



# AVS Quality Management System

**QPM #**  
AIR-001-007-F1

Revision  
**0**

<b>Originating Office:</b>	<b>Document Description:</b>	<b>Project Lead:</b>	<b>Reviewing Office:</b>	<b>Date of Review:</b>
AIR-130	AC 20-138D Field Comments	Kevin Bridges	ACE-100	8/28/14

Comment Number	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
1	Page 2  (Paragraphs 15-5c and 16-5b clarify a paragraph on data quality requirements :)	The revised sentence starts on page 1, last line, “The DQRs...must be confirmed...”. Confirming DQRs seems to imply that there are those requirements, however, they may or may be complied with (e.g., compatibility to specific system, etc.)	Clarification.	Recommended revision – “The DQRs applicable to the intended function must be <u>recognized, verified, and confirmed</u> at the aircraft level during airworthiness approval	<b>Not Accepted.</b> Evidence of a Type 2 LOA provides both verification of compliance to AC 20-153() and DO-200A as well as validation the compliance meets the needs for the compatible hardware. What we are intending is to “confirm” the DQRs applicable to the intended function at the box level are still valid, or do they need to be modified at the aircraft level during airworthiness approval.

	<b>AVS</b> <b>Quality Management System</b>	<b>QPM #</b> <b>AIR-001-007-F1</b>	<b>Revision</b> <b>0</b>
---	--	---------------------------------------	-----------------------------

<b>Originating Office:</b> AIR-130	<b>Document Description:</b> AC 20-138D Field Comments	<b>Project Lead:</b> Kevin Bridges	<b>Reviewing Office:</b> ANM-100	<b>Date of Review:</b> 8/28/14
---------------------------------------	---	---------------------------------------	-------------------------------------	-----------------------------------

2	Para 1-1.h	Suggest adding language to clarify that when seeking new installation approval that the guidance in this AC should be followed.	This has been an interpretation issue with applicants seeking to expand (on other aircraft) their existing STC.	This AC revision is not intended to modify, change or cancel equipment design or airworthiness approvals previously in existence. However, new installation approvals (TC, ATC, STC or ASTC) should follow the guidance in this AC.	<b>Accepted.</b> ATC and ASTC were changed to “amended” TC and “amended” STC to avoid creating another acronym.
3	Para 9-2d Note 2	Note 2 uses the word “But.”	Editorial	Suggest changing “But” to “However” as indicated in the change summary.	<b>Accepted.</b>
4	Para 15-5c and 16-5.b	Revise text (see recommendation)	In order to focus more on ensuring that DQRs are established at airworthiness approval.	Data Quality Requirements (DQRs) for installed databases are normally addressed at the equipment design level. The DQRs applicable to the intended function must be confirmed at the aircraft level during airworthiness approval. A Type 2 LOA may be used to	<b>Partially Accepted.</b> After further coordination, the AC has the following change:  <i>Data Quality Requirements (DQRs) for installed databases are normally addressed at the equipment design level. The DQRs</i>

	<b>AVS</b> <b>Quality Management System</b>	<b>QPM #</b> <b>AIR-001-007-F1</b>	<b>Revision</b> <b>0</b>
---	--	---------------------------------------	-----------------------------

<b>Originating Office:</b> AIR-130	<b>Document Description:</b> AC 20-138D Field Comments	<b>Project Lead:</b> Kevin Bridges	<b>Reviewing Office:</b> ANM-100	<b>Date of Review:</b> 8/28/14
---------------------------------------	---	---------------------------------------	-------------------------------------	-----------------------------------

				<p>confirm the DQRs and tool qualification are appropriate for the intended function of the installed equipment. As such, the Type 2 LOA provides evidence the DQRs are described and valid for the compatible equipment listed on the LOA. IFR operational approval is supported by the Type 2 LOA and regular recurring updates for the database that include the areas and types of intended operations (see paragraph <u>19-8</u>).</p>	<p><i>applicable to the intended function must be confirmed at the aircraft level during airworthiness approval. A Type 2 LOA may be used to confirm the DQRs and tool qualification are appropriate for the intended function of the installed equipment. As such, the Type 2 LOA provides evidence the DQRs are described and valid for the compatible equipment listed on the LOA. IFR operational approval is supported by the Type 2 LOA with regular recurring updates for the database including the areas and types of intended operations (see paragraph <u>19-8.b</u>).</i></p> <p>Additionally, the 2<sup>nd</sup></p>
--	--	--	--	---	---



AVS  
Quality Management System

QPM #  
AIR-001-007-F1

Revision  
0

<b>Originating Office:</b> AIR-130	<b>Document Description:</b> AC 20-138D Field Comments	<b>Project Lead:</b> Kevin Bridges	<b>Reviewing Office:</b> ANM-100	<b>Date of Review:</b> 8/28/14
---------------------------------------	---	---------------------------------------	-------------------------------------	-----------------------------------

					<p>sentence of paragraph 19-8.a (shown below) was deleted:</p> <p><i>The TSOA provides sufficient evidence for compliance to RTCA/DO-200A for the installation approval, but operational approval for IFR use is based upon a database assurance process through a type 2 LOA.</i></p>
--	--	--	--	--	--



# AVS Quality Management System

**QPM #**  
AIR-001-007-F1

Revision  
**0**

<b>Originating Office:</b> AIR-130	<b>Document Description:</b> AC 20-138D Field Comments	<b>Project Lead:</b> Kevin Bridges	<b>Reviewing Office:</b> AIR-500	<b>Date of Review:</b> 9/19/14
---------------------------------------	---	---------------------------------------	-------------------------------------	-----------------------------------

5	Paragraph 1, Purpose	The level of detail is a bit much. You can easily summarize the principal changes without giving a word by word comparison of the two versions.	Consistency with other Change documents.	Consider removing some the detail and relying on a narrative summary. Generally, the purpose paragraph should be a single paragraph summarizing what drove the need to issue the change.	<b>Not Accepted.</b> All reviewers liked including the actual changes in this manner to ease the burden on the reader.
6	Change 1 (first 3 pages)	Missing page numbers	Incorrect format	If this “change” page is more than a single page, number the pages as i, ii, iii, etc.	<b>Accepted.</b>
7	Page ii, paragraph 2	Incorrect word usage. Principal is an adjective meaning main or key	Typo	Replace “Principle” with “Principal”	<b>Accepted.</b>
9	Pages i-iii	Spacing and alignment of paragraphs is incorrect	Incorrect formatting	All paragraphs should be double spaced. Also, starting with the 2 <sup>nd</sup> line, all subsequent lines of the paragraphs need to be returned to the left margin.	<b>Not Accepted.</b> This makes the useful and easily readable introduction section summarizing the changes too long.



# AVS Quality Management System

**QPM #**  
AIR-001-007-F1

Revision  
**0**

<b>Originating Office:</b>	<b>Document Description:</b>	<b>Project Lead:</b>	<b>Reviewing Office:</b>	<b>Date of Review:</b>
AIR-130	AC 20-138D Field Comments	Kevin Bridges	AIR-500	9/19/14

10	Pages i-iii	All acronyms need to be spelled out upon first usage. Consider this document separate from the original AC.	Incorrect use of acronyms	Spell out acronyms upon first usage on pages i-iii.	<b>Not Accepted.</b> These are the actual text changes for the remove/insert pages one would make if one were using hard-copy rather than electronic methods. They need to read exactly as they do in the changed pages.
11	Page 2	The change described on page i to paragraph 1-1h, actually appears to be a change to paragraph 1-1i in the original AC.	In the AC that's posted to RGL, the top of page 2 starts with paragraph g which reads the same as page 2, paragraph h of this change.	Revisit to make sure that the paragraph labeling is correct on the changed page.	<b>Accepted.</b>
12	Page 2, paragraph i	Acronyms need to be defined upon first usage	TC and STC have not been defined previously	Define TC and STC on page 2 and delete definition on page 4, paragraph 1-4d(2)(a).	<b>Not Accepted.</b> This is the actual text changes for the remove/insert pages one would make if one were using hard-copy rather than electronic methods. This needs to read exactly as it does in the changed pages.
13	Page 58	Incorrect page number	Typo	Renumber as page 59	<b>Accepted.</b>
14	All changed pages	Change bars only need to highlight the parts of the paragraph that changed. No need to line the entire paragraph.	Incorrect formatting	Shorten the change bar to only cover the lines of the paragraphs that changed.	<b>Not Accepted.</b> Microsoft does not permit doing what is suggested.



# AVS Quality Management System

QPM #  
AIR-001-007-F1

Revision  
0

<b>Originating Office:</b> AIR-130	<b>Document Description:</b> AC 20-138D Field Comments	<b>Project Lead:</b> Kevin Bridges	<b>Reviewing Office:</b> AIR-500	<b>Date of Review:</b> 9/19/14
---------------------------------------	---	---------------------------------------	-------------------------------------	-----------------------------------

15	Pages 58, 116, 139, and A3-6.	Pagination has changed	If the pagination has changed for other pages of the document, then those pages need to be included in the Change (without bars).	Check the impact of the change on the pagination when compared to the original document. May need to include additional pages in the Change if the page doesn't end in the same location as the original.	<b>Not Accepted.</b> These are the "pages" one would remove and insert if one were doing hard-copy changes instead of using electronic methods to view a complete document.
----	-------------------------------	------------------------	---	---	---