

**Clearance Record**  
**DOCUMENT COMMENT LOG**

<b>Originating Office:</b>  AIR-130	<b>Document Description:</b> AC 20-151B, Airworthiness Approval of TCAS II, Versions 7.0 & 7.1 and Associated Mode S Transponders	<b>Project Lead:</b> Steve Plummer, AIR-130 650-756-0227 x166	<b>Reviewing Office:</b>	<b>Date of Review:</b>
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Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
1.	R. Sova (ACE114)	General	This Advisory Circular refers to "TSO-C119d" fifteen times, yet version "d" of that TSO does not currently exist in the FAA's RGL.	Correctness of references.	If the intent is to issue this AC only after the TSO version is updated, then there is no problem. Otherwise, if it is not updated, then this AC will incorrectly be referencing a non-existent TSO.	<b>No action required.</b> Publication of TSO-C119d will precede publication of AC 20-151B.
2.	R. Sova (ACE114)	General	There is inconsistency in the capitalization formatting of specific terms and also in the use of acronyms versus their full spellings.	Consistency of format; several terms (e.g., Extended Squitter and Resolution Advisory) used a variety of capitalization formats (i.e., either: all caps, no caps, or a mix thereof) throughout this AC. Also, several full spellings of terms continued to occur after their acronyms had been defined.	Make the formatting of specific terms and the definition and use of acronyms consistent.	<b>Partial acceptance.</b> Instances of "extended squitter" were capitalized where appropriate. No incorrect instances of resolution advisory were located. Refer to the AIR-40 comments for disposition of the inconsistent usage of certain acronyms.
3.	R. Sova (ACE114)	General	This AC does not mention Unmanned Aircraft Systems (UAS).	Completeness of guidance; questions may arise as to the applicability of this AC to UAS.	Include if appropriate, some mention of the applicability of this AC to UAS.	<b>Not accepted.</b> This guidance is not applicable to UAS. TCAS II is designed for manned aircraft and more specifically, turbine powered transport category aircraft.
4.	R. Sova (ACE114)	General	Although RTCA DO-254 is mentioned in the TSO-C119() documents (as is RTCA DO-178B which is included in this AC), it was not included anywhere in this AC.	Completeness of references.	If this AC intends to refer to DO-254 and/or its invoking AC 20-152, then it/they should be added.	<b>No action required.</b> This AC does not refer to DO-254.

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5.	L Taylor ACE-111	Page 1 Paragraph 1-1b.	Agree with Comment 31 [submitted 3/17/13 by Wayne Tonkins, AIR-103 during division review] that important respects is undefined which will cause standardization issues.	Clarification	Change last sentence to “However, if you use the means described in this AC, you must follow it in its entirety.”	<b>Accepted</b>
6.	R. Sova (ACE114 )	Page 1, Paragraph 1-3	Incorrect formatting of AC title; it has an extra “-” between “AC 20”.	Correctness of content.	Change formatting of AC title to “AC 20-151A”	<b>Accepted</b>
7.	L Taylor\ ACE-111	Page 2, Paragraph 1-4	9 <sup>th</sup> sentence says “Traffic in the vicinity of ownship with operable transponders will still be tracked and displayed by TCAS.” Ownship cannot be found in any dictionary.	Clarification	Change sentence to “Traffic with operable transponders will still be tracked and displayed in the vicinity of a TCAS II equipped airplane.”	<b>Accepted.</b> The spelling was changed from ownship to own-ship at all locations.
8.	R. Sova (ACE114)	Page 2, Paragraph 1-5.b	There is an extra lone “t” in the middle of the paragraph sentence.	Correctness of content.	Delete extra “t”.	<b>Accepted</b>
9.	R Hirt	Page 3, Section 2-2	Editorial - Spell out RAs on 2-2.b the same way as 2-2.a	Consistency descriptions of TA/RA in 2-2.a & 2-2.b	Recommend re-word 2-2.b as “Resolution advisories (RAs)...”	<b>Accepted.</b> A global change to the document has been made to use the acronym TA and RA in lieu of “traffic advisory” or “resolution advisory” respectively, when context allows it.
10.	L Taylor\ ACE-111	Page 13, Paragraph 2-17 a.	Comment 27 [submitted 3/7/13 by Buck Joslin during division review] is correct that stall should not occur in an RA. If [adding the proposed language to] appendix [A] is incorrect, then this Evaluating Aircraft Performance is a good place.	Potential hazard of stalling in following an RA.	Add the following after the 2 <sup>nd</sup> sentence: “The stall warning stick shaker, <i>stall warning pusher, or other high AOA warnings</i> must be respected when following an RA.”	<b>Not accepted.</b> Pilot responsibilities for all operational aspects of TCAS are defined in AC 120-55C. Refer to section 12, Operational Use, therein. That information can be used in the generation of the AFM supplement required by Chapter 5, Airplane Flight Manual Supplement.

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11.	R. Sova (ACE114)	Pages 21, and 22 in Paragraphs 2-19.b and 2-20 Note	This AC specifies a required DO-178B Software Level B for the TCAS system functions.	It would be better to specify the hazard level of the failure condition(s) and allow the software development standard used (in this case DO-178B) make the correlation between the hazard level and a required software assurance level.	Suggest specifying the hazard level(s) of functional failure conditions versus the required software assurance levels; in that way, possible future changes to DO-178() need not impact this AC, since whatever level it ascribes to a particular hazard level would apply.	<b>Not accepted.</b> The severity classification is defined in the TSO as hazardous/sever-major and that correlates to design assurance level B. Furthermore, because of the proliferation of FAA certification documents that rely on the classification structure in DO-178, it is unlikely that structure will be allowed to be altered in the future.
12.	L Taylor\ ACE-111	Page 23 Paragraphs 2-21b(2) and(3)	Subparagraph (1) seems to indicate it is important to announce hybrid surveillance failures to the flightcrew, but (2) and (3) says without EICAS etc. do maintenance checks.	Standardization	Change subparagraph (3) to require separate annunciations for hybrid surveillance failures if there is no centralized warning system or revise paragraph b and delete the subparagraphs if annunciation is not important.(1).	<b>Not accepted.</b> It is acceptable to monitor the continued airworthiness of the hybrid surveillance functionality by annunciating failures to the flight crew or by accomplishment of periodic maintenance checks.
13.	R. Sova (ACE114)	Page D-2, Section 5, Industry Publications	This section does not contain all of the Industry Publications.	This section contains only RTCA Publications, while other sections contain other associated Industry Publications, e.g., SAE and ARINC.	Suggest changing the title of Section 5 to "RTCA Publications" to better reflect its contents, especially since other Industry Publications are contained in other sections.	<b>Accepted</b>
14.	R. Sova (ACE114)	Page D-3, Section 6 & Page 22, Paragraph 2-20	Although SAE ARPs 4754 and 4761 are included in Appendix D, Related Documents, Section 6, neither was mentioned in the AC's related section 2-20 on System Safety Analysis.	It would seem that these SAE ARPs should be mentioned as they are the recognized guidance documents for this topic area. Note: ARP 4754 has been superseded by ARP 4754A.	Suggest these SAE ARPs (with consideration for using the latest version of ARP 4754A) be included in the text of paragraph 2-20. Otherwise, there appears to be no reason to list them in Appendix D's Related Documents section.	<b>No action required.</b> None of the SAE ARP documents listed in Appendix D, Related Documents, are invoked in the body of the AC. The SAE documents are listed as a matter of convenience for the reader.

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15.	W. Jaconetti (ACE-117C, 847-294-7161)	Page 27, Paragraph 3-5	The paragraph mentions that when testing with an intruder aircraft, it must be equipped with a transponder capable of...But what is missing is the note that it should be an already approved model transponder with the attributes mentioned.	We don't want applicants performing their testing with two transponders that are under test.	Add "previously approved" between "with" and "transponders" in sentence 4 of this paragraph.	<b>Accepted</b>
16.	J. Raspanti (ACE-117C, 847-294-7379)	Page 2, paragraph 1-5.b	Extraneous "t" after "surveillance, which t is now ..."	Correction.	Delete extraneous "t".	<b>Accepted</b>
17.	J. Raspanti (ACE-117C, 847-294-7379)	Page 23, paragraph 2-21.b	Tracking of hybrid surveillance failures should be annunciated to the flight crew AND periodic maintenance should be collecting hybrid surveillance failure history and reporting it to the TCAS manufacturer.	Clarification. items (2), (3) and (4) following 2-21.b indicate collecting hybrid failures is part of required maintenance.	Change "... flight crew <b>or</b> the occurrence of faults ..." to "... flight crew <b>and</b> the occurrence of faults ...".	<b>Partial acceptance.</b> Intent of the comment is adopted by inserting "Periodic reliability reporting of the hybrid surveillance functionality is also required" as the second sentence in section 2-21.b.
18.	J. Raspanti (ACE-117C, 847-294-7379)	Page 23, paragraph 2-21.b(1).	Suggest breaking off last sentence to emphasize reporting of hybrid surveillance maintenance history: "Report hybrid ... two calendar years between reporting periods."	Clarification.	Reword to clarify reporting of hybrid surveillance failure to the TCAS manufacturer is performed by periodic maintenance as explained in subparagraphs (2), (3) and (4).	<b>Accepted</b>

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19.	R. Rejniak ACE-119W	Cover Page Subject	<p>The Title does not accurately provide the AC is for Transport Category Aircraft, nor does the numbering sequences fit (AC 20-XXX series, instead of AC 25-XXX) given a previous Disposition, or the previous Disposition should be retracted and incorporate within the AC information regarding TCAS II system which does not limit the application to only fixed wing aircraft.</p>	<p>After reading the proposed AC and Comments 1 through 31 from R.Joslin and Wayne Tonkins [submitted 3/7/13 during division review], it was impressed via Disposition Comments for this proposed AC “TCAS II was never intended for installation on rotorcraft. Consequently neither this AC nor its predecessor revisions provides guidance specific to those aircraft. Separate guidance for installation of TCAS II in those aircraft may be created in the future.”</p> <p>However per the Draft AC Section 1-2 on page 1 it states “When TCAS II is to be certified for non-transport category airplanes, use the equivalents to the above 14 CFR part 25 sections in other parts of the regulations. Although this AC is intended for TCAS II installed on transport category airplanes, it provides useful guidance for part 23 installations when the equivalent Advisory Circulars and sections of 14 CFR part 23 are referenced.”</p> <p>However per <a href="http://www.asdnews.com/news-15798/TCAS_II_Certification_for_Helicopters.htm">http://www.asdnews.com/news-15798/TCAS II Certification for Helicopters.htm</a> , TCAS II has been installed on a Helicopter and thus the FAA should be ramping up for the rotorcraft issues since EASA has now a Supplemental Type Certification of TCAS II for rotary aircraft.</p>	<p>Specify Transport Category in Subject <b>or</b> broaden the Title to include a reference for other category use.</p> <p>Suggested Change if and only if the FAA’s stance is indeed this AC is only for Transport Category aircraft: <b>Subject: Airworthiness Approval of Traffic Alert And Collision Avoidance Systems (TCAS II), Versions 7.0 &amp; 7.1 and Associated Mode S Transponders, Primarily for Transport Category Aircraft</b></p>	<p><b>Not accepted.</b> The reasoning for choosing a 20 series numbering scheme is lost to antiquity. No value would be gained by revising the title or the series after the amount of time that has elapsed since the creation of the first TCAS II airworthiness advisory circular, AC 20-131 on Oct 3, 1988.</p>

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20.	R. Rejniak ACE-119W	Page 4 Para 2-3 b.	This section describes the display guidance presented to the pilot to avoid the threat. In parenthesis it states “or pitch angle”. Should elaborate on the term “pitch angle”.			<b>Accepted.</b> Elaboration has been provided.
21.	R. Rejniak ACE-119W	Page 6 Para 2-7	<p>This section 2-7 purports to describe the mandatory Pilot Control functions for the TCAS II system.</p> <p>It appears not all functions listed within 2-7 are mandatory.</p>	<p>Section 2-7 Pilot Control states in the first line; “A pilot control for the TCAS equipment shall be provided.”</p> <p>By using the word “shall”, this statement implies the following subsections a., b., and c., are contains functions which are mandatory or required.</p> <p>While subsections a., and b., appears to be consistent with the initial wording, subsection c. is not consistent.</p> <p>Subsection c. states; “The following optional controls may be provided:”</p> <p>This indicates that these functions are not required, but have been reviewed by the FAA to be functions controllable by the pilot and allowed / displayed within the TCAS II systems.</p>	<p>Provide consistent direction.</p> <p>To reduce issues with reformatting or renumbering the sections, recommend:</p> <ol style="list-style-type: none"> <li>1) Change the first line of 2-7 to read: “2-7. Pilot Control. Pilot controls for the TCAS equipment.”</li> <li>2) Change 2-7 a. to read: “a. The means to select the following operations must be provided:”</li> <li>3) Change 2-7 b. to read: “b. The means to select the following additional features must be provided:”</li> </ol>	<b>Not accepted.</b> The “shall statement” simply means that a pilot control is to be provided. It in no way stipulates what functionality said control performs. The required functionality resident in that control is specified in 2-7.a & 2-7.b with optional functionality prescribed in 2-7.c.

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22.	R. Rejniak ACE-119W	Page 6 Para 2-7 c.	<p>Section 2-7 c. indicates optional controls.</p> <p>Clarification is needed on whether the optional controls are the only allowed optional controls or just examples of optional controls but not limited to just those indicated in subsection c.</p>	<p>R.Joslin’s comments (12) [submitted 3/7/13 by Buck Joslin during division review] for the same section stated:” Selection of the weather radar <i>or other information, to be displayed simultaneously on a shared display with the TCAS II traffic display</i>”</p> <p>And had a disposition of: “The guidance is specific to a display that is capable of individually or simultaneously displaying TCAS data or weather radar data. This AC does not address integrating TCAS II with other surveillance systems. Recommendation not adopted.”</p> <p>If an external weather input is being allowed by the FAA to be controlled by the pilot and or displayed, the addition of possibility of the pilot control and or display terrain data (or other FAA approved input) continues to increase a level of safety to help keep the aircraft out of harm’s way by providing an increased situational awareness.</p>	<p>Provide clear guidance on optional controls.</p> <p>If the only external input allowed will be weather radar be specific in the title for subsection c., recommend:</p> <p>1) Change the first line of 2-7 c. to read: “<b>c. Only</b> The following optional controls may be provided:”</p> <p>If other external input may be allowed to be displayed simultaneously with the traffic displays, recommend subsection c., title state:</p> <p>1) Change the first line of 2-7 c. to read: “<b>c.</b> The following optional controls may be provided, consult your ACO for guidance to simultaneously display and select traffic and other situational awareness information.”</p>	<p><b>Not accepted.</b></p> <p>The commenter points out an inconsistency in the disposition of Buck’s comment against this same 2.7.c section and the actual text in the draft AC associated with displays. Contrary to the way Buck’s comment was dispositioned, the AC does in fact discuss integration with other displays (see 2.10 Traffic Display and 2.11, Resolution Advisory Display). Nevertheless, there is no need to either add a general statement about consulting with the ACO or constrain the optional controls to only those listed in 2.7.c. If an applicant elects to integrate the TCAS display with another type of display (such as an EHSI) they are free to propose to do so. They would then need to implement the necessary controls.</p>
23.	R. Rejniak ACE-119W	Page 9 Para 2-11 d. and disposition for R.Joslin’s Comment No.16.	<p>My version of Section 2-11 d. appears that the change recommended by R.Joslin [submitted 3/7/13 by Buck Joslin during division review] was indeed adopted.</p> <p>It is presumed the version reviewed by R.Joslin did not have “or degraded modes” added.</p>	<p>It appears the stated disposition and the modified version of AC 20-151B are not consistent.</p>	<p>Keep <b>Page 9 Para 2-11 d. as is in this latest revision of AC 20-151B such it states; “d. Failures.</b> Provide indications for TCAS II failures or degraded modes for example, TCAS II unable to generate RAs.”</p>	<p><b>Not accepted.</b></p> <p>The commenter points out an inconsistency in the disposition of Bucks comments on this same section and the surviving text of same that went to the field for review. The text of that section has been reverted to that which is in AC 20-151A.</p>

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24.	R. Rejniak ACE-119W	Page 11 Para 2-14 a.	Clarification on the issue of part numbering.	In reviewing the third sentence of section 2-14.a.; “All these component part numbers are certified initially as a single installed system.” Where a it would be more appropriately phrased: “All these component’s part numbers are certified initially as parts of the complete system for the single installed system.”	Replace the third sentence of section 2-14.a.; “All these component part numbers are certified initially as a single installed system.” With: “All these component’s part numbers are certified initially as parts of the complete system for the single installed system.”	<b>Partial acceptance.</b> The sentence has been altered to: “These components are all certified initially as a single installed system.”
25.	R. Rejniak ACE-119W	Page 11 Para 2-14 b.	Clarification the use of pronouns used within the document.	In reviewing the last sentence of section 2-14.b., it uses the pronouns “you” and “us”. This can be ambiguous. Who is the “you’ and “us”? This can be clarified by adding specifics.	Replace the last sentence of section 2-14.b., “Your well-developed plan will be of significant value both to you and us.” With: “A well-developed certification plan will be of significant value both to you (the applicant) and the appropriate FAA certification office.”	<b>Accepted.</b>
26.	R. Rejniak ACE-119W	Page A-4	Adding a note to Table A-1 would help the reader understand there is flexibility of the colors for symbols.	In reviewing Table A-1, and R. Joslin’s comments (#23 and #24) [submitted 3/7/13 by Buck Joslin during division review] and their Dispositions; “Although yellow or amber may be used for the color of the TA symbol, the material in this appendix provides an example AFM for a design using the yellow color”, and “Although white or cyan may be used for the color of own ship, the material in this appendix provides an example AFM for a design using the white color”; a note added to Table A-1 would help the reader understand there is flexibility of the colors for symbols.	Add a note to Table A-1 which reads; “The colors used on the following figures are used as an example. The own ship symbols may be either white or cyan, circles may be yellow or amber”.	<b>Not accepted.</b> Appendix A provides an example AFM supplement. Describing design choices i.e. color choices for a symbol is not appropriate for an AFM, even an example AFM.

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27.	R. Rejniak ACE-119W	Throughout Document, 6 places; page ii, page 6, page 7 (2 places), page 23, Page B-3.	Improve AC to follow guidance of “Plain Language Guidelines”.	There are 6 places within the document where “shall” is used. Per Plain Language Guidelines, ( <a href="http://www.plainlanguage.gov/howto/guidelines/FederalPLGuidelines/writeMust.cfm">http://www.plainlanguage.gov/howto/guidelines/FederalPLGuidelines/writeMust.cfm</a> ) The guidelines explain “ <i>The word "must" is the clearest way to convey to your audience that they have to do something.</i> ” In an example they explain: “ <i>Many agencies already use the word "must" to convey obligations. The US Courts are eliminating "shall" in favor of "must" in their Rules of Procedure.</i> ”	<p>Follow guidance of Plain Language Guidelines:</p> <p>Replace “<i>shall</i>” used on page ii, page 6, page 7 (2 places), page 23, Page B-3.</p> <p>Instead of using "shall", use:</p> <ul style="list-style-type: none"> <li>• "must" for an obligation</li> <li>• "must not" for a prohibition</li> <li>• "may" for a discretionary action</li> <li>• "should" for a recommendation</li> </ul>	<b>Accepted.</b> All five instances of “shall” have been replaced with “must.”
28.	R. Rejniak ACE-119W	Page 1 Para 1-1. b.	Clarification of the term “must”, the elimination of non-needed phrases, and incorporate acceptable phraseology.	In reviewing other AC’s (e.g. 21.101-1) the reader / applicant needs to have a clear understanding what is expected, whether it be a seasoned installer or a new installer. The phrase “ <i>you must follow it in all important respects.</i> ” tends to open up that there are non-important aspects of this AC, or that the reader may make their own judgment of what is important and what is not important.	<p>Replace the last sentence of section 1-1.b., “<i>However, if you use the means described, you must follow it in all important respects.</i>”</p> <p>With: “<i>Because the method of compliance presented in this AC is not mandatory, the term “must” used herein applies only to an applicant who chooses to follow this particular method without deviation.</i>”</p>	<b>Partial acceptance.</b> Recommendation partially adopted by replacement of the clause “important aspects” with “in its entirety.”
29.	Anthony Piggott ANE-150		If rotorcraft (part 27 or 29) are not addressed in the subject CR, then please make the following comments: 1) CLIMB RAs need to be inhibited above altitudes at which climb rates of at least 1500 ft/min, following a 0.25g maneuver, cannot be attained throughout the operating envelope.	I have to write an MoC IP for an ongoing S-92A SAC ODA TCAS II cert effort, as RCD states their part 29 concerns are not addressed in any policy yet.		<b>Not accepted.</b> TCAS II was never intended for installation on rotorcraft. Consequently neither this AC nor its predecessor revisions provide guidance specific to those aircraft. Separate guidance for installation of TCAS II in those aircraft may be created in the future.

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30.	Anthony Pigott ANE-150		2) Reversal RAs need to be inhibited above altitudes at which climb rates of at least 1500 ft/min, following a 0.35g maneuver, cannot be attained throughout the operating envelope.	I have to write an MoC IP for an ongoing S-92A SAC ODA TCAS II cert effort, as RCD states their part 29 concerns are not addressed in any policy yet.		<b>Not accepted.</b> Refer to # 29 for disposition.
31.	Anthony Pigott ANE-150		3) For icing certified helicopters, need to evaluate the TCAS II performance requirements with icing degradations. Otherwise, add limitation that TCAS to be in either TA Only or in Standby for flight in ice.	I have to write an MoC IP for an ongoing S-92A SAC ODA TCAS II cert effort, as RCD states their part 29 concerns are not addressed in any policy yet.		<b>Not accepted.</b> Refer to # 29 for disposition.
32.	Anthony Pigott ANE-150		4) Information should be contained in the RFMS that informs the pilot of any special technique in carry out an RA. For example, the force trim release may need to be depressed; power increased to MCP; pitch up; etc. Information should also address autopilot effects. For example, if coupled to altitude, what happens if the pilot pulls back on the cyclic? Does the pilot need to disconnect the AP?	I have to write an MoC fP for an ongoing S-92A SAC ODA TCAS II cert effort, as RCD states their part 29 concerns are not addressed in any policy yet.		<b>Not accepted.</b> Refer to # 29 for disposition.

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33.	Anthony Piggott ANE-150		5) The RFMS (general section is ok) should indicate which TCAS II systems is installed, i.e. 7.0 or 7.1.	I have to write an MoC IP for an ongoing S-92A SAC ODA TCAS II cert effort, as RCD states their part 29 concerns are not addressed in any policy yet.		<b>Not accepted.</b> Refer to # 29 for disposition.

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34.	Anthony Pigott ANE-150		<p>6) Helicopters operating in close proximity to other helicopters (such as electronic news gathering), can result in a aircraft density greater than the TCAS II system can handle. The main concern is the likelihood of synchronous and asynchronous garble, which may not only affect the helicopters in close proximity to each other, but also any aircraft passing by the area. RFMS procedures should instruct the pilot to switch to TA when operating in the vicinity of other aircraft. AC 20-151 (page A-16) recommendations specifically reference parallel runways. However, the RFMS should add other instances (ENG event, etc.) of the need to switch to TA Only.</p>	<p>I have to write an MoCIP for an ongoing S-92A SAC ODA TCAS II cert effort, as RCD states their part 29 concerns are not addressed in any policy yet.</p>		<p><b>Not accepted.</b> Refer to # 29 for disposition.</p>

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35.	Anthony Pigott ANE-150		7) The RFMS needs a limitation mandating TA Only when conducted external loads operations.	I have to write an MoC fP for an ongoing S-92A SAC ODA TCAS II certification, as RCD states their pan 29 concerns are not addressed in any policy yet.		<b>Not accepted.</b> Refer to # 29 for disposition.
36.	William Witzig ANE-150		TCAS requirements are found in 121.356 and 135.180; these rules use the word "airplane" which excludes transport helicopters from TCAS requirements. Despite this, our office works numerous projects to install TCAS and TCAS II systems on transport category helicopters. Although much of the guidance in AC 21-151 applies to both airplanes and helicopters, the performance considerations found in 2-16 are specific to airplanes.		Include performance considerations specific to helicopters. Or, include a statement directing applicants to the Rotorcraft Directorate for helicopter specific performance considerations when installing TCAS on helicopters.	<b>Not accepted.</b> Refer to # 29 for disposition.

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37.	William Witzig ANE-150		<p>The flight test requirements for follow on STC's and upgrading existing installations are poorly defined. The AC uses the words, "flight tests may not be required" (section 4-3). In section 4-4, regarding upgrading existing installation, the AC states, "no additional certification flight tests are required" but then goes on to state, "However, if the upgrade to a higher version TCAS II unit involves changes other than a software change (such as the addition of new interfaces), flight tests in accordance with paragraph 4-3b may be required." In both cases (section 4-3 and 4-4) no guidance is offered on how to determine when flight test are required.</p>		<p>Provide more specific criteria on when flight test is required for follow on STC's and upgrades to existing installations.</p>	<p><b>Not accepted.</b> Guidance for determining the extent of testing, both ground tests and flight tests, is provided in sections 4-1 through 4-3. That guidance is adequate for both the follow-on installation and the upgrades which are discussed in section 4-4. Section 4-4 defines very specific criteria which must be met to negate the need for a flight test.</p>

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38.	Marc Ronell ANE-150		Why does this document not address Unmanned Aerial Vehicles (UAVs)? Its 2013 and we have cellphones in our pockets, so why not require transponders on UAVs? What about ground equipment at airports? Couldn't TCAS automatically change to a ground based mode to help pilots avoid aircraft on the ground? Why not also tugs, fuel tankers and other ground based airport equipment?		If the technology exists for cellphones to navigate on the ground using GPS not to mention "apps" which find other phone uses,etc. then it seems reasonable to require UAVs, not to mention airport ground equipment to also carry and use similar transponders to avoid runway incursion and ground based accidents. UAVs in flight are really not a large technically Imaginative leap.	<p><b>Not accepted.</b> UAS are new and novel and as such the agency does not yet have enough data nor experience to create suitable guidance for an airborne collision avoidance system. Regarding the commenters suggestion for use of TCAS II during ground operations as a collision avoidance system, it is not designed for use on the ground.</p> <p>Furthermore, the agency is working to integrate UAS into the NAS in response to a congressional mandate to do so. In response to that mandate, at the request of AVS, RTCA is undertaking an effort to develop detect and avoid standards (amongst other things). Once those standards are mature, they would likely be invoked via TSOs and advisory material such as an AC.</p>
39.	Marc Ronell ANE-150		Are there any network security or encryption requirements which should be added to this AC? Does TCAS really differ that much from a wireless or WIFI network that it does not require any type of network security considerations?		It seems to be that TCAS could be abused at critical times, for example while landing or taking off from an airport where proximity to the ground would not allow for recovery from minor deviations. Aircraft experiencing a real or simulated go-around could pose a threat to other aircraft using active runways. Could TCAS signals be manipulated to generate accidents? Perhaps requiring some level of link security is worth including in the AC?	<p><b>Not accepted.</b> TCAS II is not susceptible to network security issues. The Mode S link is inherently robust.</p>

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40.	F. Carreras, ANM-130S	Page D-1, Paragraph 1 (Appendix D)	Add 14 CFR § 25.1302 <b>Installed systems and equipment for use by the flightcrew.</b>	7/2/2013 Effectively date.	Include in 14 CFR Parts list.	<b>Accepted</b>
41.	R. Stoney, ANM-160S	3, 1-6b	The para says “The latest changes...are now reflected in TSO-C119c” Is this supposed to be “d?”	Earlier in the AC there’s reference made to “new stuff” in the C-119d.	Confirm if it’s c or d. If it’s supposed to be d, change to d.	<b>Accepted.</b> Accomplished intent of the recommendation by relocating the text from the body of Section 1-6b, Recent TCAS developments, to Appendix C, Background. The section 1-6b heading has been deleted.
42.	R. Stoney, ANM-160S	6, 2-7(c)(1)	Para says optional controls may be provided: “(1) selection of weather radar only.” Confusing.	I’m not familiar with an interplay between TCAS controls and WXR. Perhaps you are referring to older displays that use a WXR display to depict traffic?	Either clarify (perhaps say “for legacy systems which utilize a radar display to host traffic information...”) or delete. Para 2-10b may also be worth a look, to clarify what you’re trying to say here.	<b>Not accepted.</b> See # 22 for further information.
43.	R. Stoney, ANM-160S	6, 2-7(c)(4)	A brief word search shows only this mention of actual flight level.	The TSO may cover this, but suggest making it clear that this “FL” mode must “time out” and/or be clearly indicated to avoid confusion over the more standard “relative” altitude.	Add wording to require that FL time out...	<b>Not accepted.</b> Characteristics for each of the five options listed in section, 2-7(c), Optional Pilot Controls, would be listed in the installation manual which would ultimately be adopted in the associated AFM supplement if an option was implemented. There is no need to attempt to describe the characteristics for each of those options in this section.

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
44.	G. Harrum	Page 1 Para 1-2	If this AC only applies to Part 25 and large Part 23 installers and does not apply to Part 27 or Part 29 installers, then why is the AC numbered with the general aircraft subchapter, the 20 in AC 20-151B, per Order 1320.46C?	It is my understanding that advisory circulars numbered with the subchapter should be generic enough to give guidance to all airworthiness parts (Part 23, 25, 27 and 29)?	Either change the AC number to AC 25-XX if this AC only applies to Part 25 aircraft, or add a disclaimer to paragraph 1-2 stating that this AC does not apply to rotorcraft installations and separate guidance for installation of TCAS II on rotorcraft is being considered.	<b>Not accepted.</b> Refer to #19 for more information.
45.	AFS-360CF	Chapter 1-1a	Chapter 1-1 paragraph a, and throughout the AC this guidance is applicable to stand-alone Mode S transponders that are certified to technical standard order (TSO)-C112d.	While this guidance may in-fact be applicable to stand-alone transponder installations in some cases it should not be listed as applicable to all. It is doubtful that manufacturers will offer different flavors of Mode S transponders and more likely they will offer only C112d compliant transponders intending the installation either employ full or partial functionality. This guidance promotes that installation of any such transponder, from the ATCRBS replacement being installed in a Cessna 182 to a back-up in a Lear 35 with out TCAS, will be required to be installed under STC and following all requirements. The end result of this over-reaching may price Mode-S installations out of feasibility when not required by regulation and discourage operator upgrades.	I suggest adding a paragraph discussing the limited application of the guidance to stand-alone Mode-S installations.	<b>Not accepted.</b> This guidance is indeed applicable to all stand-alone transponders but it is not required to be followed. As is true with other ACs, it provides a means, but it is not the sole means, to gain airworthiness approval of systems and equipment, which in the case of this AC is transponders and/or TCAS II.
46.	AIR-40	Global Change within the Table of Contents	Incorrect format.		Remove the period (.) from the titles and leave only between the title and number.	<b>Accepted</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
47.	AIR-40	Global Change within Table of Contents	Incorrect format.		Place the title "Section" beside each letter section after the Chapters.	<b>Accepted.</b> Related to #60.
48.	AIR-40	Global Change	The term "resolution advisory" has already been defined.		Use the acronym "RA". Defined in paragraph 1-4 only.	<b>Accepted.</b> The RA acronym is defined in section 1-5. Considering the context, the phrase "resolution advisory" has been replaced with the acronym RA where appropriate.
49.	AIR-40	Global Change	The term "technical standard order" has already been defined.		Use the acronym "TSO".	<b>Partial acceptance</b> in the two (2) places where it appeared as it was not used globally. There were only two (2) instances of "technical standard order" after the initial occurrence in section 1-1.a.
50.	AIR-40	Global Change including Appendix A	Missing paragraph identifiers.		Label each paragraph/subparagraph with a letter or number accordingly for reference purposes.	<b>Not accepted.</b> No instances of this could be found in the body of the document. Appendix A is an example AFM. The format for AFMs does not require letter or number identifiers for every paragraph and/or section. Formatting applied as recommended for appendices B thru D. Appendix E was already so formatted.
51.	AIR-40	Global Change	Suggestion.		Be consistent on how versions are referred to. For example version 7.0, Version 7.0, V7.1, etc.	<b>Accepted</b> Adopted and incorporated by defining two new acronyms, V7.0 and V7.1.
52.	AIR-40	Global Change	The term "traffic advisory" has already been defined.		Use the acronym "TA". Defined in paragraph 1-4 only.	<b>Accepted</b> Due to subsequent revisions, the acronym TA is now defined in 1-5, not 1-4. The recommendation has been adopted where context allowed it.

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
53.	AIR-40	Global Change	Define the terms for the following acronyms at the first usage: “ADS-B, JAA, AMC, RVSM, ATC, EICAS, PFD, CMC, JAA		Use the acronyms after the terms have been defined first.	<b>Accepted</b>
54.	AIR-40	Global Change within Appendix	Incorrect date.	Remove the date 9/25/09 in the header.	Replace with a date place holder like the previous pages “mm/dd/yyyy”.	<b>Accepted</b>
55.	AIR-40	Top of Page i	Incorrect spacing.		There is too much white spacing. Remove the extra spacing at the top of the page.	<b>Accepted</b>
56.	AIR-40	Top of Page i	Incorrect spacing.		The logo spacing is incorrect. Check the template on Order 1320.46C. for correct spacing.	<b>Partial acceptance.</b> There is no AC template within order 1320.46C dated 5/31/2002. But there is a nonfunctional hyperlink therein purportedly linking to sample ACs. Without an example to work against, judgment has been used to adjust the spacing between the scimitar and the text immediately below it.
57.	AIR-40	Subject Area/AC title, Page i	Incorrect font size.		Use Times New Roman or Arial, 11 or 12 pt.	<b>Not accepted.</b> The font size is already set at 11 and 12 on page i for the subject and title. No changes required.
58.	AIR-40	Subject Area, Page i	Improper capitalization.		Remove the capitalization from the term “and” in the AC title.	<b>Accepted</b>
59.	AIR-40	Under Subject Area, Page i	Incorrect format.	Non-compliance to Order 1320.46C, AC template.	Place a solid black line under the AC title in the Subject Area.	<b>Not accepted.</b> There are no formatting requirements in that order nor is there a sample AC to view as the hyperlink in Appendix 4, AC Template, is nonfunctional. Refer to #56 for related comments.

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
60.	AIR-40	Table of Contents, Chapter 2, Paragraphs A, B, C, Page ii	If A – C are sections, label them accordingly.		Label A – C as sections.	<b>Accepted.</b> Related to #47.
61.	AIR-40	Table of Contents, Page iii	Missing header title.		Place the title “Table of Contents (Continued)” in the top center like the previous page.	<b>Partial acceptance.</b> The TOC begins on page ii, and auto-breaks as it crosses from page ii to iii. Will attempt as suggested.
62.	AIR-40	Table of Contents, Chapter 4-4, Page iii	Missing period.		Place a period after the labeling of Chapter 4-4.	<b>Accepted</b>
63.	AIR-40	Table of Contents, Page iii	Missing space.		Place a space between paragraph 5-2 and Appendix A.	<b>Accepted</b>
64.	AIR-40	Between Pages iii & 1	Blank page.		Remove blank page from between pages iii and 1.	<b>No action required.</b> There is no blank page between iii and page 1.
65.	AIR-40	Paragraph 1-1a, 2 <sup>nd</sup> sentence, Page 1	The term “traffic alert and collision avoidance systems” has already been defined.		Use the acronym “TCAS II”.	<b>Accepted.</b> Adopted except where the full spelling is retained due to context.
66.	AIR-40	Paragraph 1-2, Page 1	Change wording of paragraph title.		Rewrite to read: <b>Applicability.</b> Applicants seeking a type certificate (TC)...	<b>Accepted.</b> Intent of recommendation adopted by revising the heading to “Who this AC applies to.”

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
67.	AIR-40	Paragraph 1-2, last sentence, Page 1	The term “advisory circulars” has already been defined.		Use the acronym “AC”.	<b>Accepted.</b>
68.	AIR-40	Paragraph 1-4, 7 <sup>th</sup> sentence, Page 2	Missing comma.		Place a comma after the abbreviation “i.e.”	<b>Not accepted.</b> A comma does not need to follow the abbreviation of id est. Quoting from Wikipedia: “[The abbreviation of id est is i.e. and it] means “that is” in Latin. The abbreviation is used to recapture the meaning of an antecedent clause by a rephrasing, so it is generally only followed by a clause describing a singular entity, and thus need not require a comma.
69.	AIR-40	Paragraph 1-5b, Page 2	Typo.		Delete the letter “t” found after the term “which”.	<b>Accepted.</b>
70.	AIR-40	Paragraph 1-5c, Page 2	Incorrect placement of acronym.		Place the acronym “ASAS” after the term “Airborne Separation Assistance System”.	<b>Accepted.</b>
71.	AIR-40	Paragraph 1-5d(3), 2 <sup>nd</sup> sentence, Page 2	Improper capitalization.		Remove the capitalization from the term/title “aircraft certification office”.	<b>No action required.</b> That paragraph has been deleted for other reasons.
72.	AIR-40	Chapter 2, Page 3	Incorrect format.		Start chapters on new page.	<b>Accepted.</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
73.	AIR-40	Paragraph h 2-1, Page 3	Change wording of paragraph title.		Rewrite to read: Description of a TCAS II System.	<b>Accepted.</b>
74.	AIR-40	Paragraph h 2-2a, 1 <sup>st</sup> sentence, Page 3	Incorrect spacing.		Remove the extra space from between acronym "SL" and term "and".	<b>Accepted.</b>
75.	AIR-40	Paragraph 2-4c, 2 <sup>nd</sup> sentence, Page 4	The term "air traffic control radar beacon system" has already been defined on page 1.		Use the acronym "ATCRBS".	<b>Accepted.</b>
76.	AIR-40	Paragraph h 2-5, 6 <sup>th</sup> sentence, Page 4	The term "automatic dependent surveillance broadcast" has already been defined.		Use the acronym "ADS-B".	<b>Accepted.</b>
77.	AIR-40	Section B, Page 4	Improper capitalization.		Remove the capitalization from the term "and" in the paragraph title.	<b>Accepted.</b>
78.	AIR-40	Under Paragraph 2-6b, Page 5	Incorrect spacing/format.		Delete page break.	<b>No action required.</b> No page break was found in that paragraph.
79.	AIR-40	Paragraph h 2-8a, Page 7	Missing bold.	Inconsistent with the rest of the document.	Bold the subparagraph title "Directional antennas".	<b>Accepted.</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
80.	AIR-40	Paragraph 2-9, 3 <sup>rd</sup> sentence, Page 7	Incorrect formatting for citing reference and using section symbol (§).	Non-compliance to the Federal Register Document Drafting Handbook.	Do not use the section (§) symbol or the word “section” when the reference follows “XX CFR”. Only use the section symbol (§) when referring to different paragraphs/subparagraphs within the same section. For example: Correct way to cite: 14 CFR 21.609 Incorrect: 14 CFR § 21.609	<p><b>Not accepted.</b></p> <p>The recommended formatting for 14 CFR citations conflicts with the guidance provided in the AC Order, 1320.46C dated 5/31/2002. That guidance is specified in Chapter 3, Section 10, Using references in your AC. In subparagraph g of that section, the order directs that “When referring to laws, the Code of Federal Regulations, and so on, use the citation standards given in the Office of the Federal Register's Document Drafting Handbook, available at <a href="http://www.nara.gov/fedreg/ddhhome.html">http://www.nara.gov/fedreg/ddhhome.html</a>. Cite FAA's regulations in the form "14 CFR part 27," for subsequent references to the same regulation use "part 27."</p> <p>Note the conflict is between the recommendation and the last sentence in subparagraph g. Furthermore, the link to the “Federal Register's Document Drafting Handbook” is non-functional.</p> <p>Lastly, the formatting for the 14 CFR citations in this AC is identical to the formatting specified for 14 CFR citations by the TSO Order 8150.1C Chg 1, dated 5/10/12. As this AC is a companion document to TSO-C119( ), [TCAS II], the formatting of 14 CFR citations will follow the TSO Order.</p>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
81.	AIR-40	Paragraph 2-10c, Page 8	Improper capitalization.		Remove the capitalization from the terms “feature criteria” in the paragraph title.	<b>Accepted.</b>
82.	AIR-40	Paragraph 2-10c, 3 <sup>rd</sup> sentence, Page 8	Improper usage of comma.		Remove the comma after the term “features”.	<b>Accepted.</b>
83.	AIR-40	Paragraph 2-11c, 3 <sup>rd</sup> sentence, Page 8	Improper usage of comma.		Remove the comma after the term “features”.	<b>Accepted.</b>
84.	AIR-40	Paragraph 2-13c(10), Page 10	Incorrect spacing.		Remove the space from between the labeling of subsection (10) and the term ‘Maintain’.	<b>Accepted.</b>
85.	AIR-40	Paragraph 2-14b, Page 11	Improper capitalization.		Remove the capitalization from the term “plan” in the paragraph title.	<b>Accepted.</b>
86.	AIR-40	Paragraphs 2-15a(1)-(3), b(1)-(6), and c(1)-(7), Page 12	Incorrect spacing.		Place a space between each subsection.	<b>Accepted.</b>
87.	AIR-40	Paragraph 2-16, 1 <sup>st</sup> sentence, Page 12	Improper capitalization.		Remove the capitalization from the term “table”.	<b>Not accepted.</b> The formatting of “Table 1” is properly capitalized as there is no table 1 in the lower case in this document.
88.	AIR-40	Paragraphs 2-17a, 3 <sup>rd</sup> sentence, b(3), c, e, & g Pages 13, 14 & 15	Improper capitalization.		Remove the capitalization from the term “table”.	<b>Not accepted.</b> See #87 for disposition.
89.	AIR-40	Paragraph 2-17c(2), Page 14	Improper usage of comma.		Remove the comma after the term “Maneuver C”.	<b>Accepted.</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
90.	AIR-40	Table 1, Page 16	Suggestion.		Additional rows should be added from hart on page 17. Can likely include full chart, then notes can be on following page in portrait orientation.	<b>Not accepted.</b> The recommended change was attempted but not adopted as doing so orphans the notes for Table 1 on a single page.
91.	AIR-40	Under Table 1, Note Section, Page 17	Inconsistent format.		Use capitalization of all letters in the title of "NOTES".	<b>Accepted.</b>
92.	AIR-40	Under Table 1, Note Section, Pages 17 & 18	Missing labeling of the last two "Note" sections.		Since there is more than one "Note" section, then each one accordingly.	<b>Not accepted.</b> There is only one (1) Note section.
93.	AIR-40	Paragraphs 2-18a - j, Pages 19	Missing bold.		Place the title of each subparagraph.	<b>Accepted.</b>
94.	AIR-40	Paragraph 2-18j, 1 <sup>st</sup> sentence, Page 21	Incorrect spacing.		Remove the extra space from between terms "and" and "or".	<b>Not accepted.</b> Overcome by other editing (OBOE) apparently as the words "and" and "or" are not in the first sentence of that paragraph now.
95.	AIR-40	Paragraph 2-19a, last sentence, Page 21	Clarity.		Is it appropriate to refer to FAA contractors?	<b>No action required.</b> Yes.
96.	AIR-40	Under Paragraph 2-20, Page 22	Incorrect format.		Remove page break.	<b>Accepted.</b>
97.	AIR-40	Paragraph 2-21a, 2 <sup>nd</sup> sentence, Page 23	Missing comma.		Place a comma after the term "fail".	<b>Accepted.</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
98.	AIR-40	Paragra ph 3-2, Page 24	Inconsistent format.	Missing period after the labeling of the paragraph.	Rewrite to read: 3-2. Create a Test Plan.	<b>Accepted.</b>
99.	AIR-40	Paragraphs 3-3a - c, Page 24	Missing bold.		Bold the subparagraph titles.	<b>Accepted.</b>
100.	AIR-40	Paragraph 3- 3m, Note Section 1, Page 26	Delete the period found after the labeling of "Note 1".	Inconsistent with the rest of the document.	Replace with colon.	<b>Accepted.</b>
101.	AIR-40	Paragraph 3- 3m, Note 1, Page 26	Inconsistent format.		Use capitalization of all letters in the title of "NOTE".	<b>Accepted.</b>
102.	AIR-40	Paragra ph 3-4g, Page 27	Missing acronym.		Place the acronym "FD" after the term "flight director".	<b>Accepted.</b>
103.	AIR-40	Paragrap h 3-4j, Page 27	The term "flight director" has already been defined in paragraph 3-4g.		Use the acronym "FD".	<b>Accepted.</b>
104.	AIR-40	Paragraph 3-6e(5), 1 <sup>st</sup> sentence, Page 30	Missing comma.		Place a comma after the term "facility".	<b>Accepted.</b>
105.	AIR-40	Paragraph 4-2j, Note 1 Section, Page 33	Delete the period found after the labeling of "Note 1".	Inconsistent with the rest of the document.	Replace with colon.	<b>Accepted.</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
106.	AIR-40	Paragraph 4-2j, Note 1 Section, Page 33	Inconsistent format.	Inconsistent with the rest of the document.	Remove the dash mark from between the terms "CAUTION and when".	<b>Accepted.</b>
107.	AIR-40	Paragraph 4-4, Page 36	Inconsistent format.	Missing period after the labeling of the paragraph.	Rewrite to read: 4-4. Upgrading an Existing TCAS II Installation.	<b>Accepted.</b>
108.	AIR-40	Paragraph 4-4, 1 <sup>st</sup> sentence, Page 36	Missing comma.		Place a comma after the abbreviation "i.e."	<b>Not accepted.</b> Refer to # 68 for disposition.
109.	AIR-40	Paragraph 5-1, Page 37	Change wording of paragraph title.		Rewrite to read: <b>Contents of an AFMS.</b>	<b>Accepted.</b>
110.	AIR-40	Paragraph 5-1, Page 37	The term 'Airplane Flight Manual Supplement' has already been defined.		Use the acronym "AFMS".	<b>Accepted.</b>
111.	AIR-40	Between Pages 37- and A-1	Blank page.		Remove the blank page from between pages 37 and A-1.	<b>No action required.</b> No blank page was found between those two pages.
112.	AIR-40	Appendix A, Page A-1	Incorrect format.		The format (labeling, spacing, etc.) of appendix A is very inconsistent. Determine the desired format for this example and realign text to meet that format.	<b>No action required.</b> The desired format is as shown.
113.	AIR-40	Appendix A, Description Paragraph, 5 <sup>th</sup> sentence, Page A-1	Missing space.		Place a space between the acronym "ATCRB" and term "equipped".	<b>Not accepted.</b> Two spaces are not used between each word in a sentence.
114.	AIR-40	Appendix A, Paragraph 2(1) – (9) and (1) – (4), Pages A-2 & A-3	Possible format error.		Since paragraph 2 is the main paragraph, then subparagraphs (1) – (9) might need to be labeled with letters not numbers, depending on AFMS guidance.	<b>No action required.</b> The current formatting is acceptable.

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
115.	AIR-40	Appendix A, Section I (1) & (2), Page A-13	Incorrect alignment.		Move the labeling of subparagraphs (1) & (2) over to appear directly under the first time in the main paragraph.	<b>No action required.</b> Refer to # 114 for disposition.
116.	AIR-40	Appendix A, Section II (2)(b)(1), Note Section, Page A-15	Missing capitalization.	Inconsistent with the rest of the document.	Capitalize the title "NOTE".	<b>No action required.</b> No instances of a lower case Note were found on page A-17.
117.	AIR-40	Appendix A, Section IV, Page A-18	Missing period.		Place a period after the term "Performance".	<b>Accepted</b>
118.	AIR-40	Appendix B, Paragraph 1, Note Section, Page B-1	Unnecessary bold.	Inconsistent with the rest of the document.	Remove the bold from the title/terms "NOTE" and "CAUTION".	<b>Accepted</b>
119.	AIR-40	Appendix B, Paragraph 1d - f(1) - (2), Pages B-1 & B-2	Incorrect format.		Delete the period found after the labeling of (1) & (2).	<b>Accepted</b>
120.	AIR-40	Appendix B, Under Paragraphs 1s & u, Note Section, Page B-3	Unnecessary bold.	Inconsistent with the rest of the document.	Remove the bold from the title/term "NOTE".	<b>Accepted</b>
121.	AIR-40	Appendix B, Between Pages B-3 & C-1	Blank page.		Remove the blank page from between pages B-3 and C-1.	<b>No action required.</b> No blank page was found between those pages.
122.	AIR-40	Appendix C, Page C-1	Missing bold.	Inconsistent with the rest of the document.	Bold Appendix C title: <b>Background.</b>	<b>Accepted</b>
123.	AIR-40	Appendix C, Paragraph 1a & b, Page C-1	Incorrect format.		Place the labeling of subparagraphs 1a and b to appear directly under the first term in the main paragraph.	<b>Accepted</b>

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
124.	AIR-40	Appendix C, Paragraph 1a, 3 <sup>rd</sup> sentence, Page C-1	Incorrect spacing.		Remove the spacing from between the year "1987" and the period.	<b>No action required.</b> No space was found in that position.
125.	AIR-40	Appendix C, Between Pages C-1 & D-1	Blank page.		Remove the blank page from between pages C-1 and D-1.	<b>No action required.</b> No blank page was found between the last page of appendix C (now C-2) and page D-1.
126.	AIR-40	Appendix D, Paragraph 1, 3 <sup>rd</sup> sentence, Page D-1	Improper capitalization.	Non-compliance with AGC memo sent on 1/24/94.	Remove the capitalization from the term "parts" when referencing CFR unless it begins a sentence.	<b>Not accepted.</b> Refer to #80 for disposition.
127.	AIR-40	Appendix D, Paragraph 2, Page D-2	The term "advisory circulars" has already been defined.		Use the acronym "ACs".	<b>Accepted</b>
128.	AIR-40	Appendix D, Paragraph 2, 3 <sup>rd</sup> AC Reference, Page D-2	Missing comma.	Inconsistent with the rest of the document.	Place a comma after the reference to "AC 25.1309-1".	<b>Accepted</b>
129.	AIR-40	Appendix D, Paragraph 3, Page D-2	The term "technical standard orders" has already been defined.		Use the acronym "TSOs".	<b>Accepted</b>
130.	AIR-40	Appendix D, Paragraph 4, Page D-2	Change wording.		Rewrite to read: You can find introduction to TCAS II V7.1, Feb 28, 2011 on the FAA Internet website...	<b>Not accepted.</b> The existing wording is acceptable.
131.	AIR-40	Appendix D, Paragraph 4, Page D-2	Unnecessary bold.		Remove bold from the sentence entirely.	<b>Not accepted</b> Use of the bold font is acceptable and consistent with the rest of the document.

Index No.	Name of Reviewer	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
132.	AIR-40	Appendix D, Paragraph 5, 3 <sup>rd</sup> RTCA Reference, Page D-3	Missing comma.	Inconsistent with the rest of the document.	Place a comma after "RTCA/DO-181E".	<b>Accepted</b>
133.	AIR-40	Appendix E, Paragraph 1g, Note Section, Page E-1	Unnecessary bold.	Inconsistent with the rest of the document.	Remove the bold from the title/term "NOTE".	<b>Accepted</b>