

DOCUMENT REVIEW LOG

1. Document No.:		2. Project Lead:		3. Reviewing Office (Name and Phone Number):		4. Date of Review:		5. Date of AIR-100 Disposition:	
TSO-C195b				ANM-100		11 March 2014			
Item No:	Page and Paragraph No:	Comment:	Reason:	Recommendation:	AIR-100 Disposition:				
1.	p2 3.a.(1) P. Siegmund, ANM-111, (425) 329-5195	The reference to operating limitations in the AFM should be more general. Any and all should be in the AFM, not just polar. And polar isn't mentioned in the AC.	Suggest rearranging the paragraph for clarity.	Revise the second half of the paragraph to read: "...Crew training and operational approvals are required. <u>Any operating limitations of the equipment must be clearly stated in the installation documents and in the airplane flight manual. If limitations have geographical boundaries, such as in polar areas, then those boundaries must be included with the relevant limitations.</u> Additional operational guidance for ITP has been published by FAA Flight Standards organization under AC 90-114, Change 2, <u>Appendix 2.</u> "	Accept.				
2.	p2 3.a.(4) P. Siegmund, ANM-111, (425) 329-5195	First usage of "SURF" isn't defined in the TSO.	See comment.	Revise to insert "...when implementing Surface Applications <u>(SURF.)</u> "	The SURF acronym has been added to Table 1 and that is the first instance where this acronym is now found. So redefining it in Section 3.a.(4) will not be needed.				
3.	p3 3.a.(5) P. Siegmund, ANM-111, (425) 329-5195	"May" makes it a true statement. But the paragraph implies that our intent is to require the TSO, which isn't necessary.	ASA needs a display. But a display does not need a TSO. We would not require one, nor would we forbid it.	Delete para (5.).	No Change. This paragraph is in response to industry input.				
4.	p3 3.b.(1) P. Siegmund, ANM-111, (425) 329-5195	Clarify this paragraph as shown. The OR (not AND) is important.	Clarity	Revise to read: "Failure of the function defined in paragraph 3.a of this TSO has been determined to be a major failure condition for malfunctions causing the display of hazardously misleading information in	We accept the grammar changes, but not the "or". We will break the compound sentence into two sentences to fix the and/or issue.				

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				airborne aircraft and <u>or</u> aircraft on the ground <u>with groundspeed</u> greater than 80 knots. Failure of the function defined in paragraph 3.a of this TSO has been determined to be a minor failure condition for malfunctions causing the display of hazardously misleading information in aircraft on the ground with groundspeed of less than 80 knots <u>or less.</u> "	
5.	p4 Table 2 P. Siegmund, ANM-111, (425) 329-5195	DO-178B is no longer current.	Inadvertently excludes DO-178C.	Either do not specify the DO-178 rev level, or add "or later."	Updated to DO-178 <u>C</u>
6.	Pages 4-5 Par. 3(d) T. Phan, ANM-100B (562) 627-5342	Un-clear about use of different standard environmental condition and test procedure than RTCA/DO-160G. The note mentioned DO-160D but was silent on DO-160E, DO-160-F.	Be specific about acceptable standard environmental tests other than RTCA/DO-160G.	Include DO-160E/F and any other acceptable environmental condition and test procedure.	Reference to DO-160D is written in accordance to standard TSO template language. AIR-132 has no control over this language.
7.	Page 5 Par. 3(e) and Page 8 Par. 6(g) T. Phan, ANM-100B (562) 627-5342	RTCA Inc. document RTCA/DO-178C should be used in lieu of DO-178B.	AC 20-11B recognized DO-178B is canceled. AC 20-115C is current and recognizes DO-178C.	Replace DO-178B with DO-178C.	New template language has been included in the TSO template. The verbiage used here has been updated per the new language for these sections
8.	p5 3.(e) P. Siegmund, ANM-111, (425) 329-5195	DO-178B is no longer current.	Inadvertently excludes DO-178C.	Either do not specify the DO-178 rev level and its date, or add "or later."	New template language has been included in the TSO template. The verbiage used here has been updated per the new language for these

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					sections
9.	p6 5.a.(3) P. Siegmund, ANM-111, (425) 329-5195	An important limitation could be missed.	It is rather buried and could confuse some stakeholders. Transport airplane makers have long since forgotten about TCAS I, and never knew TAS.	Revise to clarify: "ATAS cannot be installed in aircraft that have a TCAS II system. It can be installed in an aircraft with TAS or TCAS I."	Accept.
10.	P 11 1.1.4. P. Siegmund, ANM-111, (425) 329-5195	Our intent or expectation isn't clear. Need to clarify.	If applicants don't find SSR coverage during testing, does FAA have a problem? Not all readers will know.	"It is uncommon to be able to test the Service Status Message successfully while on the ground as SSR coverage is unlikely." Need to clarify: What action must applicant then take? Do we expect a flight test, or do we not care? If none, let's say so.	This entire section has been written to inform applicants wishing to perform ground test equipment. There is no requirement to do this, but many of them wish to do so.
11.	P 11 1.2. P. Siegmund, ANM-111, (425) 329-5195	In the first sentence, grammar is a bit off. (e.g., Who is receiving what?)	Clarity	Revise to read, after insertion "No ADS-B transmissions are required <u>in order for the system</u> to receive FIS-B broadcasts."	Accept.

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c1. Document No.:		2. Project Lead:	3. Reviewing Office (Name and Phone Number):	4. Date of Review:	5. Date of AIR-100 Disposition:
TSO-C195b			ACE-110 816-329-4128		
Item No:	Page and Paragraph No:	Comment:	Reason:	Recommendation:	AIR-100 Disposition:
1.	Page 3, Para 3.a(3)	Lists TSO-C119c but 119d is current.	Correction	Change to TSO-C119d	Current DO-317B applications do not require hybrid surveillance per TSO-C119d/DO-300A. The letter "c" will be removed from the TSO
2.	Page 3, Para 3.a(6)	Lists TSO-C129a which is not in the RGL	Clarification	Change to existing TSO	Although TSO-C129a is not listed on the RGL website, equipment still exists that is certified to TSO-C129a and is being used in the National Airspace (NAS). Most Part 25 aircraft carry TSO-C129a certified equipment. We will use open brackets to correct this issue.
3.	Page 3, Para 3.a(6)	Lists TSO-C145c, TSO-C146c, and TSO-C196a	Correction	Change to TSO-C 145d. 146d. 196b.	Accept. Open brackets added to the end of each TSO.
4.	Page 4,5,8, Table 2, para 3.e, para 6.g	Consider using the latest revision, DO-178C, not DO-178B.	AC 20-115C invokes and recommends the use of DO-178C.	Follow the current standards.	New template language has been included in the TSO template. The verbiage used here has been updated per the new language for these sections
5.	Page 4 Paragraph d. and Page 5	(Pg. 4) The third sentence reads, "You may use a different method..."	Standardization	Rewrite these two sentences to remove the "second person" style.	Accept.

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	Paragraph g.	(Pg. 5) The first sentence reads, "We have provisions for using alternate means of compliance..." Other than the opening paragraph (Pg. 1, Par. 1), these are the only instances of "second person" in this document.			
6.	Page 10 Paragraph 1.1.1.	The third sentence reads, "This allows the applicant to transmit information on the desired frequency."	The operator may not be the applicant.	Rewrite the sentence to read, "This allows the operator to transmit information on the desired frequency."	Accept.