

Comments for Draft Revisions(Not Applicable to Directives; Refer to Directive Management Officer for Directive Comment Format)

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Comments Submitted By: ANE (A. Pigott); ANM (T. Ebina, J. Hill, R. Derby); AFS-430 (R. Sultan); ASW-150 (M. Shaw); AIR-130 (L. Nguyen)

Organization:

Phone:

#	Document Name	Page Number	Paragraph Number	Referenced Text	Comment/Rationale or Question	Proposed Resolution	Comment Type (Conceptual, Editorial, or Format)	Disposition/Response to Comment
1	TSO-C157b	2	Table 1	Equipment Class 1 Functional Qualification	missing	Define the RTCA document	conceptual	Non-concur - AIR standard operating procedure allows for soliciting all FAA internal comments using an RTCA Special Committee draft that has completed Final Review and Comment (FRAC) process. AIR will do a better job of ensuring that all draft documents are identified as available in the
2	TSO-C157b	3	Table 2	Equipment Class 1 Functional Qualification	missing	Define the RTCA document	conceptual	Non-concur - AIR standard operating procedure allows for soliciting all FAA internal comments using an RTCA Special Committee draft that has completed Final Review and Comment (FRAC) process. AIR will do a better job of ensuring that all draft documents are identified as available in the
3	TSO-C157b	3	3		Missing complex electronic hardware qualification	Define the CEH qualification of RTCA/DO-254	conceptual	Concur - Changes made adding paragraph 3.f of the TSO making reference to DO-254.

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4	TSO-C157b	3	3.e	Software Qualification	While DO-178() assures a goodness of airborne software, still invites a question on the re of the internal digital activities if an AEH is embedded in an article.	Add a new section on RTCA/DO-254.	conceptual	Concur - Changes made adding paragraph 3.f of the TSO making reference to DO-254.
5	TSO-C157b	5	5.c	"If the article includes software a plan for software aspects of certification (PSAC), software configuration index and software accomplishment summary."	For evaluation of airborne electronic hardware (AEH), it would be beneficial if the AC addresses a Plan for Hardware Aspects of Airborne Electronic Hardware, a Top-Level Drawing and a Hardware Accomplishment Summary.	Add AEH expectations.	conceptual	Concur - Changes made adding paragraph 3.f of the TSO template making reference to DO-254. When designing FIS-B level D equipment, manufacturers may choose to use RTCA, Inc. document RTCA/DO-254 or continue to use their existing design assurance practices. However, if the manufacturer continues to follow the guidance in RTCA/DO-254 for FIS-B level D equipment, the FAA does not need to review the life cycle data for that device (see paragraph 6.h of this TSO).

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6	TSO-C157b	6	5.e.1	"Description of the non-TSO function(s), such as performance specifications ..."	While having a description of the non-TSO function is helpful, it is equally important to know Design Assurance Levels of both software and airborne electronic hardware in order to assure the proper systems integration of an article with its mating airborne systems at an airplane level .	Add information on Design Assurance Levels of software and airborne electronic hardware.	conceptual	Concur - Changes made addin paragraph 3.f of the TSO template making reference to DO-254. When designing FIS-B level D equipment, manufacturers may choose to use RTCA, Inc. document RTCA/DO-254 or continue to use their existing design assurance practices. However, if the manufacturer continues to follow the guidance in RTCA/DO-254 for FIS-B level D equipment, the FAA does not need to review the life cycle data for that device (see paragraph 6.h of this TSO).
7	TSO-C157b	7	6.g	"If the article includes software the appropriate documentation defined in the version of RTCA/DO-178 ..."	While the airborne software expectation is well defined, it is unclear what substantiation is necessary for compliance demonstration with DO-254.	Add RTCA/DO-254.	conceptual	Concur - Changes made addin paragraph 3.f of the TSO template making reference to DO-254. When designing FIS-B level D equipment, manufacturers may choose to use RTCA, Inc. document RTCA/DO-254 or continue to use their existing design assurance practices. However, if the manufacturer continues to follow the guidance in RTCA/DO-254 for FIS-B level D equipment, the FAA does not need to review the life cycle data for that device (see paragraph 6.h of this TSO).

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8	TSO-C157b	2 thru 7	N/A	TSO-Cxxx.	TSO reference in header is incomplete.	Replace with TSO-C157b.	editorial	Concur - Changes made
9	TSO-C157b	3	3.d.	RTCA/DO-160G, titled <i>Environmental Conditions and Test Procedures for Airborne Equipment</i>	Remove the word "titled" from the title.	RTCA/DO-160G, <i>Environmental Conditions and Test Procedures for Airborne Equipment</i> .	editorial	Concur - Our version of the TS does not include the word "titled". However, we concur with the comment. No change required.
10	TSO-C157b	4	5.a.(1)	"FIS-B information may be used for pilot planning decisions and pilot near-term decisions"	Wording seems awkward. Are "pilot planning decisions" and "pilot near-term decisions" standard terminology? Where are they defined?	Replace with "FIS-B information may be used for pilot planning and decisions making, and pilot near-term decisions."	editorial	Partially concur - Changes made to improve clarity of the sentence.
11	TSO-C157b	4	5.a.(1)(a)	To promote pilot awareness of own ship location.	Ownship is one word.	Change to: To promote pilot awareness of ownship location.	editorial	Concur - Changes made
12	TSO-C157b	4	5.a.(1)(a)	To promote pilot awareness of own ship location with respect to reported weather, including hazardous meteorological conditions, NAS status indicators, and enhance pilot planning decisions and pilot near-term decision-making.	Awkward punctuation. Use semicolon to separate lists.	Change to: To promote pilot awareness of own ship location with respect to reported weather, including hazardous meteorological conditions and NAS status indicators; and to enhance pilot planning decisions and pilot near-term decision-	editorial	Concur - Changes made
13	TSO-C157b	4	5.a.(1)(b)	To cue the pilot to communicate with the Air Traffic Control controller.	Control controller is redundant. It is common practice to just refer to the controller as ATC.	Change to: To cue the pilot to communicate with the Air Traffic Control.	editorial	Concur - Changes made
14	TSO-C157b	4	5.a.(1)(b)	FIS-B information, including, weather information, NOTAMS, and TFR areas	Unnecessary comma following "including"	FIS-B information, including weather information, NOTAMS, and TFR areas	editorial	Concur - Changes made
15	TSO-C157b	4	5.a.(1)(b)	...long- and near-term planning decision making.	Planning and decision making are two separate activities. Recommend inserting "and" between them.	...long- and near-term planning and decision making.	conceptual	Partially concur - Changes made to improve clarity of the sentence.

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16	TSO-C157b	7	8.b	<p>1. The website has changed and the instructions are no longer valid.</p> <p>2. The www.access.gpo.gov portal is difficult to navigate & is not the most direct access to the Bookstore.</p>	the correct URL.	<p>1. Replace "You can also order copies online ..." with "You can also order copies online from the U.S. Government Bookstore at www.gpo.gov."</p> <p>2. Replace the last two sentences (page navigation) with Select "Bookstore," then "CFRs."</p>	editorial	Concur - Changes made
17	TSO-C157b	one	Title	Flight Information Services- Broadcast Data Link Systems and Equipment	My belief is that this TSO wants to address FAA FIS-B as well as commercial (non-FAA) FIS. The proper terminology for both is "Flight Information Services" (as defined in AC 00-63A and AIM 7-1-11.) FIS-B is the specific name of the FAA provided system. Throughout this TSO, FIS should be used and FIS-B should only be used when referring to the FAA system		conceptual	Non-concur - "FIS-B" is a non-copyright, generic, technical term used to differentiate FIS products delivered via broadcast versus demand and contract. The FAA Program Office does not own the term FIS-B, as it is technical description of the means of FIS product delivery. Use of the term FIS-B has been embraced by RTCA Special Committee 195 in document titles published as early as 200 has been used by the FAA in TSO authorizations shortly thereafter.

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18	TSO-C157b	two	Table 1	reference to Class 1 and Class 2	Class 1 is FIS-B and Class 2 is non-FAA FIS.....I don't think you really need to classify things as Class 1 and 2		conceptual	Non-concur - Class 1 is specific MOPS for FAA SBS Program Office equipment that is UAT FIS-B compliant with FAA equipment performance expectations. Class 2 is MOPS for equipment that is not compliant with FAA SBS program office interoperability and performance expectations.
19	TSO-C157b	two	3.a.	flight advisory information	delete "advisory"		editorial	Concur - Changes made
20	TSO-C157b	two	3.b.(1)	flight advisory information	delete "advisory"		editorial	Concur - Changes made