

**Clearance Record  
DOCUMENT COMMENT LOG**

<b>Originating Office:</b>	<b>Document Description:</b>	<b>Project Lead:</b>	<b>Reviewing Office:</b>	<b>Date of Review:</b>
----------------------------	------------------------------	----------------------	--------------------------	------------------------

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
1	ARSA	Page 1 Para 1	Remove “all or some of the” from the paragraph remove the extra spaces after the period.	Adds nothing	This order provides information and guidance to aviation safety engineers (ASE) for reviewing service bulletins (SB) that incorporate drafting concepts in Federal Aviation Administration (FAA) Advisory Circular (AC) 20-176, <i>Design Approval Holder Best Practices for Service Bulletins Related to Airworthiness Directives</i> .	Concur, revised accordingly
2	ARSA	Page 1 Para 5a	Revise as recommended		We suggest revising the text as follows:  <i>In early 2008, the FAA established an AD Compliance Review Team (AD CRT) to review compliance issues related to AD 2006-15-15, McDonnell Douglas Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 Airplanes (Task 1), and the</i>	Concur, revised accordingly

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					<p><i>general process for developing and implementing ADs for commercial airplanes (Task 2).</i></p>	
3	ARSA	Page 1 Para 5c	Revise as recommended		<p>We suggest revising the text as follows:</p> <p><i>The Administrator thereafter developed an Aviation Rulemaking Committee to recommend and implement changes to address the AD CRT's report. That committee determined that SBs incorporated by reference tended to contain information that was unnecessary to directly address the identified unsafe condition. By applying agreed-upon principles for writing SBs (e.g., standardized format/location of information, use of acceptable terminology, etc.), SBs can be referenced as the primary source of information for product applicability, compliance times, and key actions in an AD in lieu of rewriting the SB information in the AD itself.</i></p>	<p>Non-concur. The intent of the paragraph is to identify the AD CRT report. Furthermore, the focus of the Aviation Rulemaking Committee (ARC) was not on SBs incorporated by reference, but rather SBs specified in an AD which may or may not be IBR'd.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
4	ARSA	Page 1 New Para 5d	Add a new a paragraph 5d as recommended		<i>To maximize compliance and minimize the need for AMOCs, the FAA must ensure that SBs do not include information that is unnecessary or extraneous to addressing an unsafe condition.</i>	Non-concur. The background section is intended to provide the link between advisory circular (AC) 20-176 and this order.
5	ARSA	Page 1 Para 5d	Revise as recommended		<i>To ensure the FAA was provided with the most succinct information, FAA AC 20-176, Design Approval Holder Best Practices for Service Bulletins Related to Airworthiness Directives, issued on December 19, 2011, presents best practices for design approval holders drafting SBs related to ADs, avoiding overlapping ,,,</i>	Non-concur. Recommended change “To ensure the FAA was provided with the most succinct information“ adds no substance to the statement.
6	Boeing	Page 1 Para. 5.d.		Our suggested change would make the wording more accurate and consistent with the wording in paragraph 7.c. of the document.	We suggest revising the text as follows: <i>d. ... This AC also introduces a new concept – critical task differentiation – for distinguishing which steps in an SB will have a direct effect on detecting, preventing, resolving, or eliminating the unsafe condition <u>identified</u> in an AD.</i>	Concur, revised accordingly. Paragraph was reformatted to paragraph 5c.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
7	ARSA	Page 2 Para 7.a.	Change third sentence and combine with fourth sentence.	Any “outside document” or portion thereof that is IBR’d must be “approved” by the OFR.	Change to:  The FAA must obtain approval from the Office of the Federal Register to IBR any information, including a SB or portion of a SB, in an AD.	Partially concur. Reference was made to “material;” in lieu of the recommended language “any information” to be consistent with the definition of IBR located in Explanation section of 14 CFR parts 1 to 59.  Paragraph was revised as follows:  “The FAA must obtain approval from the Office of the Federal Register to IBR material, including a SB or portion of a SB, in an AD.”
8	ARSA	Page 2 Para 7.b.	Font size 11.5	Standardization	Change font size to 12	Concur, revised accordingly
9	Boeing	Pg 3 Para. 9.		<b>ISSUE 1.</b> The “other documents” that are typically referenced in an SB for accomplishment of a task are many times such things as a Structural Repair	We request that FAA either: <ul style="list-style-type: none"> <li>• delete this paragraph altogether, or</li> <li>• revise it to include wording that would specifically allow for referenced documents with later revision</li> </ul>	Concur. Revised the paragraph to allow “or later revisions” when specifying the revision level and date of another document referenced in an SB.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>Manual (SRM), a Standard Wiring Practices Manual (SWPM), a Standard Overhaul Practices Manual (SOPM), or the like. Most of these types of documents are on scheduled revision cycles to be revised several times a year. (One manual alone could be revised from one to as many as 6 times in one year). Thus, the “revision level and date” of these manuals could change several times per year.</p> <p>Proposed paragraph 9.b. would require SBs to specify the revision level and date of other documents referenced in it. If left as proposed, this would result in the need for DAHs to submit an AMOC request each time the referenced document is revised, or each time an</p>	<p>levels/dates to be used without the need for an Alternative Method of Compliance (AMOC).</p>	

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>operator or maintenance provider wants to use a different version from what is specified in the SB. For example, if an SB states, "Install shims in accordance with SRM 51-20-10, Revision 42, dated January 15, 2011," the OEM would need to request an AMOC each time the SRM is revised – whether the specific installation procedure changes or not. Additionally, the SRM may be referenced in multiple SBs and therefore multiple ADs. It will not be possible for a DAH to request an AMOC for all potential SBs that may refer to the SRM. This could also result in operators being out of compliance if they use a previous or later approved version of the SRM procedure to accomplish the AD associated with the SB. It also severely limits</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>both the DAH and operators from altering the procedure to account for purposes other than AD compliance.</p> <p>If the Order is applied this way, it would certainly create an unmanageable (and untenable) situation. It would also be wholly contrary to one of the objectives of the recent FAA-sponsored AD Advisory Rulemaking Committee (AD ARC), which was to find ways to reduce the number of AMOCs; the procedure proposed in the Order would greatly increase the number of necessary AMOCs for what appears to be no substantive safety reason.</p> <p><b>ISSUE 2.</b> We note that all design change Instructions for Continued</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>Airworthiness (ICA) information is, at a minimum, accepted by process and, at a maximum, ACO-approved; thus, we maintain that the use of later revision levels/dates should be allowed without the need to request an AMOC.</p> <p><b>ISSUE 3.</b> Rather than associate recommended maintenance procedures with mandatory compliance to an AD, we would prefer the option of including, rather than referencing, procedures within the service bulletin.</p>		
10	ARSA	Page 3 Para 9.a.	Revise as recommended		... Instead of repeating the procedure, the SB should refer to the other document(s) for that task. <i>When developing the AD, the FAA must ensure IBR'd documents are succinct and controlled so the rule will be clear and unambiguous on its face</i>	Non-concur. There is no requirement by the Office of the Federal Register for documents to be succinct to IBR them.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
11	ARSA	Page 3 Para 9.b.	Is this paragraph meant to imply that the SB can IBR another document without that document being directly IBR'd into the AD?	It is my understanding that the FAA cannot enforce more than one level IBR'd document, i.e., the SB. In other words, you cannot have a "double" incorporation by reference.	Change the entire paragraph to ensure there are no double, triple and quadruple IBR'd documents.	Partially concur. Added a new paragraph 9c as follows to clarify this issue:  "Remember that a reference to another document in an SB that is IBR'd in an AD does not constitute IBR'ing of the other document. The FAA must obtain approval from the OFR for each document that is IBR'd in an AD."
12	ARSA	Page 3 Para 9.b.	Add recommended text at end of paragraph		<i>When developing the AD, the FAA must ensure all documents required for compliance are appropriately IBR'd and controlled by AMOC or an amendment to the rule if changed after a final rule is issued.</i>	Non-concur. The recommended change addresses drafting of the AD action. The audience for this order is an ASE reviewing an SB, not the person drafting the AD action.
13	Cessna	Page 3, Paragraph 9.b.	Cessna recommends that the latest version of a referenced document i.e. maintenance manual, should be used and not limited to a specific revision level		9.b. When referencing other document(s) that may be required for compliance with an AD, the SB must specify to use a specific revision level and date or latest version of those document(s).	Partially concur. The paragraph was revised as follows:  "If an SB references another document for completing a task that will be required for compliance to an AD,

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						<p>then the other document in the SB must be identified with a revision level and date. To prevent the need for an AMOC approval each time the revision level changes in the document referenced in the SB, the phrase "or later approved revision" may be added when specifying the revision level. "Later approved revision," on the other hand, cannot be used to identify the SB in the AD because it violates 1 CFR 51.7 and OFR policies for approving materials that are IBR'd."</p>
14	United Air Lines – Engineering	Pg 3 Para 9.b.	Muddled message with "...that might be..."	Message should address referenced documents required for compliance.	Remove "that might be" from sentence.	<p>Concur. The paragraph was revised as follows:</p> <p>"If an SB references another document for completing a task that will be required for compliance to an AD, then the other document in the SB must be identified with a revision</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						level and date. To prevent the need for an AMOC approval each time the revision level changes in the document referenced in the SB, the phrase "or later approved revision" may be added when specifying the revision level. "Later approved revision," on the other hand, cannot be used to identify the SB in the AD because it violates 1 CFR 51.7 and OFR policies for approving materials that are IBR'd."
15	United Air Lines – Engineering	Pg 3 Para 9.b.	Message infers all IBR'd documents require a Revision level	Some AD corrective actions may not have a need to require a specific revision level of a given referenced document/manual.	Restate as "For cases where the revision level of a given referenced document is deemed as required, the SB must specify the revision level and date of that document."	Non-concur. For IBR'd documents, the OFR Handbook, Chapter 6, paragraph 6-4, states that the regulatory text in the rule [AD] must identify the material to be incorporated, by title, date, edition, author, publisher, and identification number of the publication.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
16	Cessna	Page 3, Paragraph 10.	Cessna requests clarification on titling paragraphs. Typically Cessna spells out in the 'description' paragraph why and what. Is this suggesting different paragraphs and titles?			Yes, it is using different titles. Per Advisory Circular (AC) 20-176, these new paragraphs include specific information.
17	ARSA	Page 3 Para 10a	Add recommended text to end of paragraph		<i>When developing the AD, the description of the unsafe condition should reflect the result so that a person would understand when compliance has been achieved</i>	Non-concur. The recommended change addresses drafting of the AD action. The audience for this order is an ASE reviewing an SB, not the person drafting the AD action.
18	ARSA	Page 3 Para 10b	Add recommended text to end of paragraph		<i>When developing the AD, the FAA should ensure the configuration reflects the corrective action required by the rule</i>	Non-concur. The recommended change addresses drafting of the AD action. The audience for this order is an ASE reviewing an SB, not the person drafting the AD action.
19	Boeing	Page 3 Para. 11.a.		In practical application, notes in SBs are not always treated as "information only." Some notes can be enforceable. For example, for many years some Boeing Service	We suggest deleting the statement or clarifying it.	Non-concur. The information on 'Notes' in this order coincides with the information in AC 20-176 developed by an AD CRT subgroup that included a representative from Boeing.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>Bulletins (e.g., SB 737-52A1167, 777-24-0123, 717-55A, and others) have contained a “boilerplate” note that specifies certain required tolerances:</p> <p><i>“NOTE. ... Unless shown differently, these dimensions and tolerances are used: ... Tolerance on linear dimensions ... is plus or minus 0.03.”</i></p>		
20	ARSA	Page 3 Para 13	The language seemed to predispose the reader to assuming the “acceptable” procedures would not address the unsafe condition.	No harm in trying alternative wording to get the same point across.	Change to: The use of mandatory language in the accomplishment instructions of an SB depends on whether other procedures acceptable to the FAA <b>will ensure the unsafe condition identified in the AD is addressed.</b> If other procedures are acceptable to the FAA, flexible (e.g., non-mandatory) language should be used in the SB <b>and therefore in the AD if the SB is IBRD.</b>	Non-concur. The audience of this order is the ASE reviewing the SB, not a tech writer drafting the AD. The AD Manual, FAA-IR-M-8040.1, currently being revised, will include such guidance when drafting an AD action.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
21	ARSA	Page 4 Para 13.a.	Reword to focus the FAA engineer on the exact steps that <b>MUST BE FOLLOWED</b> to ensure the unsafe condition is addressed.	The FAA must ensure its rules are clear and unambiguous; to perform that duty and obligation in this arena it must NOT delegate that job to the certificate holder. Further, ARSA does not believe the agency can enforce double incorporations by reference.	Change to:  a. When a <b>step</b> or procedure <i>must</i> be followed to accomplish a task necessary to address the identified unsafe condition, the appropriate terminology to cite the <b>step/procedure</b> is “in accordance with.”	Partially concur. Added “step” to the paragraph. Other proposed changes were not incorporated for the following reasons:  1. Removal of the word “document” from sentence – another document may be identified in an SB for performing a certain task. The other document becomes mandatory if the task is required for compliance with the AD.  2. Adding “to address the identified unsafe condition” – this is already identified in the lead-in paragraph 13 and therefore would be redundant to repeat it.
22	ARSA	Page 4 Para 14	Revise as recommended		... <i>Steps that have a direct effect on detecting, preventing, resolving, or eliminating the unsafe condition in an AD must be identified and, if IBRD in an SB, labeled as “RC”</i>	Non-concur. There is no requirement that a SB use the RC concept. Therefore, the term “must” is not used as recommended. Additionally, paragraph

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					<i>(required for compliance). ...</i>	14a(1) identifies that only SBs that will be IBR'd can use the 'RC' label.
23	Cessna	Page 4, Paragraph 14. Critical Task Differentiation	Cessna requests clarification. Cessna Service Bulletins generally only contain steps that have a direct effect on detecting, preventing, resolving, or eliminating the unsafe condition.			Often there are steps included in an SB that do not directly impact the detection, removal, prevention, or resolution of the unsafe condition. For example, aircraft preparation steps (e.g., removing electrical power, opening and tagging circuit breakers, jacking and shoring, etc.) or access steps (e.g., removing access panels, etc.). These steps/tasks should not be identified for compliance with an AD (i.e., use the 'RC' label). Differentiating such steps from other tasks will improve an owners/operators understanding of crucial AD requirements.
24	Cessna	Page 4, Paragraph 14.	Cessna asks for clarification, that if a Service Bulletin is issued, and then an AD			An SB issued prior to an AD will not be required to be revised to adopt the concepts presented in this

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			gets issued that references the earlier released Service Bulletin—that the released Service Bulletin will not then require any revision.			order and Advisory Circular (AC) 20-176, unless deemed necessary by the FAA. AC 20-176, Chapter 2, paragraph 2-2b states “The concepts presented in this AC apply to development of new or revised SBs and are not intended to be applied retroactively, except when deemed necessary by the DAH and FAA (e.g., see paragraph 2-4b of this AC).”
25	Boeing	Page 4 Para. 14.a.		<p>Many times there are cases where an FAA-accepted procedure may be the corrective action; therefore, the RC step may refer to an accepted procedure. For example:</p> <p><i>“Replace the ground stud and bonding jumper. Refer to SWPM 20-20-10 as an accepted procedure.”</i></p> <p>or</p> <p><i>“Install placard. Refer to SOPM 20-50-</i></p>	<p>We suggest adding a new item 14.a(4) to read as follows:</p> <p><i><b>(4) For steps where an FAA-accepted procedure is the corrective action (e.g., “Refer to XXX as an accepted procedure.”)</b></i></p>	<p>Non-concur. Tasks identified with the phrase “refer to” should not be labeled RC. If an FAA-accepted procedure is required for compliance to an AD than the correct reference to it is “in accordance with.”</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<i>05 as an accepted procedure.”</i>		
26	ARSA	Page 4 Para 14a(3)	Revise as recommended		<i>With “in accordance with” mandatory language in the SB and therefore the AD.</i>	Non-concur. The audience of this order is the ASE reviewing the SB, not a tech writer drafting the AD. The AD Manual, FAA-IR-M-8040.1, currently being revised, will include such guidance when drafting an AD action.
27	ARSA	Page 4 Para 14c(1)	Revise as recommended		Use “with” in lieu of “as”	Non-concur. “As” is the correct word for the intent of the sentence.
28	ARSA	Page 5 Para 15a	Revise as recommended		<i>One way to minimize the number of AMOC requests for ADs requiring part changes is to use “later approved parts” language in the SB or the AD itself. This would allow—without an AMOC approval—installation of DAH parts that are approved after the release of the SB or reference document.</i>	Non-concur. The audience of this order is the ASE reviewing the SB, not a tech writer drafting the AD. The AD Manual, FAA-IR-M-8040.1, currently being revised, will include such guidance when drafting an AD action.
29	ARSA	Page 5 Para 15d	Revise as recommended		<i>When using “later approved parts” language, the SB <b>IBRd</b> or the AD itself must contain the following definition</i>	Non-concur. Only the SB will contain the definition provided. The AD may or may not use a

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						similar definition.
30	Embraer	Appendix A	Appendix A of the proposed order directs the FAA employee to "... consider[ing] the following ..." and to "... ask [himself] the following questions ..." but the appendix provides no further guidance on how the responses to the considerations and questions should be used to determine whether a step should be labeled as "RC" or not.	Embraer believes that the RC guidance in this area provided in AC 20-176 is more tangible and is sufficient for use by both industry and the FAA to determine whether a service bulletin step should be labeled RC or not.	Embraer suggests that the last sentence of Paragraph 14 be deleted (current note that refers to AC 20-176 is sufficient) and that Appendix A of the proposed order be removed.	Non-concur. The FAA considers the additional guidance in appendix A helpful for FAA ASE's reviewing SBs to determine if a task should, or should not, be labeled 'RC'.
31	Cessna	Appendix A. 1. b. (1)	"Design deficiency" recommend changing to "Design factor"	Order states under "What is the unsafe condition? (1) The Description must be factual and succinct." The word "factor" can be commonly used in all three causes of condition categories.	Recommend changing the word "deficiency" to "factor".	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
32	Cessna	Appendix A. 1. b. (2)	“Manufacturing error” recommend changing to “Manufacturing factor”.	Order states under “What is the unsafe condition? (1) The Description must be factual and succinct.” The word “factor” can be commonly used in all three causes of conditions.	Recommend changing the word “error” to “factor”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
33	Cessna	Appendix A. 1. b 2. (a) & 1. b. 2. (b)	In the order descriptions should be factual. The word “error” is harder to factually support than if wording was changed to “non-standard operation”	This is addressing an unsafe condition that was cause by someone detouring from a standard operation that is to produces a product to comply with the design.	Recommend changing the word “error” to “non-standard operation”	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
34	Cessna	Appendix A. 1. b. (2) (b)	Verify if “Maintenance Review Board (MRB) is the correct area.	This portion is under the manufacturing process in production, should this be Material Review Board (MRB)?	Recommend changing from “Maintenance Review Board (MRB)” to Material Review Board (MRB).	Concur, revised accordingly
35	Cessna	Appendix A. 1. b. (3)	“Maintenance error” recommend changing to “Maintenance factor”.	Order states under “What is the unsafe condition? (1) The Description must be factual and succinct.” The word “factor” can be commonly used in all three causes of conditions.	Recommend changing the word “error” to “factor”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
36	Cessna	Appendix A. 2.	Change where “deficiency” and “error” have been used to “factor”	This simplifies the cause of the unsafe conditions to use one word which can be factually backed.	Recommend changing where the word “deficiency” or “error” to use the word “factor”	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
37	Cessna	Appendix A. 2. b. (1)	Change “deficiency” to “factor”	This change of wording supports previous wording changes.	Recommend changing the word “deficiency” to “factor”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
38	Cessna	Appendix A. 2. c.	Change “error” to “factor”	This change of wording supports previous wording changes.	Recommend changing the word “error” to “factor”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
39	Cessna	Appendix A. 2. c. (1)	Change the word “error” to “non-standard operation”	This change of wording supports previous wording changes.	Recommend changing the word “error” to “non-standard operation”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
40	Cessna	Appendix A. 2. c. (4)	Change “error” to “factor”	This change of wording supports previous wording changes.	Recommend changing the word “error” to “factor”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.
41	Cessna	Appendix A. 2. d.	Change “error” to “issue”	This change of wording supports previous wording changes.	Recommend changing the word “error” to “issue”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
42	Cessna	Appendix A. 2. d. (1)	Delete to word “systemic” Change “error” to “factor”	Deleting the word “systemic” will make appendix A.1. & A.2. match. This change of wording supports previous wording changes.	Recommend deleting “systemic” and changing the word “error” to “factor”.	Non-concur. The language used in the appendix was developed and coordinated with an AD CRT subgroup.