

Field Review Comment Matrix

Originating Office: AIR-130	Document Description: TSO-C200a	Project Lead/Reviewer John C. Barry	Reviewing Office:	Date of Review:
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	Commenter	Section # and Page #	Comment	Suggested Change and Rationale	Disposition
1.	M. Shah ASW-142	Section 3, page 2	Note, Wrong referenced called “3.g”	Replace Note, Wrong referenced called “3.f”	Accepted. Incorporated
2.	M. Shah ASW-142	Section 4, page 3	Refer 14CFR § 45.15(b), required serial number also	Add serial number as per 14CFR § 45.15(b)	Not accepted. Already incorporated, S4, page 3 Para 4a already calls out requirement to mark one major component with all of the required information in 14 CFR § 45.15(b) which includes “date or serial number or both”. FAA does not intend to mandate serialization of the C200A ULD.
3.	Nazih Khaouly ANM-110	Appendix 1 last paragraph 5 /Note	Replace Appendix 1 with: Note: The FAA may impose additional special condition requirements. Installers may use TSO test data, including the battery containment test data as part of the certification package in showing compliance with an FAA installation special condition.	The suggested changes are required to ensure harmonization between the TSO article approval and the installation/certification TC or STC compliance data package.	Accepted. Added note

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4.	Georgios Roussos ANM-100B	Section 3.d.(1)., Page 2 Note	The Note references paragraph 3.g. of the Technical Standard Order (TSO). There is no paragraph 3.g.	The Note should reference paragraph 3.f of the TSO since it is the appropriate reference.	Accepted. Incorporated
5.	Georgios Roussos ANM-100B	Section 6.h., Page 5	Paragraph 6.h calls for certain actions taken under items 6.a through 6.h. Paragraph 6.h is the requesting paragraph and should not be included.	Paragraph 6.h should be revised to reference items 6.a through 6.g since paragraph 6.h is the requesting paragraph and should not be included.	Accepted. Incorporated
6.	Georgios Roussos ANM-100B	Appendix 1, Page 7	The 3rd paragraph identifies RTCA/DO-347 document as “Certification Test Guidance for Small and Medium Size Rechargeable Batteries and Battery Systems.” Same nomenclature is also shown under items 3 and 4 of Appendix 1.	The formal RTCA/DO-347 document title is “Certification Test Guidance for Small and Medium Sized Rechargeable Batteries and Battery Systems.”	Accepted. Incorporated

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7.	Georgios Roussos ANM-100B	Appendix 1, Page 7	The 3rd paragraph of the Appendix states: “Section 1.5, 1.6, 1.7 of RTCA/DO-347...meeting part 23, 25, 27, and 29 requirements and additional Special Conditions (SC).”	Special conditions are installation related requirements and would be appropriate to be identified as such. Revise paragraph to state, “Sections 1.5, 1.6, 1.7 of RTCA/DO-347... meeting parts 23, 25, 27, and 29 requirements and any additional Special Conditions (SC), required for the Unit Load Device aircraft installation.”	Accepted. Incorporated
8.	Georgios Roussos ANM-100B	Appendix 1, Page 7	Paragraph 3 of the Appendix does not include test condition per section 2.3.8 “Short- circuit Test with Protection Enabled” of the RTCA/DO-347.	Consider including testing under RTCA/DO-347 Section 2.3.8 “Short- circuit Test with Protection Enabled” since there is no restriction on use of protective circuitry. This test does not need to be performed if there is no protective circuitry.	Not accepted. Considered and not incorporated in the initial draft as the Section 2.3.9 test stresses the battery to a greater extent.
9.	Georgios Roussos ANM-100B	Appendix 1, Pages 7 and 8 Notes	The Notes at the bottom of page 7 and on page 8 refer to TAD Special conditions SC1, SC2, and SC3. There is no reference on how these SCs can be	If the SCs need to be referenced in the TSO, then properly quoted and listed so they can appropriately be	Accepted. Added reference to the TAD Transport Airplane Issues (TAI) List.

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			accessed and viewed by our TSO applicants. The available descriptions are only abbreviations of the ones detailed under these SCs. Currently they are available within the Transport Airplane Issues (TAI) List. I am not sure if all information from the TAI list is readily available to public.	accessed by our TSO applicants.	
10.	ACE-111 Jim Brady	Overall document	Why do we need a new TSO, why not have an update to TSO-C121? Having two TSOs added more cost and redundancy that is not needed.	Cancel TSO-C200a and add requirements to TSO-C121.	Not accepted. The TSO-C200A device operates on a different frequency and has an intended function of localizing the crash site. The C121 devices are at a higher frequency to facilitate recovery of the flight recorders. Separate TSOs are appropriate.
11.	ACE-114 Dave Jenson	3. page 1	The battery used in the underwater locating device authorized under this TSO	The battery used in the ULD authorized under this TSO Consistency	Accepted. Incorporated
12.	ACE-114 Dave Jenson	3.a, page 1	This TSO's standards apply to equipment intended for ULD operating	This TSO's standards apply to equipment intended for a ULD operating Grammatical	Accepted. Incorporated

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13.	ACE-114 Dave Jenson	3.d, page 2	Provided the standard is appropriate for the Airframe Low Frequency ULD equipment	provided the standard is appropriate for the Airframe Low Frequency ULD equipment. Grammatical	Accepted. Incorporated
14.	ACE-114 Dave Jenson	3.d, Note, page 2	Process as discussed in paragraph 3.g of this TSO.	process as discussed in paragraph 3.f of this TSO. Incorrect reference	Accepted. Incorporated
15.	ACE-114 Dave Jenson	3.d (2), page 2	Standard Practice for the Preparation of Substitute Ocean Water	<i>Standard Practice for the Preparation of Substitute Ocean Water</i> Consistency	Accepted. Incorporated
16.	ACE-114 Dave Jenson	4.a, page 2	Mark at least one major component permanently and legibly with all the information in 14 CFR § 45.15(b)	Mark at least one major component permanently and legibly with all the information in 14 CFR § 45.15(b). The marking must include the serial number. Missing period. Was the highlighted above, which was in TSO-121b, left out intentionally?	Not accepted. See response to #2 above. Omission of a mandatory serialization is intentional. FAA does not intend to mandate serialization of the C200A ULD.
17.	ACE-114 Dave Jenson	5.a.7, page 4	List of replaceable components, by part number, that makes up the Airframe Low Frequency Underwater Locating Device	List of replaceable components, by part number, that makes up the Airframe Low Frequency ULD	Accepted. Incorporated

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				Consistency	
18.	ACE-114 Dave Jenson	6.g, page 5	Shouldn't DO-178C be the main software reference?	Make DO-178C the main software reference.	Not accepted. Not incorporated, used current TSO template.
19.	ACE-114 Dave Jenson	6.h, page 5	If the article contains non-TSO function(s), you must also make available items 6.a through 6.h as they pertain to the non-TSO function(s).	If the article contains non-TSO function(s), you must also make available items 6.a through 6.g as they pertain to the non-TSO function(s). Typo, also in TSO-121b.	Accepted. Incorporated
20.	ACE-114 Dave Jenson	Appendix 1, paragraph 3, page 7 – global comment	<i>Certification Test Guidance for Small and Medium Size Rechargeable Lithium Batteries and Battery Systems</i>	<i>Certification Test Guidance for Small and Medium Sized Rechargeable Lithium Batteries and Battery Systems</i> Typo	Accepted. Incorporated
21.	ACE-114 Dave Jenson	Appendix 1, paragraph 3, page 7	Provide design requirements and guidelines pertinent to designing safe batteries	provide safety, design and qualification requirements and guidelines pertinent to designing safe batteries Clarity	Accepted. Incorporated

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22.	ACE-114 Ruth Hirt	Appendix, Page 7 & 8	Both pages reference to TAD SC (e.g, SC 1, SC 2, SC 3). Unless these are part 25 centric requirements that aren't captured by released policy and/or AC, TSO should reference the requirements stated in the policy and/or AC.	Suggested to remove references to TAD SC, and replace with the requirements explained in the policy, PS-AIR-20-130-02-01, and/or AC 20-184.	<p>Not accepted. TAD SC requirements specifically included in required tests to insure all destructive test data needed for installation would be available to the installers.</p> <p>Temperature profiles will facilitate zonal analysis even on Part 23 aircraft.</p>
23.	ACE-114 Dave Jenson	4.b, page 8	Should examples be given for “the ULD contained decomposition products akin to those obtained from conducting this test on a bare battery”?	Provide expected products due to thermal runaway. Clarity	<p>Not accepted. No, outcomes may differ and the products of the bare battery test need to be found inside the unit after the contained test.</p>