

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
1	Airbus Helicopters	Subtitle	1	AC 29-2C does not contain regulatory requirements. QUOTE This AC does not change regulatory requirements and does not authorize changes in, or deviations from, regulatory requirements. This AC establishes an acceptable means, but not the only means, of compliance. UNQUOTE	Add within the subtitle the wording “regulatory material(s) and guidance material”	No	Yes	Partially accepted	It is agreed that the AC29-2C does not constitute or contain regulatory requirements. However, suggestion will not be strictly followed. Instead, AC29-2C MG 18 will be excluded from the subtitle.
2	Airbus Helicopters	1.2. References	4	CAA UK CAP 1519 latest issue is 1.3	Refer the latest issue. CM annex may be affected.	No	Yes	Accepted	Version 1.3 was taken into account for the CM. the reference will be updated
3	Airbus Helicopters	1.2. References	4	AC 29-2C issue to be referred is the one dated 2 July 2018	Modify the AC 29-2C issue as follows: Chg 1 to 8 included	Yes	No	Not accepted	Change 8 has not been endorsed by EASA yet. In any case, this should not be a problem, since MG 18 has not been amended since change 4.
4	Airbus Helicopters	1.3 Abbreviations	5	ETSOA address an authorisation, not an approval	Modify the wording to “European Technical Standard Order Authorisation”	Yes	No	Accepted	Wording will be changed as suggested.
5	Airbus Helicopters	1.3 Abbreviations	5	MOPSC address a configuration, not a capability	Modify the wording to “Maximum Operational Passenger Seating Configuration”	Yes	No	Accepted	Wording will be changed as suggested.
6	Airbus Helicopters	2.3 the CAA UK CAP 1519	7	The idiom “offshore missions” is not contained within Commission Regulation (EU) 965/2012.	Match the wording to the one used in Commission Regulation (EU) 965/2012 i.e. offshore operations	No	Yes	Accepted	Changed “missions” into “operations” throughout the document whenever applicable
7	Airbus Helicopters	3.1 Compliance with SPA.HOFO.160 (c)	8	The wording ETSO-C194 approval is not in line with CS-ETSO.	Match the wording to the one used in CS-ETSO i.e. ETSO-C309 authorisation.	Yes	No	Accepted	Changed into “authorisation”
8	Airbus Helicopters	3.3.4 Nuisance alerts	9	“Certified envelope” is beyond aeronautical products certification.	Modify the wording to “envelope to be approved”.	Yes	No	Partially Accepted	The HTAWS is supposed to work as intended, in compliance with 1301 and 1309, in the entire envelope proposed for certification. Certified envelope is intended as the envelope in which HTAWS is proposed for certification and not the one of the aircraft. Of course specific limitations of the system must be taken into account. Text will be amended into “envelope proposed for the system certification”.
9	Airbus Helicopters	3.3.4	9	The maximum nuisance alert rate should be determined and demonstrated during the certification process. => This is strongly dependent on mission profile and H/C usage. Only a qualitative assessment is feasible as any test will not be exhausted.	Reword: The maximum nuisance alert rate should be qualitatively determined and demonstrated during the certification process.	O	S	Not accepted	The certification memo is intended to provide guidance on voluntary application for Offshore GPWS functions until a new standard will come in place. OEMs should have data from the fleet available that could support analysis of the nuisance alert rate for existing aircraft. For new types (if any) the certification memo does not strictly require demonstration of the nuisance alert rate only by test or by operational fleet data.

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
10	Airbus Helicopters	3.4.3	10	<p>In particular, flight testing, in combination with simulation and operational flight data analysis, will be required in order to show proper functionality of the alert envelopes within the entire rotorcraft certified envelope and to evaluate the impact of the HTAWS functions on the basic crew procedures.</p> <p>For new H/C TCs there is nooperational flight data and representative simulation may only be available late in the development.</p> <p>The OEM should be permitted to propose any of the three or a combination of them to EASA in the frame of the Major change proposal.</p>	In particular, flight testing, simulation or operational flight data analysis, will be required in order to show proper functionality of the alert envelopes within the entire rotorcraft certified envelope and to evaluate the impact of the HTAWS functions on the basic crew procedures.	O	S	Not accepted	While it is agreed (see comment 9) that for new types analysis of the envelopes cannot be performed with existing operational data, it is also deemed appropriate that proper functionality of the proposed GPWS functions, including nuisance alert, HMI, as well as impact on basic crew procedures are demonstrated by flight test. In any case, please consider the nature of the CM. It is not a binding material nor an acceptable means of compliance, but it only describes the EASA expectation and policy. Applicants are always allowed to propose alternative methods, if deemed suitable to show compliance with the applicable certification requirements.
11	'CAP 1519 team'/HeliOffshore	1.4		Recommend standardising on the definition for nuisance warnings contained in AC25.1322-1- Flight Crew Alerting, dated 13th December 2010, i.e. "a nuisance warning is defined as an alert generated by a system that is functioning as designed but which is inappropriate or unnecessary for the particular condition."		X		Accepted	Initial definition was copied from ETSO C-151 text. Text has been changed with the proposed one.
12	'CAP 1519 team'/HeliOffshore	3.1		ETSO-C194 HTAWS should not be recommended/promoted/accepted for offshore operations unless the oil and gas installations are removed from the obstacle data base. Operational experience has clearly demonstrated that an excessive and unacceptable nuisance alert rate will occur if this action is not taken. This is a significant safety issue and should be covered in the Cert Memo.			X	Not accepted	<p>The Cert Memo does not regard the Forward Looking Terrain Avoidance function. Anything regarding this topic was taken out from the scope, since it was seen as a controversial point during upfront discussions that led to the Certification Memo.</p> <p>Current Operations Regulations require a (E)TSO-C194 HTAWS. If aimed at reducing the nuisance alert when flying offshore operations, there is no objection to remove the oil and gas installations from the obstacle database. Database changes do not affect the (E)TSO authorisation. It is however recommended that crew is properly informed about the change of the database.</p>

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
13	'CAP 1519 team'/HeliOffshore	3.1		– By stating that ETSO-C194 HTAWS will be accepted as fulfilling the SPA.HOFO.160(c) rule, the FAQ and Cert Memo are effectively being used as an AltMOC to provide for a lower standard than was intended by the rule in continuation. This misuse of the FAQ and Cert Memo process and undermining of the safety intent of the rule is not considered appropriate or acceptable.			X	Not Accepted	<p>Currently DO309 is the only HTAWS standard. Both TSO C-194 and ETSO C-194 refer to it and only to it. EASA cannot point to any standard which does not exist yet or to additional requirements written in other source without the issuance of a relevant authorisation/approval, since it will be also difficult for operators and competent authorities to ascertain compliance to these requirements for a given helicopter.</p> <p>The implementing rules refer to class A HTAWS. Class A HTAWS doesn't exist. However, the intent of this rule is described in the explanatory note to the Opinion and CRD introducing this wording.</p> <p>Below the relevant extract of the explanatory note:</p> <p><i>The Agency accepts the comments received to ensure prevention related to controlled flight into terrain (sea). This corresponds with the recommendation in ICAO Annex 6, Part III, Section II. As there is an uncertainty regarding retro fitment for some helicopter types, a requirement to install terrain awareness and warning system (HTAWS) for helicopters with an individual Certificate of Airworthiness after 31 December 2018 is introduced in item (c).</i></p> <p>The ICAO recommendation in Annex 6 referred to in the explanatory note discusses only the forward looking modes as defined in DO309, and does not refer to any additional GPWS functions.</p> <p><i>4.4.4 Recommendation.— A helicopter when operating in accordance with IFR and which has a maximum certificated take-off mass in excess of 3 175 kg or a maximum passenger seating configuration of more than 9 should be equipped with a ground proximity warning system which has a forward-looking terrain avoidance function.</i></p> <p>The text on the FAQ and the cert memo only reflects the factual information above and will remain unchanged until a new standard will come in place.</p>
14	'CAP 1519 team'/HeliOffshore	3.2		The intention and the wording of SPA.HOFO.160(c) is effectively that HTAWS with GPWS functions are required, i.e. mandatory not voluntary. Since such equipment is readily available (and already installed on most offshore helicopters in service) it is surely not unreasonable to properly enforce SPA.HOFO.160(c) and require that GPWS functions are provided.	The status of the Cert Memo is noted, but the wording could and should at least be strengthened, e.g. "It is strongly recommended that offshore helicopters be equipped with GPWS functions...".		X	Not Accepted	See EASA response to comment 13. Moreover, as agreed during several meeting held in preparation of the Certification Memorandum, the document covers the voluntary implementation of CAP1519 GPWS alerting functions while a new standard is developed by WG-110. Paragraph 2.3 already points out: "EASA considers the proposed standard to be a considerable improvement in the safety of offshore oil and gas operations." This sentence is considered enough to highlight the importance of the implementation of the alerting functions described in the Cert Memo in order to improve safety.

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
15	CAP 1519 team'/HeliOffshore	3.3.4		It does not make sense to inhibit genuine warnings that could be acted upon.	Modify the second para. as follows: "The interface of the offshore GPWS functions with other helicopter systems should be designed so that the status of specific aircraft systems (e.g. OEI conditions) or flight conditions (e.g. autorotation) are recognized, and specific offshore GPWS functions are inhibited in order not to generate alerts that are not expected in that specific operational condition. If the system would normally generate an expected alert in specific circumstances or operational conditions, for example high rate of descent, but the aircraft status (for example autorotation) would not permit the crew to alter the flight path and escape the alert boundary, the alert should be inhibited."	X		Accepted	Text will be amended as follows: "The interface of the offshore GPWS functions with other helicopter systems should be designed so that the status of specific aircraft systems (e.g. OEI conditions) or flight conditions (e.g. autorotation) are recognized. If the system would normally generate an expected alert in specific circumstances or operational conditions, but the aircraft status would not permit the crew to alter the flight path and escape the alert boundary, the alert should be inhibited. A typical example for such a case, but not the only one, would be an alert generated by a high rate of descent during an autorotation."
16	CAP 1519 team'/HeliOffshore	Appendix A 1		This section could helpfully explain the issues with using RADALT or BARALT which drive the recommendation for use of ALTRATE. See Section 5.2.4 of CAP 1538.		X		Accepted	Text in Appendix A paragraph 1 has been amended with reference to the CAP 1538.
17	GAMA	General		The CM has two objectives. First to clarify HTAWS for offshore operations and secondly to provide information about additional modes that can be provided for offshore operations.	New off-shore modes should be "de-coupled" from HTAWS. Title of the document should be revised to HTAWS for Offshore Operations and Offshore Alerting Functions. The objective should clearly define the two objectives of the CM and ensure both are clearly distinguishable.	X		Partially accepted	Title has been revised as suggested. The two objectives of the Certification Memo are already considered clearly identified in paragraph 1. Moreover, paragraph 3.3.1 clearly states that "Offshore GPWS functions can be implemented either in the HTAWS equipment or through functions provided by means of other integrated avionics equipment that are installed on the rotorcraft".
18	GAMA	General		CM needs to clearly distinguish between HTAWS, GPWS and offshore modes. Several places in the document use the terms "GPWS functions", "offshore GPWS functions", "offshore mode GPWS functions", "offshore modes" interchangeably.	When the intent is to discuss compliance based on MG-18 and DO-309 the term HTAWS should be used. When the discussion is in regards to the offshore modes, the term offshore modes should be used.	X		Partially accepted	The Cert Memo has been carefully written with clear distinction among the following terms: GPWS function: alerting function, distinct from Forward Looking Terrain Avoidance, providing caution and warning alerts of imminent contact with ground/water. Offshore GPWS function or Offshore mode GPWS function: GPWS function specifically designed for Offshore operations and grouped under the Offshore Mode. Offshore Mode: Set of Offshore GPWS functions grouped under a single mode. This definitions will be included in para 1.4. Definitions are in line with the ones included in ETSO-C151a
19	GAMA	1.1	4	In line with previous comments, GPWS should be removed from the second paragraph.	Replace "GPWS" with "additional".	X		Not accepted	See EASA position to comment 18.
20	GAMA	1.3	5	Missing abbreviations for AFCS and FMS	Add missing abbreviations	X		Accepted	Abbreviations for AFCS and FMS have been included
21	GAMA	1.4	6	GPWS definition missing	Suggest adding GPWS definition.	X		Accepted	Added definition for GPWS function, Offshore (mode) GPWS function and Offshore Mode as explained in EASA response to Comment 18.
22	GAMA	2.1	6	AC 29 incorrect	Revise to AC 29-2C	X		Accepted	Text changed into AC 29-2C

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
23	GAMA	2.2	7	Confusion about HTAWS or the GPWS within the paragraph. See comment 1	Change 4th sentence as follows: ...This has resulted in differences in approach to the certification of GPWS envelopes between	X		Not accepted	The paragraph presents the current helicopter fleet situation. Currently GPWS functions, when installed, are usually embedded in the HTAWS equipment. Therefore no confusion is envisaged.
24	GAMA	3.3.6	10	<p>“A clear indication should be given to the pilot of the selected mode.”</p> <p>DO-309 2.2.2.4.g states the following: If a "Reduced Protection Mode" is provided, a visual indication to the flight crew shall be provided while operating in the Reduce Protection Mode.</p> <p>Selecting Offshore Mode is similar to the “Reduced Protection Mode” in that it modifies the default alerting behavior of HTAWS (where the default alerting is provided by Onshore Mode). Therefore, the indication of the selected mode should only be required when the selected mode is Offshore Mode.</p>	Reword this sentence to say that a clear indication should be given to the pilot when in Offshore Mode.		X	Accepted	Wording will be changed into: “A clear indication should be given to the pilot when the Offshore mode” is selected.
25	GAMA	3.4.2	10	Paragraph does not talk to validation of non-EU types	Section should be revised to add a process that recognizes acceptance of non-EU types with EASA involvement through validation.		X	Not accepted	Paragraph 3.4.2 “Eligibility” has been specifically written for EU applicants, where eligibility for certain application is possible in discriminated as per Part 21 requirements. Validation of TC/STC or major changes to TC are managed in accordance with the BASA/TIP or WA where applicable. Specifically for validation of US approvals, coordination with FAA will take place in order to decide if this item should be included in the SEI/SSD list or not.
26	GAMA	3.4.3	10	<p>In the section it is unclear when the compliance demonstration is referring to standard HTAWS or when it referring to the offshore modes.</p> <p>For example, the first paragraph refers to MG18, therefore is only applicable to standard HTAWS.</p> <p>It is not clear if the second paragraph is discussing HTAWS of the new off-shore modes.</p>	The section should be clear as to which compliance means are applicable to HTAWS (MG 18) and which compliance demonstration is applicable for the offshore modes.		X	Not accepted	The MG 18 is applicable to HTAWS installation in general, regardless the type and functions of the HTAWS. Moreover, although it is acknowledged that the title of the MG 18 relates to HTAWS equipment only, the content of the guidance material also refers to matters (nuisance alert minimisation, software certification) that are still applicable to the GPWS functions and in particular to the offshore mode, both in case they are or not included in the HTAWS equipment.
27	GAMA	Appendix A 1.	13	The mode does not account for parts of the flight envelope when rapid decent rate is expected and normal (i.e. autorotation training). As described the mode would produce nuisance alerts.	The requirement should specify automatic inhibit of the alerting for a detected power-off autorotation or training autorotation condition. This is particularly required since the possible voice alerts for this mode includes “Pull Up”. Mode should also ensure that other parts of the expected envelope would not trigger nuisance alerts.	X		Partially accepted	The comment is agreed and supported. However, suggestion is not implemented, since Appendix A only talks about definition of the envelopes proposed for the offshore GPWS functions. Inhibition of the functions, especially during emergency conditions and in particular aircraft flight conditions, is already covered under paragraph 3.3.4.

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
28	GAMA	Appendix A 2.1.1 & 2.1.2	14	CAT-A profiles under actual OEI or OEI training conditions may produce nuisance alerts given the definition of take-off condition. In a CAT A take-off, a 15-foot clearance may be achieved as VTOS is being reached as the aircraft is reaching a speed that established take-off. 10% or 20% radio height is 1.5 feet and 3 feet respectively. Ocean swells or cleared obstacles could easily produce false alarms during the climb out.	Additional criteria should be considered. For example, a loss of 20% or 20 feet whichever is greater, after a minimum 50 knots airspeed and positive rate-of-climb (barometric) is achieved and sustained for at least 1 second. At this point the 60 second monitoring window can commence. It should be specified that alerts should be inhibited whenever autorotation or training autorotation is detected.	X		Not Accepted	The Certification Memo already clarifies that the envelope presented are only proposal and that applicant may find and propose offshore GPWS functions envelopes that are deemed most suitable for their helicopter. Para 3.3.2 states: “The definition of the alert envelopes for the alert functions listed above is left to the equipment supplier and helicopter STC/TC holder to account for different aircraft performance, system architecture and specific operational requirements. For the Offshore mode, alert envelopes defined in Appendix A can be used, if found suitable by the applicant. ” Regarding the inhibition of the functions, this is already covered under paragraph 3.3.4.
29	GAMA	Appendix A 3	14	The proposed mode is an expansion of that required by CAT.IDE.H.145.	The coexistence of the proposed mode with CAT.IDE.H.145 should be explained.		X	Not accepted	The coexistence with radio altimeter requirement in CAT.IDE.H.145 is acknowledged but no conflict is envisaged. In fact, beyond the fact that this functions has a different safety intent, the GPWS function described at Appendix A paragraph 3 is a caution and not a warning, like the one required by CAT.IDE.H.145. Being the minimum altitude set at 350 ft, this is deemed compatible with the warning of the radio altimeter call-out, which is usually set at a lower altitude and has in any case with a higher priority. The GPWS function “Altitude callout” initially contained in CAP1519 (thereby referred to as “mode 6”) has been left out from the CM, since it was agreed to be covered by the requirement CAT.IDE.H.145
30	GAMA	Appendix A 3.1	14	The 350 ft threshold would mean that gear cannot be retracted until 350 ft of altitude after take-off.	Additional logic may be required to avoid nuisance alerts during take-off.	X		Partially accepted	The comment is agreed and supported. However, suggestion is not implemented, since Appendix A only talks about definition of the envelopes proposed for the offshore GPWS functions. Inhibition of the functions, especially during emergency conditions and in particular aircraft flight conditions, is already covered under paragraph 3.3.4.
31	GAMA	Appendix A 3		Miscellaneous concerns: The proposed mode can conflict with existing landing gear messages present on different aircraft types. “To Low Terrain” will have two different meanings depending on the landing gear state. Operations will cause the altitude and airspeed limits to vary.	Section should not prescribe specific alerts or a specific envelope. The section should define the safety intent which is to endure that gear is deployed when required or that the aircraft does not have sufficient altitude for a given airspeed.	X		Not Accepted	The Certification Memo already clarifies that the envelope presented are only proposal and that applicant may find and propose offshore GPWS functions envelopes that are deemed most suitable for their helicopter. Para 3.3.2 states: “The definition of the alert envelopes for the alert functions listed above is left to the equipment supplier and helicopter STC/TC holder to account for different aircraft performance, system architecture and specific operational requirements. For the Offshore mode, alert envelopes defined in Appendix A can be used, if found suitable by the applicant. ”

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
32	Leonardo S.p.A.	Sec. 1.4	6	The definition of nuisance alert provided in this section is in contrast with the use of “Nuisance Alert” in the rest of the CM.	The allocation of nuisance alert to “design performance limitation of the HTAWS” might generate confusion. What is the exact definition of “performance limitation”? Is this related to providing alerts when this should not be the case per envelopes implemented in the HTAWS SW or per a/c certified envelope? It’s recommended to redefine a nuisance alert as an alert which is not consistent with the specific flight condition and might drive incorrect pilot’s judgment and actions.	Yes	No	Partially accepted	Initial definition was copied from ETSO C-151 text. Text has been changed with the a new one (see comment 11).
33	Leonardo S.p.A.	Sec. 3.3.4	9	The CM recommends suppression of “alerts that are not expected” in specific conditions (OEI/autorotation, etc.) which instead are consequence of malfunctions and thus anomalous by definition. LH concurs with the proposed recommendations, but suggests a slightly different text.	“The interface of the offshore GPWS functions with other helicopter systems should be designed so that the status of specific aircraft systems (e.g. OEI conditions) or flight conditions (e.g. autorotation) are recognized and specific offshore GPWS functions/alerts are inhibited, under H/C malfunction conditions, in order not to provide input to the pilot which may be in contrast with the emergency procedures as stated in the RFM.”	Yes	No	Not accepted	Nuisance alert should not be intended only as the ones that occur during in emergency situation, driving incorrect pilot’s reaction, but also the ones occurring in normal conditions, which are deemed to be unnecessary and that would decrease the crew trust in the system, leading to excluding the system for the entire flight (as it is the case nowadays).
34	Leonardo S.p.A.	Sec. 3.4.3	10	In particular, flight testing, in combination with simulation and operational flight data analysis, will be required in order to show proper functionality of the alert envelopes within the entire rotorcraft certified envelope and to evaluate the impact of the HTAWS functions on the basic crew procedures.	The use of operational data can sometimes be quite challenging. The availability of Operational data for a specific platform depends on in-service experience and data recording features installed. It is possible that in some cases available data might not be sufficient to stimulate each GPWS mode, in the complete H/C envelope in a representative manner, as it seems to be expected by the CM. The intent to ask a check of proper functionality “within the entire rotorcraft certified envelope” is not clear. In relation to CAP 1519, which EASA is accepting as a safety improvement, for coherence the CM should state that the OEM has to demonstrate proper HTAWS operation in accordance to proposed HTAWS envelope, regardless of the specific a/c envelope.	No	Yes	Partially accepted	The HTAWS and the GPWS functions are supposed to work as intended, in compliance with 1301 and 1309, in the entire envelope proposed for certification. Certified envelope is intended as the envelope in which HTAWS is proposed for certification and not the one of the aircraft. Of course specific limitations of the system must be taken into account. Text will be amended into “envelope proposed for the system certification”.

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
35	Leonardo S.p.A.	Sec. 3.4.3	10	<p>In addition, the applicant should demonstrate that nuisance alerts are minimized during aircraft operations. This should at least include flight evaluation in the most critical conditions of all normal and emergency manoeuvres applicable to offshore operations included in the Rotorcraft Flight Manual.</p>	<p>Again, it is credible that management of H/C malfunctions might trigger HTAWS alerts. The safety element here is to avoid trigger of uncorrect pilot's judgment/ reaction due to alerts.</p> <p>For normal operations, it is realistic that a/c envelopes already certified will not have to be "adapted" to new CAP 1519 guidelines. It appears obvious and realistic that crews will have to be informed, possibly by proper AFM statements, about specific flight conditions in which alerts might be provided, even if such conditions are approved as "normal operations".</p>	No	Yes	Not accepted	<p>Nuisance alert should not be intended only as the ones that occur during in emergency situation, driving incorrect pilot's reaction, but also the ones occurring in normal conditions, which are deemed to be unnecessary and that would decrease the crew trust in the system, leading to excluding the system for the entire flight (as it is the case nowadays).</p> <p>The HTAWS and the GPWS functions are supposed to work as intended, in compliance with 1301 and 1309, in the entire envelope proposed for certification.</p> <p>However, demonstration of the nuisance alert rate only by means flight testing is not requested. As the paragraph says, the normal and emergency flight conditions including normal variation due to operational conditions (i.e., different pilot technique, different operational rule, wind, etc.) should be examined, and among those where a possible nuisance alert is envisaged, demonstration of the nuisance alert conditions/rate is to be proposed with means of compliance proposed by the applicant and agreed with the certification team.</p>
36	Michael Albert	3.3.6	10	<p>"A clear indication should be given to the pilot of the selected mode."</p> <p>DO-309 2.2.2.4.g states the following: If a "Reduced Protection Mode" is provided, a visual indication to the flight crew shall be provided while operating in the Reduce Protection Mode.</p> <p>Selecting Offshore Mode is similar to the "Reduced Protection Mode" in that it modifies the default alerting behavior of HTAWS (where the default alerting is provided by Onshore Mode). Therefore, the indication of the selected mode should only be required when the selected mode is Offshore Mode.</p>	<p>Reword this sentence to say that a clear indication should be given to the pilot when in Offshore Mode.</p>		X	Accepted	<p>Wording will be changed into: "A clear indication should be given to the pilot when the Offshore mode" is selected.</p>

Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion*	Comment is substantive or is an objection**	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
37	Thales Avionics	General		<p>THALES Avionics support the objective and general concern of EASA regarding the insufficient level of performance of existing HTAWS ETSO'd C-194 when used in Helicopter Offshore Operations (HOFO)</p> <p>Thales agree with EASA statement about the lack of HOFO HTAWS standard resulting "in differences in approach to the certification of HTAWS between helicopter manufacturers and also between helicopter types".</p> <p>However when willing to create an interim guidance with this memo, EASA will create also an heterogeneous situation when EUROCAE WG 110 complete its standard if the new MOPS/ETSO requirements are different from the CM ones.</p> <p>Assuming that the EUROCAE WG110 will benefit from the latest results of research and provide the state of the art golden standard when issued, all HOFO operators and OEMs will have to manage heterogeneous fleets of rotorcraft with various performance levels coming back to the today situation which is not satisfactory either.</p> <p>Moreover, Thales do not understand the issuance of such a CM with prescriptive performance level without upfront industry consultation whereas a Eurocae WG110 is active on the subject.</p> <p>Considering EUROCAE WG110 schedule, Thales recommend waiting issuance of the new EUROCAE Standard instead of issuing this Certification Memo.</p>			X	Not accepted	<p>EASA is fully aware of and is actively participating to the EUROCAE WG-110. The need for the Cert Memo has been coordinated with all the members of the group, major manufacturers, operators and other authorities. The certification memo is aimed at covering the voluntary implementation of the CAP1519 recommendation until the new standard will be produced by the WG-110. The group intent is also to create the minimum disruption possible between the current practice, as described in the certification memo, and the future standard. Once the standard is issued, EASA rulemaking activities will be such to amend the operational and certification material (including this cert memo) accordingly in order to avoid undue burden for operators and applicant and to avoid the risk of heterogeneous fleets.</p> <p>The certification memo, per its nature, is not prescriptive at all in any of the matters covered. The GPWS functions remain for the time being voluntary as well as the offshore ones. Moreover, regarding the profile presented in Appendix A, they are only proposal and applicant may find and propose offshore GPWS functions envelopes that are deemed most suitable for their helicopter.</p> <p>Para 3.3.2 states: "The definition of the alert envelopes for the alert functions listed above is left to the equipment supplier and helicopter STC/TC holder to account for different aircraft performance, system architecture and specific operational requirements. For the Offshore mode, alert envelopes defined in Appendix A can be used, if found suitable by the applicant."</p>

* Please complete this column using the word "yes" or "no"

** Please complete this column using the word "yes" or "no"