

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

Primary Report and Recommendation	Compliance Review Team (CRT): T2, R2 AEG Roles
Secondary Report and Recommendation	CRT: T1, R1, B7 T2, R7, B1 and B2 T2, R8, B1 [SB1, SB2, SB3, and SB6] IRT R2
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Links to Other Working Groups	AD Implementation WG, Service Information WG
Date to Sent to ARC	November 24, 2010
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WORKING GROUP REVIEW OF ISSUE/PROBLEM

Summary of Primary Report and Recommendation

In this summary sheet, the FAA Organization-Procedures Working Group (FAA WG), focused on strengthening the role of the Aircraft Evaluation Group (AEG) in the Airworthiness Directive (AD) process. Our main focus was on the Compliance Review Team's (CRT's) Task 2, Finding No. 2, Recommendation No. 2 (T2, R2) as identified below:

Finding 2: “The Team learned that the AEGs were not playing a significant role in either the AD review process or the operational suitability determinations. This was confirmed through interviews with AEG personnel as well as FAA principal inspectors. The Team recognizes the key role the AEG can play in the review and implementation of an AD.”

Recommendation 2: “Strengthen the role of the AEG in developing and implementing ADs. Ensure ASIs know that the AEG is a resource for reviewing the air carrier’s AD installation instructions and that the AEG acts as the liaison between the CMOs and the ACO on AD implementation issues. When questions arise, make the AEG part of these processes to make compliance with the AD as seamless as possible. This approach will help to prevent future disagreements between the FAA and the air carrier.”

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

However, there were secondary findings and recommendations found in the Task 1 and Task 2 reports supporting the statement that the AEGs were not fully participating in the AD process. The AEG is the Flight Standards Service (AFS) organization responsible for determining the operational suitability of newly certificated and modified aircraft. The AEG plays a critical role in pilot qualifications, flight crew training, minimum equipment lists, acceptance and approval of Instructions for Continued Airworthiness (ICAs) for all aircraft, engine and propeller certifications, and other continuing airworthiness requirements. The AEG is instrumental in:

- Reviewing and determining the operational suitability of ADs by providing consultation
- Assisting the Aircraft Certification Office (AIR) project managers who develop ADs

The main focus area is on the AEG's full participation in the AD process. The Aircraft Certification Office (ACO) determines whether or not the AEG participates during the development of the subject AD. As mentioned, the AEG provides expertise to the Aviation Safety Inspectors (ASIs) for ADs by providing technical consultation to Certificate Holding District Offices (CHDOs) and Certificate Management Offices (CMOs). The AEG also serves as liaison with Aircraft Certification Offices (ACOs), Design Approval Holders (DAHs)/Original Equipment Manufacturers (OEMs), and CMOs/CHDOs to distribute and answer questions on service instructions and maintenance alerts.

Although one of the AEG functions is to support the CMO on ADs, ASIs apparently do not recognize the AEG as a resource when AD compliance is in question. The ASI decision tool, as later discussed in this summary sheet, was created to emphasize the AEG's involvement in compliance determination. The FAA WG agreed that emphasis needs to be added on the roles and responsibilities of the AEG. That is, in addition to interfacing with the ACO, the AEG should be a liaison between the ACO, ECO, and CMO on implementing ADs.

The AEG is a critical component to successfully collaborate with ASIs, CMOs/CHDOs, ACOs, and the DAHs/OEMs. This technical collaboration has been highly effective in correcting and mitigating unsafe conditions. However, the Task 2 report noted areas for improvements that can be made in policy and guidance.

Overall, the FAA WG agreed with all the recommendations with the exception of the AEG organizational change. In considering the recommendation for an “organizational and procedural change,” the FAA WG reviewed the 1999/2000 AEG report, as well as T2 R7, and disagree that an organization change is needed. The FAA WG feels that the following items will address the areas where communication broke down:

- Clarify existing procedures in guidance
- Create new guidance, and
- Develop new training regarding AEG roles and responsibilities.

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

The policy/guidance and training that the FAA WG proposes will clearly delineate the AEG's earlier involvement as a liaison and technical expertise to support: operational suitability, evaluation, certification, implementation, and continued operation and maintenance of the aircraft for which it is assigned responsibility. This guidance will also assist the Principal Inspector (PI)/CHDO with noncompliance determinations as well as provide guidelines for elevating issues of resolution disagreements.

The FAA WG further determined that an outreach process should be developed to facilitate AEG communication with ASIs in the field regarding complex aircraft/fleet issues to include ADs. The AEG's role is essential with communication and collaboration among the ASI, ACO, and certificate holders in crisis situations involving compliance issues. The Service Information Working Group (SIWG) collaborated with the FAA WG with this task by providing language relating to ex parte criteria.

Summary of Secondary Report and Recommendation

In analyzing the secondary recommendations, the FAA WG determined that there were three major issues to address:

- Collaboration among key stake holders
- Communication among key stake holders
- A standard AMOC process that FAA personnel could follow and one that would allow ASIs to consider their professional judgment when determining AD compliance.

After analyzing each issue, the FAA WG determined new guidance would be needed in FAA Order 8900.1, Flight Standards Information System (FSIMS), that would identify the roles and responsibilities of the AEG as well as promote communication among AEG, ACO, and ASIs.

It was also determined that additional guidance should be developed to address the processes regarding AD development, AMOC proposals, and 24/7 support requests. In addition, the guidance would also identify actions needed to promote collaboration, which would allow concerns to be elevated.

Finally, to fully address the secondary recommendations, the FAA WG determined that additional work instructions, formal training courses, and outreach would be needed to communicate to the FAA community the proposals outlined in this summary sheet.

However, in analyzing T2, R7, B2, which addressed possible reorganization to promote communication, the FAA WG determined the current organizational structure was adequate. Instead, a staffing increase was deemed more appropriate. Our analysis of this issue included a review of the new ASI decision making tool, which emphasizes the communication of field

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

offices with AEG. (This tool is discussed in the ASI Decision Making subgroup summary sheet.)

REGULATIONS AND GUIDANCE IDENTIFIED FOR REVIEW

1. Order 1100.5C, FAA Organization – Field
 - a. This Order is outdated for AFS.
2. Order 8000.51B, Aircraft Certification Directorates' Delegation of Authority.
 - a. No revision needed.
3. Order 8100.5, Aircraft Certification Service Mission, Responsibilities, Relationship, and Programs
 - a. Para. 2-9(k)(7): “Assist ACOs in development of compliance requirements for ADs.”
4. Order 8430.21, Flight Standards Division, Aircraft Certification Division, and Aircraft Evaluation Group Responsibilities
 - a. Para. 9(f)(4): “Participation in the development of Airworthiness Directives relating to operation and maintenance of the aircraft.” Consider inserting guidance from Order 8430.21 into Order 8900.1.
5. Order 8110.4, Type Certification
 - a. Fig. 1-1: Aircraft Evaluation Group – “Evaluate continuing airworthiness requirements of new certificated or modified products and parts.”
6. Order 8110.107, Monitor Safety/Analyze Data
7. Order FAA-IR-M-8040.1C, Airworthiness Directives Manual (currently under revision)
8. AIR-ANM-029-W1, Transport Airplane Alternative Method of Compliance (AMOC) Letters. (AMOC work instruction)
9. AIR-ANM-029-W2, Transport Airplane 24/7 Flight Standards AMOC Request Support Process. (24/7 work instruction)

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

WORKING GROUP PROPOSAL TO ADDRESS THE RECOMMENDATION(S)/FINDING(S)

To address the CRT's Task 1 and Task 2 recommendations, the FAA WG proposes to:

1. Create a new chapter in Order 8900.1 that defines the AEG specialist's roles and responsibilities in the AD process (TBD). FAA-IR-M-8040.1C will be revised to include an AEG specialist's involvement earlier in the AD development process. The earlier involvement will help AEG determine when to activate an outreach program to the PI.
2. Create a new section in Order 8900.1 that defines the 24/7 AMOC process, which could help prevent the grounding of a large number of aircraft (e.g., 10 or more). This guidance would contain triggers for AEG's involvement based on FAA Order 8110.103A, Alternative Methods of Compliance (AMOC), requirements.
3. Create a new section in Order 8900.1 that refers to AIR-ANM-029-W1 and Order 8110.103A, which defines AMOCs to ADs. This guidance should contain triggers that involve the AEGs, thus ensuring continued operational safety of an aircraft at the appropriate time.
4. Develop a new training program for ASIs/Aviation Safety Engineers (ASEs) regarding AEG roles and responsibilities and their interfaces with the ACO. The training program would define the communication protocol and elaborate on the responsibilities and positions of each group (e.g., ASI, AEGs, ASEs, etc.).
5. Ensure field personnel understand that the AEG is a key resource for technical issues and continued operational safety. AFS-1 issued a memo on March 29, 2009 that established lines of communication regarding technical issues.
6. Draft a revision to FAA National Policy FS 1100.1B, Flight Standards Service Organizational Handbook. This version would be revised to provide better clarification on how the AEG fits into the AFS organization and define its roles and responsibilities.

ALTERNATIVES CONSIDERED

Not Applicable.

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

IMPLEMENTATION PLAN

To implement our proposals stated above, the FAA WG plans to:

1. Add a new section in Order 8900.1 incorporating AIR-ANM-029-W1 on how to process AMOC requests. (T1, R1, B7)
2. Add a new section in Order 8900.1 incorporating AIR-ANM-029-W2 on how to process 24/7 support requests. (T2, R8, B1 [SB6])
3. Add a new chapter in Order 8900.1, titled AEG Roles and Responsibilities, detailing AEG roles and responsibilities. (T2, R2)
4. Add a new chapter in Order 8900.1, titled AEG Outreach, incorporating AEG outreach for ADs. (T2, R8, B1 [SB1, SB2, SB3]; IRT R2)
5. Develop a new training course addressing AEG roles and responsibilities, which will include a web-based and a formal academy course. (T2, R2)
6. Develop new web-based training course addressing the AMOC 24/7 process. (T2, R2 and T2, R8, B1 [SB1, SB2, SB6])
7. Create a memo that addresses the role of the AEG and calls for reconnecting their involvement regarding ADs. This action is completed and the memo was approved on March 20, 2009.
8. Create a memo addressing AEG staffing to support an increase. This memo was approved on March 3, 2010, and staffing has been increased. (T2, R7, B2)
9. Brief to the field the AMOC 24/7 Implementation Memo. This action has already been completed. The 24/7 process was implemented January 27, 2010 and field briefings were completed June 2010. (T2, R2)
10. Revise FAA-IR-M-8040.1 to incorporate AEG coordination. This is complete based on a revision issued on May 15, 2010. (T2, R2 and T2, R7, B2)
11. Conduct field briefings regarding the AMOC 24/7 process. This was completed in June 2010. (T2, R2 and T2, R8, B1 [SB6])
12. Submit a draft update to FS 1100.1B, which is owned by AFS-100, that addresses AEG within AFS and their roles and responsibilities. (T2, R2 and T2, R7, B2)

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

13. Submit a request for revision to FAA Order 1100.5C, which is outdated both for AFS and AIR, to be updated to match FS 1100.1B. (T2, R2 and T2, R7, B2)
14. Create a new chapter in 8900.1, Volume 3, titled ASI Decision Making. (T2, R2)

ASSUMPTIONS/CONSTRAINTS

Not Applicable.

ISSUES FOR WORKING GROUP CONSIDERATION

Not Applicable.

ISSUES FOR ARC CONSIDERATION

Not Applicable.

APPENDICES

Not Applicable.

PRIMARY RECOMMENDATION: T2, R2

The following is copied directly from the CRT, Task 2, Recommendation No. 2.

FINDING NO. 2

The Team learned that the AEGs were not playing a significant role in either the AD review process or the operational suitability determinations. This was confirmed through interviews with AEG personnel as well as FAA principal inspectors. The Team recognizes the key role the AEG can play in the review and implementation of an AD.

RECOMMENDATION NO. 2

Strengthen the role of the AEG in developing and implementing ADs. Ensure ASIs know that the AEG is a resource for reviewing the air carrier's AD installation instructions and that the AEG acts as the liaison between the CMOs and the ACO on AD implementation issues. When

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

questions arise, make the AEG part of these processes to make compliance with the AD as seamless as possible. This approach will help to prevent future disagreements between the FAA and the air carrier.

SECONDARY RECOMMENDATION: T1, R1, B7

The following is copied directly from the CRT, Task 1, Recommendation No. 1.

Recommendation No. 1—Compliance Versus Noncompliance
Decisionmaking Process

The FAA should—

- Review the AMOC process for enhancements and to ensure AEG personnel are included in the process.

SECONDARY RECOMMENDATION: T2, R7, B1 AND B2

The following is copied directly from the CRT, Task 2, Recommendation No. 7.

- The FAA should establish a formal notification and coordination policy on how to handle issues where compliance is unclear. The policy should clearly delineate the AEG’s role in assisting with noncompliance determinations, specify who has decision authority, and provide guidelines for elevating issues of disagreement for resolution. (Also see recommendation No. 8 below). Such a policy will enhance overall coordination efforts and help the AEG to better coordinate with the ACO.”
- “The FAA should consider an organizational and procedural change to ensure FAA field offices have a direct link to the AEG. This will help the CMOs obtain technical advice on ADs and all issues concerning certificate management.

SECONDARY RECOMMENDATION: T2, R8, B1 [SB1, SB2, SB3, AND SB6]

The following is copied directly from the CRT, Task 2, Recommendation No. 8.

Under all circumstances, FAA technical personnel must be consistent in reviewing, approving, and applying the processes under their responsibility. If there are concerns regarding outside undue influence, the affected party must seek guidance from organizations having the

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

AEG Subgroup

appropriate level of ability and authority to provide the guidance required to address the concerns. FAA policymakers must ensure individuals responsible for the control of the AMOC processes are fully aware of the scope of their responsibilities. They should also be aware of the available recourse for appropriate management guidance where required. Educating these individuals will help ensure proper and prompt technical resolution of problems. Specifically, the Team recommends the following:

- The FAA should, in coordination with industry, charter a working group to review and develop a means to strengthen the AMOC process. The group's charter should include a review of the following:
 - Communication channels.
 - Simultaneous coordination of an AMOC with the ACO and the CMO.
 - Concurrence (that is, ACO expeditiously receives concurrence from AEG on the AMOC, and AEG advises CMO).

 - Staff availability on a 24/7 basis (ACO, AEG, and CMO).

SECONDARY RECOMMENDATION: IRT R2

The following is copied directly from the IRT Recommendation No. 2.

The FAA should provide timely information about new AD requirements, in advance of compliance dates, to all relevant FAA field offices. Those offices should then be responsive to any carrier that requests assistance in the form of *progress-towards-compliance* audits or reviews, in advance of the AD compliance dates.