

**Clearance Record
DOCUMENT COMMENT LOG**

Originating Office:	Document Description:	Project Lead:	Reviewing Office:	Date of Review:
----------------------------	------------------------------	----------------------	--------------------------	------------------------

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
1	Cessna Aircraft Company		Cessna Aircraft Company has no comment on this issue at this time.			No disposition necessary.
2	ATS /Quality		The AC should advise DAH's on best practices when an AD-related SB is corrected through a revision. Even if an AMOC is received for the revision, operators need to be notified due to the potential impact on aircraft that have already had the SB accomplished.	Example: AD 2008-16-13 requires compliance with SB 737-27-1284, dated November 28, 2007. Since the original issuance of the SB, Boeing discovered issues with the SB figures and corrected them by issuing Rev. 1 of the SB dated August 3, 2009. One of the issues resolved by the revision was swapping the positions of the inboard and outboard rods in the figure for the right hand elevator tab pushrods (ref. figure 2, sheet 2). The revised SB was approved as an AMOC. No notification was issued to rework the r/h pushrods per the revised SB and the AD still reflects the original SB that was incorrect.	Provide guidance to DAH's to assess SB revisions and to determine if rework of aircraft that have already had the SB accomplished is appropriate. Provide notification if necessary.	Non-concur. When instructions in a SB are incorrect and cannot be performed as written to resolve an unsafe condition, the AD process is to revise the AD. For the example provided, it was determined that the unsafe condition could be resolved with the error in the initial SB., therefore no revision AD was issued.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
3	Airbus	General Comment	<p>Industry wide acceptance of AC 20-xxx DAH Best Practices This AC is directed to manufacturers (DAHs) of airplanes, helicopters, engines, propellers and equipments. However, it has been developed in the the frame of the AD-ARC activities, in which only large transport airplane manufacturers were involved. For Airbus, this is a procedural issue that may lead to inconsistent standards and proceedings in the aeronautical product manufacturing industry. We've expressed this concern during the consultation loop of AC draft issue 1 and do repeat here the rationale and recommendation included in our July 2011 contribution.</p>	<p>On the cover page it is emphasized that the AC applies to DAH for aircraft, aircraft engines, propellers and articles. Only US airplane manufacturers Boeing and Learjet, and non-US DAH Airbus, Bombardier and Embraer contributed directly to the AD-ARC activities which led to the creation of this AC. No engine or equipment manufacturer participated. Consequently, the AC as drafted is primarily based on experiences from the large transport airplane sector only. As such, it may not represent specifics from other industry sectors.</p>	<p>➔ Airbus recommends FAA may initiate, in addition to implement this AC in the US domestic market, an international activity to harmonize and further detail requirements for ADs and related service information. That activity should involve OEMs for aircraft, aircraft engines, propellers and articles and cover the fact that most aviation products are manufactured, imported, exported, operated and maintained airworthy globally.</p>	<p>Partially concur. The guidance presented in this advisory circular (AC) is not mandatory. The concepts specified are intended to be generic for a DAH of any product type. A DAH may determine they cannot, or choose not to, adhere to the AC. Each directorate can work with foreign DAHs to determine what is best for them.</p>
4	ATA	Cover page	<p>Add sentence as recommended at end of paragraph.</p>	<p>The RC concept introduced in this draft AC is a significant change that</p>	<p>“... Practices related to designating certain steps in accomplishment</p>	<p>Non-concur. The concept of RC is not addressed on the cover page of the AC. Also,</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				warrants evaluation once it has been in effect. It has not been subject to a practical evaluation on in service airplanes. The AC should acknowledge and record this matter and plans to address it as discussed in the AD ARC.	instructions as “required for compliance” are new and subject to re-evaluation after a period in effect.”	this AC can be revised at any time to reflect new/changing guidance on RC.
5	ARSA	Para 1-2a	Incorrect sentence	a. AD action. One of the following types of regulatory documents issued under 14 CFR part 39 by the Federal Aviation Administration (FAA), including proposed or final supersedures, revisions or corrections to them:	a. AD action. One of the following rulemaking documents issued under 14 CFR part 39 by the Federal Aviation Administration (FAA), including proposed or final supersedures, revisions or corrections to them:	Concur, revised accordingly (paragraph reformatted to paragraph 1-6a)
6	ARSA	Para 1-2a	Complete acronym	1) Notice of Proposed Rulemaking (NPRM), including a supplemental NPRM,	1) Notice of Proposed Rulemaking (NPRM), including a supplemental NPRM (SNPRM)	Concur, revised accordingly (paragraph reformatted to paragraph 1-6a(1))
7	ARSA	Para 1-2a	Correction	(2) Final rule after notice,	(2) Final rule after NPRM or SNPRM,	Concur, revised accordingly (paragraph reformatted to paragraph 1-6a(2))
8	American Airlines	Pg. 1 Para 1-2.a.	Revise sentence to read as shown on right.	Clarity and factual accuracy. Proposed documents posted	One of the following types of documents	Partially concur, paragraph (reformatted to paragraph

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				are not regulatory documents.	published by the Federal Aviation Administration (FAA), including proposed or final supersedures, revisions or corrections to them:	1-6a) was revised for clarity as follows: “ a. AD action. One of the following types of rulemaking documents issued under Title 14 of the Code of Federal Regulations (14 CFR) part 39 by the FAA, including supersedures, revisions, and corrections to those documents.”
9	GE – GR Cert	1,1-2(a)	Delete use of word “supersedures”	Clarify message conveyed in sentence structure.	1. replace supercedures with procedures	Non-concur. The intent of the paragraph is to identify the types of AD actions issued by the FAA. As such, the term “supersedure” is correct (see FAA AD Manual FAA-IR-M-8040.1C, Chapter 5, paragraph 5 for additional information on supersedure ADs.)
10	ARSA	Para 1-2b	Remove “by a DAH’s engineering department” since it doesn’t add anything		b. Drawing. A document created to define configuration. Drawings may include other engineering information such as	Concur, revised accordingly (paragraph reformatted to paragraph 1-6b)

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					specifications, dimensions, materials, and processes.	
11	ARSA	Para 1-2c	Why the “disclaimer”?		c. Figure. An illustration, photograph, chart, graph, table, form, note, symbol, callout, text, or dimension (or any combination thereof) that supports or clarifies written instructions.	Concur, revised accordingly (paragraph reformatted to paragraph 1-6b)
12	ARSA	1-2e	Too many words	e. Incorporation by reference. A method of referring to material already published elsewhere instead of publishing it directly into an AD action. Documents incorporated by reference (IBR’d) in an AD become part of the rule. The FAA must obtain approval from the Office of the Federal Register to place IBR’d material in an AD.	e. Incorporation by reference. Referring to published material instead of publishing it. Documents incorporated by reference (IBR’d) in an AD become part of the rule. The FAA must obtain approval from the Office of the Federal Register to IBR’d material in an AD.	Partially concur. Paragraph (reformatted to paragraph 1-6f) was revised for clarity as follows: “ Incorporation by reference. A method of referring to material already published elsewhere instead of publishing it directly into an AD. Documents IBR’d in an AD become part of the AD. The FAA must obtain approval from the Office of the Federal Register (OFR) for IBR’d SBs in an AD.”
13	Garmin	Page 2, Paragraph	“ f. Product. An aircraft, aircraft engine, propeller,	CFR 14 21.(b) (5) indicates that a “product” is not an	Recommend removing “appliance” from the	Non-concur. Because we are working under the purview of

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
		1-2.f.	<p>and appliance.”</p> <p>This definition inappropriately associates “appliance” with “product”. The CFR has always kept “appliance” separate from “product”. It will cause confusion to associate them under the same term in this AC when “product” has a specific definition in the CFR.</p>	<p>appliance as follows:</p> <p>(5) <i>Product</i> means an aircraft, aircraft engine, or propeller;</p>	<p>definition of “product” in the AC so that it remains consistent with the CFR part 21.</p> <p>Additionally, recommend changing instances of the word “product” to “product and appliances” throughout the document as appropriate.</p>	<p>14 CFR part 39, we will use the definition of a product identified in 14 CFR 39.3 which states a product is an aircraft, aircraft engine, propeller, and appliance.</p>
14	ARSA	Para 1-2g	<p>Unclear that the RC “steps” will ensure “compliance”</p> <p>g. Required for Compliance. Compliance steps in an IBR’d document that have a direct effect on detecting, preventing, resolving, or eliminating an unsafe condition identified in an AD.</p>		<p>g. Required for Compliance. Steps that are required to detect, prevent, resolve, or eliminate an unsafe condition identified in an AD, that will establish compliance with the AD.</p>	<p>Partially concur, revised paragraph (reformatted to paragraph 1-6i) for clarity as follows:</p> <p>“i. Required for Compliance (RC). A method of notating which steps in a SB must be done for compliance with an AD. Steps with the RC notation have a direct effect on detecting, preventing, resolving, or eliminating the unsafe condition identified in an AD. The RC notation</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						should only be used in SBs that will be IBR'd in an AD.”
15	ARSA	Para 1-2h	Unnecessarily restrictive without regulatory basis; service bulletins are not “required” by the rules and therefore should not be restrictive in their use; the second sentence is totally unnecessary for the purposes of this AC or any other.	h. Service Bulletin (SB). Document used to convey service information (e.g., modifications, inspections, etc.) to owners/operators of products. A SB should not be used to address routine recommended inspections, standard repairs, or revisions to maintenance practices or shop procedures.	h. Service Bulletin (SB). Document used to convey maintenance, preventive maintenance or alteration information.	Partially concur, paragraph (reformatted to paragraph 1-6j) was revised as follows: “j. Service Bulletin (SB). Document used to convey service information (e.g., modifications, inspections, etc.) to owners/operators of products.”
16	Garmin	Page 2, Paragraph 1-2.h.	“h. Service Bulletin (SB). Document used to convey service information (e.g., modifications, inspections, etc.) to owners/operators of products. ...” In the GA world the owner/operator frequently is not capable of or does not have the necessary training to accomplish the modification instructed in the SB. As such, Garmin	Proper authority and training are required to accomplish modifications instructed by SB. Consequently, Garmin only provides the SB which includes instructions for the modification to qualified modifiers (Garmin approved dealers/installers) not owner/operators.	Recommend: <ul style="list-style-type: none"> • Removing “owner/operator” from this definition and replacing it with “approved modifiers” or • Changing “owner/operator” to “owner/operators with qualification and authority to modify products and articles” 	Non-concur, 14 CFR 21.99a(2) for whom the DAH must make available the design change descriptive data refers to “operators” without the qualifier for operators with the authority to modify products.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			only provides the technical data regarding the modification in the form of a SB to its approved installers/modifiers (although owners/operators are notified via other service literature that a SB exists).			
17	Garmin	Page 2, Paragraph 1-2.h.	<p>“h. Service Bulletin (SB)... A SB should not be used to address routine recommended inspections, standard repairs, or revisions to maintenance practices or shop procedures.”</p> <p>Garmin disagrees that SB should not be used to address non-AD type service or modifications.</p>	Service Bulletins are used as the Design Approval Holder (DAH) determines is appropriate and productive to communicate important modifications to qualified modifiers/installers. Consequently, Garmin does not agree that SBs “should not be used to address routine recommended inspections, standard repairs, or revisions to maintenance practices or shop procedures” if the DAH determines this use is appropriate. For example, Garmin often uses SBs to convey modifications that are available or adjustments to other published service literature such as an	Recommend deleting “A SB should not be used to address routine recommended inspections, standard repairs, or revisions to maintenance practices or shop procedures.” from the Service Bulletin definition.	Concur. Deleted the sentence as recommended (paragraph was reformatted to paragraph 1-6j).

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>installation manual to bring the latest approved improvements or changes to the attention of the service network.</p>		
18	Ken Dickenson	Page 2 Para 1-2h	<p>It is stated that “A SB should not be used to address routine recommended inspections, standard repairs, or revisions to maintenance practices or shop procedures”. The absence of explanations makes this statement unclear and questionable.</p>	<ul style="list-style-type: none"> – There is no rationale to explain this instruction and therefore the statement is not clear: i.e. why is a SB a document used to convey inspections but not routine recommended inspections? – Some terms are not defined, e.g. “routine”. – New inspections may subsequently become repetitive and thus may need to be included into the ALS and/or the MRBR and/or the MPD revision. 	<ul style="list-style-type: none"> – We recommend to clarify* the reasons why a SB should not be used to address routine recommended inspections, standard repairs, or revisions to maintenance practices or shop procedures. – We recommend to define* the term “routine” (for inspections, maintenance, etc...) – Refer also to comment on page 10, para. 3-9.b.(2). <p>* Directly in this AC or by reference to another official document</p>	<p>Partially concur. Deleted the sentence in question (paragraph was reformatted to paragraph 1-6j).</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
19	ATA	Para 1-4	Revise as recommended.	For clarity	<p>“Effective Date. The effective date of this AC for identifying critical tasks and task sequences ...”</p>	<p>Partially concur, revised paragraph (reformatted to paragraph 1-3) for clarity as follows:</p> <p>“1-3. Effective Date. The effective date for implementing critical task differentiation in SBs described in this AC (see paragraph 2-10) is June 6, 2012. This allows time for the FAA to issue guidance for FAA aviation safety engineers on how to approve SBs using this concept.”</p>
20	ARSA	Para 1-5b	Grammatical correction, the AD CRT is an “it”, not a “their”	<p>b. The AD CRT documented their findings and recommendations from the Phase 2 review in a report¹. The report focused on the process of developing and implementing ADs, and ensuring compliance. Their findings and recommendations do not fundamentally change the AD process, but provide suggested enhancements and improvements. The response</p>	<p>b. The AD CRT documented its findings and recommendations from the Phase 2 review in a report¹. The report focused on the process of developing and implementing ADs, and ensuring compliance. The findings and recommendations do not fundamentally change the AD process, but provide suggested enhancements</p>	<p>Concur, revised accordingly (paragraph was reformatted to paragraph 1-4b)</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				to some of those recommendations is addressed in this AC.	and improvements. The response to some of those recommendations is addressed in this AC.	
21	ARSA	Para 1-5c	Grammatical correction, the AD CRT is an “it”, not a “their”	<p>c. The AD CRT acknowledged in their report that the AD-friendly SB initiative,¹ developed in 2001 between the FAA and a commercial transport airplane DAH, has improved the format and quality of SBs IBR’d in an AD. By applying agreed upon principles for how to write 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 the AD in lieu of rewriting the SB information in the AD itself.</p>	<p>c. The AD CRT’s report acknowledged that the AD-friendly SB initiative,¹ developed in 2001 between the FAA and a commercial transport airplane DAH, has improved the format and quality of SBs IBR’d in an AD. 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 the AD in lieu of rewriting the SB information in the AD</p>	Concur, revised accordingly (paragraph was reformatted to paragraph 1-4c)

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					itself.	
22	ATA	Para 1-5c	Revise as recommended	Recommend expanding this new paragraph for balance with the CRT recommendations applicable to “AD-Friendly” and “User-Friendly” SBs.	<p>“..., and key actions in the AD in lieu of rewriting the SB information in the AD itself. The AD CRT also recommended that, in addition to facilitating incorporation by reference, AD-friendly SBs be further improved to ensure that they are user-friendly¹ The response to that recommendation also is addressed in this AC.”</p> <p>¹ <i>Process Review Technical Report – A review of the Title 14, Code of Federal Regulations, part 39 airworthiness directives process for commercial airplanes, dated July 8, 2009, Recommendation 1, page 8.</i></p>	Partially concur. Paragraph (reformatted to paragraph 1-4b) was revised to include which specific recommendations are being addressed within this AC.
23	ATA	Para 2-2	Revise as recommended	Previously, ATA recommended stating in this	“The FAA’s Airworthiness Directive	Concur. Paragraph 2-1 (reformatted to paragraph

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>paragraph that ‘ex parte does not apply to DAH ARs. This is a true statement. Since the recommendation was not incorporated, recommend the revising this paragraph as shown as an alternative – also true.</p> <p>In Lead Airline process evolutions, it’s not unusual for an AR to claim ‘ex parte’ as the reason for not participating.</p> <p>Reference Chapter 3 of the AD Manual.</p>	<p>Manual, FAA-IR-M-8040.1, Chapter 3, and 14 CFR part 11, appendix 1, provide information on ex parte communication, which applies to FAA employees.”</p>	<p>2-12) was moved from being its own chapter to being placed at the end of Chapter 3 (reformatted now to Chapter 2) and revised as follows:</p> <p>“2-12. Ex Parté.</p> <p>a. During AD rulemaking, an ex parte contact is any communication between the FAA (not FAA designees) and someone outside the government regarding a specific AD action before the final rule is published or the NPRM is withdrawn. If ex parte communication occurs, the FAA will place a record of the contact into the AD docket for all parties to view.</p> <p>b. The FAA’s <i>Airworthiness Directive Manual</i>, FAA-IR-M-8040.1, Chapter 3, and 14 CFR part 11, appendix 1, provide information on ex parte communication. Topics include the meaning of an ex parte contact, an explanation</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						of improper contact, and helpful precautions and practices during the AD rulemaking process (i.e., prior to issuance of notice, during the comment period, after the comment period closes, and after a meeting is announced to the general public).”
24	ARSA	Para 3-1	Clarity—reorganized words and made it clear that SBs are not the “subject of an AD”, an unsafe condition is the “subject”!	This chapter provides best practices and recommendations for DAHs on how to improve the quality and usability of SBs that will be the subject of an AD action. It also provides guidance for streamlining the SB development and revision processes for such SBs.	This chapter provides best practices and recommendations on how DAHs can improve the quality and usability of SBs that will be IBR’d in an AD. It also provides guidance for streamlining the SB development and revision processes.	Partially concur. This AC applies to IBR’d SBs and SBs that are referred to in an AD action. Paragraph 3-1 (reformatted to paragraph 2-1) was revised for clarity as follows: “ 2-1. General. This chapter provides best practices and recommendations on how DAHs can improve the quality and usability of SBs associated with an AD action. It also provides guidance for streamlining the SB development and revision processes for such SBs, and provides references for where to find information on ex parte communication.”
25	UPS	Sections 3-	Service Bulletins written	The guidance on general		No disposition necessary.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
		1 thru 3-8, Appendices A, B, & C	using the guidance provided in Sections 3-1 through 3-8 and in Appendices A, B and C would offer significant improvement in regards to clarity of the work instructions.	notes and the clarification of the terms ‘refer to’ and ‘in accordance with’ provides a consistent understanding of the intent of these terms. Adoption of the guidance in these sections will be a significant positive step towards improving AD compliance intent in service bulletins.		
26	ARSA	Para 3-2a	Clarity and simplification of the language; the SB is not the “thing” that must be complied with – the AD is the RULE that the owner/operator must follow.		<p>a. A SB should be written so owners/operators understand the items that are required for compliance with the associated AD. The following SB improvements will be discussed further in this chapter:</p>	<p>Partially concur, revised as follows (reformatted to paragraph 2-2a):</p> <p>“a. A SB that may be referenced in an AD as an additional source of information about the unsafe condition or IBR’d in an AD, should be written so owners/operators can understand and follow the accomplishment instructions. The following SB improvements will be discussed further in this chapter:”</p> <p>For clarity, paragraph 1-7 was also added to identify that only SBs IBR’d in an AD are</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						mandatory.
27	ATA	Para 3-2a(2)	Revise as recommended	Recommend adding the reference to airworthiness as shown, which relates the SB action to a design change and is consistent with current practices for developing SBs and ADs.	“Including a clear and concise description of the safety intent of the SB as well as a description of the new configuration change that removes the unsafe condition and restores airworthiness . See paragraph 3-4 of this AC.”	Partially concur. Paragraph 3-2a(2) (reformatted to paragraph 2-2a(2)) was revised as follows: “Including a clear and concise description of the safety intent of the SB as well as a precise description of the new configuration that removes the unsafe condition. See paragraph 2-4 of this AC.”
28	Airbus	Chapter 3.2a(6)	The language as used in sentence (6) may allow operators to use practices that underwent only operator internal acceptance procedures.	FAA may be not involved in acceptance procedures for operator practices.	Airbus proposes to replace “...operator accepted practices” by “Authorities accepted operator practices”	Partially concur, paragraph (reformatted to paragraph 2-2a(5)) was revised for clarity as follows: “Allowing use of industry standards or operator practices acceptable to the FAA. See paragraph 2-9 of this AC.”
29	ATA	Para 3-2b	Revise as recommended	Recommend adding the text shown to complete the thought (ie, revision is not required, but may be performed).	“Previously issued SBs are not required to be revised to include the concepts presented in this AC, but may be revised according to those concepts upon a DAH-operator agreement. ”	Partially concur. Paragraph 3-2b (reformatted to paragraph 2-2b) was revised for clarity as follows: “The concepts presented in this AC apply to development of new or revised SBs and are not intended to be applied retroactively, except when

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						deemed necessary by the DAH and FAA (e.g., see paragraph 2-4b of this AC).”
30	Ken Dickenson	Page 5 Para 3-2b	It is stated that “Previously issued SBs are not required to be revised to include the concepts presented in this AC”. The absence of explanations makes this statement questionable.	<ul style="list-style-type: none"> – There is no rationale to explain this instruction. – The future revisions of previously issued SBs are not clearly considered. – New inspections may subsequently become repetitive and thus may need to be included into the ALS and/or the MRBR and/or the MPD revisions. 	<ul style="list-style-type: none"> – We recommend to clarify whether the intent of this AC applies or not to future revisions of previously issued SBs. We recommend it can. Refer also to comment on page 10, para. 3-9.b.(2). 	<p>Concur. Paragraph 3-2b (reformatted to paragraph 2-2b) was revised for clarity as follows:</p> <p>“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).”</p>
31	ARSA	Para 3-3b	Clarity to ensure the FAA and the DAH understand that there is “no choice” in addressing an unsafe condition in a SB IBR’d; it is not “mandated” by the AD, it IS the AD!@!@#\$\$%^&*(<p>b. The content of a SB mandated by an AD should address resolving the unsafe condition identified in the AD. Sometimes, however, procedures are already published in other DAH documents which accomplish this goal. As such, the following guidelines are provided to help determine what procedures should, or should not, be included in a SB</p>	<p>b. The content of a SB IBR’d in an AD must set for the items required for compliance to address the unsafe condition(s). Procedures for addressing the unsafe condition should not be published in other DAH documents; this practices requires obtaining an AMOC for any changes to those documents. Therefore,, the following guidelines are provided to help determine what</p>	<p>Partially concur. Paragraph (reformatted to paragraph 2-3b) was revised for clarity as follows:</p> <p>“The accomplishment instructions in a SB should address resolving the unsafe condition identified in the AD. Sometimes, however, procedures are already published in other DAH documents which accomplish this goal. As such, the following guidelines are provided to help determine</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					<p>procedures should, or should not, be included in a SB:</p>	<p>what procedures should, or should not, be included in a SB:”</p> <p>Paragraph 3-3b(2) (reformatted to paragraph 2-3b(2)) was revised as follows to address the AMOC issue for changes to documents referenced in an IBR’d SB:</p> <p>“Do not duplicate (e.g., copy) the following types of procedures in a SB. Instead of repeating the procedure, refer to the other document(s) for that task. Be careful, however, because any change to the procedures referenced in the other document(s) in a SB that will be required for compliance with an AD will require an AMOC approval.”</p> <p>In addition, a new paragraph 1-7b was added as follows to address IBR’d SBs being mandatory:</p> <p>“b. The action(s) specified in an AD are intended to detect,</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						prevent, resolve, or eliminate the unsafe condition. Those actions can either be written directly into the regulatory portion (“body”) of the AD, or another document, such as a SB, can be referenced in the AD body and submitted to the OFR for IBR approval. Compliance with a SB that is IBR’d in an AD is mandatory.”
32	ATA	Para 3-3b	Revise as recommended	Specificity	“The content of a SB mandated by an AD should specify a method for resolving the unsafe condition”	Partially concur, paragraph (reformatted to paragraph 2-3b) was revised as follows: “The accomplishment instructions in a SB should address resolving the unsafe condition identified in the AD.”
33	ATA	Para 3-3b(1)(b)	Revise as recommended	For clarity	“Critical requirements (e.g., torque values, gap measurements, electrical bonding, etc.) in procedures that exist in non-approved manuals. List in the SB the critical requirements that must be met to comply with the AD and refer ...”	Concur, revised accordingly (paragraph reformatted to paragraph 2-3b(1)(b))

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
34	Ken Dickenson	Page 6 Para 3-3b(1)b	<p>It is indicated that the SB should include critical requirements (e.g., torque values, gap measurements, electrical bonding, etc.) in procedures that exist in non-approved manuals. The absence of explanations makes this statement unclear and questionable</p>	<ul style="list-style-type: none"> – There is no detail about the possibility to revise the critical requirements in the procedures that exist in non-approved manuals and the situation once the revision has been completed. – There is a need to explain the differences with the other critical requirements: A great deal of critical requirements like torque values, gap measurements, electrical bonding, etc. are published in non-approved manuals for which compliance is not controlled by a mandatory requirement such as in ADs. Deviations from these critical requirements are not controlled like for mandatory requirements included either in an AD or in the ALS. The organizations not participating in the aircraft certification process have no visibility on the assumptions chosen for certification and on the mandatory instructions when the associated airworthiness limitations exceed the 	<ul style="list-style-type: none"> – We recommend to clarify the case of revised non-approved manuals. – We recommend to impose the (exhaustive) identification of these critical requirements during the initial airplane certification. Then, the inclusion of a requirement in the ALS (extension of the CDCCL concept) to protect them is recommended. – We recommend to include an instruction in this AC to impose the update of any other manual to take into account the new/revised critical requirements introduced by the SB (or notice of future manual revision via recorded e mail). 	<p>Partially concur. The scope of this AC is for procedures required by an AD to resolve an unsafe condition. Chapter 6 (reformatted to chapter 5) addresses how to ensure that an AD mandated configuration is not changed with maintenance.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>aircraft operational life. It is a fact that some organizations other than the Type Certificate holder, the Primary Certification Authority have activities (development, approval or performance of maintenance, repairs or alterations), which may unintentionally violate the integrity of the original aircraft type design. It is therefore essential to make this information visible to preclude the development of unsafe conditions: The aviation industry should not rely in the first place, and only, on the continued airworthiness process to ensure the required level of protection of citizens when it is known that some operator normal practices may jeopardize the compliance with FAR 25 airworthiness requirements. There should not be different ways of managing similar critical requirements.</p>		
35	Garmin	Page 6, Paragraph	“Critical requirements (e.g., torque values, gap	Paragraph 3-9 is titled “Critical Task	Recommend:	Partially concur. Paragraph 3-9 (reformatted to paragraph

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
		3-3.b.(1)(b)	<p>measurements, electrical bonding, etc.) in procedures that exist in non-approved manuals. List the critical requirements that must be met to comply with the AD in the SB and refer to (see paragraph 3-10 of this AC) the procedure in the non-approved manual as an accepted procedure to achieve those requirements.”</p> <p>Use of the term “critical” may not be consistent with other uses of this term within this document.</p>	Differentiation”. It is unclear whether the “critical tasks” in paragraph 3-9 are related to the “critical requirements” paragraph 3-3.b.(1)(b).	<ul style="list-style-type: none"> • Replacing “critical” with “important” or • Defining “critical” as it is used in “critical task differentiation” and “critical requirement” in paragraph 1-2 Definitions 	2-10) was revised to better explain “critical” task differentiation.
36	ARSA	Para 3-3b(2)	This is the first place where we start trying to distinguish between RC and other steps; it should be clear that is what we are trying to do.		Do not include (e.g., copy) information that is not directly related to addressing the unsafe condition. For instance, the following types of documents need only be “referred to” in the IBR’d SB.	Non-concur. The “RC” concept is only one concept that can be applied to improve the usability of SBs. The intent of paragraph 3-3b(2) (reformatted to paragraph 2-3b(2)) of the AC is to provide guidance for when not to duplicate procedures in a SB that are contained in other documents.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
37	ATS /Quality	Page 6/ paragraph 3-3 b(2)	The AC should provide additional precautions regarding the referencing of other documents within SB instructions.	We have seen many examples where a SB will refer to another document and technicians are burdened with trying to determine which portions of the other document are applicable or required for the SB. In many cases, the referred-to document provides no instruction but simply refers to other documents. There are examples where a technician ends up referencing 5 or 6 documents and is required to integrate the applicable sections of each.	Additional precautions, such as the following, should be provided to SB authors: a) Do not provide a blanket reference to another document when only portions of that document are applicable. Refer to specific sections that are applicable. b) Do not refer to documents that simply refer to other documents. Instead refer to the end document that provides the actual instruction. c) Do not refer to documents that do not provide sufficient information i.e. “Cad plate per Boeing SOPM 20-42-05.” (SOPM 20-42-05 does not specify Type of cad plating for a specific part). d) Do not refer to documents where the	Partially concur. A new paragraph (reformatted to paragraph 2-3c) was added as follows: “c. If a SB references other documents that will be required for compliance with an AD (reference paragraphs 2-9 and 2-10 of this AC), include the revision level and date of the other document(s). Use the following guidelines when referring to other documents in a SB: (1) Specify the specific section(s) of the document that are applicable. Do not provide a blanket reference to the other document if only portions of the other document are applicable. (2) Do not refer to documents that simply refer to other documents. Instead refer to the end document that provides the actual instruction. (3) Do not refer to documents that don’t provide

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					<p>sequence of steps within the document must be integrated into the sequence of steps within the SB. Instead, refer to specific steps or operations within the referenced document in sequence with the SB steps.</p> <p>e) Do not refer to manufacturer process specifications which also include specific personnel qualification or quality control requirements.</p> <p>f) Do not refer to other documents with a qualifying statement such as “Unless otherwise specified by [document X], the following general notes apply...” If the applicability of another document must be determined, then this should be done by the DAH and</p>	<p>sufficient information to perform the task (e.g., “Cad plate per SOPM AA-XX-YY” if document SOPM AA-XX-YY does not specify the type of cad plating for the specific part).”</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					provided as instruction to the technician.	
38	ATA	Para 3-3b(2)(a)	Revise as recommended	Believe the revision shown is what the AC drafter intended when combining the previous sub-para (d) (now deleted) with this sub-para. In any case, this section should clearly address the SBs / manuals of other manufacturers & suppliers.	“Procedures that exist in other DAH, supplier, or component manufacturer SBs or manuals accessible by other parties”	Partially concur, paragraph (reformatted to paragraph 2-3b(2)(a)) was revised for clarity as follows: “Procedures that exist in other documents accessible by other parties (e.g., DAH SBs/manuals, component SBs, and supplier SBs).”
39	ATA	Para 3-3b(2)(c)	Revise as recommended	Redundant	“Tests for all components or systems that may be disturbed during incorporation of a SB. A SB should specify only the testing necessary to ensure the new or modified system ...”	Concur, revised accordingly (paragraph reformatted to paragraph 2-3b(2)(c))
40	Airbus	Chapter 3.4.a 3.4.a(1) 3.4.a(2) 3.4.a(2)(a) 3.4.b	While it is supported to include in mandated Service Bulletins (SB) information about the safety intent and specific design features resulting from implementing the SB, Airbus questions the necessity for specific paragraphs “Safety Intent” and “Design	Implementing the guidance as proposed would require Airbus, and –presuming - other non-US manufacturers to adapt their SB structures to satisfy one national market’s requirements only. Further, introducing 2 additional “boxes” is only one formal approach to identify specific information,	Airbus proposes to revise AC section - 3.4.a to read: <i>“a. When drafting an SB that is planned to be IBR’d in an AD, the DAH should include a paragraph describing the “Safety Intent,” and for ADs that will change the configuration of a part,</i>	Non-concur. The intent of this section of the AC is to have specific sections entitled “Safety Intent” and “Configuration Description” in a SB that will be IBR’d in an AD, not just the general information requested for each topic.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>Configuration”. Our SBs authoring rules include this information in the “reason/description/operational repercussions” paragraph that is standard in any Airbus SB and worldwide accepted as sufficient to cover the issues. Airbus would prefer to include some flexibility in the AC text to allow manufacturer specific solutions.</p>	<p>but without substantial benefit. Our experience shows that airline, maintenance engineering and MRO personnel is highly qualified and able to derive the information from an integrated SB section.</p>	<p><i>the “Configuration Description.” This paragraph is intended to...</i></p> <p>- 3.4.a(1) to read: <i>“(1) The “Safety Intent” description should explain that...”</i></p> <p>- 3.4.a(2) to read: <i>“(2) If accomplishing the SB will change the configuration of a part, a “Configuration Description” should...”</i></p> <p>- 3.4.a(2)(a) to read: <i>“(a) Be limited to the features that will prevent development or recurrence of the unsafe condition, once the configuration has been implemented. The description may be...”</i></p> <p>- 3.4.b to read: <i>“b. If SBs originally approved as reliability or economic enhancements subsequently are found to potentially provide correction of a safety issue, the SB should be</i></p>	

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					<i>revised to include notes (see paragraph 3-6 of this AC), and the “Safety Intent” and “Configuration Description” per the guidance in this AC.”</i>	
41	ATA	Para 3-4a	Revise as recommended	Recommend adding for completeness. The safety intent paragraph should address components – not just parts.	“... and for ADs that will change the configuration of a part or component , “Configuration Description.” ...”	Non-concur. The term “component” was considered redundant with the term “part” already used in this section of the AC.
42	ARSA	Para 3-4a(1)	Add a sentence for clarification		This paragraph should be a mirror to the FAA’s description of the unsafe condition; it should describe how to “fix” the unsafe condition described by the Administrator.	Non-concur. The sentence used in the AD to describe the unsafe condition must comply with other requirements, such as the Office of the Federal Register, and therefore may not be a “mirror” of what is placed in the SB.
43	ATA	Para 3-4a(1)	Revise as recommended	Recommend adding “clear” as the technical objective cited in current SBs are often too general. For example, a current SB says that its intent is, “to mitigate water damage of the box.” A clear statement would say, “to prevent water from dripping down from the drip shield	“...The description should be a succinct and clear statement of the specific technical objective ...”	Concur, revised accordingly (paragraph reformatted to paragraph 2-4a(1))

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				onto box P/N XXX.”		
44	GE – GR Pubs	6, 3-4 a.(1)	Safety Intent – Need more specifics in implementation (i.e. location in paragraph structure of SB, differentiation from required “Reason” content.	Ensure ease of use, standardization of interpretation, and consistent results in implementation.	<ol style="list-style-type: none"> 1. Best approach would be to simply provide “safety intent” guidance for “Reason” paragraph of SB. 2. Next best approach would be to define placement of “Safety Intent” within SB structure and describe content specifics different from Reason paragraph. 	<p>Concur. Paragraph 3-4a(1) (reformatted to paragraph 2-4a(1)) was revised for clarity as follows:</p> <p>“The “Safety Intent” paragraph should explain what accomplishment of the SB is intended to do (i.e., prevent, resolve, or otherwise remove the unsafe condition). The description should be a succinct and clear statement of the specific technical objective of the instructions. For example, “The safety intent of this SB is to prevent electrical arcing between a wire bundle and control cables in the main wheel well, which, if not corrected, could cause a hydraulic or electrical fire.” The goal is to explain in technical terms what is the affected part and failure mode or malfunction, and how it will be prevented, resolved, or otherwise removed by accomplishing the SB. This differs from the “Reason”</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						paragraph in most SBs which typically provide the history and reason for taking the SB action.”
45	ATA	Para 3-4a(2)	Revise as recommended	Recommend adding for completeness. The Configuration Description paragraph should address components – not just parts.	“If accomplishing the SB will change the configuration of a part or component , a “Configuration Description” paragraph ...”	Non-concur. The term “component” was considered redundant with the term “part” already used in this section of the AC.
46	ATA	Para 3-4a(2)	Revise as recommended	For specificity	“...provide a succinct description of the design change in terms of the new material (e.g, hardware or software) that will result from accomplishing the instructions. ...”	Partially concur, paragraph (reformatted to paragraph 2-4a(2)) was revised as follows to give an example of the level of detail: “If accomplishing the SB will change configuration, a “Configuration Description” paragraph should be included to provide a succinct, high-level description of the design change that will result from accomplishing the instructions. For example, “Incorporating this SB results in installing a new wire bundle (P/N 123456) between the J135 and J234 connectors, and installing several standoffs of increased length

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						to hold the wire bundle clear of contact.” The “Configuration Description” should:”
47	GE – GR Pubs	7,3-4 a.(2)	Configuration Description – Need more specifics in implementation (i.e. location in paragraph structure of SB, differentiation from required “Description” section.	Ensure ease of use, standardization of interpretation, and consistent results in implementation.	<p>1. Best approach would be to provide “Configuration Description” guidance for “Description” paragraph of SB.</p> <p>2. Next best approach - define placement of “Configuration Description” within SB structure and describe content specifics different from Description paragraph.</p>	Concur. Paragraph 3-4a (reformatted to paragraph 2-4a) was revised to address where the paragraphs should be placed in the SB. Paragraph 3-4a(2) (reformatted to paragraph 2-4a(2)) was revised to provide an example of what the “Description Configuration” statement may look like.
48	ARSA	Para 3-4a(2)(b)	Clarification of the second sentence	The “Configuration Description” should not be used as the final determinant of compliance with an AD.	While, the “Configuration Description” should not be used as the final determinant of compliance with an AD, if it is IBR’d by the AD, it will enhance the maintenance of the mandated configuration.	Partially concur, paragraph 3-4a(2)(b) (reformatted to paragraph 2-4a(2)(b)) was revised for clarity as follows: “Assist in understanding the post-installation mandated configuration. The “Configuration Description” may guide, but cannot be used as the final determinant of compliance with an AD.”

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
49	ATA	Para 3-4a(2)(b)	Revise as recommended	ATA again recommends this insertion. If not added, DAHs may, over time, minimize their efforts to provide a good description, or drop it altogether.	“The “Configuration Description” may guide, but cannot be used as the final determinant of compliance with an AD.”	Concur, revised accordingly (reformatted to paragraph 2-4a(2)(b))
50	American Airlines	Pg. 7 Para 3-4.a. (2)(b)	Paragraph regarding the post-mandated configuration must have additional wording to explain that once the alteration has been completed and the type design changed that any further repairs or alterations to that type design are accomplished using normal major repair or alterations CFR procedures. AC 20-XXX refers to eliminating the unsafe condition in a number of places. This is exactly what an AD is for: Part 39 “The FAA issues ADs when an unsafe condition is found to exist in a product and the condition is likely to exist or develop in other products of the same type design. ADs are used to	Once a major alteration is complete and the type design is changed the AD is complete. Any further work to the type design is accomplished using normal maintenance, repair or alteration procedures. The proof being that articles with SBs that happen to be ADs, once incorporated in production by the DAH, those articles are not included in the effectivity of the AD. The AD is done; the action has been taken to resolve the unsafe condition. Refer to Assistant Chief Counsel, Regulations and Enforcement Division, AGC-20, Legal Interpretation 1977 WL364155 (D.O.T.) that states "the AD might ...require installation of a placard...AD compliance would have been completed	Add a sentence that explains that once the post-installation configuration has been completed and the type design changed, any future maintenance, repairs or alterations are done using normal maintenance, repair or alteration CFR procedures.	Non-concur. Recommendation disagrees with AGC interpretation published April 14, 2011 (Volume 76, Number 72) which states “...Once the AD requirements are met an operator may only revert to normal maintenance if that maintenance does not result in changing the AD-mandated configuration.”

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>notify aircraft owners and operators of unsafe conditions and the actions required to resolve those conditions." Once eliminated, the AD is done, the Type Design changed and any further maintenance, repair or alterations are done per existing CFR procedures, not Part 39 and no AMOC is required.</p>	<p>when the placard was installed...and one logbook entry to that effect would have completed the AD recording...Subsequent checks would then be made pursuant to the placard...rather than the AD and there would be no requirement to record each check as a matter of AD compliance." This legal interpretation states once the alteration is done the AD is done and any further maintenance is not per an AD requirement. Refer to 8900.1 Chapter 10 Volume 6 Section 3 which specifies in multiple locations that ADs are either one-time (once completed, are done) or recurring ... There are many references to "One-time ADs" in FAA documents. One-time cannot mean anything other than once. Also, AD Manual FAA-IRM-8040.1C which has multiple references to onetime ADs. Also, see disposition of public</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>comments regarding AD 74-08-09 - "a. With regard to the required installation of placards and ashtrays, those are one-time actions, requiring no additional 'repetitive' installations. Once they are installed, operators merely need to document the appropriate maintenance records to indicate this."</p> <p>Also, AC 21- 2J which states "Compliance status of all one time Airworthiness Directives... ”meaning one-time, was it done or not.</p> <p>Also, refer to FAA Assistant Chief Counsel for Regulations, AGC-200 letter dated March 26, 2008 regarding interpretation of CFR 91.7(b) and 3.5(a) which states "...NTSB case law has recognized the difference between a new aircraft and one that has been in service, i.e., an aircraft may have accumulated a certain amount of wear and minor defects and still be considered to substantially conform to its type certificate</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>and therefore be airworthy, if it still is in condition for safe operation. Administrator v. Calavaero, 5 NTSB 1099, 1101 (1986) ("However, we do not agree that every scratch, dent, 'pinhole' of corrosion, missing screw, or other defect, no matter how minor or where located on the aircraft, dictates the conclusion that the aircraft's design, construction, or performance has been impaired by the defect to a degree that the aircraft no longer conforms to its type certificate.") Important in the NTSB's reasoning was that the FAA had not shown that "the alleged defects or discrepancies had had an adverse impact on the level of safety..." and "An airplane that has been in service a number of years clearly is not in exactly the same condition as when it left the factory. Nevertheless, if an airplane has properly been inspected and maintained in accordance with 14 CFR</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>parts 91 and 43, it should substantially conform to its type certificate to the extent that will provide a level of safety that conformity with its type certificate is intended to insure." And, "We agree...that maintenance performed must restore an aircraft to its 'original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration and other qualities affecting airworthiness...the maintenance rules do not require that an aircraft that has undergone maintenance be restored to a 'new' or 'like new' condition." Part 39.9 reads "If the requirements of an airworthiness directive have not been met, you violate Sec. 39.7 each time you operate the aircraft or use the product." The requirements of an alteration AD are to change the type design to a "safe type design. That "safe type design" is</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>not included in the effectivity of the AD. That is why products in the production line with the AD incorporated are not in the AD effectivity; they are the new type design mandated by the AD. Whether the new type design was incorporated in the production line or by the operator, the result is the same; a type design that is not part of the AD. There are no words in Part 39.9 regarding “continued compliance by the aircraft operator with the AD requirements regarding ADs alteration ADs. In fact, the opposite is the case; it states “... “have been met”. Once the alteration required is completed and the type design changed the requirements have been met. If the AD requires conditions (i.e. must have 10,000 lbs. of fuel in the center tank) or limitations (i.e. cannot fly above 35,000 feet), then these would be examples of continued compliance</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>requirements. If the AD has inspection requirements, either one-time or recurring, then these would be examples of continued compliance requirements. The fact that alteration ADs are “one-time” or “terminating action” is further supported by the FAA AD Manual FAA-IRM-8040.1C dated May 17, 2010, page 51 section f. titled Terminating Action. It states “terminating action is mandated when we have determined that long-term continued operational safety is better ensured by design changes that remove the source of the problem.” (“If the AD requires a one time action such as an inspection, modification”). FAA AD Manual FAA-IR-M-8040.1C, dated May 17, 2010, pages 17, 18, 19, 20, 36 and 38, which states “terminating action” in multiple places including “terminating action (for example, a modification)”.</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>Additionally, AC 39-7 dated 11/16/95. (“Another aspect of compliance times to be emphasized is that not all AD's have a one-time compliance requirement.”). And Order 8900.1, Chapter 10, Volume 6, Section 3. (“The information must be specific enough to identify each AD by the... One time or recurring.”), (“Spot check of one-time, and recurring ADs”). And AC 21-2J dated 6/27/00. (“Compliance status of all one time Airworthiness Directives (AD), AD amendment number, date or time of compliance, as applicable.”). FAA-AD 99-19-27 (“modification constitutes terminating action for the requirements of this AD”), (“which would terminate the requirements of this AD.”). FAA website URL:http://www.faa.gov/aircraft/air_cert/continued_operation/ad/ad_content/ Airworthiness Directive (AD) Content & Format Guidelines “However, each</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>AD is intended to resolve the unsafe condition. For interim action ADs, action that terminate the interim action are incorporated into an AD when they are determined.” FAA website URL:http://www.faa.gov/aircraft/air_cert/continued_operation/ad/type_pub/ If time by which the terminating action must be accomplished is too short to allow for public comment (that is, less than 60 days), then a finding of impracticability is justified for the terminating action, and it can be issued as an immediately adopted rule. FAA Safety Briefing March/April 2011 “Going Beyond Preflight” by Tom Hoffman dated April 2011. (“...was required by a one-time AD ...”). May 13, 2011 Aircraft Inspections by Richard D. Mileham, Airworthiness Safety Program Manager, Great Lakes Region. (“AD was a one-time compliance AD”), (“Not all AD’s are written</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>with a onetime compliance action!!!”), (“Many AD’s have recurring or repetitive compliance requirement...”) FAA InFO dated 12/15/10 from Flight Standards (“which terminating action would have been accomplished” FAA-G-8082-19, Inspection Authorization Guide, dated 2010 (“onetime Airworthiness Directive compliance entry. Installed FleetWing Service Kit Sk1910 as required by AD. No recurring action required.”) Disposition of public comments on AD 74-08-09. (“With regard to the required installation of placards and ashtrays, those are one-time actions, requiring no additional “repetitive” installations. Once they are installed, operators merely need to document the appropriate maintenance records to indicate this. FAA Legal Opinion Assistant Chief Counsel, Regulations and</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>Enforcement Division, AGC-20, Legal Interpretation 1977 WL364155 (D.O.T.) that states "the AD might ...require installation of a placard...AD compliance would have been completed when the placard was installed...and one logbook entry to that effect would have completed the AD recording...Subsequent checks would then be made pursuant to the placard ...rather than the AD and there would be no requirement to record each check as a matter of AD compliance." This legal interpretation states once the alteration is done the AD is done and any further maintenance is not per an AD requirement; but to the maintenance program. Also, refer to FAA Assistant Chief Counsel for Regulations, AGC-200 letter dated March 26, 2008 regarding interpretation of CFR 91.7(b) and 3.5(a) which states "...NTSB case law has</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>recognized the difference between a new aircraft and one that has been in service, i.e., an aircraft may have accumulated a certain amount of wear and minor defects and still be considered to substantially conform to its type certificate and therefore be airworthy, if it still is in condition for safe operation. Administrator v. Calavaero, 5 NTSB 1099, 1101 (1986) ("However, we do not agree that every scratch, dent, 'pinhole' of corrosion, missing screw, or other defect, no matter how minor or where located on the aircraft, dictates the conclusion that the aircraft's design, construction, or performance has been impaired by the defect to a degree that the aircraft no longer conforms to its type certificate.") Important in the NTSB's reasoning was that the FAA had not shown that "the alleged defects or discrepancies had had an adverse impact on the level</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>of safety..." and "An airplane that has been in service a number of years clearly is not in exactly the same condition as when it left the factory. Nevertheless, if an airplane has properly been inspected and maintained in accordance with 14CFR parts 91 and 43, it should substantially conform to its type certificate to the extent that will provide a level of safety that conformity with its type certificate is intended to insure." And, "We agree...that maintenance performed must restore an aircraft to its 'original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration and other qualities affecting airworthiness...the maintenance rules do not require that an aircraft that has undergone maintenance be restored to a 'new' or 'like new' condition." The maintenance of a particular</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>type design is per Part 43. An alteration AD simply specifies an alteration that must be done and the time frame in which it must be accomplished. That is it. If the requirements of an airworthiness directive have not been met, you violate §39.7 each time you operate the aircraft or use the product. These words cannot be read to mean other than what it says; (if the requirements of an alteration AD have been met (the alteration accomplished and the type design changed) you cannot violate 39.7.)</p>		
51	Airbus	Chapter 3.4.a.(2)(d)	<p>To identify, in the safety intent description, all “specific parts, sub-assembly, or assembly of a component affected by the safety intent.” May make that safety intent description unreadable.</p>	<p>The SB should be easy to read and comprehensive. The safety intention description does not replace the accomplishment instructions and, as such, does not need to include too highly detailed information.</p>	<p>Airbus suggests to include, in the safety intent description, a reference to the material information in the SB as appropriate.</p>	<p>Non-concur. The material information in a SB may not be easily clear what the new configuration will be since it is intended to be a materials list. An example was added to paragraph 3-4a(2) (reformatted to paragraph 2-4a(2)) to help see what a Configuration Description statement might look like in a SB.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
52	ATS /Quality	Page 7/ Paragraph 3-5	Language commonly used within SB's is "Put airplane back to a serviceable condition." This should be added as an example of an ambiguous statement.	This statement provides no criteria or instruction regarding what needs to be restored or what is considered "serviceable". The instruction should be revised to provide steps to restore specifically what was disturbed in support of the SB.	Add "Put airplane back to a serviceable condition" as an example of an ambiguous statement.	Non-concur. "Serviceable condition" is considered acceptable (i.e., unambiguous) language with our legal counsel.
53	ARSA	Para 3-5a	Just a reminder that the entire service bulletin may not be impacted.		When writing areas in a SB that are required for compliance with an AD, avoid unclear and confusing terms.	Partially concur, revised paragraph (reformatted to paragraph 2-5a) for clarity as follows: "a. Avoid unclear and confusing terms when writing a SB. See Table 1 below for examples of ambiguous language used in SBs and how to rewrite them for clarity"
54	ATA	Para 3-5b(2)	Revise as recommended	Clarity	"Tools. Use computing tools or checklists to prevent, or search for and eliminate ambiguous terms."	Concur, revised accordingly (reformatted to paragraph 2-5b(2))
55	ATA	Para 3-5b(3)	Revise as recommended	Revise as shown to avoid inferring that the DAH "approves" its own SBs.	"Processes. Implement processes during the authoring, review, validation, and DAH-	Concur, revised accordingly (reformatted to paragraph 2-5b(3))

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					internal approval of SBs that will prevent the use of ambiguous terms.”	
56	ATS /Quality	Page 8/ Paragraph 3-6	The AC does not address possible conflicts between SB notes and notes found within referenced documents.	Example: Boeing AMM contain instruction that pertains to all procedures within the document, i.e. standards torques in Chapter 20, allowance in Introductory section to use equivalent tools, etc. SB may be intended to be more restrictive.	Provide guidance to specifically address within the SB any restrictions applicable to general notes or allowances found within referenced documents. Give order of precedence between SB instruction and referenced documents.	Concur. Paragraph was reformatted to paragraph 2-6. Added a new paragraph 2-6d (existing paragraphs in 2-6 were reformatted to allow for this new paragraph) as follows: “ d. If referring to other documents within a SB, ensure that the notes specified in the referenced document do not conflict with notes in the SB. If there is a conflict, add a note in the SB to specify which note takes precedence.”
57	ARSA	Para 3-6a	Last sentence	Consistency with terms	Drafters, therefore, are strongly encouraged to review any notes to ensure they are not Required for Compliance.	Non-concur, each section in chapter 3 (reformatted to chapter 2) is meant to be an independent improvement to SBs. The intent of paragraph 3-6a (reformatted to paragraph 2-6a) is to address not placing critical steps in a note, not to include the RC concept.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
58	ATA	Para 3-6a	Revise as recommended	Recommend revising as shown for clarity and a positive tone.	“Notes are generally used to provide information related to the accomplishment of instruction steps. The “notes” concept acknowledges that air carriers may use their judgment and maintenance programs to accomplish certain SB steps. However, notes should not specify actions envisioned for IBR in an AD as a requirement. Drafters, ...”	Non-concur. Recommended language implies that accomplishment of actions in a note is always subjective, which is untrue. Appendix B provides examples of notes that allow flexibility.
59	Garmin	Page 6, Paragraph 3-6.a	<p>“Drafters, therefore, are strongly encouraged to review any notes to ensure they don’t contain any critical step(s) for accomplishing the corrective action(s).”</p> <p>Use of the term “critical” may not be consistent with other uses of this term within this document.</p>	Paragraph 3-9 is titled “Critical Task Differentiation”. It is unclear whether the “critical tasks” in paragraph 3-9 are related to the “critical steps” paragraph 3-6.a.	<p>Recommend:</p> <ul style="list-style-type: none"> • Replacing “critical” with “important” or • Defining “critical” as it is used in “critical task differentiation” and “critical step” in paragraph 1-2 Definitions 	Partially concur, revised definition of RC in paragraph 1-6i and paragraph 3-9 (reformatted to paragraph 2-10) for critical task differentiation.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
60	ATA	Para 3-6c	Revise as recommended	ATA again recommends this insertion to allow the use of part specifications, when applicable.	“When possible, write the note such that the SB user has an acceptable level of flexibility (e.g., specify alternative materials and part specifications rather than part numbers, and allow acceptance ”	Non-concur. The intent of the examples given is to identify where flexibility can be given, not that one item specifically should be used in place of another.
61	ARSA	Para 3-6c		Brings the language in line with the regulations and reminds folks that these are TECHNICAL determinations, not just “flexibility”.	Whenever technical acceptable, write notes that allow use of methods, techniques and practices developed under section 43.13. For example, specify material properties, alternative materials and other information that allows flexibility in accomplishing the tasks. Refer to appendix B for examples.	Partially concur, revised paragraph (reformatted to paragraph 2-6c) as follows: “When technically possible, write notes such that the SB user has an acceptable level of flexibility (e.g., specify alternative materials; allow acceptance to use other approved methods, techniques and practices, etc.) to accomplish the tasks. Refer to appendix B for examples.”
62	ATA	Para 3-6d	Revise as recommended	Clarity	“For SBs related to transport airplanes or engines installed thereon, seek lead airline review of the notes, reference paragraph 3-11c(8) of this AC, so that those who will implementing	Concur, revised accordingly (paragraph 3-6d was reformatted to paragraph 2-6e)

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					the SB have an opportunity to make suggestions as necessary.”	
63	GE – GR Pubs	8,3-6 e. Notes	The content of this section seems to contradict normal instruction for Warnings and Cautions	Notes call attention to methods which “make the job easier” – Warnings and Cautions are not notes.	Remove direction for Warnings and Cautions to be part of Notes.	Non-concur. Some design approval holders include such notes.
64	Ken Dickenson	Page 8 Para 3-6e(2) and (4)	It is stated “Describing”/“Specifying” standard tolerances and dimensions/practices. <u>Dissemination and/or duplication of data are sources of data conflicts and human errors.</u>	When there is a need for standard tolerances/dimensions/practices, these should already exist in other manuals. Should there be a need to require compliance with amended/new standard tolerances/dimensions/practices, the manual usually gathering the data should be revised before the AD is issued.	– We recommend to collect data of a same nature in the relevant manual and to refer systematically to this manual when this data is needed elsewhere. No dissemination and no duplication of data. – We recommend to replace “Describing”/“Specifying” by “Referring”.	Partially concur. Revised as follows (paragraph was reformatted to paragraph 2-6f(2)): “Specifying or referring to other documents for standard tolerances and dimensions,”
65	ATA	New para 3-7a	Add new paragraph as recommended	As recommended earlier, figures, illustrations and drawings should be defined in this AC to, for example, avoid confusion.	“a. Figures as used in this AC may include illustrations, drawings and tables.”	Non-concur, paragraph 1-6c already defines figure as recommended.
66	ATA	Para 3-7c	Revise as recommended	Recommend the revisions as shown to illustrate that there are allowable options for specifying tolerances.	“...or in general notes in the service bulletin. Tolerances may be expressed as a dimension value and a	Non-concur. The example in paragraph 3-7c (reformatted to paragraph 2-7c) is intended to identify how a note may identify tolerances. Proposed

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					range of variation , (e.g. “All dimensions given have a tolerance of +/- 5mm unless otherwise stated”), or as a range of dimensions (e.g., “Figures and text provide tolerances as a range of dimensions”). ”	reference to a “range of dimensions (e.g., Figures and text provide tolerances as a range of dimensions) is confusing.
67	ATS /Quality	Page 9/ Paragraph 3-7(c)	The requirement for tolerances should be extended to other types of measurements other than dimensions.	Figures often give other measurements, i.e. torque values, stress relief temperatures, etc. A range of tolerance is necessary.	AC instruction should be revised to state “Tolerances should be included for all measured values.”	Partially concur, paragraph 3-7c (reformatted to paragraph 2-7c) was revised as follows: “Tolerances should be included for measured values (e.g., dimensions, torque values, temperature). ...”
68	ATA	Para 3-7e	Revise as recommended	Revise for consistency with paragraph 3-6 d, above.	“...paragraph 3-11c(8) of this AC) so that those who will implement the SB have an opportunity make suggestions as necessary. ”	Concur, revised accordingly (reformatted to paragraph 2-7e)
69	ATA	Para 3-8	Revise as recommended	Recommend restoring this text to explain why diagrams are useful, and in turn, their purpose.	“...a logic-based diagram (e.g., flowchart) is a useful tool for assisting owner/operators in choosing a corrective action path such as repetitive inspections or a terminating modification. ”	Partially concur, paragraph (reformatted to paragraph 2-8) was revised as follows: “...For such cases, a logic-based diagram (e.g., flowchart) is a useful tool to assist owners/operators in choosing the best corrective

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						path, such as repetitive inspections or a terminating modification, based upon the discovered condition and compliance times.”
70	ATA	Para 3-8a	Revise as recommended	Clarity	“...to requests from operators or the FAA in determining whether a logic-based diagram would be helpful.”	Partially concur, paragraph (reformatted to paragraph 2-8a) was revised as follows: “... or the FAA as to whether a logic-based diagram would be helpful.”
71	ATA	Para 3-8b	Revise as recommended		“A logic-based diagrams is not the primary source for tasks, compliance times or requirements in the SB. ...”	Non-concur. This section of the AC is not specific to a SB IBR’d in an AD and therefore may not be required for compliance with the AD (see section 3-9 of the AC – reformatted to paragraph 2-10).
72	Airbus	Chapter 3-8.b	Airbus supports that logic based diagrams shall not be the primary source for tasks and compliance times in the SB. However, as written, AC section 3.8.b is too prescriptive and does not provide flexibility.	During AD-ARC discussions, Airbus discovered that all participating manufacturers have specific ways to use logic based diagrams. Experience shows that these approaches are accepted worldwide, except in the US following the AD-ARC.	To introduce flexibility, Airbus proposes to revise chapter 3.8.b to read: “b. A logic-based diagram is not the primary source for tasks or compliance times in the SB. If logic-based diagrams are used: (1) They can be located in the SB procedure or in an SB appendix.	Non-concur. The purpose of the paragraph is to provide standardization in SBs that will include logic-based diagrams.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					<p>(2) They must use descriptive, concise, and consistent terminology, and</p> <p>(3) A note must be used to make clear that the logic-based diagram only supplements the information in the accomplishment instructions. “</p>	
73	ARSA	Para 3-9	Awkward and run on sentences that don't really explain what is going on		<p>The DAH can enhance the ability of an operator to ensure compliance with ADs by issuing SBs (that will be IBR'd) that annotates items Required for Compliance. A joint industry-FAA working group developed a process for annotating items that are Required for Compliance with an AD that IBR's a SB. This differentiation will improve understanding of critical AD requirements and consistent judgment in AD compliance.</p>	<p>Partially concur, paragraph (reformatted to paragraph 2-10) was revised for clarity as follows:</p> <p>“2-10. Critical Task Differentiation. Steps that have a direct effect on detecting, preventing, resolving, or eliminating the unsafe condition in an AD should be identified in a SB with “RC” (required for compliance). Any substitutions or changes to RC steps will require an AMOC approval. Differentiating these steps from other tasks in a SB will improve an owner/operator's</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						understanding of crucial AD requirements and help provide consistent judgment in AD compliance.”
74	ATA	Para 3-9	Revise as recommended	Recommend revising as shown to more succinctly represent the intent of the AD ARC	“The FAA, in conjunction with an industry working group, developed a process for differentiating step(s) in a SB are required for compliance with an AD from those that may be accomplished performed either as described in the SB or by using the air carrier’s maintenance program . This differentiation will allow improved understanding of crucial AD requirements and consistent judgment in AD compliance.”	Partially concur, paragraph (reformatted to paragraph 2-10) was revised for clarity as follows: “ 2-10. Critical Task Differentiation. Steps that have a direct effect on detecting, preventing, resolving, or eliminating the unsafe condition in an AD should be identified in a SB with “RC” (required for compliance). Any substitutions or changes to RC steps will require an AMOC approval. Differentiating these steps from other tasks in a SB will improve an owner/operator’s understanding of crucial AD requirements and help provide consistent judgment in AD compliance.”
75	UPS	Para 3-9	UPS finds the proposal to identify sections of SB’s as ‘required for compliance (RC)’	UPS is concerned about the creation of the new term, ‘Required for Compliance (RC)’, discussed in section	UPS requests that section 3-9, as well as any reference to the ‘required for compliance’ concept,	Non-concur. The purpose of RC is to prevent over-prescriptive compliance instructions. A SB using this

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			problematic.	<p>3-9 for three primary reasons; the potential for over-prescriptive compliance instructions by DAH's, the affect on AMT's and the confusion this term creates when working other maintenance instructions, and the very limited scope of 'RC' as provided by the examples that were prepared as part of the AD ARC activity.</p> <p>By requiring that DAH's determine 'Required for Compliance', the FAA is abdicating to the DAH's the responsibility to determine the regulatory requirements. Although many DAH's would comply with the intent of the draft AC, recent trends indicate that it is likely that some DAH's would default to making an entire SB 'required for compliance', including the such items as the requirement to acquire proprietary tools, standard hardware or services. UPS believes it is the FAA's</p>	be deleted prior to the formal release of AC 20-XXX.	concept requires early coordination with the FAA to ensure that the RC steps are appropriately labeled using the guidance in this AC.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>responsibility to determine ‘required for compliance’ and the FAA should preserve the ability to mandate, within an AD, sections of a SB to prevent over-prescriptive requirements.</p> <p>In regards to the affect on AMT’s, many different work documents, such as task cards, AMM procedures, as well as service documents, are used during the course of scheduled maintenance activity. Introducing the term ‘Required for Compliance (RC)’ on some documents leads to possible interpretation that work instructions that do not have ‘RC’ are less important. The FAA has not adequately explored the potential negative human factors effect of identifying some steps on some work documents as ‘RC’ while leaving equally safety critical tasks as ‘not RC’ on other work documents.</p> <p>Example Service Bulletins</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>prepared by one DAH as part of the validation of the 'RC' concept, showed that the RC concept was not applied as specifically as airline industry had originally envisioned. Entire figures are designated as RC as instead of specific steps. The guidance in the draft AC 20-XXX, Section 3-9 e, confirms that the identification of non-RC steps will be very limited. All the items in 3-9 e could be more effectively addressed by general notes or notes that provide flexibility as in Appendices A and B of the Draft AC, rather than resorting to the problematic 'RC' term.</p> <p>UPS believes that the RC concept is problematic and unnecessary if the guidance in Appendices A and B is followed.</p>		
76	Airbus	Chapter 3.9 General Comment No.1	In the AD-ARC discussions on Critical Task Differentiation (CTD) Airbus several times stated that the	While Airbus understand the need to differ between OEM service bulletin instructions required to comply with 100% to remove the unsafe	Include, in AC chapter 3.9, a discussion on different CTD approaches and provide criteria for manufacturers	Partially concur, revised paragraph 3-9a (reformatted to paragraph 2-10a) as follows:

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>highly detailed approach preferred by some US organizations would result in prohibitive administrative and economic burden for Airbus. Airbus issued a dissenting position that is included in the AD-ARC report and summary sheets.</p> <p>Under EASA delegation principles, Airbus, as an EASA approved design organization, had to develop and implement a system of procedures and internal instructions to issue service information adapted to a worldwide market of operators and MROs.</p> <p>Over the years, we did not get evidence that Airbus service information are inappropriately structured and prepared.</p> <p>This system has never been questioned to be inappropriate under BASA-IPA and ICAO standards. Until this AD-</p>	<p>condition from the airplane and those that may be complied with using authority accepted standards, means and methods other than prescribed by the OEM, we do oppose the “one standard for all” solution in this draft AC. Today, aircraft service instructions are still developed in different national regulatory systems on the basis of international minimum standards set by ICAO. The AC as written does not adequately cover international compatibility issues.</p>	<p>to cover in their critical task differentiation approach.</p>	<p>“a. When using critical task differentiation, a DAH should coordinate with the FAA early in the SB development process to determine if the SB might be IBR’d in an AD and that the RC steps are appropriately labeled using the guidance in this AC or other methods acceptable to the FAA.”</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>ARC initiative, even from US operators and MROs, we did not receive requests to change our approach. Further, we made clear that the US market is the most important single national market, but the majority of Airbus fleets are operated in Europe and elsewhere.</p> <p>From the above, we decided not to implement a detailed CTD approach. While discussions in the AD-ARC Service Information WG evolved, it became obvious that no participating airplane manufacturer felt comfortable with the highly detailed CTD concept promoted by some US airlines and MRO representatives. 2 groups developed, Boeing/Embraer, and Airbus/Bombardier. In practice, 2 levels of details for CTD in service information will exist.</p>			

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>➔ Airbus is disappointed that the draft AC as presented does in no way refer to these differences and, as we understand the proposed guidance, supports one group of airplane manufacturers only.</p>			
77	Airbus	Chapter 3.9 General Comment no.2	<p>Explicitly, this AC is directed to manufacturers of all kind of aeronautical products. Despite this, the CTD guidance in this AC has been developed in the US large transport airplane /Part 121 operations context. This raises the question of proper involvement of affected industry sectors.</p> <p>➔ Airbus expects this will create unequal treatment issues for EU manufacturers certifying and supporting their products in the US.</p>	<p>Risk of unequal treatment and inconsistent implementation in service information for products directly related to others (e.g.airframe/engines/equipment)</p>	<p>Include, in AC chapter 3.9, a discussion on different CTD approaches and provide criteria for manufacturers to cover in their critical task differentiation approach. These criteria should cover specifics of different industry environments, e.g. for airplane/helicopter/engines/equipment .</p>	<p>Partially concur, revised paragraph 3-9a (reformatted to paragraph 2-10a) as follows:</p> <p>a. When using critical task differentiation, a DAH should coordinate with the FAA early in the SB development process to determine if the SB might be IBR'd in an AD and that the RC steps are appropriately labeled using the guidance in this AC or other methods acceptable to the FAA.</p>
78	Ken Dickenson	Page 10 Para 3-9a	<p>It is indicated to identify steps that have a direct effect on detecting, preventing, resolving, or eliminating an unsafe</p>	<p>– Could some understand “ReCommended” instead of “Required for Compliance”?</p>	<p>– We recommend to use for such steps of a procedure associated to a critical design feature to protect the term Key</p>	<p>Non-concur. The AD Compliance Review Team working group considered many different terms, including KSI, prior to</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>condition addressed by a SB as “Required for Compliance (RC).”</p> <p>Is the choice of “RC” as the code to include in front of steps that have a direct effect on detecting, preventing, resolving, or eliminating an unsafe condition addressed in the SB judicious, taking into account human factors?</p>		<p>Safety Information (KSI) as defined in 2007 by the KSI team. KSI code would be allocated to the steps that have a direct effect on detecting, preventing, resolving, or eliminating an unsafe condition associated to a critical design configuration (CDCCL). Refer also to the comment on page 6, para. 3-3.b.(1) b.</p>	<p>agreeing to RC.</p>
79	ATA	Para 3-9a(1)	Revise as recommended	Grammar	<p>“Any substitutions or deviation from the RC steps will require an AMOC approval.”</p>	<p>Non-concur, the use of the term “changes” is what is used in the AMOC order, 8110.103. The term “deviation” is associated with requested changes to a directive, not rule.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
80	Airbus	Chapter 3-9.a.(2)	As explained in general comments on chapter 3-9 above, Airbus proposes to add a discussion and criteria for aeronautical products to give guidance how to implement CTD. With regard to the note on steps which have to be identified as “Required for Compliance”, Airbus proposes to include alternative solutions. Future Airbus AD-SBs will include a note stating that 100% compliance with certain SB sections /paragraphs is required to comply with the AD.	Examples for different CTD approaches to allow manufacturers some flexibility.	Airbus proposes to include, as an option to the one proposed, a note as following: “Note: All instructions in paragraphs 3.C., Procedure and 3.D., Test, are required for compliance. These instructions must be done to comply with the AD. Instructions in other paragraphs of the accomplishment instructions are recommended but not required to comply with the AD. They may be deviated from, done as a part of other actions, or done with accepted methods different from those given.”	Partially concur. The intent of the critical task differentiation concept was to not be overly prescriptive in which tasks were required for compliance with an AD. Paragraph 3-9a(2) (reformatted to paragraph 2-10a) was revised as follows to address that other means of implementing the RC concept can be considered: “When using critical task differentiation, a DAH should coordinate with the FAA early in the SB development process to determine if the SB might be IBR’d in an AD and that the RC steps are appropriately labeled using the guidance in this AC or other methods acceptable to the FAA.”
81	Garmin	Page 10, Paragraph 3-9.a.(2)	“Note: Some steps in XX Service Bulletin xxx, Revision xx, dated xx, are identified as Required for Compliance (RC). The steps identified as RC must be done to comply	When the SB is written, it may not be known if the SB will be part of the AD compliance plan. The AD should be written to indicate the RC steps of the	Recommend revising the note as follows: “Note: ... The steps identified as RC must be done to comply with the airworthiness	Partially concur, the Note (reformatted to paragraph 2-10a(2)) was revised for clarity as follows: “Note: Some steps in the accomplishment instructions

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>with this AD. Steps not identified with RC are recommended but not required to comply with the AD. They may be deviated from, done as a part of other actions, or done with accepted methods different from those given in SB xx, Revision xx, dated xx, or not done at all if the RC steps can be done and the aircraft can be put back in a serviceable condition.”</p> <p>This suggested paragraph to be included in the body of the SB confuses AD with SB.</p>	<p>SB are required for AD compliance.</p> <p>Further, the note to be included within the SB uses the phrase “comply with this AD” instead of “comply with this SB”.</p>	<p>requirements of the change. Steps not identified with RC are recommended but not required to comply with this SB. ...”</p>	<p>are identified as Required for Compliance (RC). If this service bulletin is mandated by an airworthiness directive (AD), the steps identified as RC must be done to comply with the AD. Steps not identified with RC are recommended and may be deviated from, done as a part of other actions, or done with accepted methods different from those given in SB, if the RC steps can be done and the airplane can be put back in a serviceable condition.”</p>
82	ARSA	Para 3-9a(2) NOTE, fourth sentence on	Not in accordance with the regulations	Not all SBs are on aircraft and even if they were, as long as the RC work can be recorded as compliance with the AD, what do we care whether it is done later or not at all. We don't have to advertise that work may be left “undone” if it doesn't have to be done!	They may be done in accordance with methods, techniques and practices acceptable to the FAA, provided the RC steps can be done and the work can be approved for return to service.	Partially concur, the Note (reformatted to paragraph 2-10a(2)) was revised for clarity as follows: “Note: Some steps in the accomplishment instructions are identified as Required for Compliance (RC). If this service bulletin is mandated by an airworthiness directive (AD), the steps identified as

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						RC must be done to comply with the AD. Steps not identified with RC are recommended and may be deviated from, done as a part of other actions, or done with accepted methods different from those given in SB, if the RC steps can be done and the airplane can be put back in a serviceable condition.”
83	ATA	Para 3-9a(2) Note	Revise as recommended	Recommend revising this sentence as shown as RC applies only to IBR'd SBs	“Some steps in XX Service Bulletin xxx, Revision xx, dated xx, are identified as Required for Compliance (RC). If the SB is IBR'd, the steps identified as RC must be done to comply with the AD. Steps not identified with RC ...”	Partially concur, the Note (reformatted to paragraph 2-10a(2)) was revised for clarity as follows: “Note: Some steps in the accomplishment instructions are identified as Required for Compliance (RC). If this service bulletin is mandated by an airworthiness directive (AD), the steps identified as RC must be done to comply with the AD. Steps not identified with RC are recommended and may be deviated from, done as a part of other actions, or done with accepted methods different from those given in SB, if the RC steps can be done and the

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						airplane can be put back in a serviceable condition.”
84	ATA	Para 3-9b	Revise as recommended	Recommend deleting the text shown as non-sequitur	“Sometimes a SB may be distributed before a decision is made to IBR the SB in an AD. ...”	Partially concur, paragraph (reformatted to paragraph 2-10b) revised as follows: “Sometimes a SB is issued before a decision is made by the FAA to reference the SB as the appropriate source of information for compliance with an AD. ...”
85	ARSA	Para 3-9b(1)	Wrong tense.		The revised SB should be approved as a global AMOC to the AD.	Partially concur. Deleted paragraphs 3-9b(1) and (2). Paragraph 3-9b (reformatted to paragraph 2-10b) was rewritten as follows: “ b. Sometimes a SB is issued before a decision is made by the FAA to reference the SB as the appropriate source of information for compliance with an AD. If a SB is published without tasks labeled with RC, the SB can be revised to include the RC label. Depending where in the AD process the AD action is at, the revised SB can be referenced in the final rule AD as the appropriate source of

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						information for compliance or be FAA approved as a global AMOC to the AD.”
86	Airbus	Chapter 3-9.b.(1)	This guidance covers only the situation of SB revisions prepared and approved in the FAA regulatory system.	Under bilateral and vice-versa mutual acceptance procedures, different approaches may apply.	Airbus proposes to add a note saying: “For SBs revised and initially approved under foreign authority procedures, a revised SB may not automatically be approved as a global AMOC to the AD.”	Non-concur. This AC is drafted for guidance on SBs to be used with FAA ADs.
87	ARSA	Para 3-9b(2)	Why not? ARSA feels strongly about this one.	We should be encouraging revisions of old SBs, why would the FAA even attempt to prevent this action?	There is no need to revise previously issued IBR'd SBs to include the RC code; however, if that takes place, the new SB would need to be approved as an AMOC.	Partially concur. Deleted paragraphs 3-9b(1) and (2). Paragraph 3-9b (reformatted to paragraph 2-10b) was rewritten as follows: “b. Sometimes a SB is issued before a decision is made by the FAA to reference the SB as the appropriate source of information for compliance with an AD. If a SB is published without tasks labeled with RC, the SB can be revised to include the RC label. Depending where in the AD process the AD action is at, the revised SB can be referenced in the final rule AD as the appropriate source of

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						information for compliance or be FAA approved as a global AMOC to the AD.”
88	ATA	Para 3-9b(2)	Delete	Recommend deleting this paragraph. There is no technical reason why any SB cannot be revised per this AC, including its RC standards, and approved as an AMOC, if applicable. This is a business matter. The AC should not establish guidance based on business interests.	Delete paragraph	Concur, revised accordingly
89	Ken Dickenson	Page 10 Para 3-9b(2)	It is indicated to not revise SBs to include the RC code for ADs that are already issued. Is this judicious for SBs dealing with maintenance actions performed periodically?	– Since compliance with procedures described in SBs may need to be demonstrated periodically (repetitive maintenance), it would be wise to revise SB to include KSI codes to categorize the different steps of such procedures.	– We recommend to foster the revision of SBs dealing with maintenance actions performed periodically, even when the AD has already been issued.	Partially concur. Deleted paragraphs 3-9b(1) and (2). Paragraph 3-9b (reformatted to paragraph 2-10b) was rewritten as follows: “b. Sometimes a SB is issued before a decision is made by the FAA to reference the SB as the appropriate source of information for compliance with an AD. If a SB is published without tasks labeled with RC, the SB can be revised to include the RC label. Depending where in the AD process the AD action is at, the revised SB can be

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						referenced in the final rule AD as the appropriate source of information for compliance or be FAA approved as a global AMOC to the AD.”
90	ATA	Para 3-9d	Revise as recommended	The FAA should explain why this draft AC does not propose the “Objective Criteria” developed by the AD ARC for evaluating steps with respect to RC. The “general” guidance provided in paragraph 3-9 b clearly allows the mandate of actions that are, at best, incidental to fixing an unsafe condition.	“In general, any of the following items that are included in a SB to correct an unsafe condition due to a design deficiency, manufacturing error, systemic maintenance error, or repair, and apply directly to the detection, removal, prevention, or resolution of the unsafe condition, should be identified as RC”	Non-concur. The “Objective Criteria” developed by the AD ARC is contained in paragraphs 3-9d and 3-9e (reformatted to paragraphs 2-9c and 2-9d) in a different format.
91	ATA	Para 3-9d(1)	Revise as recommended	Recommend the deletion shown as redundant with para 3-9 d.	“...This includes repetitive inspections or a terminating action (e.g., repair).”	Concur, revised accordingly (paragraph was reformatted to paragraph 2-10c(1))
92	ATA	Para 3-9d(3)	Revise as recommended	Recommend revising for clarity and to associate these steps with the new “Configuration Description” paragraph.	“...to bring the article into compliance with airworthiness standards or conformance with the requirements of a new design configuration. ”	Partially concur. Paragraph (reformatted to paragraph 2-10c(3)) was revised for clarity as follows: “(3) Steps required to directly accomplish a change to an aircraft or component (e.g.,

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						parts, material, dimensions, methods, and processes) to resolve an unsafe condition”
93	ATA	Para 3-9d(4)	Delete	Recommend deleting as redundant with item (3). Any change of an “aircraft or component” is a modification. Also, the relevance of a modification “on aircraft in service” is unclear.	Delete para 3-9d(4)	Concur, revised accordingly
94	ATA	Para 3-9d(5)	Revise as recommended	Recommend the replacement as shown as the materials listed generally are not “installed”.	“...The step to use the material may be RC, or the specific type ...”	Concur, revised accordingly (reformatted to paragraph 2-10c(4))
95	ATA	Para 3-9e	Revise as recommended	Clarity	“...and do not apply directly to the detection, ...”	Non-concur, the term “impact” (not “apply”) was used in the AD CRT Summary Sheet.
96	ATA	Para 3-9e(3)	Revise as recommended	Recommend deleting “removing” as non-sequitur.	“Access restoration steps (e.g., installing access panels, sidewall panels, galleys or lavatories, etc.”	Concur, revised accordingly (reformatted to paragraph 2-10d(3))
97	Boeing – AD ARC	Pg 11 Para 3-9.e.(3)	I believe this was copied from (2) with the intent of re-installing everything that was removed in the access steps but (3) still shows removing sidewall panels	intent	Access restoration steps (e.g., installing access panels, installing sidewall panels, installing galleys or lavatories, etc.)	Partially concur, paragraph (reformatted to paragraph 2-10d(3)) was revised as follows: “Access restoration steps (e.g., installing access panels,

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			(should be installing) and removing galleys or lavs (should be installing)			sidewall panels, galleys or lavatories, etc.)”
98	ATA	Para 3-9e(4)	Revise as recommended		“Airplane restoration steps (e.g., restoring electrical power, closing circuit breakers, removing jacking and shoring, etc.)”	Concur, revised accordingly (reformatted to paragraph 2-10d(4))
99	ATA	Para 3-9e(6)	Revise as recommended	For brevity	“Steps to update maintenance records to show that the SB has been accomplished, which is required by other regulations. ”	Partially concur, paragraph (reformatted to paragraph 2-10d(6)) was revised as follows: “Steps to update maintenance records to show that the SB has been accomplished, which is already required by regulation.”
100	ATA	Para 3-9f(2)	Revise as recommended	Recommend adding the text as shown. The AD ARC recognized that there are special risks of over prescription in designating entire figures, drawings, or illustrations as RC.	“..., then all of the tasks in the figure, drawing, or illustration must also be accomplished. Special care should be exercised in designating figures, drawings, or illustrations as RC to avoid over prescription. ”	Non-concur. The criteria for labeling a task in the accomplishment instructions of a SB as “RC” are identified in the AC; there is no need for a warning label.
101	ATA	New para 3-9f(6)	Add new paragraph as recommended	Recommend adding this subparagraph. As discussed	Add new paragraph as follows:	Partially concur, paragraph 3-9a (reformatted to paragraph

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>in the AD ARC, a designation of RC applies solely to the associated AD. This important caution must be addressed in the AC to proactively answer questions that will arise regarding the relevance of RC items to other documents</p>	<p>“(6) The designation of a step or steps as RC in a SB that has been IBR’d applies solely to the associated AD. The designation is not transferable or implied as applicable to any other airworthiness document.”</p>	<p>2-10a(1)) was revised as follows:</p> <p>“Step(s) labeled as RC apply solely to the SB that is IBR’d in the AD. The designation is not transferable or implied as applicable to any other document.”</p>
102	ARSA	Para 3-10	<p>Appropriate regulatory language is needed— ARSA feels equally strongly about this bobble. The regulations need to be cited EXACTLY!</p>	<p>Procedures do not have to be “accepted”; they must be “acceptable to”. Additionally, the last sentence is a bias; if the person “doesn’t know” it shouldn’t be writing a SB.</p>	<p>The use of mandatory language for accomplishment instructions depends upon whether other methods, techniques and practices otherwise acceptable to the FAA are adequate to address the unsafe condition. If other procedures are acceptable to the FAA and appropriate to the accomplishment instructions, non-mandatory language is appropriate.</p>	<p>Partially concur, revised paragraph 3-10 (reformatted to paragraph 2-9) to use correct terminology. Paragraph was revised as follows:</p> <p>“3-9. Mandatory versus Flexible Language. The use of mandatory language in the accomplishment instructions of a SB depends on whether other procedures acceptable to the FAA are adequate to address the unsafe condition in an AD. If other procedures are acceptable to the FAA, non-mandatory language should be used in the SB.”</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
103	ARSA	Para 3-10a first sentence	Awkward	Clarity and consistency needed	When a procedure or document is mandatory, i.e., RC, use “in accordance with” when citing to the item.	Non-concur. The presentation of information was rearranged for clarity. Mandatory versus Flexible language (reformatted to paragraph 2-9) is now discussed before the Critical Task Differentiation (reformatted to paragraph 2-10)
104	GE – GR Cert	14,3-10(2)	Need to add OAM guidance for wire routing and spatial separation for SB wiring installations	SFAR 88, 14CFR Part 26 requirement	Add (d) OAM Wire Routing & Spatial Separation Specifications	Non-concur. The list (reformatted to paragraph 2-9a(2)) is not meant to be all inclusive which is why the following lead-in words were used to the list “may include, but are not limited to:”
105	Ken Dickenson	Page 14 Para 3-10a(2)	The paragraph 3-10.a. deals with processes, the procedures and documents that <u>must</u> be followed to accomplish a task in a SB. Unfortunately, the sub-paragraph (2) is confusing and probably not needed.	<ul style="list-style-type: none"> – The sub-paragraph (1) indicates that the term “in accordance with” must be used for a process or procedure that must be followed exactly to resolve the unsafe condition and comply with the AD. The contents of the documents listed in sub-paragraph (2) are already covered by the sub-paragraph (1). So this sub-paragraph seems superfluous. – Further, it gives the 	<ul style="list-style-type: none"> – We recommend to delete the sub-paragraph (2) and to keep referring to processes, procedures or requirements (etc...) included in other manuals. 	Non-concur. Paragraph 3-10a(1) (reformatted to paragraph 2-9a(1)) addresses processes and procedures, whereas paragraph 3-10a(2) (reformatted to paragraph 2-9a(2)) addresses documents.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>impression that compliance with the SRM, other SBs, or other approved documents (no comment for the ALS) is systematically required. Take the example of the Maintenance Review Board Report (MRBR): It is an approved manual that provides the initial minimum recommended repetitive maintenance tasks and their recommended intervals. It would be inappropriate to impose the compliance with an MRBR task interval since intervals derived from the MSG-3 may take into account economic considerations: The MRBR task intervals are not airworthiness limitations not to exceed. In addition, tying a must do requirement to a recommendation (MRBR task) risks possibility of being overlooked during MRBR task escalation process. There is a mix of the terms “approved” and “must” (/mandatory) that is ambiguous in this sub-</p>		

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				paragraph: “approved” does not mean “mandatory”. The FAA should not be afraid of using the same word regularly, if that is what is needed.		
106	ARSA	Para 3-10b	Awkward—Also see above, must use the term “acceptable to” NOT “accepted by”	Clarity and consistency needed	When a procedure or document is non-mandatory, use “refer to” when citing the item. Using this language allows the operator flexibility in determining the appropriate method, technique and practice it may use to accomplish the technically required result. Therefore, use “refer to” for procedures in other documents that are acceptable to the FAA, which include, but are not limited to:	Partially concur. Paragraph (reformatted to paragraph 2-9b) was revised as follows: “When a procedure or document MAY be followed to accomplish an action (e.g., the DAH’s procedure or document may be used, but an operator’s FAA-accepted procedure could also be used), the appropriate terminology to use to cite the procedure or document is “refer to ... as an accepted procedure.” Use this flexible language when referring to procedures in documents acceptable to the FAA and when an operator <u>may</u> use the document or their own procedure that is acceptable to the FAA. Documents or procedures acceptable to the FAA may include, but are not limited

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						to:”
107	ARSA	Para 3-10b(8)	Add		Other methods, techniques and practices acceptable to or approved by the FAA which will ensure the work is performed in an airworthy manner.	Non-concur. The list (reformatted to paragraph 2-9b) is not meant to be all inclusive which is why the following lead-in words were used to the list “may include, but are not limited to:”
108	ATA	Para 3-11c(5)	Recommend that this paragraph either explain how a Partial Revision may be IBR’d, or be deleted	This AC addresses SBs that are to be IBR’d in an AD.		Non-concur. This AC addresses both IBR’d SBs and SBs referred to in an AD. To clarify this, added a new “Scope” section in paragraph 1-5 and a new “Discussion” section in paragraph 1-7.
109	ATA	Para 3-11c(6)	Recommend that this paragraph either explain how a Temporary Revision may be IBR’d, or be deleted	This AC addresses SBs that are to be IBR’d in an AD.		Non-concur. This AC addresses both IBR’d SBs and SBs referred to in an AD. To clarify this, added a new “Scope” section in paragraph 1-5 and a new “Discussion” section in paragraph 1-7.
110	GE – GR Cert	15,3-11 c.(6)	Need to reassert the requirement that temporary revisions to the SB require AMOC approval prior to distributing to affected customers	Present wording suggest an unapproved fast track to support affected customers	Change (6) last sentence to read; The information requires AMOC approval and is included in the next revision to the document.	Non-concur. Paragraph 3-11b (reformatted to paragraph 2-11b) addresses this issue: “It is important to remember that any change to an SB, such as a partial or temporary revision, after the SB is FAA-

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						approved and referenced in an AD requires an AMOC approval.”
111	ATS /Quality	Page 15/ Paragraph 3-11(7). Page 8/ Paragraph 3-5(b)4 and 3-6(d)	For draft SB’s, the DAH should also consider the feedback of repair station in addition to that of airlines.	Repair stations are often the primary resource for accomplishing SB required actions. Historically, ATS has initiated many changes and AMOC’s due to deficient SB instruction.	Revise last sentence of 3-11(7) to “Airlines and repair stations can then view the information and provide feedback back to the DAH.” Add repair stations to paragraph 3-5(b)4 and 3-6(d) as well.	Partially concur, revised paragraph 3-11c(7) (reformatted to paragraph 2-11c(7)) as follows: “Designated parties can then view the information and provide feedback back to the DAH.”
112	ATA	Para 3-11c(8)	Revise as recommended	Recommend revising as shown to accurately describe this process. The process does not “accomplish tasks” associated with an AD – it develops instructions.	“... A process in which a DAH, operators, and a regulatory agency work together to develop actions and accomplishment instructions necessary to resolve an unsafe condition.”	Concur, revised accordingly (paragraph reformatted to paragraph 2-11c(8))
113	Ken Dickenson	Page 17 Para 4-1	It is recommended to DAHs to develop and maintain a process to track AD-related SBs to ensure that they do not result in overlapping or conflicting actions that could lead to a non-compliance. <u>Dissemination and/or duplication of data are</u>	– Our experience shows that a number of operators have missed some maintenance actions required by AD. After investigation, it has been established that operators perceived ADs as the tool to alert the public on mandatory actions for in-service issues <u>on the</u>	– We recommend to issue “technical” ADs to manage the urgent/short terms. – We recommend that mandatory reporting of compliance with the AD be systematically required for ADs addressing issues	Non-concur. Advisory Circular (AC) 39-9, “Airworthiness Directives Management Process,” was issued on June 1, 2011 to provide guidance for operators for developing an AD management process.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p><u>sources of data conflicts and human errors.</u></p>	<p><u>urgent/immediate or short terms.</u> They explained that the long-term maintenance actions they missed became lost in the “mists of time”. At different opportunities, the FAA emphasized the need for a unique location for airworthiness limitations (and associated mandatory instructions): e.g. refer to Docket No. FAA-2008-0182; Directorate Identifier 2007-NM-262-AD; Amendment 39-15577; AD 2008-13-14. RIN 2120-AA64: QUOTE</p> <p>The intent is to have all airworthiness limitations, regardless of whether imposed by original type certification or by a later AD, located in one immediately recognizable document. In 1980, the FAA identified the Airworthiness Limitations section of the Instructions for Continued Airworthiness as the appropriate document.</p> <p><u>We consider that not having all airworthiness limitations</u></p>	<p>restricted to a limited group of aircraft, engines, propellers, or parts. Then, the AD should be cancelled once the monitoring indicates that the in-service issue has been addressed for all affected in-service products (records on the details of the solved unsafe conditions should be kept by the relevant holders of a design approval).</p> <p>– We recommend for ADs addressing issues generic to a larger group of aircraft, engines, propellers, or parts, that the maintenance actions required by AD be transferred into the ALS or in ALS variations once the compliance times of the AD are over. The “technical” AD should then be superseded by a new “administrative” AD requiring compliance with the ALS revisions/variations.</p>	<p>An AD is not cancelled once all owners/operators comply with the requirements of the AD. Per 14 CFR 39.9, operators have a continuing obligation to <u>maintain</u> the AD-mandated configuration.</p> <p>Chapter 6 (reformatted to Chapter 5) of this AC addresses revising maintenance documents to ensure an AD-mandated design is not inadvertently undone.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				in one document could lead to confusion as to what is or what is not a mandatory maintenance action as identified in Federal Aviation Regulation, part 25, Appendix H, section H25.4. UNQUOTE	Reference to the maintenance procedures to comply with should be included in the ALS/ALS variations. The number of active ADs would be reduced and mandatory maintenance would be located in one immediately recognizable document.	
114	GE – GR Cert	17,4-2a. (1)	Add Software/Hardware configuration	Effective configuration management and tracking	Change a.(1) to read; Make/Model or part number (including software and hardware configuration or mod status) of affected product(s).	Non-concur. Paragraph 4-2a(1) (reformatted to paragraph 3-3a(1)) is intended to address the product (i.e., aircraft, aircraft engine, propeller, or appliance). Software can be found using reformatted paragraph 3-2a(3) – ATA code.
115	Ken Dickenson	Page 17 Para 4-2a	Not all manuals covering mandatory requirements are listed.	– It seems essential to add to the sub-paragraph (6) the AFM, the WBM and the ETOPS CMP, i.e. manuals stating data for which compliance is mandatory.	– We recommend to revise the sub-paragraph (6).	Non-concur. The purpose of this chapter is to avoid overlapping and conflicting SBs. Any requirement identified in a new or existing SB will be found in reformatted paragraph 3-2a(5) – Service Information.
116	ATA	Para 5-1c	Revise as recommended	Recommend adding for consistency with Section 3-11 c. (7).	“...on a website accessible by owners/operators as part of an Information	Non-concur. Paragraph 3-11c(7) (reformatted to paragraph 2-11c(7)) is intended to address

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					Exchange Process,”	streamlining the development and revision of SBs, not posting of AMOCs
117	Garmin	Page 18, Paragraph 5-2	“When requesting an AMOC, consider whether to request the AMOC as global (e.g., an AMOC of general applicability that applies to two or more operators, see FAA Order 8110.103, <i>Alternative Methods of Compliance</i> , paragraph 4-3a for more details) or to provide permission to share the AMOC approval response (i.e., letter or email) with the product DAH for their consideration in requesting a global AMOC.”	While this sentence assists with defining the term “global AMOC”, it is not the first use of the term within the AC as paragraphs 3-9.b.(1), 5-1.b and 5-1.c all use this term.	Recommend: <ul style="list-style-type: none"> – Including a “Global AMOC” definition in paragraph 1-2 Definitions, and – Removing “(e.g., an AMOC of general applicability that applies to two or more operators, see FAA Order 8110.103, <i>Alternative Methods of Compliance</i>, paragraph 4-3a for more details)” from the quoted sentence. 	Concur. Moved definition to a new paragraph 1-6d as follows: “d. Global AMOC. An AMOC of general applicability that applies to two or more operators.”
118	American Airlines	Pg. 19 Para 5-5	“One means to minimize the number of AMOCs for ADs requiring design changes is to use “later approved parts” language in the SB. This would allow installation of DAH parts, without an AMOC approval, that are approved after the release of the SB.” While it is a	That is not the case. Once an alteration AD removes, for example, the unsafe part, a -1 and replaces it with a -2; the AD requirements have been met and the type design changed. Any future alteration to a -3 does not require an AMOC, it is done per CFR major alteration procedures.	Change the second sentence to read “This would clarify that installation of later approved DAH parts does not require AMOC approval since future alterations of the AD type designs are done according to major alteration CFR	Non-concur. Refer to 14 CFR 39.15. A later approved part will require an AMOC unless the AD mandates service instructions that allow a later approved part.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			very good idea to clarify “later approved parts”, the second sentence is in error when it states an AMOC is, at the present time, required to do so.		procedures.	
119	American Airlines Maintenance Programs Office	5-5	<p>Preference should be given to use a statement like “part number xxx-xxxx not to be installed on any aircraft after date xxxx,” rather than preference given to a “later approved parts” statement.</p> <p>A “later approved parts” statement should only be used if all parts approved prior to the issuance of the AD have known safety issues and are being disallowed for use.</p>	<p>When a specific part, or list of parts are excluded from use on a particular aircraft or configuration it removes all ambiguity about the parts. All unlisted approved parts can be installed on the aircraft. This allows the regular maintenance program and approval process to work and provides the operators a clear action to accomplish. This is particularly critical when dealing with software revisions, new revisions are frequent and not all carriers will be at the same revision level. Operations can still dictate what revision is used and only the software with the known safety issue is excluded. This also removes the burden of determining when a part was approved.</p>	<p>Add to the 5-5 Paragraph:</p> <p>. The preferred means to minimize the number of AMOCs for ADs requiring part changes is to clearly identify the type of part with its part number(s) and manufacturer that is no longer allowed to be installed on an aircraft and the date by which that parts(s) must be removed as well as the date on which the part(s) is prohibited from being installed on the aircraft in the SB. This would allow installation any other approved part without the need for an AMOC approval.</p>	<p>Non-concur. The intent of this paragraph is to reduce AMOCs for ADs that require replacement of a part. It is not intended to address changes to software levels.</p> <p>Unless stated in the AD or a service bulletin incorporated by reference, you cannot alter the area affected by an AD without an AMOC, see 14 CFR 39.15.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
120	Ken Dickenson	Page 19 Para 5-5	This paragraph deals with one means to minimize the number of AMOCs for ADs requiring part changes. It allows use of “later approved parts” language in the SB. This would allow installation of TC holder parts, without an AMOC approval, that are approved after the release of the SB. In order to further minimize the needs for AMOCs, it would be appropriate to allow use of “later approved revisions/variatio ns” language in the ADs requiring compliance with the revisions of the ALS.	<ul style="list-style-type: none"> – Since it is possible to take into account future approvals in SB, the same should apply to AD. There are no differences in obtaining the approval: The variations and revisions of the ALS approved after the AD issuance must be approved by the authority before they can be used by operators/owners. Therefore, the impact on the AD can be reviewed before approval of the ALS variations/revisions. – Future ALS revisions introducing restrictive measures would still need to be covered with a new AD. 	We recommend to the FAA to consider the following wording for the future ADs requiring compliance with revisions of the ALS: “The use of later approved variations or revisions of this document is acceptable for compliance with the requirements of this AD. Later approved variations or revisions of this document are only those variations and revisions for which the Type Certificate (TC) Design Approval Holder (DAH) has received an approval after the Original Issue or Revision (X) of this document.”	Non-concur. Expansion of “or later approved ALS” is beyond the scope of this AC.
121	Garmin	Page 19, Paragraph 5-5.a.	“Use of such language should be on a case-by-case basis. It is not intended to be used for parts associated with a supplemental type certificate (STC), parts manufacturer approval (PMA), or owner/operator	STC parts should be eligible to use the terminology “later approved parts” in the SB just as it can be applied to TC parts because a STC is “type design”. Additionally, PMA parts that are approved under the	Recommend removing “parts associated with a supplemental type certificate (STC), parts manufacturer approval (PMA), or” from the quoted sentence.	Concur, paragraph 5-5a (reformatted to paragraph 4-5a) was revised for clarity as follows: “Use of such language should be on a case-by-case basis. Installation of parts produced by anyone other than the

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
			<p>produced parts. Installation of these parts will require an AMOC approval.”</p> <p>It is not clear why an AMOC could not or should not be used with STC or PMA parts.</p>	<p>TC/STC should be eligible to use the terminology “later approved parts” in the SB to minimize AMOCs.</p>		<p>original DAH (e.g., owner/operator produced parts) will require an AMOC approval.”</p>
122	Ken Dickenson	Page 21 Para 6-1	<p>This chapter provides guidance to DAHs for helping owners/operators and maintenance providers avoid inadvertently undoing or modifying AD-mandated type designs through routine maintenance practices.</p> <p>No consideration is given for avoiding inadvertent modification of critical design features of (initial/amended) type designs through routine maintenance practices.</p>	<p>– A great deal of critical design features are not identified as such in published manuals. Deviations from these critical design features are not controlled like for mandatory requirements included either in an AD or in the ALS. The organizations not participating in the aircraft certification process have no visibility on the assumptions chosen for certification and on the mandatory instructions when the associated airworthiness limitations exceed the aircraft operational life. It is a fact that some organizations other than the TC holder, the Primary</p>	<p>– We recommend to impose the (exhaustive) identification of these critical design feature during the initial airplane certification (and during change to type design activities). Then, the inclusion of a requirement in the ALS (extension of the CDCCL concept) to protect them is recommended.</p>	<p>Non-concur. The scope of this AC is for SBs related to an airworthiness directive, not critical design features of (initial/amended) type designs through routine maintenance practices.</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				<p>Certification Authority have activities (development, approval or performance of maintenance, repairs or alterations), which may unintentionally violate the integrity of the original/amended aircraft type design. It is therefore essential to make this information visible to preclude the development of unsafe conditions: The aviation industry should not rely in the first place, and only, on the continued airworthiness process to ensure the required level of protection of citizens when it is known that some operator normal practices may jeopardize the compliance with FAR 25 airworthiness requirements. <u>There should not be different ways of managing similar critical design features.</u></p>		
123	ARSA	Para 6-2	Typographical error and regulatory nuance correction.		If these procedures fail to take the AD-mandated requirements (e.g., inspections, altered configurations) into	Partially concur. Paragraph 6-2 (reformatted to paragraph 5-2) was rewritten to better align with AGC-200's legal interpretation for 14 CFR 39.7

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					consideration,, the aircraft could become unairworthy, i.e., it would no longer comply with the AD.	<p>& 39.9 published in the Federal Register [FR Doc No: 2011-8972, Federal Register: Volume 76, Number 72 (April 14, 2011)].</p> <p>“5-2. Maintenance of an AD-Mandated Design Change. Once a product’s approved design is changed by an AD, owners/operators may perform routine maintenance if that maintenance does not result in changing the AD-mandated configuration. The maintenance can be performed using a combination of the methods, techniques, and practices prescribed in the DAH maintenance manuals or ICA, or an operator’s own maintenance practices developed under 14 CFR 43.13(c).”</p>
124	ATA	Para 6-2	Revise as recommended	Punctuation	“...requirements (e.g., inspections, alterations, configuration) ...”	Partially concur, language was deleted
125	ARSA	Para 6-2d	That nasty “accepted by” language again! ICAs are only “acceptable to”, not “accepted by”!	Don’t change the regulations in your advisory materials!	When drafting SBs, avoid duplicating entire procedures/instructions residing in a maintenance	Partially concur, paragraph (reformatted to paragraph 5-2b(4)) was revised for clarity as follows:

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
					document or ICA. The SB should only contain the specific Required for Compliance item, not the entire procedure. Internal flags, denoting the RC items, can then be placed in the maintenance document to ensure future compliance.	“When drafting SBs, avoid duplicating entire procedures/instructions that reside in maintenance or other ICA documents. The SB should only list the specific requirement which must be met, not the entire procedure. Internal flags should then be placed in the associated maintenance document where the requirement is located to indicate that it addresses an AD compliance requirement (see paragraph 5-5 of this AC).”
126	ATA	Para 6-2d	Revise as recommended	Recommend this revision to make clear that only the DAH has access to the flagged documents.	“..., not the entire procedure. DAH-internal flags should then ...”	Non-concur. The lead-in sentence states “...the following actions should be performed by DAHs:”
127	ATA	Para 6-3	Revise as recommended	Recommend revising the text as shown as his paragraph should highlight the Airworthiness Concern Coordination Process. The process is specifically designed to play a role in the development of SBs intended for IBR in an AD. Also, delete “airline planning” as this planning	“...SB prototyping/validation, the Airworthiness Concern Coordination Process, and the NPRM process ”	Partially concur. Paragraph 6-3 was deleted since it was redundant with paragraph 6-2 (reformatted to paragraph 5-2).

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
				occurs after SB and AD development, and is addressed in AC 39-9.		
128	ATA	Para 6-3a	Revise as recommended	Clarity	<p>“When developing an SB and associated ICA the DAH should consider ways that the AD could be undone during future maintenance. ...”</p>	<p>Partially concur. Paragraph 6-3 was rolled up into paragraph 6-2 to eliminate redundant information between the two paragraphs. Paragraph 6-3a (reformatted to paragraph 5-2a) was revised for clarity as follows:</p> <p>“The potential for undoing an AD-mandated configuration should be evaluated during all stages of design and development of SBs, maintenance documents, or ICA (e.g., during the review/approval of the SB, maintenance, and ICA; SB prototyping/validation; and NPRM comment period).”</p>
129	ATA	Para 6-3c	Revise as recommended	Recommend deleting as redundant with the next paragraph.	<p>“A DAH should create new maintenance procedures or ICA to support AD-mandated type design changes if existing service information does not support the changes.”</p>	<p>Partially concur. Paragraph 6-3 was rolled up into paragraph 6-2 to eliminate redundant information between the two paragraphs. Paragraph 6-3c (reformatted to paragraph 5-2b(1)) was revised for clarity as follows:</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						<p>“During the design change and SB development stages, evaluate the need for changes to maintenance manuals or ICA to eliminate the potential for undoing an AD-mandated condition or configuration. Update any maintenance manuals or ICA to support the AD-mandated type design changes.”</p>
130	ATA	Para 6-4	Revise as recommended	Clarity	<p>“...appropriate ICA necessary to maintain the product after implementing the AD.”</p>	<p>Partially concur. Paragraph 6-4 was rolled up into paragraph 6-5 to eliminate redundant information between the two paragraphs. Paragraph 6-4 (reformatted to paragraph 5-3) was revised for clarity as follows:</p> <p>“Availability of Maintenance Procedures or ICA. A DAH should make new maintenance procedures or ICA or changes to them available as early as possible to owners/operators when an AD-related SB is issued (e.g., prior to the effective date of the AD). Doing so helps ensure that owners/operators</p>

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
						have the appropriate maintenance procedures or ICA necessary to maintain the product upon accomplishing or complying with the AD.”
131	Ken Dickenson	Page 22 Para 6-4	This paragraph indicates that a DAH should make new ICA or changes available as early as possible to owners/operators when an AD-related SB is issued (e.g., prior to the effective date of the AD). Would not it be good to direct readers to the FAR 21.50?	– FAR 21.50	– We recommend to direct readers to the FAR 21.50 so that they can read by themselves the obligations of a DAH.	Concur, added footnote reference to refer to 14 CFR 21.50 – paragraph 6-6 was reformatted to paragraph 5-3.
132	ATA	Para 6-6	Revise as recommended	Recommend revising as shown as flagging applies to procedures in other documents that are referenced in a SB, not just those that are “duplicated” in a SB.	“When a SB specifies requirements that exist ...”	Concur, revised accordingly (paragraph was reformatted to paragraph 5-5)
133	ATA	Para 6-6	Revise as recommended	Recommend adding the text shown to again re-enforce that only the DAH has access to the flagged documents.	“The procedure should be flagged in a manner that identifies that the procedure/requirement in the manual held by the DAH is mandated by an AD.”	Concur, revised accordingly (paragraph reformatted to 5-5)

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
134	ATA	Para 6-6	Recommend replacing the sentence as shown as this AC applies to DAHs, and for DAHs, the purpose of flagging is to prevent the DAH from changing procedures that were previously specified in an AD. The AC should not suggest that it's acceptable for an SB to contravene an already mandated procedure and refer the issue to the AMOC process.		“... The DAH cannot change a flagged procedure without addressing the impact of the change on existing ADs, such as a potential to adversely affect or reverse design features. The flagged language should:”	Non-concur, as stated in paragraph 1-2 of the AC, the audience for this AC is DAHs who draft SBs and owners/operators who must comply with an AD, or request an AMOC.
135	America Airlines	Pg. 22 Para 6-6 b. Note	“This procedure is used for maintaining compliance with SB XYZ, which is subject to/mandated by an AD. Do not alter this procedure without an AMOC approval.” Change to: Do not alter the intent of this procedure without an AMOC approval.”	See 8110.103A, Appendix A: <i>Question:</i> I converted the AD and the reference instructions in the referenced service document to an inhouse fleet campaign notice, engineering change order, or individual work cards. Do I need an AMOC? <i>Answer:</i> No, as long as you transfer the AD language to your own in-house instructions and those instructions precisely represent all of the AD requirements and compliance times.	Change to: Do not alter the intent of this procedure without an AMOC approval.” (refer to 8110.103A, Appendix A)	Non-concur. The Q&A response in order 8110.103A, appendix A, does not allow interpretation of the requirements and compliance times.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
136	Garmin	Page 22, Paragraph 6-7.	<p>“A SB-to-AD cross reference listing with SB revision levels should be included in the front of the DAH’s maintenance manual(s) to help owner/operators identify which SBs are related to ADs.”</p> <p>In the GA world, the owner/operator frequently is not capable of or does not have the necessary training to accomplish the maintenance in the DAH maintenance manual(s).</p>	Proper authority and training are required to accomplish maintenance included in the DAH maintenance manuals. Consequently, Garmin only provides its maintenance manual(s) to qualified modifiers (Garmin approved dealers/installers) not owner/operators.	Recommend changing “owner/operators” to “the manual user” within the quoted sentence.	Non-concur. Owner/operator is used throughout the AC.
137	ATA	Appendix A, Title.	Revise as recommended	Recommend deleting for consistency with the body of the AC.	Appendix A. Examples of Notes	Concur, revised accordingly
138	ATA	Appendix A, 2.	Revise as recommended	Recommend this change to prompt consideration of whether jacking or shoring is clearly necessary.	“...of the identified parts. If jacking or shoring are necessary, applicable limitations must be observed.”	Non-concur. This is only an example. Each DAH can customize or alter notes as they deem necessary.
139	ATA	Appendix B	Add new item 3.	Recommend this addition to provide often needed flexibility and to reduce the need for AMOCs	“3. Where applicable, specify applicable parts, piece parts and materials by specification designator rather than part number.”	Non-concur. The Notes in Appendix B are only examples. Each DAH can customize or alter notes as they deem necessary.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
140	American Airlines	Pg. B-2 Para B-10	“When the words "in accordance with" are included in the instruction, the methods, techniques, and practices specified (including tools, equipment, and test equipment) in the <i>{specify DAH name}</i> document must be used.” Change to: The intent of the methods, techniques, and practices specified (including tools, equipment, and test equipment) in the <i>{specify DAH name}</i> document must be used.”	See 8110.103A, Appendix A: <i>Question:</i> I converted the AD and the referenced instructions in the referenced service document to an inhouse fleet campaign notice, engineering change order, or individual work cards. Do I need an AMOC? <i>Answer:</i> No, as long as you transfer the AD language to your own in-house instructions and those instructions precisely represent all of the AD requirements and compliance times.	The intent of the methods, techniques, and practices specified (including tools, equipment, and test equipment) in the <i>{specify DAH name}</i> document must be used.” (refer to 8110.103A, Appendix A)	Non-concur. The Q&A response in order 8110.103A, appendix A, does not allow interpretation of the requirements and compliance times. When converting over to in-house instructions you must transfer the AD language so that it precisely represents all of the AD requirements and compliance times.

#	Company & Group	Page & Paragraph	Comment	Rationale for Comment	Recommendation	Disposition
141	ATA	Appendix C, 4. & Figure 7	Revise as recommended	Recommend adding this test and labeling the figure as shown. An example in an AC of depicting dimensions should clearly show how units of measurement should be specified.	<p>“Dimensions and tolerances should be used to show the location of parts. If applicable throughout a SB, units of measurement may be specified in Notes. Alternatively, units may be specified directly in figures, as shown below. However, units cited in Notes and in any figure must be consistent or an explanation of the difference must be provided.”</p> <p>Add to Figure 7 “All measurements in inches”</p>	Non-concur. The intent of this example was to only show what a figure might look like with dimensions and tolerances.