

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION National Policy

ORDER 8110.103A

09/28/2010

# SUBJ: Alternative Methods of Compliance (AMOC)

This order provides guidance to Federal Aviation Administration (FAA) personnel who handle alternative methods of compliance (AMOC) proposals to airworthiness directives (AD). We explain how to determine if an AMOC is needed, the process to follow and other AMOC considerations in accordance with Title 14 of the Code of Federal Regulations (14 CFR).

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#### **Chapter 1. General Information**

**1-1. Purpose of This Order.** This order defines what is an alternative method of compliance (AMOC) to an airworthiness directive (AD). This order shows how to:

a. Advise AMOC requesters whether an AMOC is necessary,

**b.** Identify who can approve or deny an AMOC proposal,

c. Handle urgent requests for AMOC support,

d. Differentiate between a transferable and non-transferable AMOC,

e. Properly coordinate an AMOC approval or denial,

**f.** Handle proposals for global AMOCs (also known as AMOCs of general applicability), and

**g.** Handle AMOC proposals from other civil aviation authorities (CAA) and foreign owners/operators.

**1-2.** Audience. We've written this order for all Federal Aviation Administration (FAA) Aircraft Certification Service (AIR) personnel responsible for AMOCs. It is also written for Flight Standards Service (AFS) inspectors, Aircraft Evaluation Group (AEG) personnel, certain designated engineering representatives (DERs) and type certification (TC) organization designation authorization (ODA) holders.

**1-3. Where to Find This Order.** You can find this order on the FAA's Regulatory and Guidance Library (RGL) website at <u>http://rgl.faa.gov</u> or the Directives Management website at MyFAA employees website at <u>https://employees.faa.gov/tools\_resources/orders\_notices/</u>.

**1-4. What This Order Cancels.** This order cancels FAA Order 8110.103, Alternative Methods of Compliance, dated 09/28/07.

**1-5. Explanation of Changes.** This version of the order presents a complete revision of the previous order, 8110.103. This change:

**a.** Clarifies which office approves AMOCs when a type certificate is transferred to another office.

**b.** Incorporates new procedures for handling urgent "24/7" AMOC support requests.

**c.** Incorporates changes that allow FAA to approve AMOCs to FAA ADs for foreign registered aircraft.

d. Incorporates a template for responding to AMOC proposals for foreign registered aircraft.

e. Revises procedures for coordinating AMOCs with AFS personnel.

f. Incorporates AEG coordination criteria for AMOC responses.

**g.** Incorporates changes to some standardized language to be included in AMOC approval responses.

h. Deletes requirements for standardized language regarding revising AMOC approvals.

i. Clarifies the definition of a global AMOC.

**j.** Clarifies how responsible office managers can delegate authority for AMOC approval and denial responses.

**k.** Provides guidance regarding handling of proprietary data.

I. Provides guidance on how to route and distribute an AMOC response.

m. Provides guidance on how to file AMOC information.

n. Provides guidance for writing specific and effective AMOC approval statements.

o. Provides examples of problematic (how not to write) AMOC approval statements.

**p.** Includes an optional AMOC response checklist to help ensure compliance to this order.

q. Allows the use of email to approve or deny AMOC proposals.

r. Clarifies process for amending an AMOC response and revoking an AMOC.

s. Removes the term "third party" AMOCs.

t. Incorporates various editorial and plain language changes for clarification.

1-6. Effective Date. This order becomes effective on December 30, 2010.

#### Chapter 2. What is an AMOC?

#### 2-1. Defining an AMOC.

**a.** An AD contains the required method for resolving an unsafe condition on an aircraft, aircraft engine, propeller or appliance. An AMOC provides an acceptable level of safety for a different way, other than the one specified in the AD, to address the unsafe condition.

**b.** In this order, we use the general term "AMOC" to define an FAA-approved alternative method of compliance to the specific requirements of an AD or a change in the required time to accomplish the AD. The term "product" refers to an aircraft, aircraft engine, propeller, or appliance per 14 CFR § 39.3.

**c.** In August 2002, we added amendment 39-9474 to 14 CFR part 39. The amendment incorporated several standard provisions previously included in individual ADs. One standard provision specified that the AD apply to the product even if it had been modified, altered, or repaired in the area addressed by the AD. Another standard provision identified procedures for asking the FAA to approve AMOCs to the AD.

#### 2-2. When and Why an AMOC is Necessary or Desirable.

**a.** An AMOC is required if an owner/operator cannot comply or finds a different way to comply with the actions specified in an AD. Appendix A of this order provides some questions and answers about when an AMOC is necessary.

**b.** The reasons an AMOC may be necessary or desirable include, but are not limited to, the following:

(1) To accomplish AD actions in a way that better suits an owner/operator's business processes,

(2) An owner/operator devises another or better way of addressing the unsafe condition,

(3) An owner/operator wishes to adjust the compliance time to an AD,

(4) Because existing modifications, alterations, or repairs to a product make compliance with AD procedures difficult or impossible,

(5) To use later revisions of service documents specified in an AD,

(6) A superseding AD invalidates previous AMOCs to the original AD, or

(7) To address errors in the service document.

#### **2-3.** Who Approves an AMOC?

**a.** Each AD identifies the office responsible for approving AMOCs to the AD.

(1) For products where the United States (U.S.) is the state of design (SoD), the responsible office will be an aircraft certification office (ACO). The term ACO identifies the unique certification offices, which include the engine certification office, rotorcraft certification office (RCO), special certification office (SCO), the airplane certification office, and the military certification office.

(2) For products where the United States is *not* the SoD, the responsible office will most likely be an AIR directorate, or in some cases, an ACO.

**b.** Sometimes the responsibility for the type design of a product transfers from one FAA office to another FAA office, such as when a type certificate is transferred. When this happens, the responsibility for approving AMOCs for that product also transfers with the type design. Therefore, when the office identified in the AD receives an AMOC proposal for a product that has transferred, that office is responsible for forwarding the AMOC proposal to the currently responsible certificate managing office for approval/denial of the AMOC.

**c.** Some ACOs have authorized certain company DERs and ODA holders to review and approve AMOC proposals for certain AD-required structural modifications, alterations, and repairs. See paragraph 3-3 for more details.

**d.** Principal inspectors (PI) cannot approve an AMOC proposal, but they may comment on an AMOC proposal they receive (such as pointing out the unique characteristics of the requester's fleet and operation, or indicating whether the operator can reliably accomplish the requirements of the AMOC proposal) before forwarding it to the manager of the FAA office identified in the AD.

**Note:** For the purposes of this order, a PI can be a principal maintenance inspector, principal avionics inspector, or a principal operations inspector.

#### Chapter 3. The AMOC Process

**3-1. AMOC Process Flowchart.** Figure 1 depicts the AMOC process in a high level flowchart. The steps are explained in the following paragraphs.

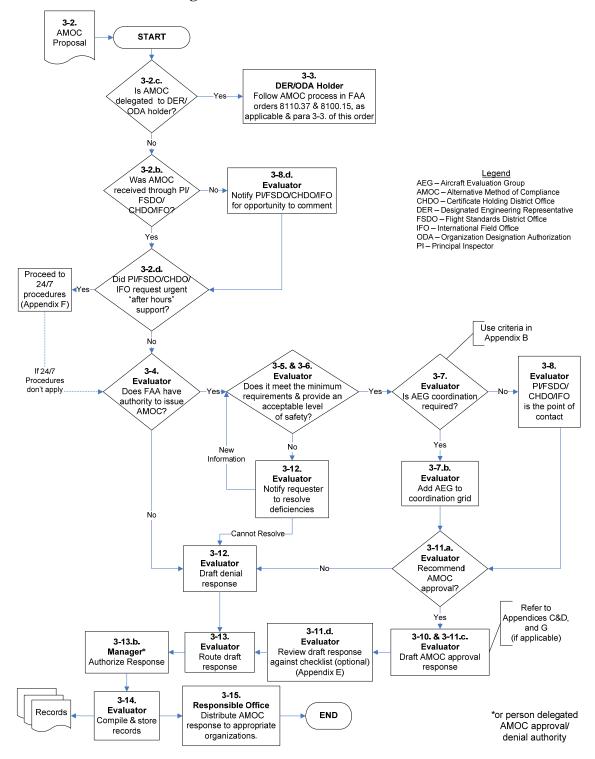


Figure 1. AMOC Process Flowchart

**3-2. The AMOC Proposal.** 14 CFR § 39.19 states that "… anyone may propose to FAA an alternative method of compliance or a change in the compliance time, if the proposal provides an acceptable level of safety."

**a.** While a letter is preferred, the FAA office identified in the AD may receive AMOC proposals submitted by other means, such as email, fax, or telephone. AMOC proposals received by telephone must be documented.

**b.** In accordance with 14 CFR § 39.19, advise AMOC requesters to send their AMOC proposal to their PI. The PI may add comments and must forward a copy of the AMOC proposal to the manager of the FAA office identified in the AD. The requester may, at the same time they send it to their PI, send a copy of the proposal to the manager of the office identified in the AD. If the requester doesn't have a PI (such as a design approval holder (DAH)), we advise them to send the proposal directly to the manager of the FAA office identified in the AD.

**Note:** If sending information directly to the manager, send it to the attention of the person identified in the Related Information section of the AD.

**c.** Requesters may also submit AMOC proposals to certain ODA holders or certain company structural DERs, if provided for in the AD. Use of this option falls under the "Unless FAA authorizes otherwise" clause in 14 CFR § 39.19.

**d.** If a PI, flight standards district office (FSDO), certificate-holding district office (CHDO), or international field office (IFO) identifies that there is an urgent need for AMOC support outside of normal business hours, then follow the process in appendix F of this order.

**Note:** A CHDO means the FSDO that has responsibility for administering the certificate and is charged with the overall inspection of the certificate holder's operations (reference 14 CFR § 119.3).

#### **3-3.** Delegated AMOCs.

**a.** Some ACOs authorize certain company structural DERs or type certification ODA holder's structural unit members (UM) to review and approve AMOC proposals (refer to FAA Orders 8100.15 and 8110.37, respectively, for information on what the ODA holder and DER can do within this delegated authority). The AD will identify if AMOC approval authority is delegated. AMOCs that have been delegated by the ACO and approved by the designee require no further FAA approval. The responsible office can delegate AMOC approvals only for ADs where the requester intends to restore an airplane's structure to its type certification basis or other known, defined, and published standards. This includes:

(1) Certain AD-mandated structural modifications, alterations, or repairs including those where no previous FAA-approved action exists, and

(2) Fully substantiated temporary structural repairs, if the standards required by the AD are well defined.

**b.** When reviewing an AMOC proposal, the DER or UM is not required to coordinate with AEG/PI/FSDO/CHDO/IFO. However, the designee must consider whether the AMOC proposal is transferable (see paragraph 3-11.b. for additional details).

**c.** ACOs must ensure that restrictions applicable to foreign registered aircraft are followed by DERs and ODA holders (see paragraph 4-5).

d. A DER or UM is not authorized to approve global AMOCs.

**e.** The responsible office can terminate delegated authority for approving AMOCs at any time, and for any reason it deems appropriate. See Order 8100.8 for more information on terminating DER delegated authority. See Order 8100.15 for more information on terminating an ODA holder's authority.

#### 3-4. Assigning Evaluator and Checking FAA Authority.

**a.** The responsible office assigns an evaluator to the AMOC proposal if they have not delegated AMOC approval authority per paragraph 3-3. The evaluator can be an aviation safety engineer, flight test engineer or pilot, as appropriate.

**b.** If the AMOC proposal is for an AD issued by another CAA, the FAA does not approve the proposal because it is the responsibility of the CAA that issued the AD. The evaluator drafts a denial response per paragraph 3-12.

**c.** If an AMOC proposal is for an FAA AD for a foreign registered aircraft, the FAA can approve the proposal, but authorizing use of the AMOC is the responsibility of the CAA of the state of registry (SoR). See paragraph 4-5 for more information on AMOC proposals for foreign registered aircraft.

**3-5. Requirements for AMOC Proposals.** If you are the evaluator, ensure the AMOC proposal contains all the required information and documentation. A submittal is not considered complete until the required information is received. You may contact the requester, as necessary, to obtain missing information. The proposal must include:

a. The requester's name and complete mailing address.

**b.** The affected product(s), model designation(s), serial number(s) (if applicable), flight hours or cycles (if applicable), and SoR (if known).

**c.** The AD number and specific AD paragraph(s) to which the proposal applies.

**d.** A complete and detailed description of the AMOC proposal, including (where applicable):

- (1) Article names,
- (2) Article numbers,

(3) Article serial numbers,

**Note:** The term "article" is defined in 14 CFR part 21.1, Amendment 21-92.

- (4) Descriptions of damage (e.g., fatigue cracks or corrosion),
- (5) Existing or affected modifications, alterations or repairs,
- (6) Alternative inspection methods, including repeat intervals,

(7) Change in compliance times,

(8) Technical descriptions of alternative processes or procedures,

(9) Pictures and drawings, and

(10) Other details necessary to define the acceptable level of safety that the AMOC will achieve.

**e.** Substantiating data showing why we should determine that the proposed AMOC resolves the unsafe condition with an acceptable level of safety. Two examples are:

(1) Data demonstrating that a different inspection method will produce acceptable results.

(2) Analysis showing that a previously modified, altered, or repaired structure in the area addressed by the AD redirects the load paths to eliminate the potential for cracking (the unsafe condition) identified in the AD.

**f.** If the requester wants to change their airplane/rotorcraft flight manual, instruct them to submit the affected sections of the manual and the proposed changes.

**g.** If the requester wants to use later revisions of service documents specified in an AD, then the proposal must include copies of those service documents and how the revised service documents provide an acceptable level of safety.

#### 3-6. Level of Safety Determination.

**a.** Evaluate the data submitted along with the information (e.g. risk analysis, etc) used to support the decision to issue an AD, and using your best engineering judgment, determine if the AMOC proposal provides an acceptable level of safety. You may contact the requester to obtain missing or additional information. For import products, you may consult with the CAA of the SoD for information to help in making the safety determination.

**b.** If you determine that the AMOC provides an acceptable level of safety, then continue with the AMOC process in paragraph 3-7.

**c.** If you determine that the proposal does not provide an acceptable level of safety, consider allowing the requester an opportunity to address any deficiencies. If any deficiency still exists after giving the requester the opportunity to respond, then you must deny the proposal per paragraph 3-12.

#### 3-7. Is AEG Coordination Required?

**a.** As the evaluator you must determine if AEG coordination is required by using the AEG coordination criteria in appendix B of this order for both individual and global AMOCs. AEG provides technical knowledge for the operator's maintenance program as well as insight to fleet issues.

**b.** If the AEG coordination criteria in appendix B are met, the AEG is your primary AFS point of contact for the AMOC proposal. Discuss the AMOC proposal with the AEG and continue the process starting with paragraph 3-9. Include AEG on the AMOC response coordination grid when routing the response for coordination per paragraph 3-13.

#### 3-8. Coordination with PI/FSDO/CHDO/IFO.

**a.** If the AEG is not the primary AFS point of contact per paragraph 3-7, then either the PI/FSDO/CHDO or the IFO is your primary AFS point of contact.

**b.** If the AMOC proposal is for a U.S. registered aircraft, then the PI/FSDO/CHDO is your primary AFS point of contact for the AMOC proposal, except if it is operated by a foreign operator (14 CFR part 129).

**c.** If the AMOC is for a foreign registered aircraft or if it is U.S. registered but operated by a foreign operator, then the IFO is your primary AFS point of contact.

**d.** If the AMOC proposal came directly to the ACO with no PI/FSDO/CHDO/IFO comments, notify the appropriate PI/FSDO/CHDO/IFO to provide them an opportunity to comment on the proposal. PI/FSDO/CHDO/IFO insight is especially important for proposals for changes in AD compliance times. If you are having difficulty obtaining a response from the PI/FSDO/CHDO/IFO or resolving issues, contact the manager of the appropriate office for assistance.

e. The evaluator must save a record of the request for PI/FSDO/CHDO/IFO comments, the resulting comments (including no comment, if applicable), and any comments initially provided with the AMOC proposal. These records can be in various formats such as a memo, printed email or telecon record.

**3-9.** Coordination with Legal Counsel. Legal review of an AMOC is not required. However, the evaluator can choose to request coordination from the Regional Airworthiness Counsel responsible for the product. When doing so, include the Regional Airworthiness Counsel on the approval letter grid.

#### 3-10. Proper Methods of Responding to AMOC Proposals.

**a.** The responsible office manager, or person delegated AMOC approval/denial authority, approves or denies the AMOC proposal via:

(1) An email response, or

(2) A letter response.

**b.** An email response must be transmitted from and contain the name and title of the official approving or denying the AMOC (see paragraph 3-11.e. and 3-12.b.). The email must contain the minimum requirements of this order for an AMOC approval response (see paragraph 3-11.c.) or denial response (see paragraph 3-12). The AMOC approval email response must contain either of the following statements, as appropriate:

(1) For ADs where specific reference is made to an AMOC letter, use "This e-mail is issued per the authority of the Manager of the [*insert approving office*] and is the AMOC approval letter referenced in paragraph (\*) of AD \*\*\*\*\_\*\*\_\*\*."

(2) For all other ADs, use "This e-mail is issued per the authority of the Manager of the *[insert approving office]* as referenced in paragraph (\*) of AD \*\*\*\*\_\*\*\_\*\*."

**c.** Do not respond to AMOC proposals verbally. This applies even if you are certain a response will be provided. You may informally state that you are working on an AMOC proposal response, but you must clarify that the proposal is not approved or denied until the requester receives the authorized written or electronic response. Refrain from making a commitment for approval or denial of the proposal since circumstances may change or delay that determination.

**3-11. How to Approve an AMOC.** If the responsible office has delegated AMOC approval authority to a DER or ODA holder, then follow the AMOC process as shown in FAA Orders 8110.37, Designated Engineering Representative Handbook, or 8100.15, Organization Designation Authorization Procedures, as applicable (see paragraph 3-3).

**a.** The evaluator reviews the comments, if any, received from the PI/FSDO/CHDO/IFO/AEG when reviewing an AMOC proposal and makes a recommendation whether to approve or deny the AMOC.

**b.** Transferability Determination. If you are considering recommending that the AMOC proposal be approved, determine if the AMOC should be transferable. A transferable AMOC is an AMOC that will continue to apply to a product after it has been transferred to a new owner/operator. The holder of a transferable AMOC can make the AMOC approval document available to someone else who receives a product covered by that document. Changes of compliance time are typically not transferable. You must be careful when determining transferability, and not make an AMOC transferable if it depends on:

(1) A particular maintenance program schedule, which may not transfer with the product,

(2) Procedures, facilities, or processes unique to the requester,

(3) Operational procedures, limitations, or training that are unique to the requester,

(4) Recurring inspections or other maintenance actions unique to a requester's maintenance program, or

(5) Any other factors unique to the requester.

**c.** The AMOC Approval Response. If you recommend approval of the AMOC proposal, you must draft an AMOC approval response. Appendix C in this order contains guidance on how to write a specific and effective approval statement within the response. See examples of problematic statements in appendix D. The approval response must, at a minimum, meet the following requirements:

(1) Clearly state the AD number and specific AD paragraph(s) to which the AMOC applies.

(2) Specify the make and model designation(s) or other limiting factors (like serial number(s) or part number(s)) to which the AMOC applies.

(3) Reference the substantiating data used to establish the acceptable level of safety which was the basis for approving the AMOC.

(4) Identify any restrictions on the AMOC, such as applicability, special procedures, facilities, processes, or time limitations (or specify that there are no restrictions, if applicable).

(5) If applicable, refer to the appropriate service documents by number, revision level, and date of revision (if available).

**Note:** If some of the required information in paragraphs 3-11.c.(1)-(5) are contained in the AMOC proposal, you may refer to the information in the proposal and attach it to the AMOC response.

(6) State whether the AMOC is transferable.

(7) Include the following statement:

"Before using this AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office."

(8) Include the following statement:

"All provisions of AD \*\*\*\*\_\*\* that are not specifically referenced above remain fully applicable and must be complied with accordingly."

(9) Include the following statement (this statement is not required for global AMOC approvals, because it may not be possible to determine who has received or is using a global AMOC):

"The [*insert approving office*] will revoke this AMOC if the [*insert approving office*] later determines that this AMOC does not provide an acceptable level of safety."

**d.** Review the AMOC Approval Response Checklist (Optional). Use the optional AMOC approval response checklist in appendix E to help you comply with this order. If you determine that the draft approval response does not comply with any requirement in this order, correct it to bring it into compliance.

**e. AMOC Approval Authority**. The manager of the responsible office, or person delegated AMOC approval authority, is the approval authority for the AMOC. The manager is authorized to delegate duties and responsibilities for AMOC approval using an approval/denial authority delegation memorandum. The manager may delegate authority for AMOC approval to other managers or non-managers. These personnel do not have to be the acting manager as long as they have been delegated approval authority by the manager via an office AMOC approval/denial authority delegation memorandum. Any limitations associated with these delegations are defined in the memoranda issued by the manager.

**3-12. Denying an AMOC Proposal.** If you, the evaluator, are considering recommending denial of the AMOC proposal, notify the requester and the responsible PI/FSDO/CHDO/IFO or AEG, as appropriate, and provide the requester an opportunity to address the deficiency. If the deficiency still exists after giving the requester sufficient time to respond, then you must draft a denial response. The AMOC denial response must state the reasons the proposed AMOC is being denied (e.g. paragraphs 3-12.a.(1) thru 3-12.a.(4)).

**a. AMOC Denial Criteria.** The responsible office must deny the AMOC proposal if the proposal:

(1) Does not provide an acceptable level of safety,

(2) Does not meet the AMOC proposal requirements per paragraph 3-5,

(3) Is for an AD issued by another CAA per paragraph 3-4.b. (the FAA refers the requester to the CAA of the country the aircraft is registered in), or

(4) Is not appropriate as an AMOC (e.g., an AMOC proposal to solely reduce the applicability section of an AD; or if the proposal is already permitted by the service information instructions required by the AD, etc.).

**b. AMOC Denial Authority.** The manager of the responsible office, or person delegated AMOC denial authority, is the denial authority for the AMOC. The manager is authorized to delegate duties and responsibilities for AMOC denial using an approval/denial authority delegation memorandum. The manager may delegate authority for AMOC denial to other managers or non-managers. These personnel do not have to be the acting manager as long as they have been delegated denial authority by the manager via an office AMOC approval/denial

authority delegation memorandum. Any limitations associated with these delegations are defined in the memoranda issued by the manager.

#### **3-13.** How to Route the Response.

**a. Response Package.** Once you have drafted the response using either an email or letter, then you must route it for coordination along with the following documentation:

(1) The original incoming AMOC proposal or documented telephone proposal (including the PI/FSDO/CHDO/IFO comments, if transmitted); and

(2) A coordination grid which includes signatures or initials of the following persons (you may collect scanned or faxed copies of coordination grids). For email responses, a copy of coordination via email is an acceptable alternative.

(a) You, the evaluator,

(b) AEG, as required,

(c) Technical specialist(s) at your discretion, and

(d) The manager of the responsible office, or person delegated AMOC approval/denial authority.

(3) The completed AMOC Response Checklist, if used; and

(4) If recommending approval, any additional substantiating data used to establish the acceptable level of safety which was the basis for recommending approval of the AMOC (e.g., service information, emails, calculations, etc.).

**b.** Approval/Denial Authority Response. If you are the manager of the responsible office, or person delegated AMOC approval/denial authority, consider the following before authorizing the AMOC response and address any issues or concerns found:

(1) Do you have the authority to approve or deny the proposal (refer to paragraphs 3-11.e. and 3-12.b.)?

(2) If approving the AMOC, does the proposal provide an acceptable level of safety?

(3) If approving the AMOC, does the AMOC response avoid problematic language? (See appendix D for examples.)

(4) If approving the AMOC, does the AMOC response approval statement include the correct AD paragraph(s)?

(5) If approving the AMOC, does the AMOC approval response follow a clearly delineated requirement chain? (See appendix C for an example.)

(6) Should AEG have been included on the coordination grid?

(7) Was the PI/FSDO/CHDO/IFO coordinated with, when required by paragraph 3-8.b or 3-8.c?

(8) Should other technical personnel or organizations review the AMOC decision?

**3-14. Compile Records and Storing in Office Files.** The office's AMOC file consists of the following information (either in hard copy or electronic format). When filing AMOC information, use file code 8040.1. See appendix H, paragraph 803 for more information on records management.

**a.** The original AMOC proposal in whatever form it came (including the documented telephone proposal, if applicable),

**b.** Record of the request for PI /FSDO/CHDO/IFO comments, the resulting comments (including no comment, if applicable), any comments initially provided with the AMOC proposal, and a record of AEG contact when required by paragraph 3-7.b.

**c.** A copy of the AMOC response.

**d.** The original coordination grid and any scanned or faxed copies of coordination grids, including email coordination (refer to paragraph 3-13.a.(2)).

e. The completed AMOC approval response checklist (appendix E), if used.

**f.** If the AMOC was approved, any additional substantiating data used to establish the acceptable level of safety which was the basis for approving the AMOC (e.g., service information, emails, calculations, record of discussion with technical specialist, etc.).

**3-15. Distribution of Responses.** The responsible office sends copies of the AMOC response as summarized in table 1.

	Individual AMOC		Global AMOC
	U.S. Registered Product	Non U.S. Registered Product	(U.S or Non-U.S. Registered Product)
AMOC Requester	Original response	Original response	Original response
PI/FSDO/CHDO/IFO Copy PI/FSDO/CHDO/IFO Copy IFO		Copy IFO	not applicable
AEG	Copy if on response coordination grid	Copy if on response coordination grid	Сору
CAA (for Non-U.S. Registered Products) *	not applicable	Copy to SoR	Copy SoR; and Copy to Transport Canada and the European Aviation Safety Agency (EASA) under the terms of our bilateral agreements

\* When replying to direct AMOC proposals for non-U.S. registered products, always send a copy to the CAA overseeing that requester, and if different, the CAA of the SoR. Contact the FAA International Policy Office, AIR-40, if you are uncertain of the appropriate CAA contact.

## Chapter 4. Other AMOC Considerations

**4-1. Amending an AMOC Response.** There may be circumstances when you need to amend an AMOC response, e.g., an omission, typographical error, submittal of additional information that doesn't affect the acceptable level of safety, etc. When amending an AMOC approval response, state the reasons it is being amended and that the original AMOC response is superseded. Ensure the amended AMOC approval response meets the criteria in paragraph 3-11.c. of this order. Only amend an AMOC response in cases where an acceptable level of safety still exists.

**4-2. Revoking an AMOC.** Although it should be rare, there may be times when a previously approved AMOC must be revoked because the AMOC does not provide an acceptable level of safety. A revocation letter will not be issued for global AMOCs because it may not be possible to determine who received or used a global AMOC. In this case it would be necessary to supersede the AD to revoke the AMOC if an unsafe condition exists.

**a.** Because an unacceptable level of safety is contrary to the public interest, the responsible office must revoke any previously approved AMOCs that no longer achieve an acceptable level of safety. To revoke such AMOC approvals, the responsible office must send a letter to the AMOC holder notifying them that the FAA proposes to revoke the AMOC and the reason for the proposed revocation. Any letters sent to the AMOC holder regarding revocation must be sent by certified mail (return receipt requested). The office must send a copy of the (proposed) revocation letter(s) to the AMOC holder's PI (or lacking a PI, the manager of the FSDO/CHDO/IFO).

(1) The proposed revocation letter must provide the AMOC holder with a minimum of seven days to respond to the proposal.

(a) During this notice period, the responsible office should work with the AMOC holder to identify a means to provide an acceptable level of safety, which may result in approval of a new AMOC.

(b) After the notice period, the responsible office decides whether a new AMOC is appropriate or whether the owner/operator must be required to comply with the AD as issued. The responsible office issues a letter revoking the AMOC and identifying the necessary actions for the owner/operator, e.g., comply with a different AMOC or with the AD as issued.

(2) If the AMOC is unsafe such that it creates an emergency situation, the notice and comment period may be waived, and the revocation may be made effective immediately. This would have the effect of grounding the affected aircraft. The reasons for the emergency action must be stated in the letter. The letter must include the following:

"This is to inform you that we have determined that the AMOC to AD [XXXX-XX-XX], approved on [MM-DD-YYYY], does not provide an acceptable level of safety. This determination is based on [INSERT JUSTIFICATION FOR THE REVOCATION and the IMMEDIATE SAFETY CONCERN]. Therefore, we are revoking the AMOC.

This revocation is effective upon receipt of this letter. You must comply with the AD as issued (reference 14 CFR § 39.9). You may propose another AMOC if necessary. Otherwise, continued operation of the affected aircraft would violate 14 CFR § 39.7."

(3) If an acceptable level of safety can be ensured over the short term, the letter may delay the effectiveness of the revocation to avoid unnecessary disruption of operations. Once the revocation becomes effective, the owner/operator must be in compliance with either the AD as issued or a new AMOC. Otherwise, continued operation would be a violation of § 39.7.

**b.** The letter proposing to revoke an AMOC (because it didn't provide an acceptable level of safety) must include the following:

"This is to inform you that we have determined that the AMOC to AD [XXXX-XX-XX], approved on [MM-DD-YYYY], does not provide an acceptable level of safety. This determination is based on [INSERT JUSTIFICATION FOR THE REVOCATION]. Therefore, we are proposing to revoke the AMOC. In deciding whether to revoke this AMOC, we will consider any information you provide us within seven days of your receipt of this letter. This information may include data indicating that our determination is erroneous or a request for a different AMOC. If we decide to revoke this AMOC, you will be required to be in compliance with the AD unless we approve a different AMOC. Otherwise, continued operation of the affected aircraft would violate 14 CFR § 39.7."

**c.** The responsible office must follow-up with the final revocation letter, if appropriate, no later than five business days after the close of the notice period. Address why any information submitted was inadequate.

#### 4-3. Global AMOCs (AMOCs of General Applicability).

**a. What is a Global AMOC?** As used in this order, a "global AMOC" is also defined as an "AMOC of general applicability," a term used in some bilateral agreements. A global AMOC applies to two or more operators; it can be used to obtain an AMOC for multiple serial numbers or makes and models specified in an AD. It can be a useful tool if the responsible office receives or expects to receive multiple requests for the same AMOC. A global AMOC applies to and is transferable with the product to other owners/operators. Anyone, including someone other than an owner/operator, may propose a global AMOC. The following are some examples of global AMOC proposals:

(1) An operator proposes a global AMOC for the entire range of aircraft cited in the applicability section of an AD, which includes, and can be used by, other operators.

(2) A company proposes a global AMOC to repair multiple aircraft, even though the company is not the DAH for those aircraft.

(3) A type club proposes a global AMOC that can be used by multiple owners of a particular aircraft model.

(4) An individual proposes an AMOC for his aircraft that other owners of that same aircraft model can use because it is of general applicability.

(5) The DAH for all aircraft affected by an AD develops a revision to the service bulletin (SB) mandated by the AD and proposes a global AMOC to allow all owners/operators of the aircraft to use the new revision. If the AMOC proposal is approved, the DAH can then notify the affected owners/operators by adding a statement in the SB revision describing which engineering aspects of the SB are an AMOC to the AD.

**b.** Is an AMOC Applicable to a Fleet of Aircraft the Same as a Global AMOC? An AMOC applicable to a fleet of aircraft is not a global AMOC, but rather an individual AMOC that applies to multiple aircraft operated by a *single* operator.

**c. Global AMOC Approval Responses.** The minimum requirements for a global AMOC approval response are in paragraphs 3-11.c.(1) thru 3-11.c.(8) above. Owners/operators using a global AMOC are still responsible for notifying their PI (or lacking a PI, the manager of the FSDO/CHDO) before using it.

**d.** Converting to a Global AMOC. If converting an individual AMOC into a global AMOC, consider coordinating the global AMOC with the original requester's PI/FSDO/CHDO/IFO per paragraph 3-8.

e. Proprietary Information in Global AMOCs. If converting an individual AMOC proposal into a global AMOC be careful to not divulge proprietary information to unauthorized entities. When distributing a global AMOC approval response, use the distribution list in paragraph 3-15, table 1. Following this list ensures that proprietary information is only sent to authorized parties/individuals. Consult with your Regional Airworthiness Counsel for any questions concerning proprietary information.

**4-4. AMOC Proposals From Foreign Entities.** We may receive proposals from foreign entities to approve AMOC proposals to FAA ADs for products that are not on the U.S. registry. Such proposals can come from a foreign owner/operator, a design or production approval holder, or another CAA for a foreign owner/operator. We respond to such proposals because it can minimize urgent proposals for AMOCs in the future. Some aircraft change registration often, sometimes during maintenance. A foreign registered aircraft today could be U.S. registered tomorrow. The importing owner/operator must demonstrate FAA AD compliance before the FAA can determine the aircraft to be airworthy. Our timely response to a foreign proposal for an AMOC, while the aircraft is on its registry, can speed up future determinations.

#### 4-5. AMOC Proposals for Foreign Registered Aircraft.

**a.** We can approve and deny AMOCs (including global AMOCs) to FAA ADs for foreign registered aircraft (see appendix G).

**b.** We cannot approve AMOCs to another CAA's AD.

**c.** When responding to AMOC proposals for foreign registered aircraft, use the template in appendix G.

(1) Our AMOC approval responses for FAA ADs for foreign registered aircraft must clearly note that the FAA does not have authority to approve AMOCs to any AD issued by another CAA.

(2) If the response involves an AMOC to a "sensitive" AD (see FAA Manual FAA-IR-M 8040.1, *Airworthiness Directives Manual*, Chapter 6, paragraph 6 for examples), coordinate with AIR-40.

## Appendix A. Questions From AMOC Requesters

#### 100. Service Documents in ADs.

**a.** *Question:* I converted the AD and the referenced instructions in the referenced service document to an in-house fleet campaign notice, engineering change order, or individual work cards. Do I need an AMOC?

*Answer:* 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.

**b.** *Question:* I complied with the referenced instructions in the service document revision referenced in the AD before the AD was issued. Do I need an AMOC?

*Answer:* Maybe. If the AD specifically allows previously accomplished work, you don't need an AMOC. If the AD is silent on previously accomplished work or it is unclear whether the work done prior to the AD is acceptable, contact the office that issued the AD.

**c.** *Question:* Do I need an AMOC if I accomplish the instructions in a later version of the DAH service document than what was mandated in the AD?

**Answer:** Yes, any deviations to the technical requirements of the specific document that are required to be accomplished by the AD will need an AMOC. So, if the aircraft DAH did not obtain an AMOC approval for the later version of the service document, you will need to apply for an AMOC. Contact the DAH or FAA responsible office to determine whether the DAH got an AMOC for the service document revision.

**d.** *Question:* The instructions in the mandated service document incorporated by reference in the AD calls for a specific fastener on my aircraft. May I substitute another fastener?

*Answer:* No. You cannot use a different fastener (or any part, material, or process) from what is specifically mandated in an AD without getting an AMOC, unless the procedures in the AD permit substitution. If you substitute another fastener without an AMOC, you violate 14 CFR § 39.7 each time you operate the aircraft.

**e.** *Question:* The AD requires me to perform actions in a service document by a certain date. The service document recommends a date that is later than required by the AD. I want to perform the actions at the later date, per the service document. Do I need an AMOC?

*Answer:* Yes. In accordance with 14 CFR § 39.27, AD requirements override any other language in service documents. You would have to propose an AMOC and substantiate that a change in compliance time similar to that referenced in the service document provides an acceptable level of safety. The service document alone is inadequate substantiation.

**f.** *Question:* The AD requires that I accomplish specific instructions in a SB. Those instructions require actions from a manual, and the manual requires actions from a standard

practice manual. My operating procedure differs from the standard practice manual. Do I need an AMOC to keep using my operating procedure?

*Answer:* Yes. You must accomplish the specific instructions in the SB specified in the AD, including any second- or third-tier documents that are required to complete the action(s).

#### 101. Changes in the Area Addressed by ADs.

**a.** *Question:* I previously repaired my aircraft structure in the area now addressed by the AD. The repair affects my ability to perform the AD. Must I obtain an AMOC for the AD?

*Answer:* Yes. In accordance with 14 CFR § 39.17, if a change to a product affects your ability to accomplish the actions required by the AD in any way, you must propose FAA approval of an AMOC. Unless you can show the change eliminated the unsafe condition, your proposal should include the specific actions that you propose to address the unsafe condition.

**b.** *Question:* During the last AD inspection, I found the crack that the AD warned about. I obtained an approved repair from the aircraft DAH, which differs from the repair mandated by the AD. Do I need an AMOC for the repair?

*Answer:* Yes, you must comply with the specific requirements of the AD. So, you or the DAH must apply for and obtain an AMOC if any action differs from the specific requirements of the AD.

**c.** *Question:* The AD requires that I visually inspect for cracks. However, the previous owner/operator installed a repair doubler that prevents me from inspecting. Do I need an AMOC?

Answer: Yes. Whenever you cannot comply with the specific requirements of an AD, you must seek an AMOC. In this case, you must either devise a new method to inspect the area identified in the AD, or show that the repair reinforces the area and redistributes the loads, so an inspection is no longer required. In either case, you must propose and obtain an AMOC to ensure compliance with the AD.

**d.** *Question:* The AD requires that I do an eddy current inspection of a structural area. There is a repair doubler behind the area that interferes with the eddy current readings, making them uncertain. Do I need an AMOC for this AD?

**Answer:** Yes. You need an AMOC any time a repair, modification, or alteration interferes with the ability to obtain proper results from a required inspection. This is true when the results of the required inspection are questionable, even though you can physically perform the inspection.

**e.** *Question:* A structural modification required by an AD was accomplished on my aircraft. I have to do a repair in the region previously modified by this AD for a specific reason (e.g. corrosion, accidental damage, cracks, etc). Do I need to apply for an AMOC to install this repair?"

*Answer:* Yes. Any change or modification to the configuration mandated by an AD requires an AMOC.

#### 102. Removing and Replacing Appliances.

**a.** *Question:* The applicability section of an AD lists an appliance that I previously removed from my aircraft. Is an AMOC required for the aircraft?

*Answer:* No. You don't need an AMOC when the AD applicability statement is against the appliance and you no longer have the appliance installed.

**b.** *Question:* The applicability section of an AD lists an appliance installed on my aircraft. I cannot accomplish the actions in the AD because I previously modified, deactivated, or partially removed the appliance. Do I need an AMOC?

*Answer:* Yes. You should propose an AMOC whenever you cannot comply with the specific requirements of an AD. In accordance with 14 CFR § 39.15, the AD still applies to the appliance even though it was modified, deactivated, or partially removed.

**c.** *Question:* The AD says I must install a specific version of software. I did that. Now I have received a later version of the same software from the DAH. Do I need an AMOC to install this later version?

*Answer:* Yes. You'll need an AMOC to install any version other than that specifically referenced in the AD.

#### 103. Superseding ADs.

**a.** *Question:* An AD supersedes another AD applicable to my aircraft. I had received an AMOC for a different inspection procedure from what the original AD called out. Is my AMOC still valid?

Answer: It depends on the superseding AD.

• *If* the superseding AD includes a provision that AMOCs to the original AD inspection are approved as an AMOC to the superseding AD inspection, *then* your AMOC is still valid for the superseding AD inspection.

#### However:

• *If* the superseding AD does not include such a provision, *then* your AMOC is not valid for the superseding AD inspection and you need to propose a new AMOC if you cannot comply with the superseding AD compliance actions.

If you have any question concerning compliance with the superseding AD, contact the responsible office.

**b.** *Question:* An AD that applies to my aircraft was superseded, adding a mandatory terminating action. It includes a provision that AMOCs to the inspection methods, approved in accordance with the original AD, are approved as AMOCs to the inspection methods in the superseding AD. Can I perform the AMOC inspection instead of accomplishing the terminating action?

*Answer:* No. Even if an AMOC is still valid, it's only valid for the specific paragraphs of the AD as listed in the AMOC response, not for the superseding AD as a whole. An AMOC inspection may be an acceptable alternative to the mandated inspection (if the superseding AD allows it), but not for the mandated terminating action (which is likely to be in a different paragraph of the AD). The mandatory terminating action must still be done within the compliance time specified in the superseding AD.

#### 104. Previously Approved AMOCs.

**a.** *Question:* I have a previously approved AMOC for a different repair method that applies to my aircraft. I was not the original AMOC proposer, but it is transferable. Do I need to obtain ACO, directorate, or company DER approval before using it on my aircraft?

*Answer:* No. However, if the AMOC has not yet been accomplished, you are responsible for notifying your PI (or lacking a PI, the manager of the FSDO/CHDO) before you use it.

**b.** *Question:* How can I find out who has an AMOC to an AD?

*Answer:* Each AD identifies an office responsible for approving AMOCs. That office can provide information about AMOCs it has already approved.

c. Question: Can the new owner/operator of my aircraft use my AMOC?

*Answer:* Only if the AMOC approval identified it as transferable and you make it available to them.

d. Question: Can other owners/operators use my AMOC?

*Answer:* Only if their aircraft are identified in your AMOC approval response. The AMOC can only be used for the specific aircraft, AD and paragraph(s) cited in the AMOC approval document. The owner/operator must ascertain that the AMOC applies to their product (that is, to the model and serial number), whether they can meet any restrictions identified, and that they can accomplish the specific instructions in the AMOC. They are also responsible for notifying their PI (or lacking a PI, the manager of the FSDO/CHDO) before using the AMOC.

e. *Question:* Is there a fee for using AMOCs?

*Answer:* We don't charge fees to use AMOCs. However, some AMOC holders may charge fees for allowing others to use their AMOC procedures.

#### 105. Global AMOCs.

**a.** *Question:* Who can apply for a global AMOC?

Answer: Anyone may apply for a global AMOC.

**b.** *Question:* The DAH of my aircraft received a global AMOC for the engineering aspects of their service document. Do I need to propose another AMOC if I use the same service document?

*Answer:* No, but if you use the service document as an AMOC, you are responsible for notifying your PI (or lacking a PI, the manager of the FSDO/CHDO) before using it.

#### 106. AD Compliance Before Delivery.

**a.** *Question:* The DAH (or production approval holder (PAH)) delivered my aircraft with AD status records (indicating compliance with all applicable ADs). Do I still need to get AMOCs for these ADs?

*Answer:* No. AMOCs are not necessary if the AD status records show that the aircraft complies with all of the applicable ADs. Note that there might be recurring or terminating AD actions that are not yet due. To continue operating the aircraft, you are responsible for complying with these actions before they become due.

**b.** *Question:* I just received my aircraft, but cannot get an AD status record from the DAH (or PAH). AD XXXX-XX-XX applies to it. Do I need to take action?

*Answer:* Yes. Before flying the aircraft, you must either comply with the AD as written, or obtain and implement your own AMOC.

#### 107. Returning Aircraft to Service.

Question: How do I return my aircraft to service after receiving an AMOC?

*Answer:* You may approve your aircraft for return to service after accomplishing an AMOC only if you record the AMOC in your aircraft maintenance records as your method of compliance with the AD. Annotate the maintenance records as follows:

(1) AMOC approval from the [XXX] ACO (or Directorate) approval authority, dated [MM-DD-YYYY], or

(2) AMOC approval, FAA Form 8110-3, "Statement of Compliance with the Federal Aviation Regulations," dated [MM-DD-YYYY] from [company DER name and employer], or

(3) AMOC approval, FAA Form 8100-9, "Statement of Compliance with Airworthiness Standards," dated [MM-DD-YYYY] from [ODA holder's name], or

(4) Global AMOC approval from the [XXX] ACO (or Directorate) approval authority to [global AMOC requester's name], dated [MM-DD-YYYY].

**Note:** You are responsible for notifying your PI (or lacking a PI, the manager of the FSDO/CHDO) before you use an AMOC. You may have additional requirements for maintenance record keeping for methods of compliance to an AD (e.g., 14 CFR §§ 43.9, 91.417 (a)(2)(v), 121.380(a)(2)(vi), or 135.439(a)(2)(v)).

# Appendix B. Criteria for Coordinating AMOC Proposals with AEG

**200.** How to Use this Appendix. This appendix provides a decision tool to determine if AEG is to be included on the coordination grid for the AMOC response. The grid copy of the AMOC response is the official record of AEG coordination. The outcome of this decision tool is recorded by inclusion of AEG on the grid or marking "AEG – not required" on the grid. No other records of this decision are required. Notes regarding this decision may be included in the office files but are optional.

#### 201. Step 1: Review the Criteria in Table 2 and Determine If Any Apply:

#### Table 2: AEG Coordination Criteria

#	AMOC-AEG Coordination Criteria. Does the AMOC:		
1	Involve a change to the airplane flight manual (AFM), rotorcraft flight manual (RFM) or AFM/RFM supplement, except in cases where the AFM/RFM change has been previously approved under existing certification/validation procedures?		
2	Affect master minimum equipment List (MMEL) dispatch?		
3	Involve flight crew training as part of the AMOC proposal (typically includes a change to the AFM)?		
4	Involve a change to what & how information is displayed to the flight crew?		
5	Involve any placard installed that affects operational use?		
6	Affect Extended Twin Engine Operations (ETOPS)/Configuration, Maintenance, and Procedures?		
7	Involve any change to a mandated maintenance requirement (e.g. SFAR 88 program changes, Corrosion Protection Control Program), or changes to manufacturer's baseline maintenance/inspection requirements (typically found in the Maintenance Review Board Report, or Electrical Wiring Interconnection System maintenance program)?		
8	Introduce a new or novel inspection/maintenance procedure?		
9	Involve a change to the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness (reference 14 CFR §§ 23.1529, 25.1529, 26.11, 27.1529, 29.1529, 31.82, 33.4, and 35.4), except in cases where the ALS change has been previously approved under existing certification/validation procedures?		

#### 202. Step 2: Make a Decision (Select One):

**Note:** If the evaluator is not sure on a criterion, either discuss it with AEG, or include AEG on the grid. If the criteria

- **a.** One or more criterion is YES: AEG on grid IS required.
- **b.** All criteria are NO: AEG on grid IS NOT required.

c. All criteria are NO, but evaluator wants AEG on grid: AEG on grid IS required.

**Note:** If AEG coordination criteria are not met, you may still consider contacting them as technical specialists. AEG's involvement may add value to the process and determination of AMOC acceptability.

## Appendix C. Guidance on Writing an AMOC Approval Statement

**300. AMOC Approval Requirements Chain.** See figure 2 for an example of an AMOC approval requirements chain.

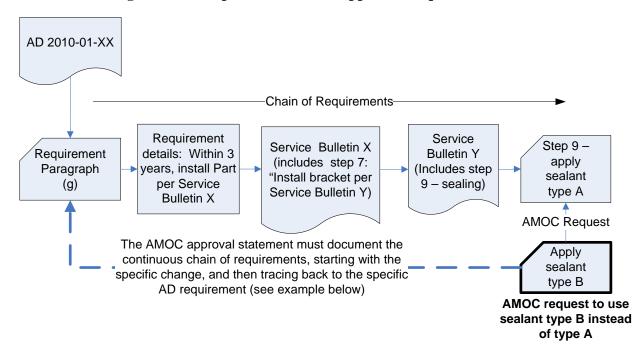


Figure 2. Example of an AMOC Approval Requirements Chain

#### 301. AMOC Approval Statement.

**a.** The evaluator should write the specific AMOC approval statement to capture this chain of requirements. The example shown is for an AMOC proposal from a domestic operator where Service Bulletins X and Y were incorporated by reference into the AD:

"The Federal Aviation Administration (FAA) received your proposal dated June 6, 2010, proposing an alternative method of compliance (AMOC) to paragraph (g) of Airworthiness Directive 2010-01-XX.

The Los Angeles Aircraft Certification Office approves your AMOC proposal to paragraph (g) of AD 2010-01-XX to replace Sealant type A with Sealant type B as required by step 9 of Service Bulletin Y, dated April 5, 2009, which is required by Step 7 of Service Bulletin X, dated April 5, 2009.

All provisions of AD 2010-01-XX that are not specifically referenced above remain fully applicable and must be complied with accordingly."

**b.** If more than one AMOC is proposed, write an AMOC approval statement for each, or alternatively write a separate AMOC response for each proposal.

## Appendix D. Examples of How <u>NOT</u> To Write AMOC Statements

#### 400. Examples of Problems. (This is what we want to avoid.)

#### a. Problematic Example 1.

Air \_\_\_\_\_ has proposed an extension of the repetitive inspection interval (Paragraph 'D') of the subject AD to 4,500 hours/18 months.

Due to Air \_\_\_\_\_'s past service experience, corrosion prevention program, and operating environment, we find this extension to be acceptable.

What's wrong with example 1?

- The specific AD is not defined in the approval response.
- The interval of 4,500 hours/18 months is not definitive. Is it which occurs first

or later?

• There is no approval. It was "found" to be "acceptable".

#### b. Problematic Example 2 (Global AMOC).

The subject service bulletin submitted with the reference letter has been reviewed in light of its relationship with Airworthiness Directive 85-13-01. The FAA concurs with the recommendation of DER\_\_\_\_\_ and considers the engineering aspects of the service bulletin to be approved.

#### What's wrong with Example 2?

• The FAA only "considers" the engineering aspects of the service bulletin to be approved. The FAA never actually approved the AMOC.

• It is unknown what "reviewed in light of its relationship" actually means (e.g., it is unknown if the service bulletin impacted the compliance times or any of the required AD actions).

• Avoid statements that approve the engineering aspects of the service bulletin, but don't approve the engineering aspects of the service bulletin as an AMOC. DERs can't approve the engineering aspects of service bulletins that are the subject of an AD or global AMOC.

• It is unknown whether the service bulletin was the document that provided an acceptable level of safety to the AD. Typically, the FAA approves both a report substantiating the acceptable level of safety to the AD and the engineering aspects of the service bulletin identifying how to accomplish the AMOC.

#### c. Problematic Example 3.

We have found the proposal acceptable based on the result of the fault tree analysis conducted by manufacturer X on the unit. Therefore, we permit extending the time interval to 3,000 flight hours for the repetitive functional tests of the unit required by paragraph (a)(2) of AD 2003-YY-ZZ.

#### What's wrong with Example 3?

Stating that we permit something is not equivalent to approving it. This AMOC is not actually "approved" and thus has potential operational impact. Also, this "change in compliance time" should have stated it was changing the repetitive test from X,XXX hours to 3,000 hrs.

#### d. Problematic Example 4.

We have reviewed Service Bulletin 7X7-51-0018, Rev. 1 dated February 30, 2008, and approve it as an AMOC to AD 2009-23-51.

#### What's wrong with Example 4?

This approval permits the service bulletin as an alternate to all actions required by the AD. It does not state specific paragraphs of the AD to which the AMOC applies or what aspects of the service bulletin are approved. If there were other requirements in the AD, the operator may use this statement to justify not doing them.

#### e. Problematic Example 5.

We have reviewed your proposal and believe that this AMOC is equivalent to the intent of paragraph (a) of AD 2006-21-05 and can be considered terminating action for the subject AD for U.S. registered airplanes.

#### What's wrong with Example 5?

Stating that we "believe" in an AMOC is not equivalent to approving it. Furthermore, the FAA's responsibility in approving an AMOC is to determine that the AMOC provides an acceptable level of safety, not "equivalent to the intent" of the AD.

# Appendix E. AMOC Approval Response Checklist

Response Number:

Evaluator:

8110.103A Chapter 3 Paragraph#	Specific Order Requirement (See Order 8110.103A for details)	Response Complies with Requirement (YES/NO/ Not Applicable)	Added Instructions	Comments
3-11.c.	The approval response must, as a minimum:			
3-11.c.(1)	Clearly state the AD number and specific AD paragraph(s) to which the AMOC applies.		"Not Applicable" is not allowed. This is listed in the introduction/background section. It is also covered in the specific AMOC approval statement as covered by requirements below.	
3-11.c.(2)	Specify the make and model designation(s) or other limiting factor (like serial number(s), registration number(s), or part number(s)) to which the AMOC applies.		"Not Applicable" is not allowed; the AMOC's applicability must be clear and unambiguous.	
3-11.c.(3)	Reference the substantiating data used to establish the acceptable level of safety which was the basis for approving the AMOC.		"Not Applicable" is not allowed; the basis for the FAA's determination of an acceptable level of safety must be documented.	

8110.103A Chapter 3 Paragraph#	Specific Order Requirement (See Order 8110.103A for details)	Response Complies with Requirement (YES/NO/ Not Applicable)	Added Instructions	Comments
3-11.c.(4)	Identify any restrictions on the AMOC such as applicability, special procedures, facilities, processes, or time limitations (or specify that there are no restrictions, if applicable).		If no restrictions, mark "Not Applicable".	
3-11.c.(5)	If applicable, refer to the appropriate service documents by number, revision level, and date of revision (if available).		Applies if proposal response included service documents.	
3-11.c.(6)	State whether the AMOC is transferable or not.		"Not Applicable" is not allowed.	
3-11.c.(7), (8) and (9)	Include the statements in 8110.103A, paragraph 3-11.c.(7), (8), and (9), as required.		"Not Applicable" is not allowed. The exact language in quotes from 8110.103A, paragraphs 3-11.c.(7), (8), and (9) must be used, as required. If not mark "NO".	
3-11.e.	The manager of the responsible office (or person delegated AMOC approval authority) must authorize the approval response.		"Not Applicable" is not allowed. Verify that the person meets the requirements of the AMOC paragraph in the AD or meets the requirements of the office AMOC approval authority delegation memo.	

Initials of person completing checklist:

Date Completed:

\_\_\_\_\_

## Appendix F. 24/7 AFS AMOC Urgent Request Support

**600. Overview.** This appendix provides details on how AIR supports the AFS when there is an urgent need, after normal business hours, for an AMOC to an AD. FAA personnel should consistently advise operators that AMOC proposals are to be submitted in accordance with 14 CFR § 39.19. Figure 3 provides a process flow chart. The steps are explained in the following paragraphs.

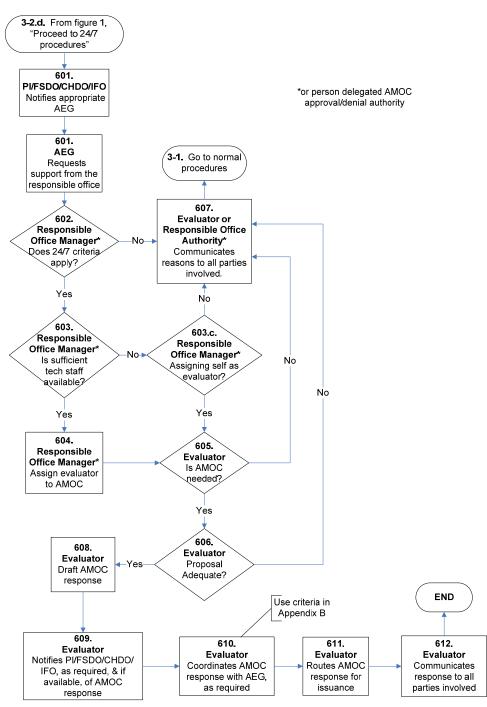


Figure 3. 24/7 AMOC Procedures

**601. Is There a Need for Urgent Support?** If the PI/FSDO/CHDO/IFO identifies the need for urgent AMOC support after normal business hours, they must notify the AEG. The AEG, if it agrees, requests 24/7 AMOC support from the manager of the responsible office, or person delegated AMOC approval/denial authority.

#### 602. Does the 24/7 Criteria Apply?

**a.** The responsible office manager, or person delegated AMOC approval/denial authority, determines if both of the following 24/7 criteria apply:

(1) AMOC support is needed after normal business hours and in order to support proposals identified by PI/FSDO/CHDO/IFOs; and

(2) AMOC support is needed to avoid significant air transportation disruptions (i.e. approximately 10 or more aircraft). This is not intended to be used for AMOCs applicable to an individual or small numbers of aircraft, or accommodate operators who have failed to plan adequately for AD compliance.

**b.** If the 24/7 criteria do not apply, proceed to paragraph 607.

**c.** If the 24/7 criteria apply, proceed to paragraph 603.

#### 603. Is Sufficient Technical Staff Available to Evaluate the AMOC?

**a.** The responsible office manager, or person delegated AMOC approval/denial authority, determines if sufficient technical staff is available to provide AMOC support.

**b.** If sufficient technical staff is available, proceed to paragraph 604.

**c.** If sufficient technical staff is not available, you may assign yourself as the evaluator and proceed to paragraph 605. If technical staff is not available and you do not assign yourself as the evaluator, inform all parties involved that the action will need to wait per paragraph 607.

**604.** Assigning the AMOC. The responsible office manager, or person delegated AMOC approval/denial authority, assigns an evaluator to the AMOC proposal. The evaluator can be an aviation safety engineer, flight test engineer or pilot, senior engineer or engineering manager, or responsible office manager or person delegated AMOC approval/denial authority.

**605.** Is an AMOC needed? As the evaluator, you must determine if an AMOC is needed. If it is, then proceed with the process. Refer to paragraph 2-2 and appendix A of this order for guidance. If you determine an AMOC is not needed then inform all parties involved of your determination per paragraph 612.

#### 606. Is the AMOC Proposal Adequate?

**a.** Use the AMOC proposal requirements in paragraph 3-5 of this order as a guide to determine if the proposal is adequate to make an evaluation. You may contact the requester, as necessary, to obtain missing information.

**b.** If you have enough information to determine that the AMOC does or does not provide an acceptable level of safety, then draft an AMOC approval or denial per paragraph 608. If the available data supports a limited period of operation, then to ensure an acceptable level of safety, consider making the AMOC time-limited (reference paragraph 3-11.c(4) of this order).

**c.** If, even after contacting the requester, you determine that you do not have sufficient data to determine if the AMOC does or does not provide an acceptable level of safety, inform all parties involved that action will need to wait per paragraph 607.

# 607. Evaluator or Responsible Office Authority, as Appropriate, Communicates Reasons to All Parties Involved.

**a.** Send an email to all parties involved (including AEG and PI/FSDO/CHDO/IFO), notifying them of one of the following reason(s) that the action will need to wait:

(1) 24/7 criteria doesn't apply, or

(2) The FAA cannot determine if the AMOC proposal does or does not provide an acceptable level of safety because of:

- (a) inadequate data, or
- (b) lack of available technical staff

**b.** When sufficient data and/or technical staff is available, you may reconsider the AMOC proposal starting from the beginning of the AMOC process per paragraph 3-2.

**608. Draft AMOC Approval or Denial Response.** The responsible office manager, or person delegated AMOC approval/denial authority, approves or denies the AMOC proposal using the methods described in paragraph 3-11.c or 3-12 of this order, as appropriate.

#### 609. Notify PI/FSDO/CHDO/IFO of AMOC.

**a.** If the AMOC proposal is global and made by someone other than an owner/operator, there is no need for you to contact the PI/FSDO/CHDO/IFO.

**b.** For all other AMOC proposals, you must notify the appropriate PI/FSDO/CHDO/IFO of the AMOC response. If the PI/FSDO/CHDO/IFO is unavailable, proceed with issuing the AMOC response.

**610.** Coordinate AMOC Response with AEG, as Required. The evaluator must coordinate with AEG, if needed. Use the criteria identified in appendix B of this order.

#### 611. Route AMOC Response.

**a.** Coordinate and route the AMOC response along with the incoming AMOC proposal (including the PI/FSDO/CHDO/IFO comments, if transmitted). You must file all correspondence and communication records in your office's file per paragraph 3-14.

**b.** Authority for delegation of the approval or denial of the AMOC is in accordance with relevant authority delegation memo (see paragraphs 3-11.e. and 3-12.b. of this order). See appendix E of this order for an optional checklist to support compliance with this order for AMOC approval responses.

**612.** Communicate Response. Communicate the AMOC response to all parties involved, as appropriate. Distribute the AMOC response per paragraph 3-15 of this order.

# Appendix G. AMOC Template for Foreign Registered Aircraft

**700.** Foreign AMOC Response Template. Use the following template content when responding to AMOC proposals for a foreign registered aircraft. Fill in customized information in place of the italicized text. Follow the latest FAA branding and format guidance.



U.S. Department of Transportation Federal Aviation Administration

FAA Evaluation of an AMOC Proposal for a Foreign Registered Aircraft

[Date]

[*Mr. /Ms.* + Name] [*Title*] [*Organization*] [*Street Address*] [*City*] [*Country*]

Dear \_\_\_\_\_:

The Federal Aviation Administration (FAA) received your proposal dated [*Month, Day, Year*], proposing an alternative method of compliance (AMOC) to paragraph(s) [*identify specific paragraph(s) of the AD*] of Airworthiness Directive (AD) [*insert AD number*].

#### [For approval of the AMOC include the following:]

The [Insert approving office] approves your AMOC proposal to [Identify the specific paragraph(s) of the AD] of FAA AD [insert AD number] to [insert description of AMOC including the minimum requirements described in FAA Order 8110.103A, paragraphs 3-11.c.(1) thru 3-11.c.(5)].

[*If the AMOC is transferable per FAA Order 8110.103A, paragraph 3-11.b:*] This FAA AMOC is transferable with the aircraft to an operator who operates the aircraft under U.S. registry.

[*If the AMOC is not transferable per FAA Order 8110.103A, paragraph 3-11.b:*] This AMOC is not transferable with the aircraft to another owner/operator.

Upon transfer of the aircraft to U.S. registry, the following statement applies in accordance with FAA Order 8110.103A if you have not used the AMOC:

"Before using this AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office."

The [*Insert approving office*] will revoke this AMOC if the [*Insert approving office*] later determines that this AMOC does not provide an acceptable level of safety.

All provisions of FAA AD [*insert AD number*] that are not specifically referenced above remain fully applicable and must be complied with accordingly.

This AMOC only applies to the FAA AD listed above. The FAA does not have the authority to approve this as an AMOC to any AD issued by another civil aviation authority (CAA). Approval of an AMOC to another CAA's AD must come from that CAA. A copy of this response will be forwarded to the CAA where this (these) aircraft is (are) registered for their consideration.

#### [For denial of the AMOC, include the following:]

We have reviewed your proposal, and the FAA denies the proposal as an AMOC to FAA AD [*insert AD number*] because [*provide reasons*].

#### [For approval or denial, include the following:]

If you have any questions or need additional information, please contact [*insert name of AMOC evaluator*] at telephone [*insert telephone number*], fax [*insert fax number*], or electronic mail at [*insert email address*].

Sincerely,

[*Typed Name of AMOC approval/denial authority*] [*Typed Title of AMOC approval/denial authority*]

cc: [Civil Airworthiness Authority of State of Registry and the FAA AEG responsible for the product type]

# Appendix H. Administrative Information

**800. Distribution.** Distribute this order to the Washington headquarters division and branch levels of the Aircraft Certification Service and AFS, to the headquarters division and regional divisions of AFS, to aircraft evaluation groups, to all Aircraft Certification Service directorates and certification offices and branches, manufacturing inspection offices (MIO), manufacturing inspection district offices (MIO), all flight standards district offices and certificate-holding district offices (FSDO/CHDO), aircraft certification and airworthiness branches of the FAA Academy, and AIR-40.

#### 801. Related Federal Regulations and Publications.

- 14 CFR §§ 39.7, 39.15, 39.19 and 39.21
- FAA Advisory Circular (AC) 20-114, Manufacturers' Service Documents
- AC 39-7, Airworthiness Directives
- AC 43-9, Maintenance Records
- AC 120-16, Air Carrier Maintenance Programs
- AC 120-77, Maintenance and Alteration Data
- FAA Manual FAA-IR-M-8040.1, Airworthiness Directives Manual
- FAA Order 8040.1, Airworthiness Directives
- FAA Order 8100.8, Designee Management Handbook
- FAA Order 8100.15, Organization Designation Authorization Procedures
- FAA Order 8110.37, Designated Engineering Representative Handbook
- FAA Order 8900.1, Flight Standards Information Management System

**802.** Suggestions for Improvement. If you find any deficiencies, need clarification, or want to suggest improvements to this directive, send a written or electronic copy of FAA Form 1320-19 to the Aircraft Certification Service, Administrative Services Branch, AIR-510, Attention: Directives Management Officer. You may also send a copy to the Aircraft Engineering Division, AIR-100, Attention: Comments to Order 8110.103A. If you urgently need an interpretation, contact the Delegations and Airworthiness Programs Branch, AIR-140, at (405) 954-4103. Always use FAA Form 1320-19 to follow-up each verbal conversation.

**803. Records Management.** See Orders 0000.1, FAA Standard Subject Classification System; 1350.14, Records Management; and 1350.15, Records, Organization, Transfer and Destruction Standards; or your office records management officer or directives officer for guidance regarding retention or disposition of records.

## 804. List of Acronyms.

ACAdvisory circularACOAircraft certification officeADAirworthiness directiveAEGAircraft Evaluation GroupAFSFlight Standards ServiceAIRAircraft Certification ServiceCAACivil Aviation AuthorityCHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMISOOrganization Designation AuthorizationPAHProduction approval holderPIService bulletinSoDState of DesignSoRState of Registry14 CFRTitle 14 of the Code of Federal Regulations	AMOC	Alternative method of compliance
ADAirworthiness directiveAEGAircraft Evaluation GroupAFSFlight Standards ServiceAIRAircraft Certification ServiceCAACivil Aviation AuthorityCHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing satellite officeMISOOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoRState of Design	AC	Advisory circular
AEGAircraft Evaluation GroupAFSFlight Standards ServiceAIRAircraft Certification ServiceCAACivil Aviation AuthorityCHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoRState of Registry	ACO	Aircraft certification office
AFSFlight Standards ServiceAIRAircraft Certification ServiceCAACivil Aviation AuthorityCHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoRState of DesignSoRState of Registry	AD	Airworthiness directive
AIRAircraft Certification ServiceCAACivil Aviation AuthorityCHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMISOOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoPState of DesignSoRState of Registry	AEG	Aircraft Evaluation Group
CAACivil Aviation AuthorityCHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoRState of Design	AFS	Flight Standards Service
CHDOCertificate holding district officeDAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing inspection officeMISOOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	AIR	Aircraft Certification Service
DAHDesign approval holderDERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing inspection officeMISOOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoRState of DesignSoRState of Registry	CAA	Civil Aviation Authority
DERDesignated engineering representativeFSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing inspection officeMISOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	CHDO	Certificate holding district office
FSDOFlight standards district officeIFOInternational field officeMIDOManufacturing inspection district officeMIOManufacturing inspection officeMISOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	DAH	Design approval holder
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MIOManufacturing inspection officeMISOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	IFO	International field office
MISOManufacturing satellite officeODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	MIDO	Manufacturing inspection district office
ODAOrganization Designation AuthorizationPAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	MIO	Manufacturing inspection office
PAHProduction approval holderPIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	MISO	Manufacturing satellite office
PIPrincipal inspectorSBService bulletinSoDState of DesignSoRState of Registry	ODA	Organization Designation Authorization
SBService bulletinSoDState of DesignSoRState of Registry	PAH	Production approval holder
SoDState of DesignSoRState of Registry	PI	Principal inspector
SoR State of Registry	SB	Service bulletin
	SoD	State of Design
14 CFRTitle 14 of the Code of Federal Regulations	SoR	State of Registry
	14 CFR	Title 14 of the Code of Federal Regulations

# Appendix I. FAA Form 1320-19, Directive Feedback Form



Federal Aviation Administration

#### **Directive Feedback Information**

Please submit any written comments or recommendation for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order 8110.103A

To: Directive Management Officer, <u>AIR-510</u>

(Please check all appropriate line items)

- □ An error (procedural or typographical) has been noted in paragraph \_\_\_\_\_ on page \_\_\_\_\_ .
- □ Recommend paragraph \_\_\_\_\_ on page \_\_\_\_\_ be changed as follows: (attached separate sheet if necessary)
- □ In a future change to this order, please include coverage on the following subject (*briefly describe what you want added*):
- □ Other comments:

□ I would like to discuss the above. Please contact me.

Submitted by:	 Date:

Telephone Number: \_\_\_\_\_\_ Routing Symbol: \_\_\_\_\_

FAA Form 1320-19 (10-98)