

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee
Airworthiness Directive Implementation Working Group

Primary Report and Recommendation	AD Implementation Working Group, Finding 3, Recommendation 3, bullet 4.
Secondary Report and Recommendation	None
Assigned Members	Craig Amadeo (DAL) Russell Reed (CQT) Ken Filippelli (FAA) Jeff Hodowanic (AirTran) Kawehi Lum (FAA) Nick Pearson (FAA)
Links to Other Working Groups	
Date Sent to ARC	12/7/2010
Date of ARC Approval	2/16/2011

WORKING GROUP REVIEW OF ISSUE/PROBLEM

Task 2, Recommendation 3, Bullet 4:

Aviation Safety Inspectors (ASI) are often not familiar with operators’ airworthiness directive (AD) compliance plans, which can raise questions and concerns as to how an operator is complying with a particular AD. Having ASIs participate in the carrier’s AD planning process will give them visibility of any issues with complying with the AD, the plan for accomplishment, as well as provide them the opportunity to provide guidance and offer suggestions to facilitate compliance.

Compliance documents are sometimes difficult to understand or can contain errors that are not detected during the paperwork review. An on-aircraft prototype of the work instructions would ensure accuracy of the instructions and the ability to accomplish the work as written. . This is an actual prototype of the air carrier’s implementation document. This resides outside of the ATA Spec 111 service instruction prototyping process. The ATA Spec 111 prototype may not capture all of the specific issues, concerns, or configurations that an air carrier may experience. Some ADs are capable of being undone during normal maintenance activities. Consideration to how an AD can be undone, or continued verification of configuration, should be included in the AD compliance planning process.

REGULATIONS AND GUIDANCE IDENTIFIED FOR REVIEW

- Element Performance Inspection (EPI) 1.3.6 (ATOS related)
- Safety Attribute Inspection (SAI) 1.3.6 (ATOS related)
- FAA Order 8900.1
- 14CFR39
- AC 43.13
- AC120-16E
- AC39-7C
- ATA Spec 111

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

The working group proposes to draft documentation for incorporation into a new Advisory Circular (AC) that would provide best practices for an AD management process, including prototyping of air carrier AD implementation documentation and consideration of AD verification.

Inconsistent or non-existent AD compliance planning throughout the industry can result in non-compliance with ADs. For this reason, it is important to communicate best practices for AD compliance planning.

Recommended ASI participation in AD compliance planning and the prototype process will be included in the developed documentation. Aviation Safety Inspectors (ASI) are often not familiar with operators' airworthiness directive (AD) compliance plans. This can raise questions and concerns as to how an operator is complying with a particular AD. Having ASIs participate in the carrier's AD planning process will give them visibility of any potential AD compliance issues, the carrier's plan for accomplishment, as well as provide them the opportunity to provide guidance and offer suggestions.

In addition, ASIs are not always familiar with what is involved in accomplishing AD tasks. ASI participation in the prototype process fosters a culture of open and honest communication with the goal of improving continued operational safety.

In the discussion of prototyping the air carrier's compliance documentation, we will discuss the possible use of silent prototyping. Silent prototyping can be used as an effective means of verifying engineering instructions for accomplishing an AD, especially when the work will be done as part of line maintenance with little supervision. The compliance planning best practices will outline the role of the ASI in during the silent prototyping process. We will explain the expectation of collaboration between the FAA and the air carrier to make the silent prototyping process a constructive, non-punitive exercise to verify the air carrier's compliance planning documents.

Some ADs can be undone during the course of normal maintenance, even when measures have been taken to prevent this occurrence. For this reason, the AD compliance planning should consider an AD verification process so that AD configurations that can be undone are verified to be maintained. The draft language for the new AD Management AC will include best practices to augment air carrier compliance planning with an AD verification program.

We expect that air carriers will incorporate these suggested best practices into their AD compliance planning process.

The working group will also draft language for incorporation into FAA order 8900.1, or a policy letter, that provides guidance to ASIs on their role in the air carrier AD compliance planning meetings. This language will include expectations of integrity and professionalism that should help preclude targeted inspections by the ASI when armed with specific airworthiness

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information and the implementation plan of the air carrier. We will also include guidance to ASIs on their role during the air carrier’s compliance documentation prototyping, particularly the silent prototyping process.

ALTERNATIVES CONSIDERED

The working group considered revising AC 120–16x or AC 39–7x, but the working group’s consensus is that an AD management process is not directly related to the topics of these AC: AC 120–16 is related to maintenance programs and AC 39–7 applies to all aircraft owners and operators, not just air carriers. In addition, AD management and compliance are very critical functions that have recently had industry-wide impact. The working group contends that a single location for AD management processes will allow for focused review and future process improvement. For this reason, the working group recommends a new AC.

IMPLEMENTATION PLAN

The working group proposes to develop industry best practices for operators to follow in response to ADs. This implementation plan will include pre-planning, implementation, and AD verification programs, as well as prototyping of the work instructions. Prototyping the work instructions will ensure that they are clear and compliant and can be repeated. We expect this suggested wording will be incorporated into a new FAA Advisory Circular for AD Management.

The working group recognizes that upon issuance of the proposed AC, the FAA will revise the Element Performance Inspection (EPI) and Safety Attribute Inspection (SAI) Data Collection Tools to include reference to the new AC for industry best practices. Revision of the EPI and SAI Data Collection Tools will encourage the use of these practices and the AC and promote an industry standard method of processing ADs to comply with the applicable regulations.

The working group also proposes to develop language for FAA Order 8900.1 to identify the ASI’s role in the air carrier’s AD compliance planning process. The suggested wording will be intended for incorporation in a revision to Order 8900.1, or into a policy letter for ASIs.

Implementation milestones:

- (1) New FAA Advisory Circular outlining best practices
 - AIWG submits draft language for new AC 12/31/2010
 - AFS-300 publishes AC 4/30/2011

- (2) ATOS revision to reference the new AC
 - ATOS releases rapid revision to add references to EPI and SAI.....5/6/2011
 - ATOS revises EPI and SAI.....6/30/2011

- (3) Revised FAA Order 8900.1

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AIWG submits draft language for revision to Order 8900.1 12/31/2010
AFS-300 publishes revised Order 8900.1 4/30/2011
AFS-300 completes training plan for ASIs on Order 8900.1 revision 6/30/2011

- (4) Air Carrier confirmation of implementation of best practices
AD ARC communicates need for industry to adopt best practices 4/30/2011
AD ARC gathers data on implementation by operators 6/30/2011

ASSUMPTIONS/CONSTRAINTS

ASSUMPTIONS:

- It is assumed that the FAA may not always attend the AD Compliance Planning meetings or prototypes when invited.

CONSTRAINTS:

- The FAA may not want to participate in the AD Compliance Planning meetings.
- The FAA may not be available to participate in the AD Compliance Planning meetings.
- The Air Carrier may not want the FAA to participate in the AD Compliance Planning meetings.
- EPI 1.3.6 may need to be revised to add references to a new AC, if a new AC is developed.
- SAI 1.3.6 may need to be revised to add references to a new AC, if a new AC is developed.
- The FAA may need training on their role in AD Compliance Planning meetings and during the prototype process. Their role should not be a quality control function but rather to obviate the need for AMOCs and to reduce paperwork violations and infractions.

ISSUES FOR WORKING GROUP CONSIDERATION

None

ISSUES FOR ARC CONSIDERATION

The ARC needs to determine whether to include the working group's proposed language into a new AC, existing ATA Specification 111, or use a new ATA specification (ATA Specification 118). The working group contends the ARC should not use an ATA specification as carriers that are not ATA members would not have acceptable visibility to the procedures that the working group has been tasked to implement across the entire industry. Therefore, the working group recommends the FAA consider creating a new AC to communicate best practices for an AD Management Process. ATA Spec 111 currently stops at the point the Service Action, often a Service Bulletin, is released to the fleet. ATA Spec 111 is aimed at the OEM, the Lead Airline,

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and, to some extent, the FAA and the ATA. AD Compliance Planning, however, typically is performed at individual air carriers, does not include the ATA or the OEM and happens significantly after the release of the service action.

FINDING NO. 3

The Team found the Lead Airline Process supports industry collaboration objectives, but may need to be updated to reflect today's OEM and air carrier supporting internal processes. As the aviation industry business environment has changed, the impact thresholds for activating full network coordination and full-scale prototyping have increased.

The Team also observed that the ex parte policy may not be well understood by the FAA and air carriers. Many in the FAA and the industry believe that ex parte communications are restricted to data requests from the FAA after an NPRM is published in the Federal Register. The Team noted that the FAA can communicate with the lead airline after NPRM publication; however, the FAA must document all communications and place them in the rulemaking docket.

RECOMMENDATION NO. 3

The ATA should add to ATA Specification 111, or develop a new specification to address (upon adoption of an AD) AD compliance planning that includes the following industry guidelines:

- Invite the ASI to air carrier compliance planning sessions and AD compliance prototyping for better understanding of issues.
- Ensure the accuracy and clarity of the engineering order (EO) or other implementation document. The air carrier should consider silent prototyping where a technician prototypes the EO without verbal or other assistance.
- Augment air carrier compliance planning with an AD verification program.