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NR	Author	Section, table, figure	Page						
1	ADAC Luftfahrt Technik GmbH	3.1.1  3.2.2	6  7/8	<p>“NVIS approval of helicopters equipped with NVIS compatible or friendly cockpit lighting should also be classified as a major design change”</p> <p>“1) Only companies holding a DOA with NVIS capability are entitled to carry out a NVIS approval (major change or STC) of Non-NVIS helicopters. APDOA are not eligible for such changes. Therefore, APDOA that are already holders of this kind of NVIS STC are expected to apply for a full DOA before application of further NVIS STC of the same kind.</p> <p>2) DOA or APDOA with NVIS capability are permitted to perform: a) NVIS approval of helicopters with NVIS friendly/compatible cockpit (sometimes also known as NVIS special lighting or NVIS compatible lighting).”</p> <p><b>The above sections are in contradiction of each other.</b></p>	<p><b>Suggested wording as follows:</b></p> <p>“2) DOA or APDOA with NVIS capability are permitted to perform: a) NVIS approval of helicopters with NVIS friendly/compatible cockpit (sometimes also known as NVIS special lighting or NVIS compatible lighting). 3) Applicants not holding a DOA or APDOA (typically operators <b>and APDOA</b>) as any legal person, can only apply for Minor Changes to previously approved NVIS helicopters.”</p>	Yes	No	Not accepted	The contradiction between point 1 and 2 of the list is not agreed. Point 1 clearly states that only DOA with NVIS capabilities can perform full NVIS approval of non-previously NVIS modified helicopters. Point 2 regards the possibility for DOA and APDOA to certify helicopter whose lighting is modified as NVIS but not NVIS certified or major changes to NVIS certified helicopters. In these cases, the design activities are very limited. Suggested revision is not accepted since in adherence with Part 21 an APDOA can apply for major changes, but no privileges are granted.
2	ADAC Luftfahrt Technik GmbH	3.1.2	6	<p>„Historically EASA has agreed that each TC/STC holder of an NVIS approval should propose their own criteria for classification of lighting changes that only have a limited impact on the NVIS approval and therefore can be considered to be minor. These criteria depends greatly on the: _ experience and knowledge of the specific organisation, _ type/model affected, _ kind of NVIS technology applied, and _ NVIS approval. For those companies having a Design Organisation Approval (DOA) with NVIS capability in the Terms of Approval, the DO Handbook should contain these classification criteria.“</p>	<p><b>Suggested wording as follows:</b></p> <p>„Historically EASA has agreed that each TC/STC holder of an NVIS approval should propose their own criteria for classification of lighting changes, that only have a limited impact on the NVIS approval and therefore can be considered to be minor. These criteria depend greatly on the: _ NVIS approval. _ experience and knowledge of the specific <b>DOA in NVIS and NVIS flight testing</b>, _ type/model affected, <b>extent and effect of modification</b>, _ kind of NVIS technology applied“</p> <p>For those companies having a Design Organisation Approval (DOA) with NVIS capability in the Terms of Approval, the DO Handbook should contain these classification criteria. <b>These criteria shall constitute the basis for classification between the DOA and EASA.</b>“</p>	Yes	No	Partially accepted	<ul style="list-style-type: none"> <li>Modification of the second bullet from “experience and knowledge of the specific organization” into “experience and knowledge of the specific DOA in NVIS and NVIS flight testing” is partially accepted. Classification criteria are set based on the NVIS experience in general (which should already imply experience in NVIS flight testing). Text is revised as follow: “experience and knowledge of the specific organization acquired in previous NVIS projects”</li> <li>Addition of the bullet “extent and effect of modification” is accepted.</li> <li>Addition of the sentence is not needed. The criteria listed in the DOA handbook remain applicable to that specific DOA only and are known to EASA Certification Team by means of the approval of the Handbook.</li> </ul>

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3	ADAC Luftfahrt Technik GmbH	3.2.3.2	8	<p><i>"In accordance with the definitions given in Part 21 Appendix XII , flight tests for development and certification of helicopters with initial NVIS modification (including full NVIS approval of helicopters with NVIS friendly cockpit/compatible) should be classified as Category 2, as the NVIS will require a re-assessment of the basic crew procedures. Similarly, NVIS flight tests for changes to previously NVIS approved helicopters that will have a major impact on NVIS capabilities should be classified as Category 2."</i></p> <p>By declaring NVIS flight tests as "category 2" flight test pilots and flight test engineers must have competence level 2. We object that automatically these flight test generally are category 2 flight tests !</p> <p>Since these changed helicopters are certified for IFR and/or night VFR, these flight tests (in night VMC with higher minima) are performed in a domain corresponding to the normal operation of this rotorcraft. The NVIS modification of itself does not affect the behaviour of the rotorcraft in any way. i.a.w GM No 1 to Appendix XII to Part-21.</p> <p>In our view, experience and competence of the flight test crew in the area of NVIS should have high priority over the competence level 2 vs. 4 with relation to flight testing ! Being flight test personnel of competence level 2 does not necessarily mean a high NVIS competence and/or experience at the same time. In our opinion a competence level 4 flight test crew with extensive NVIS experience is of a higher value than a competence level 2 flight crew with (minimal) knowledge of NVIS as described in SPA.NVIS.130. This flight test pilot-personnel is available at operators, who perform NVIS flights frequently. Flight test engineers are available at DOAs, who perform NVIS changes on a regular basis. To demand pilots and engineers of competence level 2 <u>for every NVIS flight test</u> will squeeze smaller DOAs out of business -even, if they have proved their NVIS competence (including flight tests) to EASA several times. Only big companies such as Airbus and large DOAs will be able to offer NVIS changes in the future, if the requirements as described in this CM are made law. We hope that EASA is not involved in Industrial policy in favour of Airbus !</p>	<p><b>Suggested wording as follows:</b> "In accordance with the definitions given in Part 21 Appendix XII , flight tests for development and certification of helicopters with initial NVIS modification (including full NVIS approval of helicopters with NVIS friendly cockpit/compatible) <u>on a project-related basis</u> should be classified as Category 2 <u>or Category 4, depending on the criteria listed below</u> , as the NVIS will require a re-assessment of the basic crew procedures. Similarly, NVIS flight tests for changes to previously NVIS approved helicopters that will have a major impact on NVIS capabilities should be classified as Category 2 <u>or Category 4 depending on the criteria listed below</u>. Therefore, for these cases, flight test pilots and lead flight test engineers should have at least a <u>competence level 2 the competence level i.a.w.the determination in the FTOM of the DOA, as indicated in the same Appendix XII.</u> These criteria depend greatly on the: _ NVIS approval. _ experience and knowledge of the specific DOA in NVIS and NVIS flight testing, _ type/model affected, _ extent and effect of modification, _ kind of NVIS technology applied"</p>	No	Yes	Not accepted	<p>Comment is not agreed. Flight Test Competence is as important as NVIS experience in flight testing of NVIS. For this reason EASA also requires the (A)DOAs seeking NVIS capabilities to clearly identify minimum NVIS experience and currency requirements for their Flight Test Personnel in the FTOM or NVIS design procedure. These requirements may be even more stringent than the ones identified in SPA.NVIS.130. NVIS flight testing for full NVIS approval or major changes is classified Cat 2 not because the helicopter is flown outside the operational domain, but because the competence of the flight test personnel to perform HMI assessment, as well as to assess basic flight procedure and rotorcraft behaviour during the NVIS flight is considered essential for this discipline and can only be achieved with a competence level 2 in flight testing. In general, DOA experience is not a principle for categorisation of the flight test in accordance with Appendix XII of Part 21.</p> <p>In any case, the Text clearly identifies that flight test for NVIS certification is to be classified Cat 2 for new full NVIS approval and for all design changes whose NVIS impact is identified as major. Therefore, flight test for a NVIS design change classified as Minor can be classified as Cat 4. A clear statement has been added to paragraph 3.2.3.2</p>

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4	ADAC Luftfahrt Technik GmbH	3.3.2	9	"Flight Test Report" should be replaced by "Flight Test Programme/Plan". The Report is the outcome and analysis of the Programme/Plan and as such cannot be provided to EASA prior to their evaluation visit.	<b>Suggested wording as follows:</b> "Ground and Flight Test Programme/Plan should to be agreed and accepted by EASA before company flight test takes place; the Flight Test Report <b>Programme/Plan</b> should be provided to the EASA Flight Test Team prior to their evaluation visit."	Yes	No	Not accepted	NVIS flight test is usually repeatable. Therefore, EASA flight test should always be performed only after the company flight test has been completed, unless for specific and very exceptional reasons. These reasons include, for example, the case in which the EASA flight test personnel is supporting the DOA Team and therefore needs to evaluate the competence of the DOA. In such a case, the visit will comprise witnessing of the company flight testing rather than an independent evaluation. We are aware that sometime a final Flight Test Report may not be submitted, due to the limited time between the end of the company flight test and the EASA evaluation. In these instances, availability of preliminary flight test data is considered acceptable. Text has been amended to clarify this point
5	ADAC Luftfahrt Technik GmbH	3.5	10	<i>For NVIS approvals not limited to specific helicopter serial numbers, it is probable that there will be a variety of different pre-existing cockpits on which the same STC will be applied. This may require different limitations or crew procedures to be applied. For these reasons, the applicant of a NVIS STC/major change should provide a dedicated RFM supplement for each serial number(s) set having the same lighting configuration. As an alternative, the RFMS can be structured in two parts. The first covering the basic helicopter configuration, having the general normal procedures and limitations. The second part should be an Appendix, specific to applicable helicopter serial number(s), containing any modified or additional limitations or procedures relative to any specific configurations or optional equipment installed and possibly including reference to the specific helicopter serial number(s) configuration file. An example RFM Appendix is provided in Annex 2. An example RFM supplement is provided in MG16 of AC27/29.</i>	<b>Suggested wording as follows:</b> "For NVIS approvals it is probable, that there will be a variety of different pre-existing cockpits on which the same STC will be applied. This may require different limitations or crew procedures to be applied."  Hence a NVIS approval should be limited to specific helicopter configurations or –if necessary- to specific helicopter serial numbers.  Alternatively the applicant of a NVIS STC/major change should provide a dedicated RFM supplement for each serial number(s) set having the same lighting configuration or a RFMS being structured in two parts. The first covering the basic helicopter configuration, having the general normal procedures and limitations. The second part should be an Appendix, specific to applicable helicopter serial number(s), containing any modified or additional limitations or procedures relative to any specific configurations or optional equipment installed and possibly including reference to the specific helicopter serial number(s) configuration file. An example RFM Appendix is provided in Annex 2. An example RFM supplement is provided in MG16 of AC27/29."	Yes	No	Not accepted	First part of the sentence "For NVIS not limited to specific helicopter serial numbers..." already implies the possibility to limit the NVIS approval to specific S/N. However, this is and must remain a choice made by the design organisation and cannot be imposed by EASA. Proliferation of STC and major changes for NVIS approval for any change in the configurations in a helicopter fleet should also be avoided

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6	Airbus Helicopters	3.1.1	6	<p>§ 3.1.1 addresses 3 different types of changes. Discussions in the past with different DOs and EASA revealed deviating understanding of different types of changes with respect to NVIS. This is how Airbus Helicopters understands and interprets the CM contents and recommends clarifying some aspects:</p> <ul style="list-style-type: none"> <li>- <u>first-time installations</u> (first full NVIS approval for a certain type and design organisation): <ul style="list-style-type: none"> <li>o aircraft change from non-NVIS to NVIS-compliant (incl. required primary lighting system modifications),</li> <li>o change from ‘NVG compatible’ or ‘NVG friendly’ cockpit to NVIS compliant (without or only minor primary lighting system changes required),</li> </ul> </li> <li>- <u>follow-on installations</u> (modification of NVIS approved configurations): <ul style="list-style-type: none"> <li>o change in NVIS lighting.</li> </ul> </li> </ul> <p>The second category is not consistent with the title of the paragraph (Non NVIS approved helicopters), because it concerns – based on our understanding - a helicopter already approved for NVIS operations.</p>	Categories or definitions of changes related to NVIS should be clarified in the CM. Additionally, ‘change in NVIS lighting’ should be moved to § 3.1.2.	No	Yes	Partially Accepted	<p>Change in NVIS lighting mentioned in paragraph 3.1.1 refers to the design change in the lighting needed to achieve the first NVIS certification. Paragraph has been reworded for better explanation.</p> <p>NVG friendly lighting is moved into a new paragraph (3.1.2)</p> <p>Modification of NVIS approved helicopters are now under Paragraph 3.1.3</p>
7	Airbus Helicopters	3.1.2	7	<p>Last paragraph: (“...clear indication of the items that need to be removed as part of the NVIS approved configuration...”).</p> <p>Why should any item of an approved NVIS configuration be marked, identifying the need of its removal? Removing items required to sustain an NVIS approval (minimum configuration items for approval) invalidates that approval.</p>	<p>Please clarify this section.</p> <p>Should it rather read “must not be removed or changed as otherwise, an NVIS approval may be invalidated”?</p>	No	Yes	Partially accepted	<p>Some helicopter items (already installed or optional on the helicopter under certification) may be found as incompatible with the NVIS (e.g. external mirror). Therefore, these items need to be removed when the helicopter is to be used in NVIS operations.</p> <p>However, it is understood that there are some items that may need to be added as well when configuring the helicopter for NVIS.</p> <p>Therefore, the sentence will be reworded as follows.</p> <p>“ICA and RFM(S) provided by the NVIS approval holder should provide clear indication of the items that need to be removed or added as part of the NVIS configuration when the helicopter is to be configured for NVIS operations”.</p>
8	Airbus Helicopters	3.2.3.2	8	<p>First paragraph:</p> <p>Probably a typo in first sentence. “...with NVIS friendly cockpit/compatible)...”</p>	Should probably read “...with NVIS friendly/compatible cockpit)...”	Yes	No	Accepted	Wording will be changed into NVG friendly lighting



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9	Airbus Helicopters	3.8.2	13	Within the last part of paragraph 3.8.2 EASA intends to restrict the use of the same NVG during NVG aided night flight. Airbus Helicopters proposes to also allow mixed NVG usage as per the approved NVG's mentioned in the respective flight manual documentation.	The use of NVG during night flight is a supportive means to enhance the situational awareness of the flight crew. The use of NVG does not reduce any operational minima and with this the flight crew at any time can remove the NVG out of the direct FOV and with this proceed the flight unaided. If during the NVIS Certification different kinds of NVG showed compliance with the helicopter NVIS, then it should be permitted to use these NVG in any combination during night aided flight. Thus Airbus Helicopters proposes to allow the use of different NVG's during night aided flight as long as they are approved within the dedicated flight manual documentation.	No	Yes	Not accepted	Use of the same NVG make, model and characteristics is foreseen by the operational rule. Moreover, FAA AC27/29 MG16 is clear in this respect.
10	Airbus Helicopters		Annex 1	Opening the file called "CM-FT-001 Issue 02 Annex 01 Example of ICA NVIS configuration appendix.pdf" then reads "Appendix A". This is misleading.	Change "Appendix A" to "Annex 1".	Yes	No	Accepted	Text will be amended as requested
11	Airbus Helicopters	V.	Annex 3 page 7	Within Annex 3, Section V. on page 7 a "WARNING!" informs the maintenance personnel, that the activation of the NVG might damage the IIT.	Rather call it a "CAUTION" than a "WARNING". You might damage the IIT but this will not lead to any fatalities.	Yes	No	Accepted	Text will be amended as requested. However, It is to be understood that Annexes only represents examples acceptable to the Agency. They are not the only ones and any design organisation should present and agree their own ones, with wording that is deemed more appropriate for their own design.
12	Airbus Helicopters	-	-	General comment: navigation within the document could be simplified.	Add bookmarks based on chapter and sub-chapter numbering/headings.	Yes	No	Accepted	Pdf of the final version will be created with bookmarks
13	Helicopters Italia	3.2.2 paragraph 2)	7 of 14	For an STC held by an APDOA, in case of defect/failure/malfunction, the APDOA cannot guarantee the issue of the required Information/Instruction in timely manner, due to the absence of any kind of privileges that the APDOA holds.  Furthermore, taking into consideration the classification of the Flight Test Category to be carried out (Cat 2), the NVIS installation is comparable to the certification of an autopilot system that in reference to the GM No 1 to 21.A.112, is considered part of Group 1 (Design Organization should be required) and not Group 2.	The APDOAs that intends to certify the NVIS are expected to apply for a full DOA approval	NO	YES	Partially Accepted	The intent of the paragraph is to clearly identify the eligibility requirements. Full NVIS certification (i.e. from non-NVIS compliant to NVIS compliant) usually implies extensive design capabilities and therefore a DOA is requested. On the other hand, major changes to NVIS certified helicopters or certification of a NVIS compatible helicopter is considered of a lower complexity. Therefore, APDOA with NVIS capability should suffice.  GM No 1 to 21.A.112B will be modified at the next revision to reflect the content of the paragraph.  It is worth highlighting that the eligibility requirement should not be related to the capability of the organisation to discharge the continuing airworthiness obligations, which should be performed as per Part-21 provisions in any case.  Furthermore, please do not misunderstand the complexity of the design with the category of the related flight test, which is given based on different criteria.

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14	Helicopters Italia	3.6.	11 of 14	The requirement that is reported in the § 3.6. <i>Instructions for Continued Airworthiness (ICA)</i> for the experience/qualification of the personnel performing the inspection on NVIS system after the entry into service of the aircraft, is misleading.	The § 3.6. Instructions for Continued Airworthiness shall report that the Maintenance Organization PART 145 performing the activities (installation of STC/minor change or inspection/maintenance) on an NVIS certified aircraft, shall use personnel trained and qualified on NVIS system.  The use of NVIS TC/STC holder personnel, is considered an acceptable means of compliance, once they are properly qualified by the PART 145 organization.  This requirement can also be applied in reference to the Regulation EU No 1321/2014 145.A.30 Personnel requirements § (e) and (f)	NO	YES	Partially accepted	Comment is valid in principle but there are considerations that make it not applicable. Today there is no requirement on Maintenance organisations to have NVIS qualified personnel, neither the existing regulation has provision for maintenance personnel qualification on NVIS. For this reason, is difficult that a Maintenance Organisation could qualify anybody to do NVIS check. As there is no maintenance requirement, all relative information on how to do maintenance must be provided in the ICA.  The content of this part is unchanged from Issue 1 of the CM although reworded for better reading.
15	REDAK/SAD	3.1.2.	7	The last sentence starting with: ICA and RFM(S) provided.... “ is not understood. Why should items be removed as part of NVIS approved configuration.	Either removing the sentence or explain why this should be the case.	YES	NO	Partially accepted	Some helicopter items (already installed or optional on the helicopter under certification) may be found as incompatible with the NVIS (e.g. external mirror). Therefore, these items need to be removed when the helicopter is to be used in NVIS operations.  However, it is understood that there are some items that may need to be added as well when configuring the helicopter for NVIS.  Therefore, the sentence will be reworded as follows.  “ICA and RFM(S) provided by the NVIS approval holder should provide clear indication of the items that need to be removed or added as part of the NVIS configuration when the helicopter is to be configured for NVIS operations”.
16	REDAK/SAD	3.2.1	7	“Initial assessment and continuous oversight of personnel competences...” In the case of APDOA we believe this is not ensured to be available. I don’t know of any (regular) oversight of APDOA in this respect, the related other capabilities the APDOA must have or must be able to manage such as OSD, Flight Testing make us believe that equal application of the regulation can not be ensured at APDOA level, even if these tasks (OSD, Flight testing) are contracted to other DOAs..	Limit APDOA modifications to NVIS to small modifications equal to the “oversight” of APDOA. We believe that the review of technical data cannot be considered equal to a DOA oversight.  The oversight and the related financial burden on DOA is rather high and to allow APDOA to do almost any change without similar (active) oversight is not appreciated.	NO	YES	Not accepted	The intent of the paragraph is to clearly identify the eligibility requirements. Full NVIS certification (i.e. from non-NVIS compliant to NVIS compliant) usually implies extensive design capabilities and therefore a DOA is requested. On the other hand, major changes to NVIS certified helicopters or certification of a NVIS compatible helicopter is considered of a lower complexity. Therefore, APDOA with NVIS capability should suffice. Lack of continuous oversight on APDOA is mitigated by the full involvement of the Agency in their STC/major change projects.  GM No 1 to 21.A.112B will be modified at the next revision to reflect the content of the paragraph.
17	REDAK/SAD	3.2.2.	7	Para. 1) wording... are entitled to carry out a NVIS approval .. Today and prior equivalent Major, there is no privilege to approve a major change or STC.	Propose to reword to: .... are eligible to apply for a major change or STC ....	YES	NO	Accepted	Text has been revised as requested

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18	REDAK/SAD	3.2.2.	7	<p>Para. 2a) Following clarification is requested:</p> <p>a) The definition in 3.1.1. seems to suggest that it is called NVG (versus NVIS here) compatible or NVG (versus NVIS here) friendly lighting.</p> <p>b) We assume EASA wants to identify the upgrade of a previously NVG friendly/compatible cockpit and exterior light installation (non-NVIS, approved for unaided flight) to a NVIS approved installation which would require e.g. NVG, windshield, HF and other topics evaluated in addition.</p> <p>Typically, such NON NVIS approved installation is not controlled and maintained sufficiently to ensure that an organisation at a later point in time can just assume that the NVIS friendly/capable condition is still satisfied. This is due to various modifications could be introduced in between. Since these modifications are applied on a non-NVIS aircraft no further specific mention in the documentation is currently required. Therefore we claim that this modification (non-NVIS but potentially NVIS friendly) has to be re-evaluated considerably to show conformity with the NVIS regulation. By this making the change almost as critical as the condition in paragraph 1 and would require the same qualification of the DOA performing the mod.</p>	<p>We suggest changing the wording to:</p> <p>“a) The NVIS approval of a previously NVG (or NVIS ?) friendly/compatible cockpit and exterior lighting.”</p> <p>However, a clear definition shall be provided of the initial “friendly” installation only. Does it include exterior and interior, or other conditions as well?</p>	YES	YES	Accepted	<p>a) Subpara a) of 3.2.2. was amended as requested. As a consequence, all text in CM “NVG (or NVIS) friendly/compatible cockpit lighting” has been replaced with “NVG friendly lighting” in order to include also external lighting and to avoid confusion with definition of NVIS compatible in the MG 16.</p> <p>b) EASA intention was to address the cases where the applicant is asked by their customer to get a NVIS STC on their helicopter, whose configuration has been declared as NVG friendly from the manufacturer. Most of the time this is limited to new helicopters, whose configuration has not been changed from the initial one which was declared as NVG compatible and therefore needed to have very limited design changes implemented in order to achieve the full NVIS certification. However, the main assumption used in the text is that the configuration must be the same as the initial one. If the configuration has been changed and differs from the one referred as NVIS friendly, the amount of redesign a reinvestigation needed, the design change is not simple anymore, and therefore an APDOA may not be entitled to apply for this kind of STC.</p> <p>The text in the new paragraph 3.1.2 NVG friendly cockpit lighting, has been amended with the following addition:</p> <p>“Moreover, applicant should exercise caution in ensuring that, in this case, the configuration of the helicopter proposed for certification has not been changed by means of subsequent modification or maintenance activities from the one that has been initially declared as NVG friendly. In case the configuration has been modified, a proper evaluation should be performed in order to identify the effects of the modifications on the NVIS. The evaluation and the re-design needed could lead to a case of non-NVIS helicopter described in paragraph 3.1.1.”</p> <p>The following text has been added to para 3.2.2 in point 2)a):</p> <p>“(refer to paragraph 3.1.2 for specific conditions applicable to this case).</p>

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19	REDAK/SAD	3.1.1	6	<p>We believe that the terms “NVIS approved”, “NVIS compliant” (3.1.1), NVG or NVIS compatible and NVG or NVIS friendly (3.1.1 and 3.2.2) and NVG compatible and NVIS compatible (AC 27/29 Definitions) shall be clearly defined to allow to use them in an unambiguous sense.</p> <p>e.g. The AC is identifying in a. Purpose, that it relates to the “aircraft lighting modification for NVIS compatibility”. Our question is: What is a NVG or NVIS compatible or friendly installation compared to that term?</p> <p>It seems NVG/NVIS compatible (ref. 3.1.1) is identified as <u>evaluated to NVIS</u> but not approved for NVIS for some reason. What is therefore the base line for further upgrades. The CM seem to suggest it is the potential capability at the time of the initial evaluation (NVIS but not approved), while on any other change it is the approval status of the change which for this installation would be “NON NVIS”. We believe it makes considerable difference for the approval process. See Comment 4 for this.</p> <p>In 3.1.1. it first defines NVG compatible and friendly while as further down it talks about NVIS compatible and friendly. Are the two terms interchangeable? We believe not. An installation could be NVG capable (non interference) but not NVIS capable (shadowing of dials)</p> <p>It seems that the AC calls anything “NVIS” which is considered to justify “..to operate an aircraft successfully and safely with the aid of NVG.” That would be NVIS approval in our terms.</p> <p>AC is identifying NVIS friendly only in regards to external lights while the CM in 3.2.2.-2a seems to reference to cockpit.</p>	We suggest to make a clarification of the terms used in regards to NVIS (propose similar wording as in the AC) as well as NVG, compatible and friendly and then streamline the document accordingly.	YES	YES	Accepted	Wording has been changed in the entire documents to refer to “NVG friendly lighting” only in order to avoid confusion between NVG and NVIS, avoid conflict with definition of “NVIS friendly” in AC MG 16, and include both the cockpit and external lighting.
20	REDAK/SAD	3.8.	11	Wording	Propose to say: “Miscellaneous”	YES	NO	Not Accepted	“Miscellanea” is the plural term for “Miscellaneous”
21	Petipas/CEV	3.1.2		The modification of the concept of operations of the NVGs is not addressed in this chapter. As an example, modification of the concept of operations can occur in case an operator which uses NVG for ferry flight (with minimum height limited in the flight manual) wishes to use goggles for take off and landing. In this case, the modification consists in a modification in the RFM, which may have consequences on h/c definition (necessity to add additional landing lights for example).		No	Yes	Not Accepted	The change of limitations for the NVIS operations is classed as major change in accordance with Part 21.A.91 and related guidance material.



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22	Petipas/CEV	3.4		NVIS certification takes into account the cockpit (internal and external lighting) but also the NVG. Therefore:  Controls to be performed in case of change of NVG model/type should be addressed in this document Is it a minor or major change?		Yes	No	Not Accepted	NVG model plays an essential role in the NVIS certification of an aircraft. In accordance with MG 16, the evaluation shall be performed with the same model to be included in the NVIS approval. Moreover, NVG models that can be used during NVIS operations are usually included in the Limitation section of the RFM(S). Therefore, any change to the NVG model/type should be in principle classified as major.
23	Petipas/CEV	3.6		ICA of NVG are not mentioned in this chapter.		Yes	No	Not Accepted	This matter is covered by MG16 Chg 7.
24	Boeing	3.1.1	6	<p>“3.1.1. Non NVIS approved helicopters</p> <p>According to Part 21.A.91, any modification that changes an aircraft from non-NVIS to NVIS-compliant is a major change because it has an appreciable effect on the operational characteristics of the aircraft. Additionally, NVIS lighting modifications are to be considered as being a major change as they introduce functions whose failure could have a hazardous effect, due the inherent characteristics of NVIS technology and the effect that the use of NVGs has on visual perception.”</p> <p>Fully integrated displays and lighting can be made to be NVIS compatible and EASA/FAA certifiable without any changes to operational characteristics.</p> <p>Lighted equipment or flight deck flood lighting should only be considered a major change if there is a change, or alteration, that is made to existing certified equipment whose appearance or failure (i.e. stick on filters, blocking tape, nonintegrated NVIS lighting) could lead to operational failures or operations characteristics changes. One would not consider the mere fact that something that is designed to be NVIS compatible would be a major change. For example, the installation of a green LED flood light, that happens to be compatible with NVGs could be considered a minor change.</p>	<p>We request to edit the proposed text as follows:</p> <p>“3.1.1. Non NVIS approved helicopters</p> <p>According to Part 21.A.91, any modification that changes an aircraft from non-NVIS to NVIS-compliant <u>may be</u> is a major change <u>if because</u> it has an appreciable effect on the operational characteristics of the aircraft. Additionally, NVIS lighting modifications are to be considered as being a major change if as they introduce functions whose failure could have a hazardous effect, due the inherent characteristics of NVIS technology and the effect that the use of NVGs has on visual perception.”</p>	No	Yes	Not accepted	Text addresses the modification and certification process that make the entire helicopter NVIS compliant and therefore worth a NVIS certification. The change of the single equipment is not addressed here. The effect of a change of a single equipment into NVIS compatible shall be evaluated in the frame of the specific design change certification process.

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						
25	Boeing	3.6	11	<p>“3.6. Instructions for Continued Airworthiness (ICA) ...</p> <ul style="list-style-type: none"> <li>The following are maintenance items typical to NVIS that should be considered in the scheduled maintenance: <ul style="list-style-type: none"> <li>Change the windshield/transparencies if crazed or cracked in a manner to impair vision when using NVGs.</li> <li>If the NVIS configuration includes removable filters, they should be checked for condition, cleanliness, security, crazing and moisture between the filter and instrument glass. No cracks, crazing or moisture should be allowed. A day light inspection of the filtered avionics should be conducted to ensure that the filter has not degraded in a way to impair readability or colour identification in daylight conditions.</li> <li>All NVIS bezel lights / map lights/ post lights/ should be checked for condition and security.”</li> </ul> </li> </ul> <p>Unattended light leaks in the flight deck could increase the overall flight deck NVIS radiance impairing NVG performance or causing distractions.</p>	<p>We request adding one additional sub-bullet to the list.</p> <p>o “Touch-up paint should be used to conceal chipped paint on NVIS lighted cockpit avionics panels that allow unattended (filtered or unfiltered) light leaks.”</p>	No	Yes	Not Accepted	This is part of the actions resulting from the light leak check, which is already addressed in the paragraph.

\* Please complete this column using the word “yes” or “no”

\*\* Please complete this column using the word “yes” or “no”