General update of the Air Operations Regulations, Specific Approval SPA.HOFO

Implementing Rule Changes & Associated AMC/GM

Comment Response Document (CRD) for Focussed Consultation

NB: The item numbers in brackets correspond to the item numbers in the public consultation published in January 2025.

ltem	Reference	Comments	Response
1 (1)	SPA.HOFO.110(b)(3)	This does not allow for situations where the risk of wearing a survival suit is grossly disproportionate to the risk of water immersion. There are circumstances where the OAT may exceed 40 Deg C, and the wording for this change makes no allowance for not wearing a survival suit. There should be some allowance for circumstances where heat exhaustion would be the greater risk to crew safety.	The main reason for updating the text is to introduce the new survival suit standard. A significant feature of the new standard is the inclusion of four levels of insulation, allowing a better match to the prevailing environmental conditions as described in AMC1 SPA.HOFO.110(b)(3). This is intended to minimise the risk of heat exhaustion without placing flight crew at risk in the event of immersion. See EASA NPA 2016- 01 – see Appendix B, 7.2.2 Item 50 starting on page 253.
2 (2)	AMC1 SPA.HOFO.110(b)(3)	What data influenced the increase in water temperature from 10°C to 12°C?	This is explained in EASA <u>NPA 2016-01</u> – see Appendix B, 7.2.2 Item 50 starting on page 253. The idea is to ensure that everybody wears an immersion suit year-round for UK operations.
		Could the Table 1 have some explanatory notes? I'm finding it a little difficult to interpret.	Comment subsequently withdrawn.
		Crew suits – existing won't meet the new standards but we are currently undergoing a phased implementation of new suits that will (when the standard is eventually published). Given the expenditure levels required, we would simply propose phased transitions to meet new standards are deemed acceptable.	For all of the new survival equipment standards (lifejacket, survival suit, EBS and life raft) the wording "manufactured after 01 January 2026" has been used in the proposed SPA.HOFO text. This enables equipment currently in service to be used until retired and also enables manufacturers to use up existing stock.

			This approach will enable a phased introduction.
3 (3)	GM1 SPA.HOFO.110(b)(3)	To facilitate this objective the four categories of immersion suit with differing levels of insulation detailed in AMC1 SPA.HOFO.110(b)(3) Table 1 should be available. Are operators expected to provide 4 survival suits at >£1000 per suit, per flight crew, with additional ongoing maintenance and inspection fees x4 current costs? Should there be GM on a standard method of calculating survival time?	Immersion suit manufacturers propose to produce a single 'shell' suit and a range of liners to deliver the four suit categories. For UK operations, a suit and no more than one or two liners should be required. Note that the new standards will apply only to suits manufactured after 01 January 2026. This means that existing suits in service can continue to be used until retired, and that existing manufacturers' stocks of current suits can also be used.
4 (4)	GM1 SPA.HOFO.110(b)(10)	No comments.	-
5 (5)	SPA.HOFO.115(a)	No comments.	-
6 (5)	SPA.HOFO.115(b)	No comments.	-
7 (5)	SPA.HOFO.115(c)	No comments.	-
8 (6)	SPA.HOFO.160(d)	 Operator 1: We have a new (old) addition to our AW139 fleet which only has TCAS I. As a ball park, as it will require a second RADALT etc for the upgrade, the general thought is a high 5 figure sum at the least. We are hoping to upgrade it to TCAS with the Phase 7 upgrade next year, but this would certainly give us some breathing space with the time frame suggested below. [01 Jan 2027 cut-in for ACAS II] Operator 2: 5 out of 7 of our S92s are TCAS1 – we have ambition to retrofit but it is costly and will take some time to complete the fleet. Both of our 139s are TCAS1. These 	 In the light of the comments received the proposed update has been amended to initially require either ACAS I or ACAS II, and allow a lead in period of 2 years (assuming passed under the autumn 2025 SI) for the requirement for ACAS II as follows: (d) Unless otherwise provided for by Regulation (EU) No 1332/2011, helicopters used in CAT operations with a maximum certificated take-off mass (MCTOM) of more than 3175 kg or a maximum operational passenger seating configuration (MOPSC) of more than 9: (1) shall be equipped with ACAS I or ACAS II from 01 January 2026, and

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	 are looking to be swapped out for new models with TCAS2 April 2026. We would need flexibility from a rule making standpoint to allow a period of time to make these changes. As an ESTIMATE, the current intel suggests \$350k per aircraft with a lead time of 500 days. We would then need to rotate through heavy maintenance I suspect to complete. 1st Jan 2027 is probably workable. As ever, just be cautious of legislating the "older aircraft" out of existence! Requiring only ACAS I would be the 'safer' option in regards to not generating a fleet capability issue. To give you some reassurance, the IOGP industry guidelines push for ACAS2 as a contractual minimum, and we are striving to meet that as it is in our commercial interest. That will drive the operators to the desired position anyway. I would suggest ACAS1 in HOFO as the preferred position. 	 (2) shall be equipped with ACAS II from 01 January 2028. The 14 aircraft that will require upgrading to ACAS II are spread over five operators. Plans are already in place to upgrade seven of the 14 aircraft affected prior to 01 January 2028. In addition, customer pressure will likely also drive upgrade. The effect of the mandate will therefore be to reinforce rather drive the upgrade to ACAS II.
	Operator 3:	
	 We have 2 x S92 and 2 x AW139 that are only TCAS 1. There is a plan to achieve this [upgrade] by 1st Jan 2027. 	
	Operator 4:	
	 PDG currently have three aircraft which are or could be engaged in HOFO activities, <u>none</u> of which are ACAS II equipped. RE: ACAS II - in reality only two of our fleet are regularly engaged in HOFO, and both are EC135s and would therefore not be subject to SPA.HOFO.160. The other potential aircraft is an AS365N2 which would be required to fit ACAS II, however it is unlikely that this aircraft will be engaged in HOFO. Operator 5: 	

		 We have 2 x AW139 which only have TCAS I in the SNS. Unsure of the plan to upgrade to TCAS II, but this may speed things along. Thought there would be some sort of transition period. At least the 'line will be in the sand' to ensure we get upgraded. 	
9 (7)	SPA.HOFO.165(a)	 (i). Crew jackets – existing won't meet the new standard but we are currently evaluating a new jacket that will meet the standard (~2-3x cost increase). Given the expenditure levels required, we would simply propose phased transitions to meet new standards are deemed acceptable. (ii). There should be some consideration for operations that do not fit within the standard HOFO model – particularly reference NCC. The CAA needs to have an ability to consider operations that do not fit within the standard UI & Gas model. There are circumstances where the over water sector is so short (less than 3 nm), it would be appropriate to leave the CAA some room to consider the particular circumstances and retain some flexibility to approve differences. 	 (i). For all of the new survival equipment standards (lifejacket, survival suit, EBS and life raft) the wording "manufactured after 01 January 2026" has been used in the proposed SPA.HOFO text. This enables equipment currently in service to be used until retired and also enables manufacturers to use up existing stock. This approach will enable a phased introduction. (ii). The proposed change only requires that any integrated survival suits used be approved. The change does not otherwise alter the existing requirement to wear a survival suit. In addition, it is considered appropriate to optimise the rules for the majority of affected operations and address special cases based on merit. Also, the length of the overwater sector is not considered to be especially significant as most accidents occur during take-off and departure/approach and landing.
10 (8)	SPA.HOFO.165(b)	There should be some consideration for operations that do not fit within the standard HOFO model. The CAA needs to have an ability to consider operations that do not fit within the standard Oil & Gas model. There are circumstances where the over water sector is so short (less than 3 nm), it would be appropriate to leave the CAA some room to consider the particular circumstances and retain some flexibility to approve differences.	This is not a new requirement. The proposed change introduces the new survival suit standard which includes four levels of insulation, increasing flexibility by allowing a better match to the prevailing environmental conditions as described in AMC1 SPA.HOFO.165(b). In addition, it is considered appropriate to optimise the rules for the majority of affected operations and address special cases based on merit. Also, the length of the overwater sector is not considered to be especially significant as most

			accidents occur during take-off and departure/approach and landing
11 (9)	SPA.HOFO.165(c)	 (i). It would be advantageous to have some clear guidance on HUET training here, are we accepting that '15 minutes DVD brief' is sufficient to comply with this? (ii). There should be some consideration for operations that do not fit within the standard HOFO model. The CAA needs to have an ability to consider operations that do not fit within the standard Oil & Gas model. There are circumstances where the over water sector is so short (less than 3 nm), it would be appropriate to leave the CAA some room to consider the particular circumstances and retain some flexibility to approve differences. There are types of operations that involve conditions and factors very different to standard Oil & Gas, and where applying 'one rule suits all' solutions does not deliver the best results. The CAA needs to keep some flexibility in these areas of regulation regarding passenger safety and survival equipment to cover situations that have yet to be anticipated or encountered. It is important to consider the level of exposure to an individual passenger outside the Oil & Gas environment. Some passengers may be exposed to this particular risk for less than 9 seconds in their entire lives, and there could be many other controls and mitigations to reduce this even further – is a blanket approach to EBS entirely appropriate for all circumstances? 	 (i). When EBS was introduced under Safety Directive SD-2014/002, the manufacturers minimum recommended training (classroom training only) was required. This 'requirement' will be added to AMC1 SPA.HOFO 165(c) as follows: (d) Instruction in the use of EBS should, as a minimum, include the EBS manufacturer's minimum recommended training. The current BOSIET/FOET syllabus includes both classroom and shallow water EBS training. Full HUET training (i.e. including capsizes) would be desirable but: BOSIET/FOET is not an aviation requirement (see response to item 20 below) so CAA is unable to dictate the syllabus, and HSE applies the Diving at Work regulations to HUET training which require trainees to pass a full diving medical. Exemption No. DWR/1 of 2018 permits immersion to a chest depth of 1.5 m for subjects who have passed a lung spirometry test. Currently, the offshore industry has not included a lung spirometry test in the offshore medical. (ii). The proposed change only requires that EBS be approved. The change does not otherwise alter the existing requirement to wear EBS. In addition, it is considered appropriate to optimise the rules for the majority of affected operations and address special cases based on merit. Also, the length of the overwater sector is not considered to be especially significant as most accidents occur during take-off and departure/approach and landing. Furthermore, aviation safety is generally not regulated

			on the basis of exposure. Safety targets are normally based on a per flight hour basis.
12 (10)	SPA.HOFO.165(d)(2)	No comments.	-
13 (10)	SPA.HOFO.165(d)(4)	No comments.	-
14 (11)	SPA.HOFO.165(e)	Some operations are conducted in daylight conditions only, and some VIP aircraft are not suitable for conventional emergency lighting systems. The benefit of having to develop bespoke modifications would be grossly disproportionate to the cost. This should be a CAT only requirement.	The proposed change only requires that the emergency cabin lighting system be approved. The change does not otherwise alter the existing requirement to provide emergency cabin lighting.
		As previously discussed, HOFO is applicable to CAT/SPO/NCO although the focus is heavily weighted towards CAT. Emergency Cabin Lighting / HEELS should only be a requirement for CAT, or when persons are carried in the cabin.	
15 (12)	SPA.HOFO.165(j)	Presume the 10 minutes is in relation to other CAT regulations, should it also be at 'normal cruise speed'	The CAT.IDE.H.320(a) text specifying "10 minutes flying time at normal cruise speed" applies. The words "at normal cruise speed" will be added.
16 (13)	AMC1 SPA.HOFO.165(a)	No comments.	-
17 (14)	GM1 SPA.HOFO.165(a)	No comments.	-
18 (13)	AMC1 SPA.HOFO.165(b)	No comments.	-
19 (16)	GM1 SPA.HOFO.165(b)	To facilitate this objective the four categories of immersion suit with differing levels of insulation detailed in AMC1 SPA.HOFO.165(b) Table 1 should be available. As per flight crew survival suits – this is x4 the cost to the operator	Immersion suit manufacturers propose to produce a single 'shell' suit and a range of liners to deliver the four suit categories. For UK operations, a suit and no more than one or two liners should be required. Note that the new standards will apply only to suits manufactured after 01 January 2026. This means that

			existing suits in service can continue to be used until retired, and that existing manufacturers' stocks of current suits can also be used.
20 (17)	AMC1 SPA.HOFO.165(c)	No comments.	-
21 (18)	AMC1 SPA.HOFO.165(d)(e)	Bristow CAMO looking at availability and aircraft certification status for meeting the 1 st January 2026 deadline.	Only life rafts manufactured after 01 January 2026 need to meet the new standard (BS EN 4866:2024). The intent is that current equipment in service will be allowed to continue until retired. By using the word "manufactured" it also allows manufacturers to use up any existing stock.
22 (19)	AMC1 SPA.HOFO.165(h)(b)(1)	No comments.	-
23 (20)	AMC1 SPA.HOFO.165(j)	 (i). Not convinced of the value of this. Existing HOFO measures are aimed towards the rapid evacuation of the aircraft within a 60-second survival window. These markings are presumably for SAR which will be on-site long after that window has closed. (ii). High visibility markings are already in play on our aircraft. 	 (i). This has been standard practice for oil & gas support operations for many years and is aimed primarily at improving the conspicuity of capsized helicopters and hence minimising rescue time. It was originally, driven by Safety Recommendation 4.10 in the <u>AAIB Aircraft Accident Report 8/78</u> (G-BBHN), and also Safety Recommendation 4.5 in the <u>AAIB Aircraft Accident Report 10/82</u> (G-BIJF). This topic is covered in EASA <u>NPA 2016-01</u> – see Appendix B, 7.2.2 Item 54 starting on page 268. EASA RMT.0120 determined to formally adopt this measure but agreed that it should form an operational requirement as opposed to incorporation in the Certification Specifications. (ii). Noted, and this is understood to be the case for most/all aircraft currently employed in UK offshore operations. Incorporation into the Air Ops Regulations is effectively an underpinning exercise.

24 (-)	General	Whilst I naturally support the initiative, I notice that in the RIA there is no consideration of future market sectors (recently highlighted) where HOFO is relevant, but where the underlying assumption that passengers will be trained to the same level as the Offshore Workforce is not appropriate and unachievable. Due to the re-definition or re-defining of the nature of 'Offshore', it will inevitably capture more activities than previously envisaged – and this should be included in the considerations.	There is no plan to change the scope of SPA.HOFO in the update, only the content. There is currently no aviation requirement for passenger training other than the pre-flight brief (SPA.HOFO.110(b)(2)) and EBS training (SPA.HOFO.165(c)). In the case of the latter, the manufacturers minimum recommended training (classroom training only) was stipulated when EBS was first introduced under Safety Directive SD-2014/002.
			The lack of any requirement for BOSIET/FOET was raised in the Offshore Review (<u>CAP 1145</u> - see 9.20 and 9.21) which resulted in the following recommendation to EASA:
			R6 It is recommended that the EASA Helicopter Ditching and Survivability RMT.0120 consider making safety and survival training for offshore passengers a requirement.
			The EASA response (detailed in <u>CAP 1877</u> – see Annex A) was as follows:
			During the evaluation of the various means to improve offshore helicopter safety within the scope of RMT.0120 EASA established the following position relating to passenger survivability training: "While the Agency has a role in ensuring passenger briefings are given prior to flight, it is not at all clear that the issue of passenger training, in relation to their experience and ability to operate safety equipment, falls within the Agency's
			remit. Furthermore, putting the obligation of training passengers on the operators would appear to be an
			be seen as the responsibility of the employer (the oil and gas industry in the case of most North Sea operations) to train their employees appropriately against all hazards
			that they are likely to face as part of their employment,

	including flying if this is an essential part of the job. Basic Offshore Safety Induction and Emergency Training (BOSIET) or equivalent, which includes use of EBS, sea survival and helicopter underwater escape training, is mandated by employers for most offshore employees.
	The Agency should not be directly involved. No recommendation is made."
	The UK AAIB also included the following Safety Recommendation in the <u>G-WNSB air accident report</u> :
	Safety Recommendation 2016-024: It is recommended that the European Aviation Safety Agency (EASA) amends the operational requirements for commercial offshore helicopter operations, to require operators to demonstrate that all passengers and crew travelling offshore on their helicopters have undertaken helicopter underwater escape training at an approved training facility, to a minimum standard defined by the EASA.
	There is currently no proposal to introduce any changes to the passenger training requirements in SPA.HOFO.