extensively covered in the regulation. Q5: Agree - but see comment to Q4 above Q6: Agree - The regulation will help to get the fledgling eVTOL industry airborne and is therefore an important and positive development. However, a general reflection on the detail of regulatory material should be undertaken with MS and industry. It is ACI EUROPE's view that a more hands off, high level approach to regulation would benefit the industry without negatively impacting on safety.

	Q7: See comments above on keeping regulatory material more objective based rather than providing detailed, prescriptive requirements even in soft law.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*259* comment by: *Airbus Helicopters* Please find here below our feedback on the Quality of the NPA 1. The regulatory proposal is of technically good/high quality Agree. 2. The text is clear, readable and understandable Fully agree 3. The regulatory proposal is well substantiated Disagree Although EASA included some *rationales* for a limited number of regulatory content, this is not the case for the vast majority of AMC/GM. Acknowledging the difficulty to anticipate on future operations and the lack of in-service experience, the *rationale* fields could have been more used accross the NPA 4. The regulatory proposal is fit for purpose (achieving the objectives set) Neutral Although some specific objectives of the NPA as highlighted on the executive summary have been fullfilled, the fact that the proposed NPA "enable operators to safely implementent the applicable regulations" cannot be (yet) verified. 5. The regulatory proposal is proportionate to the size of the issue Neutral The density of the VCA traffic has certainly an influence on the way to address proportionality of the regulatory measures, in particular the operational uncertainties have conducted to initially adopt a protective regulatory attitude. There migh be a need for future consolidation of the proportionality when in-service experience will have been gathered. 6. The regulatory proposal applies the 'better regulation' principles[1] P Neutral See comment 5 7. Any other comments on the quality of this document (please specify)

	When actions are required from the commenters to provide a specific feedback like on page 53 of the NPA, EASA could have highlighted this better like it has been done in the past on other NPAs (field Action, etc..)
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 Article 2(14) Definitions p. 25

comment	*98* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **GM1 Article 2(14) Definitions, Page 25** The expression 'VEMS dispatch centre' found in the definition of VEMS Flight might need clarification. What may constitute a VEMS dispatch centre? (For instance JRCC, an alarm callcentre, the operator's own dispatch?). There is a definition of a 'HEMS dispatch centre', see GM1 Annex I Definitions of (EU) no. 965/2012 point 'm'. Perhaps this could be broadened to include 'VEMS dispatch centre'?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM37 Annex I Definitions p. 25

comment	*187* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **GM37 Annex I Definitions, page 25** This is not in line with other regulations, for example Commission Regulation (EU) no 1178/2011 (Aircrew), if towing is included in the calculation towards flight time.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

7.2. Draft GM to Annex I (Definitions) to Regulation (EU) No 965/2012 p. 25

comment	*327* comment by: *Federal Aviation Administration* FAA comment: Regarding definition 31(b), "Ground Taxiing of VCA," the definition states that the risk of inadvertent take-off is not present during the ground taxiing phase of the VCA using a carriage system or equivalent system. Without additional explanation or context being provided in the document, it is unclear how the risk determination was made and how the use of a carriage (or equivalent) system affects the risk. The FAA recommends considering revising the document to provide additional explanation or context, which could include a reference to appropriate documents,

	to support the statement that the associated risk of an inadvertent VCA take-off is not present when using a carriage (or equivalent) system. Additionally, the FAA recommends considering defining what the carriage system is for those not familiar with a carriage system, and what an equivalent system might be. Is it a tow system where the VCA is unpowered during its taxi phase?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ARO.OPS.224(a) Approval of fuel/energy schemes for IAM operations p. 26

comment	*48* comment by: *Danish Civil Aviation and Railway Authority* OK it's an OK demand but it might be difficult to find an inspector with experience to approve electric scheme
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*108* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 ARO.OPS.224(a) Approval of fuel/energy schemes for IAM operations, Page 26** An insight to what EASA think is "the necessary knowledge and expertise to understand, monitor and validate the applicable criteria" is sought. The interpretation of the wording as it stands may be widespread and lead to mismatch between a member states judgement of this and EASA's picture of what they expect.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*114* comment by: *DGAC FR (Mireille Chabroux)* To ensure consistency with the opinion, DGAC-FR suggests to modify paragraph as follows: *b) The competent authority inspectors should have the necessary knowledge and expertise to understand, monitor and validate the applicable criteria of points UAM.OP.VCA.190, UAM.OP.VCA.191, UAM.OP.VCA.195 and UAM.OP.~~M~~VCA.192 of Annex IX.*
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ARO.OPS.100(b) Issue of the air operator certificate p. 26

comment	*163* comment by: *DGAC FR (Mireille Chabroux)*

As CAT is only for aeroplane and helicopter (Article 5a and 5b of 965), DGAC-FR suggests to modify as follows:
b) The following factors should be taken into account when deciding the area of operation for CAT or IAM operations:

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ARO.OPS.224(b) Approval of fuel/energy schemes for IAM operations p. 27

comment | *49* comment by: *Danish Civil Aviation and Railway Authority*

It may be difficult to collect data for a period of 2 years if the VCA operator is brand new.
we suggest: "period of minimum of 6 months or a period agreed with the competent authority."

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *75* comment by: *EUROCONTROL*

(3) VCA-fleet-specific and route-/area-specific items: (i) consumption data;
"consumption" data is referring to what VCA flight state?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *328* comment by: *Federal Aviation Administration*

FAA comment:

Regarding subsection (a)(3)(iv), the assessment and verification of the efficiency and capacity of energy storage devices for the planned operating conditions, the FAA recommends considering the need to also account for any unplanned operating conditions related to contingency/emergency conditions. The assessment and verification of the efficiency and capacity of energy storage devices should take into account all planned and unplanned conditions (e.g., emergency/contingency conditions) to which the VCA could be exposed.

The FAA recommends considering revising the document to add a sub-bullet, or expand on existing bullet, to account for the assessment and verification of the efficiency and capacity of energy storage devices related to any unplanned operating conditions, such as contingency/emergency conditions.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *329* comment by: *Federal Aviation Administration*

FAA comment: Regarding subsection (b), the FAA recommends considering revising the document to provide an explanation and associated rationale for determining the identified minimum data collection period to improve clarity. It is unclear what

	assumptions and information were considered in determining the minimum period of 2 years for collecting statistically relevant data.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ARO.OPS.224 Approval of fuel/energy schemes for IAM operations p. 27

comment	*76* comment by: *EUROCONTROL* The individual fuel/energy scheme may be route-specific and/or VCA-fleet-specific Are the "route-specifics" not derived from the "flee specifics" ?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

7.4. Draft AMC & GM to Annex III (Part-ORO) p. 28

comment	*74* comment by: *EUROCONTROL* (3) VCA-fleet-specific and route-/area-specific items (vi) the route(s) and/or area(s) of operation where the individual fuel/energy scheme will be used; Does this include considerations of the battery lifespan and it's degradation of capacity throughout time?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*77* comment by: *EUROCONTROL* GM1 ORO.GEN.310 to GM1 ORO.GEN.310(d) What is the purpose of this section?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*78* comment by: *EUROCONTROL* 7.4 Draft AMC & GM to Annex III (Part-ORO) GM1 ORO.GEN.310 to GM1 ORO.AOC.125(a)(2) EXAMPLES OF POSSIBLE SCENARIOS FOR THE USE OF AIRCRAFT AEROPLANES OR HELICOPTERS LISTED ON AN AOC Aeroplanes and helicopters are referred to in here below as aircraft. Why is the term "aircraft" erased from this and the subsequent section titles, eventhough it is written "Aeroplanes and helicopters are referred to in here below as aircraft."
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.AOC.110(c) Leasing agreement p. 30

comment	*195* comment by: *FOCA (Switzerland)* (d) In our opinion, the proposed text does not reflect the amendment requiring Part M/G organisations to be certified under Part CAMO. Therefore, we would like to propose to amend the end of the text as follows: *for continuing airworthiness management of the third-country operator, Part-M1 Subpart-B, Subpart-C and Annex Vc, Part-CAMO, excluding CAMO.A.310 and CAMO.A.320;*
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 ORO.MLR.100 Operations manual - General p. 32

comment	*6* comment by: *ACI EUROPE* Reference: p. 35, 8.3.15 (f) covering smoking on board - Comment: This point can be deleted as smoking in aircraft and public spaces is already generally prohibited.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*38* comment by: *Widerøe Zero* Suggest that 8.2.1 (a)(4) states: "for VCA, when the lift ***and/or*** thrust units are powered on;" to possibly avoid confusion.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 ORO.MLR.100 Operations manual - general p. 32

comment	*12* comment by: *Europe Air Sports* AMC3 ORO.MLR.100 Operations manual – general CONTENTS — CAT OPERATIONS WITH AEROPLANES AND HELICOPTES AND IAM OPERATIONS WITH VCA 8.2.1 Fuelling procedures. A description of fuelling procedures, including: ... ... (4) for VCA, when the lift and thrust units are powered on; **EAS COMMENT:** We find the term "powered on" possibly worth clarifying. In contrast to most traditionally powered aircraft, where "powered on" usually implies hazards of

	moving parts and/or hot gases, a VCA might be equipped with a "rotors parked idle mode" where rotors etc. are stationary despite power being on. EAS suggests including in the fueling procedure description (as well as e.g. boarding/unboarding procedure descriptions) a detailed description of this type of hazards.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*59* comment by: *DE-LBA* Page 34, item 8.3.9: "[...] For VCA, consideration should be given to the radial component of the downwash (outwash) around the VCA." We assume that the radial component of the downwash should be considered among other effects. Proposed text: "For VCA, consideration should **also** be given to the radial component of the downwash (outwash) around the VCA."
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*88* comment by: *EUROCONTROL* Such instructions should take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight re-planning replanning and of failure of one or more of the aircraft's power plants or lift and thrust units. Shouldn't the failure of the battery itself be added here?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*89* comment by: *EUROCONTROL* 8.1.3 Methods and responsibilities for establishing aerodrome/vertiport operating minima What is defined by "vertiport operating minima"? Does it refer to only visibility, or to operating hours, separation minina, minimum technical equippment necessary to operate a vertport, minimum infrastruture requirements that have to meet in order to allow VCA operations to operate a vertiports, etc.?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*90* comment by: *EUROCONTROL* 8.2.1 Fuelling procedures. A description of fuelling procedures, including: (a) safety precautions during refuelling and defuelling including when: (1) an aircraft auxiliary power unit is in operation; or (2) for helicopters, when rotors are turning; or (3) for aeroplanes, when an engine is running; or (4) for VCA, when the lift and thrust units are powered on;

Does this include the "fueling" process for the "energy" category? However, this does not include battery swapping and should be considered here too. "Fuelling procedure" is not the best term used here since it is ambiguous and does not include battery swapping.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *91* comment by: *EUROCONTROL*

" 8.2.2 Aircraft, passengers and cargo handling procedures related to safety. A description of the handling procedures to be used when allocating seats, embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, such as charging or swapping of VCA batteries while passengers embark, are on board, or disembark, should also be given. Handling procedures should include:
[…]
(f) safety on the aerodrome/operating site or vertiport/diversion location, including fire prevention and safety in blast and suction areas;
(g) start-up, ramp departure and arrival procedures, including, for aeroplanes, push-back and towing operations and, for VCA, ground movement;
[…]"

ADDITIONAL POINT:(h) the dangers to ramp operators by rotors or propellers or other rotating parts adressing when is safe to approach to the VCA.

Proposed change:
" 8.2.2 Aircraft, passengers and cargo handling procedures related to safety. A description of the handling procedures to be used when allocating seats, embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, such as charging or swapping of VCA batteries while passengers embark, are on board, or disembark, should also be given. Handling procedures should include:
[…]
(f) safety on the aerodrome/operating site or vertiport/diversion location, including fire prevention and safety in blast and suction areas;
(g) start-up, ramp departure and arrival procedures, including, for aeroplanes, push-back and towing operations and, for VCA, ground movement;
(h) the dangers to ramp operators by rotors or propellers or other rotating parts adressing when is safe to approach to the VCA.
[…]"

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *92* comment by: *EUROCONTROL*

CONTENTS — CAT OPERATIONS WITH AEROPLANES AND HELICOPTES AND IAM OPERATIONS WITH VCA

Typo
CONTENTS — CAT OPERATIONS WITH AEROPLANES AND HELICOPTERS AND IAM OPERATIONS WITH VCA

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *116* comment by: *DGAC FR (Mireille Chabroux)*

It is suggested to delete 4.1.3 and modify 4.1.2 as follows to make it applicable to aeroplane, helicopter and VCA:

4.1.2 If performance data, as required for the aircraft operations ~~appropriate performance class~~, are not available in the AFM, then other data should be included. The OM may contain cross-reference to the data contained in the AFM where such data are not likely to be used often or in an emergency
~~4.1.3 If performance data, as required for the VCA operations, is not available in the AFM, then other data should be included~~

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *118* comment by: *DGAC FR (Mireille Chabroux)*

To ensure consistency with the proposed AMC's titles in the NPA (cf AMC1 ORO.FC.120 Operator conversion training"), DGAC-FR suggests to change the title of AMC 4 as follows:
CONTENTS – NON-COMMERCIAL SPECIALISED OPERATIONS WITH COMPLEX MOTOR-POWERED AIRCRAFT AND COMMERCIAL SPECIALISED OPERATIONS – AEROPLANE AND HELICOPTERS

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *164* comment by: *DGAC FR (Mireille Chabroux)*

As per GM39 annex I, a vertiport is considered a type of aerodrome. DGAC-FR suggests the following change:
8.1.5 Presentation and application of aerodrome, including vertiport, and en-route operating minima

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *170* comment by: *DGAC FR (Mireille Chabroux)*

An "R" is missing in the following title:

CONTENTS — CAT OPERATIONS WITH AEROPLANES AND HELICOPTERS AND IAM OPERATIONS WITH VCA

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *210* comment by: *Airbus Helicopters*

Comment: Paragraph 4.3 Flight crew incapacitation clarifies that procedures have to be included by the operator for multi-pilot operation only. This is in line with ICAO Annex 1 2.1.5 where applicants for type rating shall have: — procedures for crew incapacitation and crew coordination including allocation of pilot tasks; crew cooperation and use of checklists; (ref Annex 1, 2.1.5.2).This requirement applies to aircraft certificated for operation with a minimum crew of at least two pilots as per 2.1.3.2 a); This is also part of the skills required to be demonstrated but only for co-pilot of turbine-powered aeroplanes certificated for operation with a minimum crew of at least two pilots as per 2.5.1.3.It is also required as a skill for ATPL to perform, as pilot-in-command of any aircraft within the appropriate category required to be operated with a co-pilot as per 2.6.1.3.1

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *211* comment by: *Airbus Helicopters*

Comment : AMC3 ORO.MLR.100 on Page 34 paragraph 8.3.14
Procedures for incapacitation of crew member extension to single-pilot operations seems to contradict with the AMC content of 4.3 which limits it to multi-pilot operation only.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.MLR.100 Operations manual - general p. 32

comment | *79* comment by: *EUROCONTROL*

Except for IAM operations, In the case of for commercial operations with other-than-complex motor-powered aircraft or non-commercial operations with aeroplanes or helicopters, a 'pilot operating handbook' (POH), or equivalent document, may be used as the type-related part of the OM, provided that the POH covers the normal and abnormal/emergency operating procedures.

Why are IAM operations excluded from this statement?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *220* comment by: *EHA*

By EHA: AMC3 ORO.MLR.100 Operations manual – general

	Misspelling of 'helicopters' in contents Consistency of application of AAM v. IAM v. UAM
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/commander p. 37

comment	*221* comment by: *EHA* By EHA: AMC3 ORO.MLR.100 Operations manual – general **3.3 … with aeroplanes, helicopters or IAM operations with VCA.** Grammar. Replace 'or' with ',' for readability
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/ commander p. 38

comment	*86* comment by: *EUROCONTROL* (2) Area and route familiarisation training should also ensure that the pilots are aware of the most significant underlying risks and threats of a route that could affect their operations following the 'threat and error management model' or an alternative risk model agreed with the authority. Who is responsible in providing the "most significant underlying risks and threats of a route that could affect their operations" ?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*93* comment by: *EUROCONTROL* (b) Vertiport knowledge Does this include the specifics which VCA designs/characteristics can operate a the vertiport?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*109* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC3 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/commander, page 39**

	"Route, area and vertiport knowledge from IAM operators", consider whether it would be beneficial to add "potential environmental conditions" under section (b) Vertiport knowledge p (1).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*295* comment by: *General Aviation Manufacturers Association (GAMA)* Ref. AMC3 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/ commander **RATIONALE / REASON / JUSTIFICATION** Explanation on methods of familiarisation is included for 'diversion location knowledge': Methods of familiarisation may include briefing or self-briefing by means of programmed instruction, instruction in a suitable FSTD or other means. Same methods can be applied for 'vertiport knowledge and 'area and route knowledge' familiarization. **PROPOSED TEXT** Same methods can be applied for 'vertiport knowledge and 'area and route knowledge' familiarization. Suggestion to add the same sentance to para (a)(4) and (b)(2).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/ commander p. 38

comment	*222* comment by: *EHA* By EHA: AMC3 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/ commander **(a)(4) … complexity of the route, the type of risk or threat** Typo. Remove superfluous space before comma
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 ORO.FC.105(b)(2) Designation as pilot-in-command/ commander p. 38

comment	*223* comment by: *EHA* By EHA: AMC3 ORO.FC.105(b)(2);(c) Designation as pilot-in-command/commander

(b) (4) Where floating installations/surfaces are used, the limitations determined in accordance with the approval for operations on floating surfaces should be taken into account.

Elevated conventional take-offs (eConvTO) are specifically mentioned at AMC1 UAM.POL.VCA.120 Take-off.

Should additional considerations be applied to elevated vertiports too, in view of their characteristics?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ORO.FC.105(c) Designation as pilot-in-command/commander p. 40

comment | *50* comment by: *Danish Civil Aviation and Railway Authority*

Should also include the maximum flight altitude/height.
the aircraft and the equipment may have an altitude maximum the same way persons onboard may have.
Suggest: "Minimum and maximum flight altitudes/heights."

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.105(c) Designation as pilot-in-command/commander p. 40

comment | *94* comment by: *EUROCONTROL*

ROUTE/AREA AND AERODROME/VERTIPORT/DIVERSION LOCATION RECENCY (a) The 12-month period of validity of the aerodrome/vertiport knowledge should be counted from the last day of the month: (1) when the initial familiarisation training was undertaken; or (2) of the latest operation on the route or area to be flown and of the aerodromes/vertiports, facilities and procedures to be used. (b) The 36-month period of validity of the route or area knowledge or diversion location knowledge should be counted from the last day of the month: (1) when the initial familiarisation training was undertaken; or (2) when the latest operation on the route or area was flown; or (3) when the latest operation at a diversion location was flown.

Aren't those timeframes very long for VCA's operating in low level and urban airspace? In an urban environemnt, new obstancles may appear within 3 years.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 ORO.FC.115 Crew resource management (CRM) training p. 41

comment	*110* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC2 ORO.FC.115 Crew resource management (CRM) training, Page 41** Since the suggested AMC says 'single-pilot VEMS operations with technical crew' it raises a question weather VEMS is the only operation with VCA that is allowed that need a technical crew? Other operations that (might) need a technical crew is hoist and HEC (task specialist) and NVIS (according to underlaying activities). Are such activities not allowed using a VCA?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.120 Operator conversion training p. 41

comment	*266* comment by: *AESA* According to Annex Vd to EASA Opinion No 03/2023, ORO.FC.120(a) is replaced by the following: '(a) The flight crew member shall complete the operator conversion training course before commencing unsupervised line flying: (1) when changing to an aircraft for which a new type or class rating is required; (2) each time the flight crew member joins an operator As ORO.FC.120(a) (2) currently reads "when joining an operator", we expected some specific GM to clarify this point. It should be noted that this change was not envisaged in NPA 2022-6 but was nevertheless included in the referred opinion and therefore no associated rationale is available. We consider that, at least, the case when the pilot was previously employed by the same operator should be clarified.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ORO.FC.130 Recurrent training and checking p. 42

comment	*100* comment by: *EUROCONTROL* PERIODIC CHECKS (a) For CAT operations with aeroplanes and helicopters and IAM operations with VCA, the operator proficiency checks and the line checks are both part of the periodic checks. For EBT operators, the EBT module and the line evaluations of competence are both part of the periodic checks. Does this also cover VEMS operations?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.146(e);(f)&(g) Personnel providing training, checking and assessment p. 44

comment *33* comment by: *Eve Air Mobility*

(f1) For IAM operations with VCA under VFR by day, the minimum experience of the nominated PIC should be more than 350 hours total flight time with at least 25 sectors on the type, class or the aircraft variant.

Comment/ Rationale:
As per the definition of route sector under FCL.010 Definitions (ANNEX I (Part-FCL) SUBPART A – GENERAL REQUIREMENTS), “Route sector means a flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases”. Considering that typical UAM routes are not likely to be more than 15 minute-long, “cruise of not less than 15 minutes” takes longer than the entire typical flight. As there might be flight duration variations across the different VCA models, some flexibility will be needed: the AMC could contain a definition of route sector especifically applicable to IAM operations or the OSD process would be the adequate one to address that. Another point that those 25 route sectors could be obtained in suitable FSTD (or a combination of aircraft and FSTD), as well. Route sectors should replicate those typical missions/ routes the operator has approval, or is about to obtain the authorization, to conduct; no matter how long the cruise time takes. The route sectors performed in an FSTD should also be considered as meeting the requirement since the future commander can be exposed to more situations, including non-normal or unexpected ones, than s/he would while performing route sectors (under supervision) in aircraft. The employment of LOS scenarios would be highly beneficial as both technical and non-technical competences can be observed, developed and lastly debriefed. By conducting the route sectors in FSTD, the PIC will have made through more settings, such as, different mass and balance configurations, weather conditions, malfunctions than s/he would face in VCA as these route sectors could be completed in a very limited period and conditions.

Proposed Text:
Change proposed AMC1 ORO.FC.146 Personnel providing training, checking and assessment(e);(f)&(g) (f)(1) to:

(f1) For IAM operations with VCA under VFR by day, the minimum experience of the nominated PIC should be more than 350 hours total time with at least 25 sectors on the type, class or the aircraft variant, obtained in aircraft and/ or FSTD, unless credits are estabilished in the Operational Suitability Data in accordance with Commission Regulation (EU) No 748/2012"
Consider adding a definition of "route sectors" specific to IAM under this AMC:

For VCA or IAM operations, route sector means a flight comprising take-off, departure, typical cruise time, arrival, approach and landing phases.

or "Route sector means a flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases (in aircaft or FSTD). For VCA the route sector duration should be established in the Operational Suitability Data in accordance with Commission Regulation (EU) No 748/2012 and it may be less than 15 minutes.”

response Please, refer to the Excel file ‘CRD 2024-01: EASA responses to individual comments’.

comment	*66* comment by: *ASD* Comment: The rationale for the 350 hours total flight time vs the 750 hours on helicopters/aeroplanes should be provided considering the inial pilot of VCA should be holding a CPL(H) or CPL(A) and might therefore be expected to have comparable pre-requisite experience for CAT PIC. Proportionality between CAT and non CAT operations has to be also considered. Suggested resolution: Clarification is expected on the justification for equivalent safety between current helicopters/aeroplanes requirements and proposed ones with possible distinction made between CAT and non CAT pre-requisite requirements
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*101* comment by: *EUROCONTROL* (f1) For IAM operations with VCA under VFR by day, the minimum experience of the nominated PIC should be more than 350 hours total flight time with at least 25 sectors on the type, class or the aircraft variant. In the context of VCA, what defines a "sector" ? Later on in page 73 the term "route sector" i used. Are both referring to the same?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*121* comment by: *DGAC FR (Mireille Chabroux)* As the scope of PART IAM is restricted to operations under VFR by day, it may be not needed to add "under VFR by day". DGAC-FR suggests to modify as follow: f1) For IAM operations with VCA ~~under VFR by day,~~ the minimum experience of the nominated PIC should be more than 350 hours total flight time with at least 25 sectors on the type, class or the aircraft variant.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*166* comment by: *DGAC FR (Mireille Chabroux)* As SPO – Annex VIII never applies for a VCA, DGAC FR suggests the following change: 3) for SPO ~~with aeroplanes or helicopters~~, which manoeuvres the nominated PIC/commander should not train or check unless qualified as an instructor.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*296* comment by: *General Aviation Manufacturers Association (GAMA)*

Ref. AMC1 ORO.FC.146(e);(f)&(g) Personnel providing training, checking and assessment

RATIONALE / REASON / JUSTIFICATION

As per the definition of route sector under FCL.010 Definitions (ANNEX I (Part-FCL) SUBPART A – GENERAL REQUIREMENTS), “Route sector means a flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases”. Considering that typical UAM routes are not likely to be more than 15 minute-long, “cruise of not less than 15 minutes” takes longer than the entire typical flight. As there might be a lot of endurance variation for each aircraft type/design, some flexibility will be needed. The workload and thereby experience can come from sectors which are very short. It is important to specify the elements that a sector should contain, i.e., take off, cruise and landing, not necessarily the time.

Another point that those route sectors could be obtained in FSTD, as well. Route sectors should replicate those typical missions/ routes the operator has approval, or is about to obtain the authorization, to conduct; no matter how long the cruise time takes. The route sectors performed in an FSTD should also be considered as meeting the requirement since the future commander can be exposed to more situations, including non-normal or unexpected ones, than s/he would while performing real route sectors (under supervision) in aircraft. The employment of LOS scenarios would be highly beneficial as both technical and non-technical competences can be observed, developed and lastly debriefed. By conducting the route sectors in FSTD, the PIC will have made through more settings, such as, different mass and balance configurations, weather conditions, malfunctions than s/he would face in VCA as these route sectors could be completed in a very limited period and conditions.

PROPOSED TEXT

Change proposed AMC1 ORO.FC.146 Personnel providing training, checking and assessment(e);(f)&(g) (f)(1) to:

"For IAM operations with VCA under VFR by day, the minimum experience of the nominated PIC should be more than 350 hours total flight time with at least 25 sectors on the type, class or the aircraft variant, unless credits are established in the Operational Suitability Data in accordance with Commission Regulation (EU) No 748/2012."

For IAM operations with VCA, a route sector means a flight comprising take-off, departure, typical cruise time, arrival, approach, and landing phases. This concept should apply to other sections of this NPA that refer to route sectors. At the same time, GAMA urges EASA to consider (when possible, under an FCL rulemaking project) changing the route sectors definition in FCL.010 - Definitions of Regulation (EU) 2020/359 to establish necessary elements that have to be contained in a route sector, without necessarily prescribing the duration thereof.

response | Please, refer to the Excel file ‘CRD 2024-01: EASA responses to individual comments’.

AMC1 ORO.FC.146(b) Personnel providing training, checking and assessment p. 44

comment

111 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 ORO.FC.146(b) Personnel providing training, checking and assessment, page 44
The suggested wording 'CAT operations with aeroplane and helicopters and, *if applicable*, for IAM operations with VCA'; when should it not be applicable to follow this AMC for IAM operations with VCA? Clarification might be needed.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

165 comment by: *DGAC FR (Mireille Chabroux)*

As CAT is only aeroplane and helicopter (Article 5a and 5b of 965), DGAC-FR suggests the following change:

(a) Flight training by a type rating instructor (TRI) or class rating instructor (CRI), flight instructor (FI) or, in the case of the FSTD content, a synthetic flight instructor (SFI). For commercial air transport CAT operations ~~with aeroplanes and helicopters~~ and, if applicable, for IAM operations with VCA, the FI, TRI, CRI or SFI should satisfy the operator's experience and knowledge requirements sufficiently to instruct on aircraft systems and operational procedures and requirements.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.220 Operator conversion training and checking p. 45

comment

60 comment by: *DE-LBA*

Page 45, item (f1): "[...] the minimum experience of the nominated PIC should be more than 350 hours total flight time with at least 25 **sectors** on the type, class or the aircraft variant."

Is "sectors" correct, or should it say "hours" like in item (f) for aeroplanes and helicopters?

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

112 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 ORO.FC.220 Operator conversion training and checking, page 46

Why delete the wording "as applicable" for pilot incapacitation? This would add a ground for confusion regarding pilot incapacitation training for single pilot operations. There is no requirement today for training of pilot incapacitation for single pilot ops (who would take over controls?). There is a suggested new GM1 ORO.FC.420 with guidance for single pilot operations in VCA for early identification of possible incapacitation. We would welcome the same guidance material for single pilot operations on airplanes and helicopters.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *212* comment by: *Airbus Helicopters*

Comment: The AMC content entitled "CAT OPERATIONS WITH AEROPLANES AND HELICOPTERS AND IAM OPERATIONS WITH VCA — SUITABLY QUALIFIED PIC OR COMMANDER OR INSTRUCTOR NOMINATED BY THE OPERATOR" seems to be missing an AMC numbering. The content of paragraph (h) seems to refer to paragraph (c) of current AMC1 ORO.FC.146(b) Personnel providing training, checking and assessment. However AMC1 ORO.FC.146(b) title is not repeated in the NPA.
It is porposed to clarify to which AMC proposed content is belonging to.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.230 Recurrent training and checking p. 46

comment | *51* comment by: *Danish Civil Aviation and Railway Authority*

Very relevant change as a VCA will be able to be flown a a single pilot.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *115* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 ORO.FC.230 Recurrent training and checking, page 46
Why include single pilot operations to the requirements of flight crew incapacitation training? This would need clarification on what that training should comprise of (see GM1 ORO.FC.420 as example) since there is no other crew member to recognise and train to deal with incapacitation of his/her colleague. We would welcome the same guidance material for single-pilot operations on airplanes and helicopters.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *213* comment by: *Airbus Helicopters*

Comment on AMC1 ORO.FC.230 page 46:
The removal of "as applicable" in paragraph (a)(1)(i)(C) makes the requirement for recurrent training of incapacitation applicable also for single pilot operations on all aircraft categories. This proposal is not aligned with the AMC3 ORO.MLR.100 of this NPA and ICAO annexes SARPS. A complete assessment of the repercusions is

	recommended, preferably in the frame of a dedicated rulemeking task to assess properly the impact on the full range of stakeholders: operator's, ATC,ATO,etc.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*297* comment by: *DGAC FR (Mireille Chabroux)* Regarding pilot incapacitation: -first DGAC-FR wonders whether it is relevant to change the wording of ORO.FC.230 through this NPA as some of the interested parties (helicopter or aeroplane operators) may not be aware of that this NPA proposed changes to the CAT domain. -secondly pilot incapacitation is already dealt with through the human factor training and aeromedical traioning (and through ORO.GEN.110 for terrorist action and unruly passengers).There is no added value. -thirdly, practical training is not relevant when there is no system (such as panic button) in order to stabilize the aircraft. At this stage, DGAC-FR is not in favour of adding training for pilot incapacitation in single pilot operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.220(f) Operator conversion training and checking p. 46

comment	*113* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 ORO.FC.220(f) Operator conversion training and checking, page 46** Why delete the wording "as applicable" for pilot incapacitation? This would add a ground for confusion regarding pilot incapacitation training for single pilot operations. There is no requirement today for training of pilot incapacitation for single pilot ops (who would take over controls?). There is a suggested new GM1 ORO.FC.420 with guidance for single pilot operations in VCA for early identification of possible incapacitation. We would welcome the same guidance material for single pilot operations on airplanes and helicopters.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.420 Operator conversion training and checking p. 47

comment	*37* comment by: *Eve Air Mobility* **Point (a)(1)(iii)** Point (a)(1)(iii) does not provide enough clarity on whether training can be performed solely in the aircraft or in an FSTD or even in a combination of aircraft and FSTD.

Replace AND with AND/OR: "(iii) flight training and checking (aircraft AND/OR FSTD)".

Point (a)(1)(iv)
Specify different ways on how LIFUS can be performed considering the AAM design characteristics, such as: ZFTT, credits could be established in the OSD report, establish the role of the supervising pilot as a safety pilot with or without direct access to the controls, or even as LOS (LOFT/ SPOT/ LOE) scenarios in FSTD.

CS FCD.305 allows for LIFUS credits between aircraft types. As initially the VCA will be operated by CPL pilots, we could benefit from their experience in other aicraft types

Change to: "(iv) line flying under supervision and line check (aircraft or FSTD). Considering VCA design characteristics, LIFUS and line checks credits may be estabilished in the Operational Suitability Data in accordance with Commission Regulation (EU) No 748/2012."

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *104* comment by: *EUROCONTROL*

(e) Operator proficiency check (1) For VCA, the operator proficiency check that is part of the operator's conversion checking should include at least the following emergency/abnormal procedures as relevant to the VCA and the operations, as applicable:

"battery failure" and "drone/wildlife intrudor" should be added to the list

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *119* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 ORO.FC.420 Operator conversion training and checking, page 47
AMC1 ORO.FC.420 point (a)(1)(i)(C) should include "as applicable" after "pilot incapacitation". (Unless there is a system and a function in VCA to deal with pilot incapacitation by another member of the operator (remotely) or by the aircraft itself?)

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *214* comment by: *Airbus Helicopters*

Comment on AMC1 ORO.FC.420 on page 47
Paragraph (a)(1)(i)(C) includes pilot incapacitation in the abnormal and emergency procedures for conversion training syllabus. This proposal does apply even in case of single pilot operations of VCA. This proposal is not aligned with the AMC3 ORO.MLR.100 of this NPA that limits the need for procedures for incapacitation to multi-pilot operation only and ICAO annexes SARPS. A complete assessment of the repercusions is recommended, preferably in the frame of a dedicated rulemeking

	task to assess properly the impact on the full range of stakeholders: operator's, ATC,ATO,etc. Reference to line flying under supervision in AMC content induces the applicability of such activity on VCA. AS per definition of "training flight", Line flying under supervision (LIFUS), line checks and similar flights are not included in this category, as they are usually performed during commercial operations (CAT flights). According to (EU) No 1178/2011 "Line flying under supervision" (LIFUS) means line flying after an approved zero flight time type rating training course or the line flying required by an operational suitability data (OSD) report. It is suggested to clarify wether the definition of LIFUS remains applicable to VCA pilot subject to LIFUS.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*215* comment by: *Airbus Helicopters* Comment on AMC1 ORO.FC.420 Page 48 Paragraph (c)(2)(iv) refers to halon extinguishers which are prohibited for use as per Regulation (EC) 1005/2009. It is suggested to remove reference to halon extinguishers
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*216* comment by: *Airbus Helicopters* Comment on AMC1 ORO.FC.420 page 50: Paragraph (e)(2) refers to CRM skills assesment should be indicated as "as applicable" for consistency as they are applicable to multi-crew operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*217* comment by: *Airbus Helicopters* Comment on AMC1 ORO.FC.420 on page 51 Paragraph (f)(1) does not clarify the prerequisite on the supervisor for LIFUS and he/she positioning on the aircraft. For aeroplanes this is covered at rule level under ORO.FC.220(e) It is suggested to clarify the pre-requisites for the LIFUS supervisor.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*298* comment by: *General Aviation Manufacturers Association (GAMA)* Ref. AMC1 ORO.FC.420 Operator conversion training and checking **RATIONALE / REASON / JUSTIFICATION** Specify different ways on how LIFUS can be performed considering the AAM design characteristics: ZFTT, credits could be established in the OSD report, establish the

role of the supervising pilot as a safety pilot with or without direct access to the controls, or even as LOS (LOFT/ SPOT/ LOE) scenarios in FSTD.

CS FCD.305 allow for LIFUS credits between aircraft types. As initially the VCA will be operated by CPL pilots we could benefit from their experience in other aicraft types.

PROPOSED TEXT

Change to: "(iv) line flying under supervision and line check **(aircraft or FSTD). Considering VCA design characteristics, LIFUS and line checks credits may be estabilished for IAM operation in accordance with Commission Regulation (EU) No 748/2012"**

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.330 Recurrent training and checking - operator proficiency check p. 47

comment | *117* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 ORO.FC.330 Recurrent training and checking — operator proficiency check, page 47
Why delete the wording "as applicable" for pilot incapacitation? This would add a ground for confusion regarding pilot incapacitation training for single pilot operations. There is no requirement today for training of pilot incapacitation for single pilot ops (who would take over controls?). There is a suggested new GM1 ORO.FC.420 with guidance for single pilot operations in VCA for early identification of possible incapacitation. We would welcome the same guidance material for single pilot operations on airplanes and helicopters.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 ORO.FC.420 Operator conversion training and checking p. 51

comment | *13* comment by: *Europe Air Sports*

AMC1 ORO.FC.420 Operator conversion training and checking
OPERATOR CONVERSION TRAINING SYLLABUS FOR IAM OPERATIONS

(d) Flight training ...

(4) The training should include at least three take-offs and landings in the VCA.

EAS COMMENT

	We may have misunderstood, but three take-offs and landings appears to be a very low requirement before transitioning to proficiency check and line flying under supervision, especially considering the demanding environment where VCAs will be flown. Please clarify.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*291* comment by: *Joby Aviation* The "AND" implies that training in aircraft is mandatory. Changing from AND to AND/ OR intends to mean that training can be perfomed solely in the aircraft or in an FSTD or even in a combination of aircraft and FSTD. Suggest: Replace AND with AND/OR: "(iii) flight training and checking (aircraft AND/OR FSTD)
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ORO.FC.420(d) Operator conversion training and checking p. 51

comment	*14* comment by: *Europe Air Sports* GM1 ORO.FC.420 Operator conversion training and checking SINGLE PILOT INCAPACITATION IN IAM OPERATIONS WITH VCA Question in the NPA: "For single-pilot IAM operations with VCA, unlike CAT, SPO and NCC operations with aeroplanes and helicopters, it was found appropriate to include guidance on pilot incapacitation training. EASA is hereby inviting interested parties to provide their opinion as to whether similar guidance needs to be included for CAT, SPO and NCC operations?" **EAS COMMENT:** We assume the question concerns single-pilot CAT, SPO and NCC operations. We suggest an approach with voluntary single pilot incapacitation guidance. We also note that a growing number of general aviation aeroplanes can be equipped with "auto-land" systems capable of landing the aeroplane in a pilot-incapacitated situation. This should not be hindered by regulation.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ORO.FC.420 Operator conversion training and checking p. 52

comment	*52* comment by: *Danish Civil Aviation and Railway Authority*

	It is not necessary to establish same high requirements for SPO-operators as for CAT-operators. SPO-operators do not have any passengers on board.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*107* comment by: *EUROCONTROL* Incapacitation may have different severity states. Death is the most extreme example of incapacitation (typically due to cardiovascular disease). By far the most common cause of flight crew incapacitation is gastroenteritis. Other causes may include: — hypoxia at altitudes above 10 000 ft; Eventhough VCAs are not operating at those altitudes, for general understanding this information is added here, isn't it?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*123* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **GM1 ORO.FC.420 Operator conversion training and checking, Page 52** This is a new guidance material written for IAM operations. It seems like the aim is to include pilot incapacitation training also for single pilot operations with VCA. The idea is ok, to include guidance to the single pilot on how to early identify possible incapacitation. The first part of the suggested GM, down to the end of the first list of bullet points (ending with "terrorist action" may work as guidance material. The following text though is written more like it's meant to be an AMC. This would be appropraiate if the aim is to get the operator's to implement this training also for single pilot operations. There is also a need to give the same guidance material and AMC for single pilot operations with aeroplane or helicopter if there shall be training for pilot incapacitation single pilot in those activities (as proposed by changes to AMC to ORO.FC.220 and ORO.FC.230). Then, we also have a reflection on the text in italic below the GM1 ORO.FC.420: the statement "Operator's procedures in the event of pilot incapacitation are required today for both single-pilot and multi-crew operations," this might be true for operations where there is requirements to carry cabin crew or technical crew member, but for all cases with pure single pilot operations, there is no reuirement as of today. We kindly ask you to support the statement with information on what in todays regulation that requires procedure for pilot incapacitation for single-pilot operations without another crew member (cabin or technical) onboard. (To only point to AMC3 ORO.MLR.100 is rather weak, since this is a list of topics and their numbering in the manual, there need to be regulatory requirement to fill the topic with relevant text in the manual, and if, for instance, pilot incapacitation, only states "as applicable" in the requirements and you only have one crew, it is hard to fill the topic with relevant text unless you have guidance for, the now proposed alternate procedure, early recognition to try to avoid pilot incapacitation in single-pilot operations, where there is no one else to intervene after incapacitation has occurred.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

199 comment by: *Austro Control*

Explanatory Note / Articles / Appendix:
GM1 ORO.FC.420 Operator conversion training and checking

Comment:
"Operator's procedures in the event of pilot incapacitation are required today for both single-pilot and multi-crew operations, however, relevant training (OCC, OPC, recurrent) is only prescribed for multi-pilot/multi-crew CAT, SPO and NCC operations with aeroplanes and helicopters.
For single-pilot IAM operations with VCA, unlike CAT, SPO and NCC operations with aeroplanes and helicopters, it was found appropriate to include guidance on pilot incapacitation training. EASA is hereby inviting interested parties to provide their opinion as to whether similar guidance needs to be included for CAT, SPO and NCC operations."

Yes, for consistency, guidance should also be provided in the appropriate sections for Commercial Air Transport (CAT), Special Operations (SPO), and Non-Commercial Complex (NCC) operations.

Classification:
-

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

218 comment by: *Airbus Helicopters*

Comment on GM1 ORO.FC.420 on page 53
Answering to the EASA invitation to comment on the inclusion of similar guidance for CAT, SPO and NCC operations of helicopters, Airbus helicopters recommends that a full assessment of the repercusions is conducted, preferably in the frame of a dedicated rulemaking task to assess properly the impact on the full range of stakeholders: operator's, ATC,ATO,etc. Indeed current proposal is going beyond the ICAO Annex 1 standards which limit the incapacitation procedures and associated training to multi-crew operations and the implementation at operator's level should be carefully evaluated.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.420(e) Operator conversion training and checking p. 52

comment

120 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 ORO.FC.420(e) Operator conversion training and checking, page 52
AMC1 ORO.FC.420(e) point (c)(2); "The line checker should only conduct recurrent line checks of pilots whose previous line check has not expired". Yes, this lies within the frasing 'recurrent'. However, what has this to do with specific conversion course? A specific conversion is performed because the type is new to the operator and

	therefore the pilot under training has not performed a line check on the type at the operator at a previous occasion. The same text is found in AMC1 ORO.FC.220(f) point (c)(2), so clarification on meaning is sought also for that point. (Is this wording because of a possibility to hire an external line checker for recurrent line checks during recurrent training and checking in accordance with ORO.FC.230?)
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*224* comment by: *EHA* By EHA: GM1 ORO.FC.420 Operator conversion training and checking SINGLE PILOT INCAPACITATION IN IAM OPERATIONS WITH VCA … flight crew member unable to carry out their normal duties because of the onset, during flight, of the effects of physiological **or psychological** factors The effect of VCA operations on pilots' mental health and well-being are not yet known
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.430 Recurrent training and checking p. 53

comment	*124* comment by: *DGAC FR (Mireille Chabroux)* As the scope of PART IAM is single pilot operations, the sentence which was relevant for aeroplane of helicopter to distinguish between single and multiple crew operations is not relevant for single pilot operations. The OPC are performed by an examiner or by a designated pilot holding an instructor qualification.DGAC-FR suggests to delete the sentence: ~~b)1)i) B) Operator proficiency checks should be conducted with one qualified pilot in single-pilot operations~~
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*126* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 ORO.FC.430 Recurrent training and checking, page 58** Point (d)(2), could we please get EASA's wiev on the term "reasonably practicable to gain access to such devises (FSTD)"? What may be deemed to be "reasonably practical" may vary quite a lot in the industry.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*167* comment by: *DGAC FR (Mireille Chabroux)* As this requirement covers only VCA and for consistency, the following change is suggested: 2) Emergency and safety equipment training (i) Emergency and safety equipment training may be combined with emergency and safety equipment checking and should be conducted in ~~an aircraft~~ a VCA or a suitable alternative training device. d) Use of FSTD (1) Training and checking provide an opportunity to practise abnormal/emergency procedures that rarely arise in normal operations and should be part of a structured programme of recurrent training. This should be carried out in an FSTD when available and accessible. (2) The line check should be performed in the ~~aircraft~~ VCA. All other training and checking should be performed in an FSTD, or, if it is not reasonably practicable to gain access to such devices, in an aircraft of the same type or in the case of emergency and safety equipment training, in a representative training device. The type of equipment used for training and checking should be representative of the instrumentation, equipment and layout of the ~~aircraft~~ VCA type operated by the flight crew member.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*225* comment by: *EHA* By EHA: GM1 ORO.FC.420 Operator conversion training and checking SINGLE PILOT INCAPACITATION IN IAM OPERATIONS WITH VCA **While it has not been explained why it was 'found appropriate to include guidance' on this issue, a consistent approach is supported.** Operator's procedures in the event of pilot incapacitation are required today for both single-pilot and multi-crew operations, however, relevant training (OCC, OPC, recurrent) is only prescribed for multi-pilot/multi-crew CAT, SPO and NCC operations with aeroplanes and helicopters. For single-pilot IAM operations with VCA, unlike CAT, SPO and NCC operations with aeroplanes and helicopters, it was found appropriate to include guidance on pilot incapacitation training. EASA is hereby inviting interested parties to provide their opinion as to whether similar guidance needs to be included for CAT, SPO and NCC operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 ORO.FC.430 Recurrent training and checking p. 59

comment	*128* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

	GM1 ORO.FC.430 Recurrent training and checking, page 59 Could we please ask you to write out the full expression "operator's proficiency check" instead of "proficiency check" unless it is the licence proficiency check that is meant in the text? (And the same plea goes for existing text in ORO.FC.)
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.FC.440 Operations on more than one type or variant	p. 59

comment	*129* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 ORO.FC.440 Operations on more than one type or variant, page 59** Could we please ask you to write out the full expression "operator's proficiency check" instead of "proficiency check" unless it is the licence proficiency check that is meant in the text? (And the same plea goes for existing text in ORO.FC.) Also; We wonder what effect operation on one type of VCA should have on number of types of helicopters allowed to be operated in CAT? "when the combination consists of aeroplanes and/or helicopters, operated in CAT, NCC and/or SPO, and at least one VCA operated in IAM, the applicable requirements with regards to those aeroplanes and/or helicopters are contained in ORO.FC.240." Is there need for an update of ORO.FC.240 regarding number of types operated? (Should there be a proposal for update of ORO.FC.240 that we foreseened, please disregard this note.)
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.TC.105 Conditions for assignment to duties	p. 60

comment	*53* comment by: *Danish Civil Aviation and Railway Authority* Very relevant addition under (3). We agree
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.TC.115 Initial training	p. 60

comment	*125* comment by: *DGAC FR (Mireille Chabroux)* DGAC-FR suggests to improve the wording as follows: 3) When conducting extended overwater operations with helicopters, ~~including~~ or operations with VCA over water in a hostile or non-hostile sea at a distance from land corresponding to more than 10 minutes flying time at normal cruise speed, water survival training, including the use of personal flotation equipment.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*168* comment by: *DGAC FR (Mireille Chabroux)* As a vertiprot is an aerodrome, it is suggested to amend as follows: (iii) the general procedures of ground-based emergency services at aerodromes, including vertiports;.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM 1 ORO.FC.440 Operations on more than one type or variant p. 60

comment	*200* comment by: *Austro Control* **Explanatory Note / Articles / Appendix:** GM 1 ORO.FC.440 Operations on more than one type or variant **Comment:** "Information about the 'group of types of helicopters' is provided in AMC1 ORO.FC.240." It is unclear how AMC1 ORO.FC.240 can be used for the operator in context with Appendix 9, which deals with VCA. How can the connection be established for VCA in connection with "group of helicopter types"? **Classification:** Minor
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 ORO.TC. 120 &.125 Operator conversion training and differences training p. 61

comment	*226* comment by: *EHA* By EHA: AMC1 ORO.TC.120&.125 Operator conversion training and differences training (a)(1)(iii) manage a fire of a battery mounted on a VCA, where applicable. **Is 'manage' defined?**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

7.5. Draft AMC & GM to Annex V (Part-SPA) p. 62

comment	*54* comment by: *Danish Civil Aviation and Railway Authority*

	Comment to:GM1 SPA.VEMS.100 Emergency medical service operations with manned VTOL-capable aircraft (VEMS): Relevant and important. We agree.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*132* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 SPA.VEMS.100 Emergency medical service operations with manned VTOL-capable aircraft (VEMS), page 66** Would this (to include in the operators manual a description of aerodromes, including obstacles and contingency plans) only apply to PIS places, not other aerodromes/heliports/vertiports?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*133* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC2 SPA.VEMS.100 Emergency medical service operations with manned VTOL-capable aircraft (VEMS), page 67** Far more stringent requirements for pre-surveyed VEMS operating sites than there are for pre-surveyed operating sites for helicopter and certain airplanes. Amongst others "the operating region's prevailing weather conditions". That requirements looks more like a requirement for the intention to establish a new airport, when it's required to establish the runway in the most favourable orientation. What is the background for this? Please comment if this is one of the things mentioned in rationale to AMC5 UAM.OP.VCA.191 *all safety layers foreseen for VCA flights are expected to better assure the achievement of a safe operation?*
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*134* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC3 SPA.VEMS.100 Emergency medical service operations with manned VTOL-capable aircraft (VEMS), page 68** Point (b), what is meant to be understood by "all information reasonably practicable to aquire"? This could be a wast amount of information or perhaps none information at all.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*135* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

GM1 SPA.VEMS.100 Emergency medical service operations with manned VTOL-capable aircraft (VEMS), page 68
These things to consider for non pre-surveyed sites should be stated on AMC level, and also include considerations for protection of third party on the ground. Compare with AMC1 CAT.OP.MPA.105, to have this in GM is far to weak. Another option is to describe reconnaissance turns in GM and to improve suggested AMC3 SPA.VEMS.100 to be more like AMC1 CAT.OP.MPA.105.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *136* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 SPA.VEMS.110 Equipment requirements for VEMS operations, page 70
Similar AMC to the new one in SPA.HEMS, but the same question arises, what makes the difference that allowes a EFB type B application in this case that is otherwise not allowed to be a EFB type B application? (We have sent this question to Ops at EASA for clarification.)

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *169* comment by: *DGAC FR (Mireille Chabroux)*

As only single pilot operations are in the scope of the regulation, DGAC-Fr suggests the following change:

AMC3 SPA.VEMS.130 Crew requirements

~~SINGLE-PILOT~~ OPERATIONS WITH NO TECHNICAL CREW MEMBER

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *175* comment by: *DGAC FR (Mireille Chabroux)*

AMC3 SPA.EFB.100(b)(3)(c)
The intent of the modification is clear and aims to cover the implication of the TCM in the use and surveillance of EFBs however the syntax could be updated as follow:

Workload should be shared between ~~flight crew members,~~ between the pilot and the technical crew member, to ensure ease of use and continued monitoring of other flight crew functions and aircraft equipment

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *176* comment by: *DGAC FR (Mireille Chabroux)*

AMC3 SPA.EFB.100(b)

DGAC-FR would like to know if the requirement for a LOFT session in case of EFB deployment without paper back-up is really applicable and relevant for VCA operations (manned or unmanned)?

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *177* comment by: *DGAC FR (Mireille Chabroux)*

General comment:
As a reminder an EFB is defined in the regulation as an electronic platform, hosting EFB eligible applications, that are used by pilots in the flight deck (cf definition of portable EFB in 96a and EFB host platform).
As such, it would be expected that the use of an EFB be limited to MVCA operations but it is defined in section VCA.
For example, introduction of a portable PED that will use its GNSS COTS to provide (through a datalink to be defined) a terrain proximity information with relative altitude to the PIC on the ground won't be classified as an EFB. This would also apply to the use of a portable PED to ensure electronic conspicuity through mobile network.

DGAC-FR suggets to update "Flight Deck" into "station" because station is used in the CAT.IDE to design the place of the crew in the Flight Deck but it is also used in Part IAM to define the station in case the PIC is on the ground.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *178* comment by: *DGAC FR (Mireille Chabroux)*

AMC10 SPA.EFB.100(b)(3)

What is the purpose of this change and its associated substantiation?
As currently written, the requirement could allow IFW applications with own-ship display while no weather radar is implemented, which is not deemed as acceptable.

DGAC-Fr suggest the following change:

In the specific case of IFW applications, the display of own-ship on such applications is restricted to **VCA or**, aeroplanes and helicopters equipped with a weather radar.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *188* comment by: *EUROCONTROL*

AMC2 SPA.VEMS.100 Emergency medical service operations with manned VTOL-capable aircraft (VEMS)

(c) The operator should specify in the operations manual the VEMS sites that are pre-surveyed. The operations manual should contain diagrams and/or ground and aerial

	photographs, and depiction (pictorial) and description of: (7) site adequacy with reference to aircraft performance; Not only performance is relevant. Aircraft design and size (D-value) describes a crucial parameter which should be added here. Also, does statement (7) include fuel/energy status? Change to: (7) site adequacy with reference to aircraft performance, aircraft size and energy/fuel status;
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*227* comment by: *EHA* By EHA: AMC1 SPA.EFB.100(b) Use of electronic flight bags (EFBs) — operational approval SUITABILITY OF THE HARDWARE **iOS devices shutdown with overheat, which is exacerbated by onboard charging, so should be included as a suitability consideration.**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*228* comment by: *EHA* By EHA: AMC1 SPA.VEMS.130 Crew requirements VEMS PILOT-IN-COMMAND MINIMUM EXPERIENCE This is a very significant increase over the basic requirement for IAM operations with VCA under VFR by day: The minimum experience of the nominated PIC should be more than 350 hours total flight time with at least 25 sectors on the type, class or the aircraft variant. (Page 45 – CAT OPERATIONS WITH AEROPLANES AND HELICOPTERS AND IAM OPERATIONS WITH VCA — SUITABLY QUALIFIED PIC OR COMMANDER OR INSTRUCTOR NOMINATED BY THE OPERATOR) **What is the basis for this level of enhancement over other CAT operations?**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*244* comment by: *EUROCONTROL* AMC1 SPA.VEMS.125 Performance requirements for VEMS operations VEMS OPERATING SITE DIMENSIONS AND FEATURES (a) A VEMS operating site in a congested area, when selected from the air, should have a minimum dimension of at least 2 × D. What definition of "congested area" is referred to here? Does "D" refer to "D-value" ?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *245* comment by: *EUROCONTROL*

AMC2 SPA.VEMS.130 Crew requirements
VEMS TECHNICAL CREW MEMBER (a) When the crew is composed of one pilot and one VEMS technical crew member, the latter should be seated in a forward-facing front seat during the flight, so as to be able to carry out his or her primary tasks of assisting the commander in: (1) collision avoidance; (2) selection of the VEMS operating site; (3) detection of obstacles during the approach and take-off phases; and (4) reading of checklists. (b) By day, the VEMS technical crew member may be seated in the cabin at the discretion of the PIC if all of the following conditions are met: (1) the VEMS technical crew member provides medical assistance to the medical patient in flight; or (2) the flight is conducted to or from a VEMS operating site
How can the VEMS technial crew member carry out tasks such as collision avoidance, selection of the VEMS operating site etc. and provide medical assisstance to the medical patient at the same time?

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *299* comment by: *General Aviation Manufacturers Association (GAMA)*

Ref. AMC2 SPA.VEMS.130 Crew requirements

RATIONALE / REASON / JUSTIFICATION

"VEMS TECHNICAL CREW MEMBER
(b) By day, the VEMS technical crew member may be seated in the cabin at the discretion of the PIC if all of the following conditions are met:
(1) the VEMS technical crew member provides medical assistance to the medical patient in flight; or
(2) the flight is conducted to or from a VEMS operating site."

'Or' does not make sense as point be says that 'all of the following conditions are met'.

PROPOSED TEXT

Please change from 'or' to 'and'.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *307* comment by: *ADAC Luftrettung gGmbH*

Segment: AMC1 SPA.VEMS.125 (a)
Page: 71

Proposed text

"(a) In order to select a VEMS operating site from the air, the operator should define either:
(1) minimum VEMS operating site dimensions of at least 2 × D by day (the largest dimensions of the VCA when the rotors are turning) or
(2) alternative criteria for the VEMS operating site together with operating procedures and training, which mitigate the risks identified in the operator's risk assessment. In this case the operator may choose not to define minimum site dimensions."

Rationale
The distinction between congested and non-congested is new in comparison to HEMS, but in line with the overall new approach of IAM vs. CAT. However, it is in congested areas, where 2xD cannot always be met, it is there, where alternative criteria are needed most.
Helicopters are allowed to land in congested areas using alternative criteria and dimensions smaller than 2xD.
VCA are much better suited for urban operations: The have a weaker downwash and outwash, are capable of sustained vertical flight profiles for confined area landings and their rotors have less rotational/inertia energy, thus making VCA much less dangerous to operate and for third parties in urban environments.
It is inherent to EMS, that one needs to get close to where people live, hence congested areas. We require highly trained pilots with a lot of operational experience (SPA.VEMS.130) to do this in a safe manner. This justifies a deviation from the otherwise reasonable different risk profiles for urban and non-urban operation in this particular case of EMS oprations.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *308* comment by: *ADAC Luftrettung gGmbH*

Segment: AMC2 SPA.VEMS.130 - (b) (1)
Page: 72
strike the "*or*" - all of the conditions must be met

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *312* comment by: *ADAC Luftrettung gGmbH*

Segment: AMC1 SPA.VEMS.100
Page: 66

Text:
add: "The competent authority should grant the approval to use the public interest site if this information in the operating manual of the applicant is complete."

Rationale:
The competent authority needs to know what to check before giving an approval. Should habe been in Part-ARO, but was missed.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *323* comment by: *General Aviation Manufacturers Association (GAMA)*

Ref. AMC2 SPA.VEMS.130

RATIONALE / REASON / JUSTIFICATION

GAMA understands that EMS operations need a specific training and experience to ensure safe operations in often more challenging environment compared to more predictable commercial operations. However, for gaining experience on VTOLs, it is important to consider the number of sectors flown, incl. the number of take-offs and landings performed. Adding to that the overall movement towards competency-based training principle, we urge EASA to consider, in the current or the upcoming rulemaking phase, complementing the purely flight time-based experience with the competency based training concept.

PROPOSED TEXT
EASA consider providing an alternative to be able to calculate the relevant flight experience in sectors.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 IAM.GEN.VCA.100 Pilot responsibilities p. 93

comment | *7* comment by: *ACI EUROPE*

AMC2 IAM.GEN.VCA.100 Pilot Responsibilities should be amended as follows:

ALCOHOL and PSYCHOACTIVE SUBSTANCE CONSUMPTION

Consider combining this AMC with AMC1 *and* AMC2 IAM.GEN.VCA.170 Psychoactive substances

Rationale: With the increasing availability and legalisation of soft drugs such as canabis it is important to explicitly cover non-consumption of drugs also. As there is no major diffrence in the effects of alcohol or psychoactive substances on the fitness to operate an aircraft both AMCs can be merged into one.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *230* comment by: *EHA*

By EHA: AMC2 IAM.GEN.VCA.100 Pilot responsibilities

ALCOHOL CONSUMPTION

… (b) the blood alcohol level should not exceed the lower of the national requirements or 0.2 per thousand at the start of a flight duty period;

	Units **missing**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 IAM.GEN.VCA.100 Pilot responsibilities	p. 93

comment	*40* comment by: *Widerøe Zero* Require regulation on a national level. Considering new technology and single pilot operations both changes the potential risks of operation, not mandating any sort of flight, duty and rest requirement introduces unnecessary risk and the potential of misuse and abuse of pilots. The inherent limitations that follows from "VFR DAY ONLY" with regards to daylight varies significantly from the equator to higher latitudes. At 0°N/S, you get approx. 13 hours of possible flying time throughout the year. At 70°N/S however, you have 4 hours of twilight during the darkest period and 24/7 daylight for 3 months, possibly putting immense pressure on scheduling if no rules exist. Existing regulation in Part-ORO should be considered as an absolutely maximum. Additional restrictions could be imposed depending on national considerations such as, but not limited to: varying daylight throughout the year, airspace of operation, types of operation, frequency of flights, length of flight. Prefered solution: Simply refer to or copy-paste the "crew members in an unkown state of acclimatisation" in ORO.FTL.205 (Table 3). This would both be simple to use and adds margins of safety compared to Table 2, "Acclimatised crew members"-table.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*202* comment by: *Austro Control* **Explanatory Note / Articles / Appendix:** GM2 IAM.GEN.VCA.100 Pilot responsibilities **Comment:** FTL (Flight Time Limitations) should not be determined at the "operator and/or national level," but rather by EASA. There is a significant inconsistency in FTL for helicopter operations across Europe, which should be avoided with the initiation of IAM. **Proposed Change:** Propose to develop an FTL subart for IAM **Classification:** Major-Conceptual
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.100 Pilot responsibilities p. 93

comment *229* comment by: *EHA*

By EHA: GM2 IAM.GEN.VCA.100 Pilot responsibilities

FLIGHT TIME, DUTY TIME AND REST REQUIREMENTS

… With regard to VCA operations, flight time, duty time and rest requirements may be established at the operator and/or national level.

This will lead to inconsistencies between MS and is at odds with RMT.0494 direction of travel.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 IAM.GEN.VCA.130 Powering-on of lift and thrust units p. 96

comment *30* comment by: *Eve Air Mobility*

Replace "trust" with "thrust" where applicable.

a) The following two situations where the lift and THRUST units are powered on should be distinguished: (1) for the purpose of flight; this is the intent of IAM.GEN.VCA.130; (2) for maintenance purposes or for parking. (b) Lift and THRUST unit engagement for the purpose of flight: the pilot should not leave the controls when the lift and THRUST units are powered on. (c) Engagement of lift and THRUST units for the purpose of maintenance or parking: IAM.GEN.VCA.130 does not prevent ground runs or ground taxi from being conducted by qualified and authorised personnel other than pilots.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *127* comment by: *DGAC FR (Mireille Chabroux)*

Replace "trust by "thrust"

INTENT OF THE RULE
(a) The following two situations where the lift and thrust units are powered on should be distinguished:
(1) for the purpose of flight; this is the intent of IAM.GEN.VCA.130;
(2) for maintenance purposes or for parking.
(b) Lift and thrust unit engagement for the purpose of flight: the pilot should not leave the controls when the lift and thrust units are powered on.
(c) Engagement of lift and thrust units for the purpose of maintenance or parking: IAM.GEN.VCA.130 does not prevent ground runs or ground taxi from being conducted by qualified and authorised personnel other than pilots.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *247* comment by: *EUROCONTROL*

TRUST
typing error. Trust written where thrust expected. Four occurences
THRUST

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *300* comment by: *General Aviation Manufacturers Association (GAMA)*

Ref. GM1 IAM.GEN.VCA.130 Powering-on of lift and thrust units

RATIONALE / REASON / JUSTIFICATION

Typo

PROPOSED TEXT

Replace "trust" with "thrust" where applicable.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC4 IAM.GEN.VCA.105 Responsibilities of the pilot-in-command (PIC) p. 96

comment | *137* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC4 IAM.GEN.VCA.105 Responsibilities of the pilot-in-command (PIC), page 96
As Annex IX is applicable to approved training organisations (ATOs) a reference to the applicable reporting regulations for ATO´s should be included as well; ORA.GEN.160

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *246* comment by: *EUROCONTROL*

Proposal to add a paragraph addressing "drone hazards and strikes". Currently this information is missing here.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.140 Portable electronic devices (PEDs) p. 96

comment | *138* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 IAM.GEN.VCA.140 Portable electronic devices (PEDs), page 96
This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.141 Use of electronic flight bags (EFBs) p. 97

comment | *139* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 IAM.GEN.VCA.141 Use of electronic flight bags (EFBs), page 97
This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.145 Information on emergency and survival equipment carried on board VCA p. 97

comment | *301* comment by: *General Aviation Manufacturers Association (GAMA)*

AMC1 IAM.GEN.VCA.145 Information on emergency and survival equipment carried on board VCA

RATIONALE / REASON / JUSTIFICATION

"ITEMS FOR COMMUNICATION TO THE RCC
The IAM operator should include, as applicable, the number, colour and type of life rafts and pyrotechnics, details of emergency medical supplies, e.g. first-aid kits, emergency medical kits, water supplies and the type and frequencies of the emergency portable radio equipment."

It seems like the sentence should rather say: 'The list containing information on the emergency and survival equipment should include, as applicable, the number, (...). The sentence 'IAM operator should include number of life rafts' does not make sense.

PROPOSED TEXT

	Please correct the sentence. E.g., 'The list containing information on the emergency and survival equipment should include, as applicable, the number, (...)'.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA 160 Carriage of sporting weapons and ammunition p. 98

comment	*44* comment by: *Widerøe Zero* Typo: AMC1 IAM.GEN.VCA 160 (b), appears twice. Should be (b) and (c).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*55* comment by: *Danish Civil Aviation and Railway Authority* Very relevant.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*201* comment by: *Austro Control* **Explanatory Note / Articles / Appendix:** AMC1 IAM.GEN.VCA 160 **Comment:** Incorrect numbering of bullet points. **Proposed Change:** A), B), C) **Classification:** Editorial
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 IAM.GEN.VCA. 160 Carriage of sporting weapons and ammunition p. 98

comment	*248* comment by: *EUROCONTROL* Sporting weapons may be carried on board an aircraft, in a place that is not inaccessible. Double negative is a) difficuelt to understand b) ambiguous. Sporting weapons may be carried on board an aircraft, in a place that is accessible.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.170 Psychoactive substances p. 99

comment

140 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 IAM.GEN.VCA.170 Psychoactive substances, page 99
This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 IAM.GEN.VCA.176 Pilot support programme p. 100

comment

39 comment by: *Widerøe Zero*

Single pilot commercial operations does not exist to any significant extent today in Europe. VCA has the potential to change this and the risks that arises from this is difficult to assess. Pilot support should likely be expanded when considering single pilot operations to counter new threats that arises from SPO.
SPO also significantly changes the possibilities for non-formal transfer of knowledge between flight crew. Discussions and talk during non-critical phases of flight, meal breaks, layovers and other occasions where flight crew may learn and grow have an unknown amount of contribution towards learning and flight safety. SPO removes these areas almost entirely. The suggestions below likely help alleviate this risk without requiring a significant revamp of for instance ORO.FC.230 Recurrent training and checking:

1) Introduce AMC2 IAM.GEN.VCA.176 or perhaps GM2 with the following SPO-specific means of mitigation:
- Require a buddy/mentor program for any new employee involved in SPO. Provides a point of contact for professional and/or personal discussion after release from training. Could last for 12 months from initial employment.
2) Introduce a general requirement for the operator to consider transfer of knowledge for all decisions that affect flight crew in single-pilot operations. This could for example happen through ORO.GEN.110 Operator Responsibilities.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

145 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Suggest new AMC to IAM.GEN.VCA.185, page between 100-101

We propose a new AMC to clarify that approved training organisations should comply with NCO.GEN.135 and are not required to preserve information on the ground.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *198* comment by: *Widerøe Zero*

Physical health and safety is fairly well understood in our industry, **psychosocial risk** understanding is not that mature. Royal Aeronautical Society compares it to our understanding of fatigue **prior** to Fatigue Risk Management in the newly published society briefing paper ("*Psychological Risk Management and Mental Health*", hereafter named "RAeS Raport"), and new tools, metrics, and regulation to promote positive mental health and prevent negative mental health outcomes would be required.

Simply copy-pasting existing peer support regulation without adding other means of mitigation and support is inadequate when introducing single pilot operations to the extent that Part-IAM might do. We protect our customers and assure a safe travel by also considering the human in the machine. Peer support programs have a typical usage rage of 3-4%, while the "*Lived Experience Wellbeing Survey Project*" from Trinity College Dublin, shows a incidence rate of 12-15% for mental distress in pilots (*RAeS Report*, pg. 8). The same project also indicates a high burnout rate.

One of the existing regulatory tools limiting working hours is the limitations regarding flight time, duty and rest (ORO.FTL.205), which the NPA suggests through GM2 IAM.GEN.VCA.100: "**may** be established at the operator and/or national level". This lenient approach would most likely result in additional pressure, burnout and in the end; worse mental health for pilots comprimising safety. In essence, the sum of increased risk does not align with the objectives of NPA 01/2024 as a whole:

- "*[…] safely implement the applicable regulations […] safe operation of manned VCA*", NPA 01-2024, Executive Summary.

Suggestion:
Less is not more in this case. VCA will be under extreme public scrutiny as it becomes part of the mix of air mobility. Aiming at safety levels equal to or above those of commercial aviation today is a minimum. It is a likely that some sort of "psychosocial risk management" will be implemented at some later point in time. If such a program covers both multi-crew and single pilot operations sufficiently, that would likely satisfy our concerns.
Until then:

- Stricter than existing flight time-, duty-, and rest requirements in ORO.FTL.205 should apply to VCA and single pilot operations (SPO)
- Additional mitigating features for SPO, such as, but not limited to:
  - Buddy/mentor program when joining an operator and throughout training and first year after release

	○ Additional recurrent training, focusing on single pilot resource management, mental health awareness, how to prevent negative mental health outcomes, promoting positive mental health, usage of peer support ○ Gather information, assess relevance and provide additional guidance on best practices for Peer Support in **SPO** specifically, seeing as multicrew CAT-operations are the basis for current Peer Support regulation.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.175 Endangering safety p. 100

comment	*141* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 IAM.GEN.VCA.175 Endangering safety, page 100** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 IAM.GEN.VCA.175 Endangering safety p. 100

comment	*142* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC2 IAM.GEN.VCA.175 Endangering safety, page 100** The possibility for ATO´s to replace the psychological assessment with an internal assessment should be possible as well.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.176 Pilot support programme p. 100

comment	*143* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 IAM.GEN.VCA.176 Pilot support programme, page 100**

	We propose to clarify that the requirements for ATOs. ATO should establish a philpsofie regarding safety in line with ORA.GEN.200. Also, this proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for our training organisations to have to follow. Our training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings p. 101

comment	*146* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings, page 101** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings p. 101

comment	*147* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC2 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings, page 101** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings p. 102

comment	*148* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC3 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings, page 102** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC4 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings p. 102

comment	*149* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC4 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings, page 102** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC5 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings p. 102

comment	*150* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC5 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings, page 102** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do

	so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.VCA.200 Transport of dangerous goods under a specific approval p. 103

comment	*130* comment by: *DGAC FR (Mireille Chabroux)* DGAC-FR wonders if it would be possible to simply refer to AMC 1 CAT.GEN.MPA.200(e) (with may be some adaptations).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC6 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings p. 103

comment	*151* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC6 IAM.GEN.VCA.195 Preservation, production, protection and use of recorder recordings, page 103** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 IAM.GEN.VCA.200 Transport of dangerous goods under a specific approval p. 106

comment	*193* comment by: *DGAC FR (Mireille Chabroux)* DGAC-FR wonders if it would be possible to simply refer to GM1 CAT.GEN.MPA.200 Transport of dangerous goods (and rename current GM 1 IAM.GEN.VCA.200 "GM2…")
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 IAM.GEN.MVCA.180 Documents, manuals and information to be carried on board each flight p. 108

comment	*152* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 IAM.GEN.MVCA.180 Documents, manuals and information to be carried on board each flight, page 108** According to opinion 03/2023, Article 5(5)(c) in the cover regulation to Commission Regulation (EU) 965/2012, training organisations shall when conducting flight training comply with the requirements specified in Annex IX (Part-IAM). The proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. We have also noted that in one suggested AMC you must hold an AOC certificate, which the training organisations do not hold. Are the training flights for VCA under the scope of an ATO included in the design and making of Annex IX (Part-IAM) to Commission Regulation (EU) 965/2012?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*179* comment by: *DGAC FR (Mireille Chabroux)* This AMC should be deleted as it clearly states that an electronic means is necessary and mandatory, which is not consistent with operators' practices and not consistent with the high-level requirement that states "in paper or digital media". If the intent is to clarify the use of the word "digital media" it should be added directly in the regulation or should be labelled as a GM. GM : The IAM operator **may** ~~should~~ use digital media such as EFBs that host type A and/or type B EFB applications as an alternative to the carriage of documents, manuals and information in paper on each flight, in accordance with point IAM.GEN.VCA.141.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 IAM.GEN.MVCA.180 Documents, manuals and information to be carried on board each flight	p. 109

comment	*171* comment by: *DGAC FR (Mireille Chabroux)* There is no Part-SERA in Regulation (EU) N° 923/2012. Proposal: The procedures and the visual signals information for use by intercepting and intercepted aircraft should reflect those contained in ~~Part-SERA~~ Regulation (EU) N° 923/2012. They may be part of the operations manual.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM5 IAM.GEN.MVCA.180 Documents, manuals and information to be carried on board each flight p. 110

comment *64* comment by: *Cesare CIANCHI*

Attachment #1

Cesare Cianchi on behalf of ENAC (ITALY)

Comment:
In this formulation some discrepancies are present regarding the definition of "supplemental meteorological information". The definition of GM5 IAM.GEN.MVCA.180 is entitled "SUPPLEMENTAL INFORMATION", but it refers to "SupplementARY information", which is something different from "supplementAL meteorological information".
Please see GM3 CAT.GEN.MPA.180(a)(18) attached, which clearly explains such a difference.
In ENAC interpretation, when we read "supplemental meteorological information" in AMC3 IAM.GEN.MVCA.180, we are referring to that kind of information indicated as "supplementAL" in GM3 CAT.GEN.MPA.180(a)(18).

Proposed text:
If ENAC interpretation is correct, GM5 IAM.GEN.MVCA.180 as it is now should be entitled "SUPPLEMENTARY INFORMATION" instead of "SUPPLEMENTAL INFORMATION", or much more better, it should be structured like GM3 CAT.GEN.MPA.180(a)(18) explaining the difference between "SupplementAL Information" and "SupplementARY information".

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM. OP.VCA.125 Taxiing and ground movement p. 111

comment *99* comment by: *German NSA (BAF)*

UAM.OP.VCA.125 concerns Taxiing and ground movement. GM1 (a) states that "taxiing is the movement of a VCA on the movement […] either on the ground or in the air".
It is suggested to remove the words "either on the ground or in the air" as taxiing movements according to the current definition only occur on the ground.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *250* comment by: *EUROCONTROL*

GENERAL (a) Taxiing is the movement of a VCA on the movement area of a vertiport, diversion location or VEMS operating site , under its own power, either on the ground

	or in the air. (b) Ground taxiing with passengers for the purpose of flight or after landing is a critical phase of the flight (Definition (31)) as is air taxiing and hover taxiing. Due to the safety-critical nature of these types of taxiing, they are performed by an appropriately qualified pilot at the controls of the VCA Does the bold text only refer to air taxiing and hover?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 IAM.GEN.MVCA.181 Documents and information that may not be carried on board p. 111

comment	*204* comment by: *Austro Control* **Explanatory Note / Articles / Appendix:** IAM.GEN / UAM.XX **Comment:** As already commented for Opinion 03/2023, it is questionable why the numbering within Part-IAM (Annex IX) switches after IAM.GEN. Subpart A from IAM to UAM.xx. in Subpart B. While all other rules of the appropriate parts of Reg. 965/2012 follow a logical system with the same three letter code (eg. ORO.GEN.xxx, ORO.AOC.xxx, …), new Part-IAM is not consistent. It starts with IAM.GEN., but continues with UAM.OP.xxx GM1 IAM.GEN.050 (Scope) does neither explain UAM and its link to IAM nor does it clarify why both terms are used in Part-IAM and its subparts and why the numbering system is split. Justification: For harmonisation reasons and for a uniform numbering, the IAM provisions in the rules and their the numbering in appropriate AMC and GM should be the same in the whole Part-IAM (only IAM.xxx). Stakeholders are used to this system and confusion should be avoided. **Proposed Change:** Propose to change the inconsistent numbering from UAM to IAM in Part-IAM, or add – at least – an explanation GM for this rupture with the numbering principle. **Classification:** Editorial
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.VCA.125 Taxiing and ground movement p. 112

comment	*22* comment by: *Darío Ares* To add (a) (4) section that should detail between the different ground taxy systems (e.g. self powered wheels, non powered wheels or skids).

response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.VCA.135 Routes and areas of operation p. 112

comment	*63* comment by: *DE-LBA* Page 113, first paragraph: "If the competent authority of the **place of operation** has designated [...]" What is the definition of "Place of Operation"? We believe it is unclear which CA is responsible without a definition or further clarification.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.VCA.145 Establishment of minimum flight altitudes p. 113

comment	*56* comment by: *Danish Civil Aviation and Railway Authority* To (a)(1) SERA is called 923/2012, not 623/2012
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*153* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 UAM.OP.VCA.145 Establishment of minimum flight altitudes, page 113** Under section a) of "considerations when establishing minimum flight altitudes", section (a) p (1) list 623/2012, correct? or should it be 923/2012?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*172* comment by: *DGAC FR (Mireille Chabroux)* - SERA.5005 (f) does not address minimum altitudes but minimum heights, although the referenced AMC mentions altitudes. - We also propose to clarify the wording related to the minimum heights established by the competent authorities above SERA.5005 (f) heights. Indeed, the wording "minima established by the State" might be misunderstood as this possibility only exists thanks to a GM which may not be widely known (GM1 SERA.3105). We therefore advise to use a closer wording to the one of said GM. - There is also a typo in the reference to the Regulation (EU) N° 923/2012. Proposal: 1) the minimum flight heights~~altitudes~~ specified in point SERA.5005(f) of Regulation (EU) No 923~~623~~/2012 or the exemptions granted by the competent authorities of the place of operation or the ~~minima established by~~minimum heights established above

	those of SERA.5005 (f) by the State where the operation takes place, when applicable;
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.VCA.135 Routes and areas of operation p. 113

comment	*251* comment by: *EUROCONTROL* USE OF ADEQUATE VERTIPORTS, DIVERSION LOCATIONS OR VEMS OPERATING SITES The actions needed to make a diversion location comply with the requirements, such as those related to availability and adequacy, may be subcontracted (for example, to the owner of the land or any third party) in accordance with ORO.GEN.205. The IAM operator should ensure, in particular, that the services provided by the subcontractor are appropriately integrated to its flight preparation and operations management processes. The text after the header is only referencing "diversion loations". Therefore, vertiports and VEMS operating sites should be erased from the header USE OF ADEQUATE DIVERSION LOCATIONS. The actions needed to make a diversion location comply with the requirements, such as those related to availability and adequacy, may be subcontracted (for example, to the owner of the land or any third party) in accordance with ORO.GEN.205. The IAM operator should ensure, in particular, that the services provided by the subcontractor are appropriately integrated to its flight preparation and operations management processes.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.VCA.190 Fuel/energy scheme - general p. 113

comment	*254* comment by: *EUROCONTROL* For the purpose of establishing the fuel/energy scheme for safe operations with VCA, the IAM operator should consider the certified minimum performance (CMP) data set of the VCA obtained by considering the effect of single failures and combinations of failures that are not extremely improbable on the nominal performance parameters. Is the (CMP) data set reflecting performance changes due to changing temperature. CMP can vary seasonally when considering electrically powered VCAs?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.
comment	*255* comment by: *EUROCONTROL*

	The CMP data allows the operator to plan the range of VCA if affected by the CFP, as well as other flight parameters such as rate of climb, thus assessing the suitability of the vertiports, diversion locations or VEMS operating sites along the route before each flight. It should be mentioned that this data is also necessary too plan the vertiport network.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*263* comment by: *Airbus Helicopters* Comment on GM1 UAM.OP.VCA.190 Fuel/energy scheme page 114 The sentence"For reference, the CMP corresponds to a critical engine failure (OEI) scenario of a Category A helicopter" is somewhat incorrect as for the Category A certification not all combination of failures not extremely improbable are required to be taken into account for the certified minimum performance (such as CAT A takeoff profiles, OEI ceilings,etc.) It is proposed to indicate instead" the CSFL following a CFP for VCA can be compared to the continued safe flight and landing or safe rejected take-off following a critical engine failure for helicopters operated in performance Class 1"
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*302* comment by: *General Aviation Manufacturers Association (GAMA)* GAMA supports the Agency's proposal for performance-based energy reserves. This approach acknowledges the safety layers inherent in the operating environment of VTOL aircraft, including the availability of vertiports and diversion locations, while allowing the industry and authorities to collect data during initial operations. The Agency also has the opportunity to provide additional AMC and/or GM as necessary.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM 1 UAM.OP.VCA.191 Fuel/energy scheme - fuel/energy planning and in-flight re-planning p. 114

comment	*68* comment by: *EUROCONTROL* *Ref. NOTAMs can be accessed online and are also available at most airport weather stations.* *The proposed wording is not particularly good: firstly there is no definition for an "airport weather station"; it's not an official entity.* *Furthermore, there is no requirement for any of the MET functions (aeronautical meteorological station or aerodrome meteorological office) to provide anything other than weather, climate, volcanic ash etc. certainly, the promulgation of NOTAMS is not a MET function.*

	It is assumed that this text is trying to indicate that NOTAMS could be accessed in the same location where a pilot would access an "automated pre-flight information system". *According to ICAO Annex 3 (9.4.2), these systems are "providing for a harmonized, common point of access to meteorological information and aeronautical information services information by operators, flight crew members and other aeronautical personnel concerned should be as agreed between the meteorological authority and the civil aviation authority or the agency to which the authority to provide service has been delegated in accordance with Annex 15, 2.1.1 c)."* *The relevant PART-MET section of the EU rule is AMC1 MET.TR.215(a)(f) and AMC3 MET.TR.215(a)* *Accordingly, our recommendation is that a more accurate text would be:* ***"NOTAMS can be accessed online and through automated pre-flight information systems."***
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.VCA.191 Fuel/energy scheme - fuel/energy planning and in-flight replanning p. 114

comment	*154* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 UAM.OP.VCA.191 Fuel/energy scheme — fuel/energy planning and in-flight replanning, page 114** Something as important as the fuel/energy calculation for a flight, we deem necessary to base on certified/approved data from an aircraft flight manual. Or, if there might be cases where this does not exist, a guide on what may constitute "estimated" fuel/energy consumtion data is required.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*191* comment by: *DGAC FR (Mireille Chabroux)* It could be require from th operator to have in place a way to monitor the real consumption to be able then to account for the data obtained through this monitoring. The AMC1 could refer to the monitoring by the operator. "the planned amount of usable fuel/energy for the flight may be based on estimated fuel/energy conumption data. These estimated fuel/energy consumption data should be based on a monitoring by the operator of the real consumption.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*252* comment by: *EUROCONTROL*

	Typo: Sometimes it is written "replanning" and sometimes "re-planning"
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*253* comment by: *EUROCONTROL* VCA SPECIFIC DATA When no VCA-specific data (derived from a fuel/energy consumption monitoring system) exists for the precise conditions of the flight, the planned amount of usable fuel/energy for the flight may be based on estimated fuel/energy consumption data. How is that safe?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 UAM.OP.VCA.191 Fuel/energy scheme - fuel/energy planning and in-flight replanning p. 115

comment	*43* comment by: *Widerøe Zero* Is 10% contingency fuel a bit conservative? Considering new technology, with likely more precise measurement of fuel/energy usage as well as advanced planning tools that includes detailed weather, wind and other information – 10% is quite significant. To allow different operations with different use of technology and information for planning, suggest including that: following verification of planned energy/fuel use vs. actual energy/fuel use, contingency energy/fuel requirements may be reduced to 5% (or 3%?) dependent on accuracy. Continous monitoring of accuracy would then be required following a reduction below 10% contingency fuel/energy.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*256* comment by: *EUROCONTROL* CONTINGENCY FUEL/ENERGY The contingency fuel/energy should be equivalent to 10 % of the planned trip fuel/energy or, in the event of in-flight replanning, 10 % of the trip fuel/energy for the remainder of the flight How is the number of 10% derived? Does this account for diverting to an alternate vertiport?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.VCA.191 Fuel/energy scheme - fuel/energy planning and in-flight replanning p. 115

comment	*231* comment by: *EHA* By EHA: AMC2 UAM.OP.VCA.191 Fuel/energy scheme — fuel/energy planning and in-flight replanning TRIP FUEL/ENERGY **To include start and taxy, where appropriate.** **As a general comment: While individual flight planning and execution will be dynamic, as now, the envisaged volume of traffic will require greater active management than previously seen but this is not reflected in traditional planning calculations.**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC4 UAM.OP.VCA.191 Fuel/energy scheme-fuel/energy planning and in-flight replanning p. 115

comment	*240* comment by: *Cesare CIANCHI* Cesare Cianchi on behalf of ENAC (ITALY): Comment: ENAC understands EASA position that to keep the minimum flying times requirements as per traditional aircraft (e.g. 30 minutes for VFR NCO airplanes or VFR CAT helicopters or 20 minutes for VFR NCO helicopters or 10 minutes for A to A VFR NCO airplanes) could be incompatible with the capabilities of the first VCAs but we believe also that a good compromise shall be found. Something more is needed in our view to avoid situations where the operator once reached the destination vertiport could have FRF as low as that necessary for only one minute of flying time. Such a situation, according to all our experts of VFR flights, would be very unsafe. A VFR pilot is and will be a VFR pilot with all his/her human limitations and on early VCA he/she will not have more technological support than the pilot of a vintage R22 or C150. Moreover, once at destination, so with all trip energy already exhausted, the pilot could have interaction with ATC (maybe asking for a holding path 360°) or with other traffic or find unplanned situations affecting the FATO. Having said that we look forward for a wise application of the performance based rule proposed in EASA opinion, ENAC anyway wants to ensure that even if AFMs will give a representative go around time less than 5 minute the final reserve energy will be enough for at least 5 further minutes of safe flying. Proposed text (to be added to the existing one): When, having taken into account all the considerations in point (c)(4) of UAM.OP.VCA.191, the determined final reserve fuel/energy results to be less than the amount of fuel/energy necessary to guarantee 5 minutes flying at the appropriate configuration/speed to perform the go-around and approach procedures, the operator should ensure that in no case the FRF is less than the

amount of fuel/energy necessary to guarantee 5 minutes flying at the appropriate configuration/speed to perform the go-around and approach procedure.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *290* comment by: *DGAC FR (Mireille Chabroux)*

DGAC-FR would like to ensure that the final reserve will be sufficient in order to guarantee the safety of the flight. DGAC-FR fears that the time in the AFM could be less than 5 minutes which would not ensure safety (see general comment).
It is suggested ti change the text as follows:

I - The representative time in accordance with UAM.OP.VCA.191(c)(4)(ii) should be provided by the VCA manufacturer in accordance with MOC VTOL.2130. In any case, final reserve fuel/energy should not be less than the amount of fuel/energy necessary to guarantee 5 minutes of flight time, equivalent to the time needed to perform at the appropriate configuration/speed the go-around and approach procedures taking into account the CMP of VCA.

II – In order to determine the conservative fuel/energy consumption, the operator should take into account the reliability of battery charge indicators.

Moreover, as the intent of the diversion location is to ensure that, in case of a mechanical issue or in case the energy is not sufficient anymore (which may happen quite often), the VTOL is able to land with the final reserve onboard, it is crucial to make sure that the diversion location will be available.
DGAC-FR thus suggests to write a new AMC so that the operator takes into account the margins he took (including the margins to define the final reserve) to determine its methodology for the availability of the diversion location. If the margins are low, he may decide to put fences around the diversion location, or have someone to watch over it making sure that the DL is available during the whole flight of the VTOL.
A new AMC is poposed:
AMC4 UAM.OP.MVCA.107 Adequate vertiport and adequate diversion location
AVAILABLE DIVERSION LOCATION

When assessing the methodology and deriving measures to ensure that the diversion location is available when needed, and the nature of pre-survey that is adequate, the operator should take into account what its procedures, hypothesis and related level of confidence provide for:
(a) the margin used during flight preparation regarding the wind speed.
(b) the margin used during flight preparation regarding visibility and ceiling.
(c) The methodology used to define the final reserve and associated margin
(d) the density of other diversion locations and alternate vertiports available in the vicinity

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC5 UAM.OP.VCA.191 Fuel/energy scheme - fuel/energy planning and in-flight replanning p. 116

comment

155 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC5 UAM.OP.VCA.191 Fuel/energy scheme — fuel/energy planning and in-flight replanning, page 116
We would ask EASA to set up work shops or seminars to prepare the national competent authorities on how to approve total time for final reserve.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

232 comment by: *EHA*

By EHA: AMC5 UAM.OP.VCA.191 Fuel/energy scheme — fuel/energy planning and in-flight replanning

ADDITIONAL ENERGY

The pre-flight planning should take into account the CMP data and, in particular, a potentially lower total fuel/energy remaining after an assumed CFP and a potentially higher consumption after an assumed CFP.

The principle is understood but to be determined whether this will be sufficiently robust in practice, especially in view of the scale issue identified above.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

257 comment by: *EUROCONTROL*

ADDITIONAL ENERGY

Change to:
ADDITIONAL FUEL/ENERGY

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment

260 comment by: *EUROCONTROL*

At this point, the inclusion of an arbitrary value (which is not based on actual data) would have more drawbacksthan benefits. For example, if it is too low, it may become a target for operators, who would most likely end up by not factoring in all other safety precautions, also leaving NCAs with no leverage in the future.

Typo
Change to:
At this point, the inclusion of an arbitrary value (which is not based on actual data) would have more drawbacksthan benefits. For example, if it is too low, it may

	become a target for operators, who would most likely end up by not factoring in all other safety precautions, also leaving VCAs with no leverage in the future.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM5 UAM.OP.VCA.191Fuel/energy scheme - fuel/energy planning and in-flight re-planning p. 116

comment	*258* comment by: *EUROCONTROL* FINAL RESERVE/FUEL ENERGY Typo Change to: FINAL RESERVE FUEL/ENERGY
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM4 UAM.OP.VCA.191Fuel/energy scheme - fuel/energy planning and in-flight re-planning p. 116

comment	*330* comment by: *Europe Air Sports* GM4 UAM.OP.VCA.191Fuel/energy scheme — fuel/energy planning and in-flight re-planning FINAL RESERVE FUEL/ENERGY **EAS COMMENT:** We would suggest a slight rewording of Para 2 for better clarity. EASA text: "The PIC should plan the flight so in way that allows from any point along the route a safe-landing to be performed with more than the final reserve fuel/energy." **EAS SUGGESTION:** **"**The PIC should plan the flight ***in such a way*** that allows from any point along the route a safe-landing to be performed with more than the final reserve fuel/energy."
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.VCA.195 Fuel/energy scheme - in-flight fuel/energy management p. 117

comment	*23* comment by: *Darío Ares*

	The specific check points should be regularly distributed along the route to allow for a safe management of the fuel/energy in flight.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*233* comment by: *EHA* By EHA: AMC1 UAM.OP.VCA.195 Fuel/energy scheme — in-flight fuel/energy management IN-FLIGHT FUEL/ENERGY CHECKS (c) The relevant fuel/energy data and estimations should be recorded. **It is not specified what should happen to this information or how long it should be retained.**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.VCA.195 Fuel/energy scheme - in-flight fuel/energy management p. 118

comment	*261* comment by: *Airbus Helicopters* Comment on AMC2 UAM.OP.VCA.195 page 118 If the purpose of the in-flight check is to ensure enough energy is measured as sufficient to cover the remaining part of the flight, the verification should take into account the parameters influencing the amount of energy required to be used to reach the planned destination or, if required during the remaining of the flight to reach a vertiport or diversion location. Both amounts of energy will need to be computerized against the battery energy simulation model at flight planning level. This is already required to ensure compliance with the rules of UAM.OP.VCA.190. If a deviation from the predicted energy remaining is observed at the defined check point, the equipment listed under AMC1 UAM.IDE.MVCA.140 (a)(2) to (a)(4) should provide the necessary information to the PIC. The proposed AMC content compares the usable energy upon landing at destination with the sum of final energy reserve and the energy necessary to reach destination from the check point: this is not aligned with the intent of the AMC1 UAM.IDE.MVCA.140 and should be clarified. Indeed usable energy upon landing can only be predicted and it will be more logical to compare with the actual remaining energy at the check point.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.VCA.290 Proximity detection p. 120

comment	*16* comment by: *Europe Air Sports*

	GM1 UAM.OP.VCA.290 Proximity detection TRAINING OBJECTIVES FOR THE USE OF THE PROXIMITY WARNING SYSTEM **EAS COMMENT** We assume "Ground Proximity Warning System" is meant. We suggest including also the "Ground" word, to avoid any possible confusion with airborne warning systems (ACAS or Conspicuity systems).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.VCA.300 Approach and landing conditions p. 120

comment	*24* comment by: *Darío Ares* Modify point (D) adding: Or automatic communication regarding safe landing based on weather conditions and specific variables / thresholds of the aircraft (not only nominal values, but also specific limits of this vehicle in this precise momment that could be affected for other internal / external events that could affect real thresholds). Also consider to add the automatically (e.g. sensors or cameras) calculated values that could be provided for the Vertiport Operator/Manager.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 UAM.OP.VCA.300 Approach and landing conditions p. 120

comment	*26* comment by: *Darío Ares* Could recommend that the vertiport operator should provide this information in real time via any vertiport digital service.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.VCA.300 Approach and landing conditions p. 120

comment	*28* comment by: *Darío Ares* Thinking in providing the maximum automation, we consider this information shall be reported at real time (digital service provided by Vertiport management).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.MVCA.100 Use of air traffic services (ATS) p. 121

comment	*57* comment by: *Danish Civil Aviation and Railway Authority* Very relevant.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.100 Use of air traffic services p. 121

comment	*102* comment by: *German NSA (BAF)* AMC1 (c) must be aligned with the AMC to SERA.6005 (c) of CIR (EU) No 923/2012 and must not contradict it.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.MVCA.100 Use of air traffic services p. 121

comment	*105* comment by: *German NSA (BAF)* This GM1 is duplicated.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*267* comment by: *EUROCONTROL* Whole section was already defined in GM1 UAM.OP.MVCA.100 Use of air traffic service which is why it can be erased entirely.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*303* comment by: *General Aviation Manufacturers Association (GAMA)* This GM1 is duplicated. Please remove.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.VCA.315 Flight hours - reporting p. 121

comment	*268* comment by: *EUROCONTROL* Flight hours may be reported either: (a) as flight hours flown by each VCA — identified by its serial number and registration mark — during the previous calendar

	year; or (b) as total flight hours of each VCA — identified by its serial number and registration mark — on the 31st of December of the previous calendar year Does this equal to the accumulated total flight hours recorded up to the 31st of December of the previous calendar year?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.MVCA.107 Adequate vertiport and adequate diversion location p. 122

comment	*17* comment by: *Europe Air Sports* AMC2 UAM.OP.MVCA.107 Adequate vertiport and adequate diversion location ADEQUATE DIVERSION LOCATIONS **EAS COMMENT** The concept of Adequate Diversion Locations raises several questions not fully addressed in the NPA and relating to the rights and obligations and the safety of the VCA pilot in command; 235 (if it is open for access). An example would be if the Diversion Location is simultaneously an aerodrome or a private operating site used by other modes of aviation. Does the NPA allow this?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*27* comment by: *Darío Ares* Consider adding: V: Maxium movement during take-off and landing maneuvers. VI: Type of landing systems allowed (e.g wheels, skids). VII: Availability of the diversion FATO (off nominal situation).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*269* comment by: *EUROCONTROL* Additional item should be added e.g. (h) ground moving equipment, if available.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 UAM.OP.MVCA.107 Adequate vertiport or adequate diversion location p. 123

comment	*29* comment by: *Darío Ares* Not only "existing means indicating wind speed and direction", but also air density, humidity, snow, etc.

Consider adding:
(13): Add Vertiport location (3D dynamic) for not fixed vertiports.
(14): Other systems such as 4G/5G private networks for communication purposes.
(15): The availability of the FATO (off nominal situation).

NOTE: eVTOLs are more affected by weather conditions than other aircraft, specially for offshore or elevated rooftop vertiports (in ships or oil rigs).

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *270* comment by: *EUROCONTROL*

(12) the means to remove a VCA from a diversion location.

Does this include the movement from the FATO? If not, this should be added here?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 UAM.OP.MVCA.107 Adequate vertiport and adequate diversion location p. 124

comment | *271* comment by: *EUROCONTROL*

(d) A diversion location should not be understood as a diversion vertiport.

What is the difference?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC5 UAM.OP. MVCA .107 Adequate vertiport and adequate diversion location p. 125

comment | *67* comment by: *ASD*

Comment:
The suggested procedure in point (c) is modelled based on the coordination procedure in Part SPO (ARO.OPS.150 (f)). This procedure suggested to apply for the choice of diversion locations in a cross-border context effectively means that operators will have to wait until authorities have coordinated among each other, with no visibility on timeline, which may well significantly delay the approval process.

This procedure has been widely criticised for not working. Specific Guidelines were issued in 2019 ("for coordination of cross-border high-risk commercial specialized operations"), but they mitigated rather than solved the matter.

In addition, the NPA lists this procedure as AMC 5, but it should rather be AMC 4 as the previous one is AMC 3 (Pages 123-124).

Suggested resolution:
The effects of the implementation of this procedure should be monitored once eVTOL operations will commence, and its content should be revisited in the next versions. Further clarification and definition of the procedure is required to mitigate any potential negative effect on operations and to assure an efficient process.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *304* comment by: *General Aviation Manufacturers Association (GAMA)*

Ref. AMC5 UAM.OP.MVCA.107 (c)

RATIONALE / REASON / JUSTIFICATION

The suggested procedure in point (c) for the choice of diversion locations in a cross-border context is modelled based on the coordination procedure in Part SPO (ARO.OPS.150 (f)). This procuedure effectively means that operators will have to wait until authorities have coordinated among each other, with no visibility or indication on timeline, which may well significantly delay the approval process. This procedure has been widely criticized for not working well/being inefficient. Specific Guidelines were issued in 2019 ("for coordination of cross-border high-risk commercial specialized operations"), but they mitigated rather than solved the matter.

PROPOSED TEXT

We call on EASA to regularly monitor the application of this procedure based on experience of initial eVTOL operations, to assess the need for potential revisions and propose amendments to AMCs/GMs as appropriate.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *305* comment by: *General Aviation Manufacturers Association (GAMA)*

RATIONALE / REASON / JUSTIFICATION

There is no AMC4

PROPOSED TEXT

Reidentify to AMC4.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC6 UAM.OP.MVCA.107 Adequate vertiport or adequate diversion location p. 125

comment | *156* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC6 UAM.OP.MVCA.107 Adequate vertiport or adequate diversion location, page 125
We suggest that approved training organisation should assess the safety risk that is associated with the type of the operation and the safety risk assessment may conclude that there is no need for availability of RFFS at the aerodrome of intended landing because of the low risk that is associated with the type of aircraft and type of operation.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *272* comment by: *EUROCONTROL*

The VCA operator should: (a) as part of its safety management system, assess the level of RFFS protection available at the vertiport or diversion location intended to be used, to ensure that an acceptable level of protection is available for the intended operation; and (b) include relevant information related to the RFFS protection that is deemed acceptable by the operator in the operations manual.

What is an acceptable level of protection?
Currently the RFFS level of protection at airports, are based on JET A1 planes o helicopters, but the electric vehicles are completely different.
Firefighters at airports are not always trained for a lithium battery fire.
Requirements for vertiports should also be developed.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *306* comment by: *General Aviation Manufacturers Association (GAMA)*

RATIONALE / REASON / JUSTIFICATION

There is no AMC4

PROPOSED TEXT

Reidentify to AMC5.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM4 UAM.OP.MVCA.107 Adequate vertiport or adequate diversion location p. 126

comment | *46* comment by: *Widerøe Zero*

As we understand it, RFFS certification specifications for both battery-electric and hydrogen fuel-based aircraft will be developed as part of RMT.0230, possible as part of subtask G#1 (CS-VPT-DSN) with planned NPA 2025/Q4 and Opinion/Decision 2026/Q3, which likely would indicate approval by the European commission around 2027/Q1.

Considering likely entry into service and operational start before this, we are concerned that operational feasibility could be hindered by lack of proper rescue and firefighting that hinders approval of operations.
The current prototype specification (PTS-VPT-DSN) does not include RFFS requirements beyond highlighting that the current regulation is insufficient. Compliance with AMC6 UAM.OP.MVCA.107 and GM4 could be difficult/not possible.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *273* comment by: *EUROCONTROL*

RESCUE AND FIREFIGHTING SERVICES (RFFS) AND OTHER SERVICES AND FACILITIES (a) An adequate vertiport or diversion location should be provided with rescue and firefighting services (RFFS). This means that the vertiport or diversion location are equipped for firefighting (e.g. fire extinguishers, fire hoses, fire and welding blankets) or an agreement is established with a local firefighting unit or there is another adequate arrangement. (b) The operator should assess which other services and facilities are necessary for the intended operation, such as air traffic services, lighting, communications, weather reporting, navigation aids, charging equipment, sound protection, etc.

Currently airports publish their level of protection in terms of RFFS level that takes into account the dimensions of the plane or helicopter. Something similar has to be developed for vertiports taking into account its characteristics.
Firefighters at airports are not always trained for a lithium battery fire.
Requirements for vertiports should also be developed.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *274* comment by: *EUROCONTROL*

RESCUE AND FIREFIGHTING SERVICES (RFFS) AND OTHER SERVICES AND FACILITIES
(a) An adequate vertiport or diversion location should be provided with rescue and firefighting services (RFFS). This means that the vertiport or diversion location are equipped for firefighting (e.g. fire extinguishers, fire hoses, fire and welding blankets) or an agreement is established with a local firefighting unit or there is another adequate arrangement. (
b) The operator should assess which other services and facilities are necessary for the intended operation, such as air traffic services, lighting, communications, weather reporting, navigation aids, charging equipment, sound protection, etc.

Consider an adequate vertiport with a RFFS capable to attend VCA operations.

Proposal for change:
(a) An adequate vertiport or diversion location should be provided with rescue and firefighting services (RFFS) capable to attend VCA. This means that the vertiport or diversion location are equipped for firefighting (e.g. fire extinguishers, fire hoses, fire and welding blankets) adressed to VCA operations or an agreement is established with a local firefighting unit or there is another adequate arrangement.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.155 Carriage of special categories of passengers (SCPs) p. 127

comment	*35* comment by: *Eve Air Mobility* Opinion 2023/03 proposed in UAM.OP.MVCA.155 "(b) SCPs shall not be allocated to, nor occupy, seats that permit direct access to emergency exits or where their presence could: (1) impede crew members' duties; (2) obstruct access to emergency equipment; or (3) impede the emergency evacuation of passengers." For those VCA which all the doors are also emergency exits, an acceptable means of compliance should be established so that SCPs can be carried without compromising safety; otherwise, SCPs will be prevented from being passengers in those VCA with this configuration. Provide acceptable means under AMC1 UAM.OP.MVCA.155 to comply with the regulatory-level provision that allows flexibility based on the specific design. "For those VCA for which all doors are emergency exits, SCPs may occupy seats that permit direct access to emergency exits provided that all passengers are properly instructed on emergency evacuation procedures or an alternative procedure is approved by the CAA."
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*309* comment by: *General Aviation Manufacturers Association (GAMA)* Ref. AMC1 UAM.OP.MVCA.155 Carriage of special categories of passengers (SCPs) **RATIONALE / REASON / JUSTIFICATION** Opinion 2023/03 proposed in UAM.OP.MVCA.155 "(b) SCPs shall not be allocated to, nor occupy, seats that permit direct access to emergency exits or where their presence could: *(1) impede crew members' duties; (2) obstruct access to emergency equipment; or (3) impede the emergency evacuation of passengers."* For those VCA which all the doors are also emergency exits, an acceptable means of compliance should be established so that SCPs can be carried without compromising safety; otherwise, SCPs will be prevented from being passengers in those VCA with this configuration. **PROPOSED TEXT** Provide acceptable means to comply with the regulatory-level provision that allows flexibility based on the specific design. *"For those VCA for which all doors are emergency exits, SCPs may occupy seats that permit direct access to emergency exits provided that all passengers are properly instructed on emergency evacuation procedures or an alternative procedure is approved by the CAA."*
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.165 Passenger seating p. 128

comment

47 comment by: *Widerøe Zero*

Highlighting a possible oversight. Due to designs of VCA, for instance with doors on both sides of the VCA, it is not unlikely that ALL SEATS will be defined as emergency exit seats.
If SCPs can't be seated at an emergency exit, SCPs can't be transported in this case. Operating a mode of transportation where "*infants, children, unaccompanied minors and persons of reduced mobility aren't welcome*" – is hardly a win for air mobility.

If AMC1 UAM.OP.MVCA 165: "[...]*Passengers who, because of their condition, might hinder other passengers during an evacuation*" is to be understood as: "if all seats are emergency exits seats, then no passenger are able to hinder other passengers" – this is not a problem. It might however be wise to emphasise it to avoid confusion. Suggest an additional point to AMC1.UAM.OP.MVCA.165 or a new AMC2:

- *"If all passenger carrying seats onboard are defined as permitting direct access to emergency exits, seating of SCPs shall be done based a risk assessment performed by the operator."*

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.MVCA.160 Stowage of baggage and cargo p. 128

comment

275 comment by: *EUROCONTROL*

Stowage of baggage and cargo, "The term 'cargo' in UAM.OP.MVCA.160(b) refers to anything that belongs to a passenger travelling but is not a piece of luggage"

Will all cargo belong to a passenger? It is not the case for commercial manned air transport today.

response

Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.MVCA.170 Passenger briefing p. 129

comment

157 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC2 UAM.OP.MVCA.170 Passenger briefing, page 129
This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training

	for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.175 Flight preparation p. 133

comment	*234* comment by: *EHA* By EHA: AMC1 UAM.OP.MVCA.175 Flight preparation OPERATIONAL FLIGHT PLAN —VEMS AND LOCAL OPERATIONS (f) No entries should be made in the operational flight plan during the flight. **This is at odds with the intent of the dynamic nature of the OFP for all other flights, which concludes with the statement, "(d) All entries on the operational flight plan should be made concurrently and be permanent in nature."** **An abbreviated form is supported, which is proportionate to the scale and extent of the VEMS or local operation.**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*276* comment by: *EUROCONTROL* OPERATIONAL FLIGHT PLAN Does this equal an "ATS flight plan" as mentioned in page 134?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*277* comment by: *EUROCONTROL* (a) The operational flight plan used and the entries made during flight should contain the following items: (12) route and route segments with checkpoints/waypoints, distances, time and tracks; What are checkpoints/waypoints for VCA? How defines them? Are they perhaps based on the fuel/energy scheme? More clarification is needed.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*278* comment by: *EUROCONTROL* OPERATIONAL FLIGHT PLAN —VEMS AND LOCAL OPERATIONS (e) For VEMS and local operations with VCA, the operational flight plan may be established in a simplified form. Local operations should be defined in the operations manual.

	What does "local operations" mean? is there a definition which can be referenced here?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*279* comment by: *EUROCONTROL* OPERATIONAL FLIGHT PLAN —VEMS AND LOCAL OPERATIONS (e) For VEMS and local operations with VCA, the operational flight plan may be established in a simplified form. Local operations should be defined in the operations manual. SERA mentions "abbreviated flight plan" - if the "simplified form" refers to that then please use that term. Otherwise explain what is simplified form.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.VCA.177 Submission of an air traffic services (ATS) flight plan p. 134

comment	*235* comment by: *EHA* By EHA: AMC1 UAM.OP.VCA.177 Submission of an air traffic services (ATS) flight plan … (2) if **a** VCA is overdue or missing, ensure that the appropriate ATS or SAR service is notified; and **Typo**
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC3 UAM.OP.MVCA.192 Fuel/energy scheme - selection of vertiports and diversion locations p. 136

comment	*18* comment by: *Europe Air Sports* AMC3 UAM.OP.MVCA.192 Fuel/energy scheme — selection of vertiports and diversion locations PLANNING MINIMA AND SAFETY MARGINS FOR THE DESTINATION VERTIPORT OR ANOTHER SAFE LANDING OPTION AT DESTINATION "(b) The PIC should ensure that the duration of the flight and the actual and forecast meteorological conditions, based on appropriate meteorological information, are such that during a period commencing 1 hour before and ending 1 hour after the estimated time of arrival at the destination vertiport or at another planned safe landing option, an approach and landing are possible at or above visibility and distance from cloud minima as specified in SERA.5001..."

EAS COMMENT:
What is the reason to require adequate weather already 1 hour before estimated time of arrival?

From a rational viewpoint, one would assume it's enough if the weather becomes adequate, say, 15 minutes before the earliest possible arrival time of the VCA, taking into account VCA flying speed and the influence of the wind?

In a dense urban environment weather may change rapidly and a loss of "flyable time" due to having to wait unnecessarily for adequate weather may have significant impact on the operation.

(For the opposite case i.e. margin for deteriorating weather, EAS concurs with the 1 hour margin proposed in the NPA.)

EAS Suggestion:
"The PIC should ensure that the duration of the flight and the actual and forecast meteorological conditions, based on appropriate meteorological information, are such that during a period commencing ***either 1 hour before the estimated time of arrival or at the time of departure, whichever is later,*** and ending 1 hour after the estimated time of arrival at the destination vertiport or at another planned safe landing option, an approach and landing are possible at or above visibility and distance from cloud minima as specified in SERA.5001..."

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *45* comment by: *Widerøe Zero*

(b):
Requiring: "*[…] during a period commencing 1 hour before and ending 1 hour after the estimated time of arrival at the destination vertiport*" appears excessive when flights are likely to be range from only a couple of minutes to possible a few hours, depending on design and fuel/energy onboard.

Considering the shortest flight of only a few minutes, suggest adding a new additional point:

- "*For flights with a duration shorter than 1 hour, the required period prior to the estimated time of arrival at the destination vertiport or at another planned safe landing option, may be reduced to the planned trip time. The period commencing after the estimated time of arrival shall remain 1 hour*" or something along those lines.

This would align the operational nature of short duration VCA-flights with regulation in our opinion.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.193 Safe landing options at the destination p. 137

comment	*19* comment by: *Europe Air Sports* AMC1 UAM.OP.MVCA.193 Safe landing options at the destination TRAFFIC AND OTHER OPERATIONAL CONDITIONS "(b) If the landing options are collocated at the destination vertiport, the PIC should ensure that no other aircraft is taking off or landing at any of them at the same time when the landing of the VCA is expected, [unless the landing options are independent and operation on one of them does not affect safe landing at the other one.]" **EAS COMMENT:** A humble question: does this wording ensure positively that a landing order ("who lands first?") agreed by both of two simultaneously approaching VCAs is always established? Or should the rule require that both PICs communicate with each other (or via ATC as appropriate) to establish the landing order? (Note: we assume the vertiport's airspace classification requires VCAs to establish two way radio communication).
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*236* comment by: *EHA* By EHA: AMC1 UAM.OP.MVCA.193 Safe landing options at the destination … (b) If the landing options are **co-located** at the destination vertiport, the PIC should ensure that no other aircraft is taking off or landing at any of them at the same time when the landing of the VCA is expected, unless the landing options are independent and operation on one of them does not affect safe landing at the other one. Word use.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.200 Special refuelling or defuelling of VCA p. 138

comment	*280* comment by: *EUROCONTROL* (9) one pilot should stay at the controls, constantly monitor the refuelling, and be ready to shut off the lift and thrust units and evacuate at all times; and Why is it referred to "one". Is this NPA considering multiple pilots of one VCA? Proposal for change:

	(9) the pilot should stay at the controls, constantly monitor the refuelling, and be ready to shut off the lift and thrust units and evacuate at all times; and
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.MVCA.200 Special refuelling or defuelling of VCA p. 139

comment	*281* comment by: *EUROCONTROL* (g) unless passengers are regularly trained in emergency evacuation procedures, an additional crew member or ground crew member should be assigned to assist in the rapid evacuation of the passengers. How realistic is it to have more than one crew member which is the pilot?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.OP.MVCA.205 Charging or swapping of VCA batteries while passengers embark, are on board, or disembark p. 140

comment	*288* comment by: *EUROCONTROL* RISK ASSESSMENT AND NECESSARY PRECAUTIONS (a) The operator should assess as a minimum the following risks, hazards and mitigation measures related to charging or swapping of batteries while passengers are embarking, on board or disembarking, as applicable: (1) fires; (2) overcharging of batteries; (3) battery short circuit; (4) stability of electrical currents when charging batteries; 5) ambient conditions in which battery charging will take place; (6) available mitigation, such as the safety features of the charging installation, RFF capability, fire extinguishers that are specifically designed to combat a battery fire, available personnel, ease of emergency evacuation of the VCA, etc. (b) The operator should take the necessary precautions to avoid or mitigate the risks of overcharging, overheating, short circuit and fire when charging or swapping batteries with passengers embarking, on board, or disembarking. (c) Qualified personnel should be ready to initiate and direct passenger evacuation from the VCA using the most practical and expeditious means available, where necessary. Currently there is no requirements established at vertiports. Requirements for vertiports should also be developed.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.OP.VCA.295 Use of airborne collision avoidance system (ACAS) p. 142

comment	*61* comment by: *DE-LBA*

	Page 142, heading GM1 UAM.OP.**VCA**.295 Use of airborne collision avoidance system (ACAS) Is the reference correct or should it say UAM.OP.**MVCA**.295?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*310* comment by: *General Aviation Manufacturers Association (GAMA)* Ref. GM1 UAM.OP.VCA.295 Use of airborne collision avoidance system (ACAS) **RATIONALE / REASON / JUSTIFICATION** Typo **PROPOSED TEXT** Replace UAM.OP.VCA.295 with UAM.OP.MVCA.295.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 UAM.OP.MVCA.205 Charging or swapping of VCA batteries while passengers embark, are on board, or disembark p. 142

comment	*282* comment by: *EUROCONTROL* Charging or swapping of VCA batteries while passengers embark, are on board, or disembark, " Electromagnetic exposure during charging of the battery packs mounted on VCA may have a negative impact on people wearing pacemakers, implantable defibrillators or other implanted devices." What is the recommended procedure in such cases?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.OP.MVCA.205 Charging or swapping of VCA batteries while passengers embark, are on board, or disembark p. 142

comment	*314* comment by: *ADAC Luftrettung gGmbH* **Segment: AMC2 UAM.OP.MVCA.205** **Page: 142** **Proposed text:** *"The removal/installation of a battery on the VCA as well as any other method of batteries swapping while passengers embarking, on board, or disembarking, should*

	be certified by a person authorised as 'certifying staff' in accordance with Regulation (EU) No 1321/2014." **Rationale:** "and in any other case of batteries swapping" is misleading. This is to be understood in the context of passenger-operations as any alternative to removal/installation. Clarifying change to the text only.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.POL.VCA.100 Type of operation p. 143

comment	*205* comment by: *Austro Control* **Explanatory Note / Articles / Appendix:** GM1 UAM.POL.VCA.100 Type of operation (SC VTOL) **Comment:** Reference to SC-VTOL does not include specific version of SC-VTOL. **Proposed Change:** Propose to add information on the Version/Issue date of SC-VTOL. **Classification:** Minor
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*206* comment by: *Austro Control* **Explanatory Note / Articles / Appendix:** GM1 UAM.POL.VCA.100 Type of operation (SC VTOL) **Comment:** According to SC-VTOL.2005 Certification with this small category special condition applies to an aircraft with a passenger seating configuration of 9 or less and a maximum certified take-off mass of 3175 kg (7 000 lbs) or less. The MTOM referred to in GM is 5700 kg, which is higher than the applicability of SC-VTOL. Please provide clarification of the discrepancy. **Proposed Change:** Please adapt the applicability of SC-VTOL in regards to maximum take-off mass of 3175 kg (7 000 lbs). **Classification:** Editorial
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.POL.VCA.120 Take-off p. 144

comment	*144* comment by: *German NSA (BAF)* As regards pages 144-150: According to the opinion here, "take-off" and "landing" described in these AMC/GMs are meant as operational procedures and not as instrument flight procedures as prescribed in CIR (EU) 2017/373 Annex XI. Conseequently, VCA have to use existing IFP when operating IF.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.POL.VCA.115 Obstacle accountability p. 144

comment	*283* comment by: *EUROCONTROL* DIMENSION 'D' The diameter 'D' is defined in MOC VTOL.2115, point (6). It should be published in metres and feet, rounded up to the next tenth. If the VCA changes its dimensions during taxi or parking (e.g. folding wings), a corresponding Dtaxi and Dparking should also be provided. Should be introduced as D-value to be consistend with the PTS-VPT-DSN,
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 UAM.POL.VCA.110 General performance requirements p. 144

comment	*284* comment by: *EUROCONTROL* REPORTED HEADWIND COMPONENT The reported headwind component should be interpreted as being the one reported at the time of flight planning and may be used, provided that there is no significant change of unfactored wind prior to take-off. Given the variety of VCA designs, not only headwind is of interest. Especially when chosing "VTO", other wind directions need to be considered and not only headwind.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.POL.VCA.120 Take-off p. 146

comment	*285* comment by: *EUROCONTROL*

	TAKE-OFF PROCEDURES The take-off procedures define profiles and scheduled data for various environmental conditions and masses Not sure what this sentence means.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.POL.VCA.120 Take-off p. 147

comment	*311* comment by: *General Aviation Manufacturers Association (GAMA)* AMC2 UAM.POL.VCA.120 Take-off **RATIONALE / REASON / JUSTIFICATION** EASA PTS and ICAO Annex 14 refer to take-off climb surface. Suggestion to align the wording here. **PROPOSED TEXT** Please replace with take-off climb surface.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.POL.VCA.125 Take-off flight path p. 149

comment	*173* comment by: *DGAC FR (Mireille Chabroux)* Comment: There is no Part-SERA in Regulation (EU) N° 923/2012. Proposal: The take-off flight path ends at 1 000 ft above the highest obstacle in congested areas or whenever the VCA reaches the minimum flight altitude/height as established in accordance with ~~Part-SERA of~~ Regulation (EU) No 923/2012.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*313* comment by: *General Aviation Manufacturers Association (GAMA)* GM1 UAM.POL.VCA.125 Take-off flight path **RATIONALE / REASON / JUSTIFICATION** The take-off flight path ends at 1 000 ft above the highest obstacle in congested areas (...).

	The separation should be over the highest obstacle along the flight path, not in general above the highest obstacle in the congested area (which can be located far away from the actual operation). Suggestion to make it clearer in the text. **PROPOSED TEXT** Please add 'along the flight path' to the sentence.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 UAM.POL.VCA.135 Landing p. 149

comment	*174* comment by: *DGAC FR (Mireille Chabroux)* There is no Part-SERA in Regulation (EU) N° 923/2012. Proposal: The landing flight path starts at 1 000 ft above the highest obstacle in congested areas or at the minimum flight altitude/height as established in accordance with ~~Part-SERA of~~ Regulation (EU) No 923/2012.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.POL.VCA.140 Mass and balance, loading p. 151

comment	*158* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC2 UAM.POL.VCA.140 Mass and balance, loading, page 151** We suggest that for aircraft operating in ATO´s only the aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known and are not subjected to a specific timeframe.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC 6 UAM.POL.VCA.140 Mass and balance, loading p. 154

comment	*159* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC6 UAM.POL.VCA.140 Mass and balance, loading, page 154** This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.

response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.IDE. MVCA .125 Flight instruments and associated equipment p. 158

comment	*180* comment by: *DGAC FR (Mireille Chabroux)* UAM.IDE.MVCA.125 (b) states that: b) Additional flight instruments and equipment shall be installed on or carried in the VCA, as necessary, according to the expected operating conditions and crew workload. EASA should produce an AMC/GM to this requirement that is specific to VCA.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*239* comment by: *Airbus Helicopters* Comment on GM1 UAM.IDE.MVCA.125 on page 158: The GM indicates "A reference to the type certification approval, including the required flight instruments, should be available in the VCA flight manual and/or TCDS." The recommendation as written seems to apply to the content of the VCA flight manual and/or TCDS which is not owned by the operator that will have to apply the GM. The intent of the GM seems rather to indicate to the operator's that the required instruments/equipment are those that have been installed on the aircraft for the type certification of the aircraft. Indeed, depending on the design characteristics of the VCA and in particular the flight control system, the list of required instruments may vary. This determination will be made at type certification level. However a list of specific instruments/equipment for day VFR may not appear directly in the TCDS and/or flight manual. However, unless inoperative and allowed as per the approved MMEL/MEL, all installed instruments/equipment part of the type design definition have to be installed/operative and there is no need to have them listed. It is therefore proposed to indicate in the GM: "The required flight instruments/equipment are those specified in the certified type design definition of the VCA for the intended kind of operations "
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.IDE.MVCA.145 Height-determination equipment p. 159

comment	*181* comment by: *DGAC FR (Mireille Chabroux)* AMC2 UAM.IDE.MVCA.145 states that**:**

a) The audio warning should be a voice warning. The voice warning alert should be distinguishable from other warnings and should contain a clear and concise voice message. The height at which the audio warning is triggered should be such as to provide adequate time for the pilot to take corrective action.
(b) The visual warning should require a minimal interpretation by the pilot for both an instantaneous impression of absolute height and rate of change of height. The voice warning should be triggered only whilst descending through the preset datum height and be inhibited whilst ascending.

DGAC-FR thinks that quantitative guidance on this subject should be provided; a reference to GM1 CAT.IDE.H.145 could be added to help operators identify Authority expectations.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.IDE. MVCA .145 Height-determination equipment p. 159

comment *184* comment by: *DGAC FR (Mireille Chabroux)*

GM1 UAM.IDE.MVCA.145 states that:

"A VCA equipped with a TAWS capable of determining the height and capable of emitting an audio warning below a preset value and a visual warning at a height selectable by the pilot does not need to be equipped with a separate radio altimeter."

DGAC-FR thinks that the proposed wording is deemed as confusing and should be re-worked.

Indeed, considering DO-161 and ARINC-723 contents it is understood that, in order to determine height, TAWS equipment will necessarily rely on data input from a Radalt, and that the latter will very likely be separate from the TAWS physical components.

As such, it is not clear what is implied by EASA's proposed wording.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.IDE.MVCA.185 Cockpit voice recorder (CVR) p. 160

comment	*9* comment by: *MichaelSTROBEL* Please add EUROCAE Document ED-155 besides ED-112B analog to AMC1.UAM.IDE.MVCA.191 point (e) and (f). E.g. The operational performance requirements for cockpit voice recorders (CVRs) should be those laid down in: (a) EUROCAE Document ED-155 or any later equivalent standard accepted by EASA for lightweight flight recorders; or (b) in EUROCAE Document 112B or any later equivalent standard accepted by EASA for crash protected flight recorders.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.IDE.MVCA.190 Flight data recorder (FDR) p. 160

comment	*10* comment by: *MichaelSTROBEL* Please add EUROCAE Document ED-155 besides ED-112B analog to AMC1.UAM.IDE.MVCA.191 point (e) and (f). E.g. (a) The operational performance requirements for flight data recorders (FDRs) should be those laid down in: (1) EUROCAE Document ED-155 or any later equivalent standard accepted by EASA for lightweight flight recorders; or (2) in EUROCAE Document 112B or any later equivalent standard accepted by EASA for crash protected flight recorders. (b) The FDR should, with reference to a timescale, record the parameters established in Table 1 and Table 2, as applicable, and any parameters that have been established during the type certification of the VCA.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*286* comment by: *EUROCONTROL* Flight data recorder (FDR), "Status or each flight control computer" typing error "or" --> "of" Flight data recorder (FDR), "Status of each flight control computer"
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.IDE.MVCA.191 Flight recorder p. 163

comment	*190* comment by: *DGAC FR (Mireille Chabroux)*

	DGAC-FR thinks that the energy remaining should be recorded. This is all the more important at the beginning of the operations as long as we have no feedback experience.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*287* comment by: *EUROCONTROL* Flight recorder: What about vertical acceleration?
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*319* comment by: *ADAC Luftrettung gGmbH* **Segment: AMC1 UAM.IDE.MVCA.191 (c) [new]** **Page: 163** Proposed new **AMC1 UAM.IDE.MVCA.191 (c):** "The recorded data can partially be retained on the ground instead of in the recording device itself."
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 CAT.IDE.H.200 Flight data and cockpit voice combination recorder p. 165

comment	*160* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* **AMC1 CAT.IDE.H.200 Flight data and cockpit voice combination recorder, page 165** The AMC reference seems to be wrong. The AMC refers to CAT.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*315* comment by: *General Aviation Manufacturers Association (GAMA)* AMC1 CAT.IDE.H.200 Flight data and cockpit voice combination recorder **RATIONALE / REASON / JUSTIFICATION** Typo **PROPOSED TEXT** Replace CAT.IDE.H.200 with UAM.IDE.MVCA.200.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.IDE. MVCA .220 First-aid kits p. 166

comment *31* comment by: *Eve Air Mobility*

Comment:
Language as proposed includes same first aid kit content requirement as standard CAT operations despite limited scope of operation, flight duration, number and demographics of passengers, etc.

Standard DIN 13164 first-aid kits has already been approved by EASA for local flight operations of helicopters (Alt/22/0048, AltMoC granted to FOCA for First-Aid Kit Acccording to CAT.IDE.H.220). Given that those operations are similar to VTOL operations, the AMC should allow VTOLs to use other standard than the one currently referred to in the AMC.

Propose changing to:

CONTENT OF FIRST-AID KITS
First-aid kits should be equipped with appropriate and sufficient medications and tools. The minimum content of the first-kit should comply with AMC1 CAT.IDE.H.220 (b) (1), (2) and (3). A different minimum content may be proposed to the competent authority by means of acceptable industry standards proportionate to the given scope of operations.

Additional GM should further clarify that standard DIN 13164 can be deemed acceptable to meet AMC1 UAM.IDE.MVCA.220.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *161* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC1 UAM.IDE.MVCA.220 First-aid kits, page 166
This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *316* comment by: *General Aviation Manufacturers Association (GAMA)*

Ref. AMC1 UAM.IDE.MVCA.220 First-aid kits

RATIONALE / REASON / JUSTIFICATION

Language as proposed includes same first aid kit content requirement as standard CAT operations despite limited scope of operation, flight duration, number and demographics of passengers, etc.

Standard DIN 13164 first-aid kits has already been approved by EASA for local flight operations of helicopters (Alt/22/0048, AltMoC granted to FOCA for First-Aid Kit Acccording to CAT.IDE.H.220). Given that those operations are similar to VTOL operations, the AMC should allow VTOLs to use other standard than the one currently referred to in the AMC.

PROPOSED TEXT

Propose changing to:

CONTENT OF FIRST-AID KITS
First-aid kits should be equipped with appropriate and sufficient medications and tools. The minimum content of the first-kit should comply with AMC1 CAT.IDE.H.220 (b) (1), (2) and (3). A different minimum content may be proposed to the competent authority by means of acceptable industry standards proportionate to the given scope of operations.

Additional GM should further clarify that standard DIN 13164 can be deemed acceptable to meet AMC1 UAM.IDE.MVCA.220

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 UAM.IDE.MVCA.250 Handheld fire extinguishers p. 166

comment | *192* comment by: *DGAC FR (Mireille Chabroux)*

It is not clear if applicability of (EU) 2024/590 to VCAs was confirmed by EASA.If not applicable, it would be expected that this AMC1 introduces requirements with respect to extinguishing agents' acceptable characteristics

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC2 UAM.IDE.MVCA.280 Emergency locator transmitters (ELTs) p. 168

comment | *162* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

AMC2 UAM.IDE.MVCA.280 Emergency locator transmitters (ELTs), page 168
This proposed AMC in Part-IAM refers to provisions in Part-CAT, which we see as problematic and burdensome for the training organisations to have to follow. The training organisations are not required to comply with Part-CAT in terms of training for aeroplanes nor helicopters and we do not see that they should be required to do

	so for VCA. When the pilots undergo the training for a VCA type rating, it is not a question of commercial operations.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM. IDE .MVCA.280 Emergency locator transmitters (ELTs) p. 168

comment	*186* comment by: *DGAC FR (Mireille Chabroux)* GM1 UAM.IDE.MVCA.280 states that: "ELT compliant with the applicable ETSO means either compliant with ETSO-C126c or be part of an overall VCA approval. Tracking system compliant with the applicable ETSO means either compliant with a particular ETSO or be part of an overall VCA approval." Wording should be improved to address the following: - 'VCA approval' is not deemed as clear enough and should be further clarified (It is understood that it refers to the VCA EASA approval with respect to the applicable airworthiness requirements). - It is also understood that ELT and tracking system implementation will in any case be addressed by and covered under the 'VCA approval' (It is understood that it refers to the VCA EASA approval with respect to the applicable airworthiness requirements), whether holding an ETSO approval or not.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*317* comment by: *General Aviation Manufacturers Association (GAMA)* GM1 UAM.IDE.MVCA.280 Emergency locator transmitters (ELTs) **RATIONALE / REASON / JUSTIFICATION** MOC.VTOL.2535 refers to AMC 27.1470 for ELT compliant to ETSO-C126b. However, this GM only refers to ETSO-C126c. We suggest to align with SC VTOL **PROPOSED TEXT** Align with MOC.VTOL.2535 and recognize ETSO-C126b. *ELT compliant with the applicable ETSO means compliant with* *1) ETSO-C126b;* *2) ETSO-C126c; or* *3) be part of an overall VCA approval.*

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 UAM.IDE. MVCA .300 Flights over water p. 170

comment | *42* comment by: *Widerøe Zero*

Requirements for Flights over water does not sufficiently consider the introduction of Continued Safe Flight and Landing (CSFL), which in case of critical failure of performance, the safety level is likely far improved compared to typical rotorwing operations.
Requiring limited overwater certification in addition to CSFL if a flight accumulates three minutes of flight over water seems too restrictive. Especially for designs featuring forward flight capability much like conventional aircrafts.

Ideally, regulation adopted by Opinion 03/2023 UAM.IDE.MVCA.300 Flights over water; (a)(3) and (b)(2) concerning "Limited overwater certification" could be removed all-together, since in our opinion it adds additional requirements that doesn't improve safety levels above those already provided by the existing requirments that CSFL provides.

Alternatively, an additional AMC2 UAM.IDE.MVCA.300 (a)(3) and (b)(2) could be introduced, stating:
VCA designs featuring both forward flight characteristics and complying with CSFL-requirements does not have to comply with certification requirements for "Limited overwater operations"

This would differentiate between designs featuring purely vertical flight and those combining wing-borne and and vertical flight. Designs able to glide are better suited to handle certain emergencies such as a potential partial or complete loss of power of water.

For further mitigation, it could be wise to not allow **transitional** flight between vertical and forward flight over water unless certified for limited overwater operations or ditching.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM2 UAM.IDE.MVCA Life jackets and other equipment p. 171

comment | *36* comment by: *Eve Air Mobility*

Add No "305" to the title in GM2 UAM.IDE.MVCA Life jackets and other equipment.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *62* comment by: *DE-LBA*

	Page 171, heading GM2 UAM.IDE.MVCA Life jackets and other equipment The reference seems to be incomplete. We assume it should say "UAM.IDE.MVCA.**305**" as in GM1.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*318* comment by: *General Aviation Manufacturers Association (GAMA)* GM2 UAM.IDE.MVCA Life jackets and other equipment **RATIONALE / REASON / JUSTIFICATION** Typo in title **PROPOSED TEXT** Add No "305" to the title in GM2 UAM.IDE.MVCA Life jackets and other equipment
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 UAM.IDE.MVCA.345 Navigation equipment p. 174

comment	*183* comment by: *DGAC FR (Mireille Chabroux)* AMC/GM do not detail where to find those requirements..
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

8. Annex II - Proposed amendments to the AMC & GM to FCL and rationale p. 176

comment	*32* comment by: *F.A.S.T.-Group (TB)* • Reference to FSTDs missing. Due to the innovative aircraft design, adaptations in the **practical** and theoratical training programm is needed. • Comment "**The use of FSTDs is desired to familiarize the student pilot with the VTOL capable aircraft**"
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

AMC1 Article 4f(2) and (3) Type ratings for VCA p. 176

comment *41* comment by: *Widerøe Zero*

Does EASA intent to impose additional experience requirements in addition to those required by Article 4f (CPL(A/H)) during the "initial phase of operation"?

The context is that NPA 06/2022 and subsequent Opinion 03/2023 previously communicated that:

- "the intention is that **only experienced pilots** shall fly VCA during the **initial roll-out phase** of their operation" (Opinion 03/2023)
- "the intention is that **only experienced pilots** shall fly VTOL-capable aircraft during the **initial phase** of their operation" (NPA 06/2022)

Article 4f does as mentioned require CPL(A/H) + type rating for VCA operation, which in our understanding would equate "*least amount of experience possible for commercial operations*". This is not the same as "*only experienced pilots*".
So, if additional experience requirements are to be imposed during the "*initial phase*"?

- how long would an "initial phase" be?
- what sort of additional requirements would be proposed?

response Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment *264* comment by: *Widerøe Zero*

No additional experience requirements is introduced above CPL(A/H) for the issue of type ratings.
When considering that NPA 06/2022 and subsequent Opinion 03/2023 previously communicated that:

- "the intention is that only experienced pilots shall fly VCA during the initial roll-out phase of their operation" (Opinion 03/2023)
- "the intention is that only experienced pilots shall fly VTOL-capable aircraft during the initial phase of their operation" (NPA 06/2022)

Also considering both

1. That excisting regulation ARO.OPS.100 (c) states that for issue of an AOC, "*the compoetent authority **may** determine specific operational limitations*", and;
2. The type of operations within urban and non-urban areas as well as operations over hostile land/sea, areas with increased risk of icing

conditions, different airspace, topography and other factors provide hugely **different possible exposure to risks and required knowledge**.

Suggest either introducing limitations concerning requirements for experience for the issue of a type rating for VCA as an AMC to Article 4f, or;
Strenghten ARO.OPS.100 (c) with Guidance Material that more specifically guides specification of operational limitations for Part-IAM operations concerning operational experience.

The required experience for commercial operations should probably be less strict than for VEMS-operations, which have defined AMC-requirements for Crew experience through AMC1 SPA.VEMS.130. The requirements for crew experience should apply until sufficient operational experience and data is gathered to better understand risk as well as the relevant training and experience to combat that risk. The requirements for crew experience should be valid until an ab-initio training program for VCA-pilot license exist.
The argument being that when sufficient knowledge and experience exist to develop an ab-initio program for VCA-pilot license, the operational risks and proper mitigation to limit those will be present to maintain an equal or higher level of safety.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *320* comment by: *General Aviation Manufacturers Association (GAMA)*

GAMA strongly supports the Agency's emphasis on the requirement of a type rating to permit pilots to receive the appropriate training and experience to ensure they have the necessary skills to operate a specific type of aircraft. This acknowledges the wide spectrum of products currently in development and underlying type certification and aligns with the approach at the International Civil Aviation Organisation (ICAO), where Annex I currently provides for a type rating of a VTOL rating to be added to an aeroplane or helicopter pilot licence.

GAMA welcomes the clear guidance to facilitate the reliance on the existing means of compliance for the design and conduct of helicopter type rating courses to facilitate the establishment of type rating training courses for VTOL aircraft. GAMA would however favour an approach which also acknowledges the potential appropriateness of aeroplane type rating courses also. This will be the case for some aircraft, which have significant similarities to aeroplane handling, particularly in some phases of flight.

Similarly, GAMA would propose the Agency consider amending the list of areas of particular emphasis to include flight on the wing, where appropriate. We would also caution that any reference to U-Space should not imply that this is a requirement for AAM operations.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *321* comment by: *General Aviation Manufacturers Association (GAMA)*

AMC1 Article 4f(2) and (3), Draft AMC & GM to Regulation (EU) No 1178/2011

RATIONALE / REASON / JUSTIFICATION

Both points (a) and (b) solely refer to helicopter type rating training courses. However, according to EASA Certification Memorandum No. CM–FCD-001 Issue 01, for the training, skill test and proficiency check for a Type Rating, Appendix 9 of Part-FCL is applicable in principle and the syllabus to be established by the applicant for the type rating training needs to follow parts from different sections, as necessary (helicopter, aircraft and powered lift).

PROPOSED TEXT

In point (a), reference to "airplane and powered lift" after "the conduct of helicopter" shall be added and reference to "as contained in AMC3 ORA.ATO.125 of ED Decision 2012/007/R" shall be deleted.

In point (b), the reference “on the syllabus set out in Section II of AMC1 FCL.725(a)(theoretical knowledge instruction for helicopter type rating training)” shall be replaced with the following: “on the syllabus to be established by the applicant for the type rating training following parts from different sections, as necessary (helicopter, aircraft and powered lift)."

response | Please, refer to the Excel file ‘CRD 2024-01: EASA responses to individual comments’.

GM1 SERA.5001 (***)(b) VMC visibility and distance from cloud minima p. 178

comment | *196* comment by: *FOCA (Switzerland)*

In this regard, the question has arisen as to whether this is not more of a rule than GM and should therefore not be included in SERA.5001(***)(b) itself.

response | Please, refer to the Excel file ‘CRD 2024-01: EASA responses to individual comments’.

comment | *237* comment by: *EHA*

By EHA: GM1 SERA.5001 (***)(b) VMC visibility and distance from cloud minima

FLIGHT VISIBILITY — MANNED VCA

Until sufficient safety data related to operations of manned VCA is available, manned VCA should not be operated with less than 1 500 m flight visibility.

This crawl, walk, run approach to implementation is strongly supported but it is important that more restrictive limits are not 'baked into' hard law that would subsequently be difficult or time consuming to revise in the light of operating experience.

response | Please, refer to the Excel file ‘CRD 2024-01: EASA responses to individual comments’.

comment | *322* comment by: *General Aviation Manufacturers Association (GAMA)*

As outlined in our previous feedback to NPA 2022-06, industry consensus is to align helicopter/VTOL minimums, unless there is a clear safety case requiring another approach. As such, we would favour consistency between flight visibility minimums, with the empowerment of the competent authority to assess the specific risk and needs per use case.

If the Agency opts to retain its approach to require a threshold of 1,500m flight visibility specifically for VTOLs, GAMA would ask that EASA prioritise the near-term collection and analysis of data to allow for an assessment of this requirement in the coming years.

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *325* comment by: *Swiss Aeroclub*

According to Art. 1 para 1 of Regulation (EU) 923/2012, SERA applies to GAT, but - to our understanding - not to UAS, with the exeption of UAS operated in the specific category (Art 7 para 3 of Regulation (EU) 947/2019). Proposed GM1 SERA.5001 would only cover specific category operations with manned VCA. What about all the others specific category operations, are they not subject to SERA.5001?

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

GM1 SERA.11012 Minimum fuel and fuel emergency p. 178

comment | *208* comment by: *AESA*

In GM1 SERA.11012, references to "fuel" are replaced by "fuel/energy". However, there is no proposed mdification to SERA.11012. We propose to also include in this NPA the modificaton of SERA.11012 to consider the case of electric aircraf:
"SERA.11012 Minimum fuel**/energy** and fuel**/energy** emergency
(a) When a pilot reports a state of minimum fuel**/energy**, the controller shall inform the pilot as soon as practicable of any anticipated delays or that no delays are expected.
(b) When the level of fuel**/energy** renders declaring a situation of distress necessary, the pilot, in accordance with SERA.14095, shall indicate that by using the radiotelephony distress signal (MAYDAY), preferably spoken three times, followed by the nature of the distress condition (FUEL)."

response | Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment | *209* comment by: *AESA*

References to "fuel" are replaced by "fuel/energy" in the content of the GM. However, the title of this GM1 still contains a reference to"fuel", because it comes from the title of SERA.11012, which is not proposed to be modified. Maybe it has been decided to keep the title referring only to "fuel" (and not to "energy") because the phraseology only uses "fuel", but since it can be considered that the title refers to the situation, and not to the phraseology, we propose to also include in this NPA

	the modificaton of SERA.11012 title (Minimum fuel**/energy** and fuel**/energy** emergency), and consequently, the title of this GM1.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

comment	*326* comment by: *Swiss Aeroclub* We propose to also amend SERA.11012 accordingly during the next revision of 923/2012.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

Appendix 1 to AMC1 SERA.14001 General p. 180

comment	*65* comment by: *Danish Civil Aviation and Railway Authority* Comment to Appendix 1 to AMC1 SERA.14001 General We recognize that the NPA does not propose to change the applicability of the phraseology example provided in 1.1.3. However, DCARA believes it is pertinent to extend the applicability of point b) to Flight Information Services (FIS) as well. This is because a pilot may declare "MINIMUM FUEL" to a FIS unit, which requires an appropriate acknowledgment (ROGER) in response. As the note to 1.1.3 outlines, information about delay will still not be given by a FIS-unit. Additionally, while we acknowledge that OPS-regulation CAT.OP.MPA.185 mandates pilots to inform Air Traffic Control (ATC) of their minimum fuel state, DCARA suggests that EASA assess the relevance of potentially amending this requirement to refer to Air Traffic Services (hence including FIS-units). Information about minimum fuel state is relevant for AFIS units (or Flight Information Centers) as well, as they may need to provide pertinent information to the aircraft, other air traffic, or aerodrome personnel in such situations. In light of these considerations and as a consequence, it is advisable to review and amend GM1 SERA.11012 accordingly.
response	Please, refer to the Excel file 'CRD 2024-01: EASA responses to individual comments'.

3. Appendix — Attachments


GM3_CAT.GEN.MPA.180a18.png
Attachment #1 to comment #64