

AIR-100 Comment Table

FAA Proposed Policy on Non Required Safety Enhancing Equipment (NORSEE)

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
1.	Delta Engineering	General comment	<p>1. So how does a US manufacturer get into the minor approval process without being holder a TC/STC? 14 CFR Part 21.91 requires someone to hold a type certificate (or STC) in order to follow 21.95. Subpart D of Part 21 is only applicable to TC/STC holders.</p>			<p>Editorial: Section 1 of this policy statement provides guidance and procedures for issuing a design, production, and installation approval to a U.S. manufacturer pursuant to § 21.8(d) for equipment designated as NORSEE only. Equipment approved pursuant to § 21.8(d) is intended to enhance safety and is considered complementary (that is, secondary or non-essential) to the required equipment. It does not require a type certificate holder to receive NORSEE approval. A third party which designs and produces NORSEE can apply for 21.8(d)approval. As stated most of the equipment that are approved under 21.8(d) can be installed under minor alteration by a licensed mechanic. For example: Carbon monoxide detection system can be installed under minor alteration by a licensed A&P mechanic with a log book entry. For those installations that are deemed a major change to type design then the applicant is required to pursue Supplemental Type Certificate (STC) process.</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			<p>a. Also Part 21.8 is approval of articles not installation. Are you trying to take the PMA approach of replacement articles? If so replacement articles are based on removing something identical versus a modification article. Also a replacement article that is major change to product requires STC (21.113).</p> <p>b. Also a "minor change" is one that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the product. Adding equipment to aircraft will probably appreciable effect on WB (especially smaller Part 23 aircraft) and mounting to existing structure can have negative impact on the structure if the margins of safety were already close to 0.</p> <p>Is there a rule change coming for this policy?</p>			<p>a. Explanation: The PMA approach is not taken in NORSEE approval. The Safety equipment is not a replacement for any existing article. It is an approval for a new installation of safety equipment that is not required by any regulation. Page 3 last paragraph also addresses the requirements for STC <i>“a situation in which NORSEE approval requires modifications that are considered a major change to type design. In this case the applicant is required to pursue another certification path (such as a supplemental type certificate (STC)) for its approval, regardless of the “non-required” designation.”</i></p> <p>b. Agreed with the commentator. The review of the NORSEE application will be reviewed and go through vetting process by the ACO engineer to ensure the proposed installation addresses all of the factors that the commentator has stated.</p> <p>There is no rule change at this time. 21.8(d) provides a path for the administrator to exercise its discretionary authority in promulgating this policy</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
2.	John Hed	General	Why in the “Applicability” section was Part 25 left out? This is the airplane equivalent to Part 29 that <i>was</i> included.		Include part 25 aircraft	Editorial: There were numerous discussions regarding inclusion of part 25 transport category aircraft. It was concluded that manufacturers of transport aircraft spend great amount of time in system redundancy design, human factor (e.g. Flight deck layout, integration) and pilot workload during certification programs. The need for aftermarket safety enhancing equipment is not as much as the other categories. Further Part 25 may be similar in some instances but there are significant differences in many areas than part 29. Currently, part 23 and part 27 will greatly benefit from NORSEE installation.
3.			In paragraph 1.5. “Human Factors Considerations”, I would add some verbiage to the effect that the design is not too compelling that the operator would be inclined to use it instead of using the required instruments. An example would be to make a new AOA display that was large and so compelling that the pilot would use it instead of using proper airmanship by use of airspeed and pitch. If an item is too compelling and a pilot uses it instead of other instruments, then the hazard category for its failure could well go up above minor.			Editorial: Agreed with the commentator. Page 4 section 1.5 states that “ <i>The design of NORSEE should consider interactions and operational interfaces related to human factors.</i> ” The discussion of compelling indication versus primary takes place during the design phase of the instrument. Furthermore, The placard placed in the cockpit states it clearly that “it is not to be used as a primary instrument.”
4.	GAMA	All/ General	Appendix 2, Table 1-1 states that the verb “must” “Refers to a regulatory requirement that is mandatory for design approval”.	There are several instances of the verb “must” used throughout this	If a clear regulatory requirement cannot be found when the verb “must” is used, the text should be revised to remove the implication that the policy	Editorial- Policies are followed by FAA employees and representatives. The word "must" is directed to the

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			<p>Every instance of the verb “must” within the entire draft policy should be examined to determine whether there is a clear regulatory requirement for the use of “must”.</p> <p>A few specific examples of this issue are provided in the following comments but these comments should not be considered to be an exhaustive evaluation of each instance of “must”.</p>	policy.	<p>is based on a regulatory requirement. If a clear regulatory requirement can be found, it should be referenced to enable the reader to make the connection to the regulation that is the basis for the policy using the verb “must”.</p>	<p>employees in conducting their course of business. It is not intended to be a mandate on the industry but rather to provide information as to how the FAA will conduct their review to this particular issue.</p>
5.	GAMA	All/general	<p>Appendix 2, Table 1-1 states that the verb “should” “Refers to instructions for a particular MOC”. Furthermore, Table 1-1 states that “Alternative MOC has to be approved by issue paper” if the applicant chooses to do something other than the “particular MOC”.</p> <p>Every instance of the verb “should” within the entire draft policy should be examined to determine whether it applies to the applicant in a context that is consistent with this definition. A few specific examples of this issue are provided in the following comments but these comments should not be considered to be an exhaustive evaluation of each instance of “should”</p> <p>There are several instances of the verb “should” used throughout this policy that do not appear to be consistent with the Appendix 2, Table 1-1 definition.</p>	<p>There are several instances of the verb “should” used throughout this policy that do not appear to be consistent with the Appendix 2, Table 1-1 definition.</p>	<p>If a clear connection to the applicant’s responsibility in meeting this policy cannot be found when the verb “should” is used, the text should be revised to remove the implication that the policy applies to the applicant.</p>	<p>Editorial -Policies are followed by FAA employees and representatives. The word "must" is directed to the employees in conducting their course of business. It is not intended to be a mandate on the industry but rather to provide information as to how the FAA will conduct their review to this particular issue.</p>
6.	GAMA	Editorial	<p>Appendices are listed as 1 and 2. Meanings are listed in Appendix 2</p>		<p>change either the reference to Appendix 2 or rename the appendices to Appendix A and B.</p>	<p>Adopted- Revised and corrected to appendix 2</p>
7.	GAMA	Summary	<p>Section 2 addresses NORSEE approval with failure conditions above Minor. It does not mention or address type design changes that are Major. The following paragraph on page 3 under the “Policy” heading appears to</p>		<p>Remove the words “change to the type design is major and” from the sentence in the Summary.</p>	<p>Not adopted- Non-Required Safety Enhancing Equipment” (NORSEE) that is determined to be a minor change to type design and whose failure condition is minor is addressed</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			<p>exclude any Major change in type design from using this policy at all: “There may be a situation in which NORSEE approval requires modifications that are considered a major change to type design. In this case the applicant is required to pursue another certification path (such as a supplemental type certificate (STC)) for its approval, regardless of the “non-required” designation.”</p>			<p>under this policy. The design changes are categorized per following: 1. Design changes to the article a. Minor changes – does not change form, fit or function b. Major changes- changes to the functionality and operation, requiring re-evaluation of the article 2. Design changes to the aircraft (type design) a. Major change- As defined in part 21. 93 b. Minor change – As defined in part 21.93</p>
8.	GAMA	1-8	<p>The document does not seem to have much in the way of explanation for the installation aspects. In other words, it appears to be assumed that the Major Alteration/Minor Alteration process under Part 43 applies but this is never explicitly stated. Is it the intent of the “installation approval” with this data that it will be considered FAA approved data for use in a Major Alteration? Therefore, no FAA Field Approval would be required for an installation that followed the manufacturer’s installation data? Should there be additional requirements included in the policy memo with regard to the installation? The document addresses the design requirements and the manufacturer’s responsibilities and information for the NORSEE Implementing Office and the ACO but is silent on follow-on installations.</p>	<p>Provide intended use of the approved NORSEE manufacturer’s installation data in regard to a Major Alteration. Add a section to the Policy document that addresses “Installation Considerations” or Installation Requirements” or something to that effect. (Note a comment later about the placard notes that it is really installation related and would be a good addition to an “Installation Consideration” section.) Also the intended use of the ICMO by the installer could be</p>		<p>Editorial - NORSEE is intended to approve the article and the related design data which includes the installation instructions as part of that design data. However, the installer is responsible to evaluate the installation of that article in a particular aircraft. If the installer determines that particular installation rises above a minor alteration then it follows the Major alteration approval process, ICMO is part of the design approval where maintenance and calibration documents are normally kept.</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
				addressed (where does this document go?).		
9.	GAMA	2	<p>GAMA agrees this is an important objective to increase safety enhancing systems being installed in aircraft. Note that the Flight Standards (AFS-300) Major Repair and Alteration Data Approval Job Aid could imply a more onerous evaluation or approval path than would seem to be intended from this policy. The Stability and Control system is a good example of this as the Job Aid indicates: "Autopilots (AP), Flight Guidance Systems, and Automatic flight control systems (AFCS) or flight directors (FD)" as needing "STC". The Job Aid also indicates "Simple single-axis autopilot systems with limited control authority that are not required for operation of the airplane, such as a simple wing leveler system" as needing Evaluation.</p>	<p>Consideration should be given to updating the Job Aid to address NORSEE equipment and the desired approach to classifying changes. The Job Aid should provide a clear indication that NORSEE Stability and Control systems such as autopilots or stability augmentation systems should be Evaluation (presumably a Field Approval would be required only when an installer was deviating from the FAA approved manufacturer's installation data for the NORSEE equipment, see earlier comment on Installation Considerations).</p>		<p>Editorial - Flight Standards is responsible for updating the Job Aid to include NORSEE products.</p>
10.	GAMA	1.1-1.2	<p>The policy should anticipate that some industry standards might have some very appropriate requirements while at the same time including requirements that would not be necessary for NORSEE equipment. The current wording implies that if the manufacturer chooses to only partially implement a standard, the FAA will invoke additional requirements.</p>	<p>The wording of the policy should be adjusted to make it clear that additional requirements could be invoked if necessary or if appropriate.</p>		<p>Adopted- Revised policy memo to clarify the acceptance method.</p> <p>The FAA can accept the proposed industry standard , partially accept it, or add additional requirements to meet the objectives of the MDR</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			Note that some standards for equipment are many years old and include aspects that are no longer applicable to modern electronic systems. This is just one example of where partial requirements might be appropriate.			
11.	GAMA	1.1	Does this mean that once one applicant has proposed a set of MDRs that have been accepted for a certain equipment type that all subsequent requests from different equipment applicants for a similar equipment type will now have to follow the same set of already accepted MDRs?	Recommend allowing each applicant to specify intended function and eliminate the concept of MDR.		Adopted - Revised memo and added "Any other proposal needs re-evaluation and approval."
12.	GAMA	1.2	Most existing affordable safety enhancing devices were developed while following no industry standards. Decades of field experience has proven this method produces good results.	Recommend removing requirement for NORSEE equipment to be designed/developed according to an industry standard. This will align the policy with the current FAA policy that allows the applicant to specify the requirements which must be met by a non-TSO function without implying that a specific industry standard must be met. E.g., Order 8110.4C Chg 5 paragraph 6-9.b.(4)(a)3 includes: "The manufacturer's specified performance requirements for the		Editorial- The policy recommends that applicants adopt one of the widely accepted industry standards, but does not mandate it.

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
				declared non-TSO function(s). Where possible, the manufacturer is encouraged to adopt existing industry accepted standards (RTCA, EUROCAE, SAE, ARINC, or others). ...”		
13.	GAMA	1.4	The “must” used in this statement is most likely based on 2x.1309 but to enable the reader to readily make the connection to the regulation that is the basis for the policy, it would be helpful to make this clear.	Suggest revising the text to: “In accordance with 23.1309, 27.1309, or 29.1309, the safety evaluation must show evidence that such failures do not reduce the capability of the aircraft or the ability of the pilot/flightcrew to cope with a failure condition worse than minor.”		Editorial- The suggested revision does not add further clarity to the existing text which already has been reviewed and accepted.
14.	GAMA	1.4	GAMA’s concern is that the typical FAA engineer will see these “considerations” as “requirements” as written. In other words, Separation, Independence and Protection will become hard requirements for the installation of NORSEE systems. It would seem more appropriate to specifically identify examples of appropriate mitigations of these “considerations”. e.g., AC 20-173 paragraph 5.c.(1) allows EFBs to be connected via read-only communication as a means to “ensure protection”.	Suggest rewriting or adding a clarifying sentence and/or examples that appropriate mitigations could be applied to any of these identified aspects.		Adopted- Revised the memo and changed from “should” to may include.
15.	GAMA	1.5	While the intentions seem clear, these terms can mean anything the user of the document may want them to mean. When the user is an ACO	Alternative would be to include these terms in the “Definition of		Editorial- Training instructions are in process of being developed for ACO engineers to better understand the terms

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			engineer, especially one with limited experienced, these terms, without definition or qualification, could be very problematic.	Terms” appendix and reference the appendix for the definitions include a definition or explanation of each of the referenced terms, “exceptional skill, unreasonable workload, and unreasonable training” so the policy is clear as to what should be the correct interpretation.		and definitions of this policy memo.
16.	GAMA	1.6	It is unclear what the responsibilities of the local ACO are in regard to the NORSEE approval. The Chicago ACO is noted as the approving ACO. Why are two ACOs required? What specifically does the local ACO provide as part of this process?	Clarify the intended involvement of each FAA office, minimizing the total number of reviews required in order to obtain FAA approval of NORSEE.		Adopted- Revised language to clarify confusion. Before submitting a request for an LOA, the applicant should discuss the design of non-required equipment with the FAA certification office (preferably during the early stages) so the FAA and applicant can determine whether the proposed system qualifies as safety-enhancing equipment
17.	GAMA	1.6.2.1	Present certification processes do not promote rapid and efficient software updates for fielded products and this results in poor customer service, and delays in getting needed improvements to the field. Non-certified products do not have this impediment because they can be updated at any time with no regulatory oversight.	Recommend approving products based on intended function independent of software version to support developer maintenance activities to update software as often as necessary without the burden of regulatory oversight. This is consistent with the recommendations of		Not adopted- The software is an integral subpart of a product, therefore it is approved as a total package, not” independent of.” The recommended approach has been used in experimental aircraft but it is not currently allowed by the regulation for certificated aircraft.

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
				<p>the Part 23 ARC. See Part 23 ARC final report section 3.3.4 under the “Authorization of Additional Preventive Maintenance Operations” heading, which states “The AMWG sees numerous attractive opportunities for safe and economical additions to existing PM authorizations by this route, including installation of databases other than those authorized in part 43 itself and installation of software, where procedural simplicity and aircraft configuration allow.” (emphasis added)</p>		
18.	GAMA	1.6.2.3	<p>In this case, it is not clear what regulation is being used as the basis for use of the verb “must” in this the policy. Consequently, it would be helpful to make this clear.</p>	<p>If a clear regulatory requirement cannot be found when the verb “must” is used, the text should be revised to remove the implication that the policy is based on a regulatory requirement.</p> <p>If a clear regulatory requirement can be found, it should be referenced to enable the reader to make the connection to the regulation that is the</p>		<p>Editorial- Under 21.8(d) states “Any other means acceptable to the administrator.” NORSEE policy is developed in conjunction with various regulatory basis. There may not be a direct correlation to a specific regulation mentioned in the policy.</p> <p>In this case, one of the regulation is XX.1301 (intended function) to distinguish that NORSEE installed under this policy is not to replace the required equipment.</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
				basis for the policy using the verb "must".		
19.	GAMA	1.6.2.4	<p>The "Instructions for Continued Maintenance and Operation (ICMO)" is a relatively new term that appears to be describing what has been generally referred to as a maintenance manual.</p> <p>The new term also introduces confusion by using "and Operation" and the policy furthers this confusion by stating "The ICMO ... ensures continued safe operation of the equipment as it was intended." Traditional maintenance manuals do not deal with the "operation" of the equipment. Operation of the equipment is typically included in a pilot's guide or owner's manual (e.g., what paragraph 1.6.2.2 appears to be describing).</p>	To eliminate confusion, remove "and Operation" and other references to "operation" from within this paragraph to make it clear that these instructions are for the purpose of maintaining the NORSEE.		Editorial- The requested documents are not dictated to a specific format but rather information typically found in an ICA or an AFM supplement. This allows the applicant the flexibility and scalability to provide the required information based on the type of equipment they are seeking approval. A simple Carbon Monoxide sticker will have a different ICMO than a complex electronic display.
20.	GAMA	1.6.2.6	By definition there can be no "safety critical service problems" with non-essential NORSEE equipment, so this is just added burden and unnecessary oversight. Defects and failures are handled between the supplier and customer as with any other commercial product. There is no need for regulatory oversight to expedite development of corrective actions. Involving the FAA only delays issue mitigation and significantly increases costs.		Recommend removing the reporting requirement.	Not adopted- The responsibility of reporting is a regulatory requirement per 21.3. Further it allows the FAA to evaluate the effectiveness of NORSEE installation versus its reported problems in the field.
21.	GAMA	1.6.2.7	<p>There is no reason to placard NORSEE equipment that does not have a primary certified counterpart.</p> <p>Additionally, this seems to be in an area that is dealing with equipment qualifications and not installation requirements. Placards are an installation issue and not equipment qualification. Also, placards are normally used for airworthiness limitations. Changing the</p>	<p>Remove the requirement to placard equipment when no primary counterpart is installed.</p> <p>Additionally, recommend that this section explicitly state that electronic markings can be</p>		Adopted- Revised text and added electronic placards. A placard may be required during evaluation of the design. If a placard is required, it can be electronic or descriptive displaying the following or similar notice in a suitable location in the cockpit. In this instance the placards are re enforcing the existing

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			airworthiness limitations of an aircraft requires FAA approved data to do so.	used if the NORSEE contains or is integrated with a display unit. The required information can be explicitly acknowledged by the pilot before being extinguished, which should satisfy this requirement. Alternative MOC should not have to be sought and approved through an issue paper for use of electronic markings in place of a placard.		limitations not changing them.
22.	GAMA	1.6.2.8	As explained in other comments, there should be no requirement to develop these products to a particular industry standard.		Remove requirement to make certifying statement of compliance to a standard.	Not adopted. NORSEE premise is based on a standard that meets a minimum design requirement. This standard could be an internal company standard as well.
23.	GAMA	1.8	It is unclear what data the FAA intends to reach a retention agreement with the applicant. e.g., the equipment design, installation instructions, pilot's guide, etc. Additionally, in this case, it is not clear what regulation is being used as the basis for use of the verb "must" in this the policy. Consequently, it would be helpful to make this clear.		Clarify what data is intended to be part of the retention agreement. Additionally, with respect to the use of the verb "must": · If a clear regulatory requirement cannot be found when the verb "must" is used, the text should be revised to remove the implication that the policy is based on a regulatory requirement. · If a clear regulatory requirement can be found, it should be referenced to enable the reader to make the connection to the regulation that is the basis for the policy using the verb "must".	Editorial: NORSEE data retention may cover a wide range of product. It is not practical to list each item. The data retention agreement should be similar, but scalable for the product, to AC 20-179 (Certification Data Retention Agreements and Government Records).
24.	GAMA	1.10	This paragraph mixes applicant responsibilities with ACO responsibilities by beginning with the statement that "The applicant must		Separate the applicant responsibilities from the ACO responsibilities. To make this separation more clear, suggest moving 1.10, 1.11, and 1.12	Editorial- This paragraph is explaining to the ACO engineer what is expected from the applicant and the next step

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			<p>...”.</p> <p>Additionally, referring back to the general comment on the use of the verb “must”, it is not clear in this case what regulation is being used as the basis for use of the verb “must” in this the policy. Consequently, it would be helpful to make this clear.</p>		<p>from under the “Policy” paragraph into a paragraph that clearly separates FAA responsibilities and expectations from the possible connection to the applicant’s responsibility for MOC (see comment on paragraph 1.11). Additionally, with respect to the use of the verb “must”:</p> <ul style="list-style-type: none"> · If a clear regulatory requirement cannot be found when the verb “must” is used, the text should be revised to remove the implication that the policy is based on a regulatory requirement. · If a clear regulatory requirement can be found, it should be referenced to enable the reader to make the connection to the regulation that is the basis for the policy using the verb “must”. 	<p>in the evaluation process.</p> <p>Under 21.8(d) states “Any other means acceptable to the administrator.” NORSEE policy is developed in conjunction with various regulatory basis. There may not be a direct correlation to a specific regulation. In this case, one of the regulation is XX.1301(intended function) to distinguish that NORSEE installed under this policy is not to replace the required equipment.</p>
25.	GAMA	1.11	<p>These statements are not referring to anything within an applicant’s control with respect to the “particular MOC” defined within the policy.</p>		<p>Suggest moving 1.10, 1.11, and 1.12 from under the “Policy” paragraph into a paragraph that clearly separates it from the possible connection to the applicant’s responsibility.</p>	<p>Editorial- This is an FAA document that is shared with the public. The methodology and instructions stated in the document are aimed at the FAA engineers to outline their responsibilities in processing NORSEE approval.</p>
26.	GAMA	1.12	<p>Although this is included as just a recommendation (“should” and “recommended database”), it is unclear how the FAA believes such a database could be used to evaluate the effectiveness of the NORSEE equipment. i.e., this appears to be unnecessary burden and oversight for products which by definition only have a Minor failure classification.</p> <p>It is also unclear how much latitude the ACOs will have for mandating additional data gathering systems under this wording.</p>		<p>Recommend removing this requirement entirely. At the very least, it should be clarified how any data collected will be analyzed and the scope of the ACO’s ability to add requirements for data collection.</p>	<p>Adopted- Revised and remove Safety evaluation heading. The evaluation of NORSEE will be broader in nature and not specific to the safety evaluation. This database can be used for number of other things such as number of units installed and in-service difficulties</p>
27.	GAMA	2.2	<p>Section 2 does not provide any guidance on the depth of analysis required to show the intent of this policy has been met. As written, the</p>		<p>Provide more clarification on what depth of analysis is required so that what is expected is implemented. There should be clarification as to the</p>	<p>Out of scope- Section 2 of this policy provides reference to guidance material that is outside of the scope of this</p>

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
			ACO engineers could require the same in-depth process as required for all other projects; therefore, getting no real credit for the added safety afforded by NORSEE.		reduction in either the level of certitude (i.e., reduce the DAL and probability requirements) or depth of analysis allowed for NORSEE.	policy. This policy is not the primary source of in-depth analysis. The level of analysis is dependent upon the complexity and design features of the products being introduced. The level of analysis needs to be negotiated and agreed to with the ACO.
28.	GAMA	2.3	<p>There should be an explicit statement that this policy supersedes any previous policy including the references and takes precedence. For example, PS-ASW-27,29-10 does not allow such equipment when installed in Part 135 rotorcraft and there are other examples of problematic or conflicting policies in the references that will prevent the installation of NORSEE in aircraft that could benefit from it.</p> <p>e.g., P135 are allowed to use EFBs even though they have no “certification approval” and some of the items on EFBs like TOLD are clearly covered by other certification guidance. While EFBs must obtain operational approval, the NORSEE policy should result in a similar benefit even in revenue operations like P135.</p>		Include a comment or note that states “This policy supersedes any conflicting policy, guidance or acceptable practices and will take precedence.”	<p>Editorial- This policy does not supersede PS-ASW-27, 29-10 .</p> <p>The commentator incorrectly states that rotorcraft NORSEE policy prohibits installation in part 135 rotorcraft. NORSEE can be installed in part 135 aircraft if that system is not required by the regulations.</p>
29.	GAMA	Implementation	See earlier comment on paragraph 2.3. This statement allows for the introduction of directorate-specific “additional requirements” that could effectively block the intended benefit of this policy “to encourage and enable voluntary safety enhancements”.	Recommend that the policy include a clearly identified resolution process for adjudicating whether directorate-specific “additional requirements” really improve the safety of NORSEE or unreasonably block NORSEE installations.		Editorial- The commentator’s recommendation requires a rule making effort which is outside the scope of this policy.

#	Company or Group	Page and Paragraph	Comment	Rationale	Recommendation	Disposition
30.	GAMA	Appendix -2 Table 1-1	<p>It doesn't seem reasonable to require an issue paper for use of "other" means of compliance for the statements using the verb "should" within the NORSEE policy. Issue papers are an extremely inefficient method for achieving other means of compliance. Thus, use of an issue paper seems contrary to the AIR 2015 Roadmap for AIR: 2018 "to encourage and enable voluntary safety enhancements".</p> <p>It would seem more logical for other MOC to be reviewed and accepted by the NORSEE Implementation Office (currently described in paragraph 1.11).</p>	Suggest changing to "Alternative MOC has to be accepted by the NORSEE Implementation Office."		Editorial- The issue paper process is the FAA's standard practice of capturing alternate method of compliance to regulations.
31.	GAMA	Paragraph 2.3	<p>The proposed EASA CM-AS-007 Issue 01 specifically references ASTM F3153 Standard Specification for Verification of Avionics Systems as an acceptable means of compliance for verifying NORSEE-type equipment performs its intended function.</p> <p>Includes "For approval of those NORSEE installations with failure conditions above minor, use section 2 of this policy and other guidance material including, but not limited to the following:"</p>		The FAA should provide similar recognition of ASTM F3153 to relieve the design assurance burden associated with NORSEE.	Editorial- This ASTM is recognized by the FAA and it is up to the applicant to propose it if they choose to do so.