

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

ASI Decision Making Subgroup

Primary Report and Recommendation	Compliance Review Team (CRT): T2, R8, B2 [SB1 & SB2] & B3 ASI Decision Making
Secondary Report and Recommendation	CRT: T1, R1, B1-B6, B8, & B9
Assigned Members	Tim Holt (AFS) (POC) Patty Williams (AFS) Chuck Heald (Boeing) Pete Spofford (AFS) Sarah MacLeod (ARSA) Doug Anderson (ANM-7) Steve Fox (AIR) Steve Jones (AA) Ed Walton (UPS) Susan Trask (AFS) Johnny Richter (AFS)
Links to Other Working Groups	AD Implementation WG, Service Information WG
Date Sent to ARC	November 24, 2010
Date of ARC Approval	February 16, 2011

WORKING GROUP REVIEW OF ISSUE/PROBLEM

Summary of Primary Report and Recommendation

Without being required to conduct a risk assessment, Federal Aviation Administration (FAA) Aviation Safety Inspectors (ASIs) should rely on professional judgment as well as available resources to help determine Airworthiness Directive (ADs) compliance. The resources should include new policy, guidance, training, and a decision-making flowchart. The new decision-making policy should emphasize the authority and role of key stake holders, such as Aircraft Certification Offices (ACOs), ASIs, Certificate Management Offices (CMOs), Original Equipment Manufacturers (OEMs), etc.

Proposal:

The FAA Organization/Procedures Working Group (FAA WG) formed an ASI Decision Making subgroup to address how ASIs could coordinate internally within the FAA and externally with the operators to determine and/or validate AD compliance. Based on the subgroup's analysis

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

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and recommendation, the FAA WG proposes to develop policies within FAA Order 8900.1, Flight Standards Information Management System, that would:

- a. Guide the ASI during the decision-making process regarding AD compliance.
- b. Include a decision-making logic flowchart, which shows that ASIs have the authority to determine whether noncompliance exists. By following the flowchart, ASIs' decision-making logic would be guided by their work with regional personnel in the Aircraft Engineering Group (AEG) and ACOs when determining AD compliance.
- c. Outline how an ASI should review an Alternative Method of Compliance (AMOC) proposal to an AD.

Summary of Secondary Report and Recommendation

The FAA should develop a standard process that helps an ASI determine, regardless of the situation, whether or not an aircraft complies with an AD. The standard process should address the following concerns:

- a. The role of the ASI: How can ASIs objectively determine an aircraft's compliance to an AD while still using their professional judgment, as defined in Order 8900.1, Volume 1, Chapter 3, Section 2.
- b. Collaboration: How do ASIs and other groups (AEG, ACOs, operators, etc.) interact with each other to promote transparency, communication, and collaboration? How can a single person be prevented from determining AD noncompliance?
- c. Standardized Resources: What resources (i.e., training, guidance, tools, etc.) are available to help ASIs determine AD compliance?

REGULATIONS AND GUIDANCE IDENTIFIED FOR REVIEW

Guidance reviewed:

- Order 8900.1, Volume 1, General Inspector Guidance and Information
- Order 8900.1, Volume 3, General Technical Administration
- Order 8900.1, Volume 4, Aircraft Equipment and Authorization
- Order 8900.1, Volume 10, Air Transportation Oversight System (ATOS)
- Data Collection Tool (DCT) Element 1.3.1
- DCT Element 1.3.3
- DCT Element 1.3.4
- DCT Element 1.3.6
- DCT Element 1.3.1
- DCT Element 2.1.1

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

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Guidance possibly impacted by the CRT recommendations and/or FAA WG proposals are:

- Order 8900.1, Volume 3: Create a new chapter titled *ASI Decision Making*, which would include a logic flowchart and risk matrix.
- Order 8900.1, Volume 3: Create a new chapter titled *AMOCs to ADs*.

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

The FAA WG proposes to create new policy that provides standardized guidance to ASIs when determining if an aircraft complies with an AD and how that determination may apply to other aircraft in a fleet. The new policy would outline the processes to solve difficult and controversial issues and eliminate single-person determinations. Specifically, the FAA WG proposes to develop new sections in Order 8900.1 that would:

- Guide the ASI during the decision-making process regarding AD compliance.
- Include a decision-making logic flowchart, which shows that ASIs have the authority to determine whether noncompliance exists. By following the flowchart, ASIs' decision-making logic would be guided by their work with regional personnel in the Aircraft Engineering Group (AEG) and ACOs when determining AD compliance.
- Outline how an ASI should review an AMOC proposal to an AD.

The FAA WG also proposes to mandate for all part 121/135 airworthiness ASIs complete Training Course No. 25704, titled Foundation for Principal Inspectors, which addresses ASI decision making and the Risk Management Plan (RMP).

ALTERNATIVES CONSIDERED

The FAA WG considered the CRT's recommendations as valid; thus, no alternatives were considered.

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

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IMPLEMENTATION PLAN

The following actions will implement the FAA WG's proposals stated in this summary sheet:

1. Mandate for all part 121/135 airworthiness ASIs complete Training Course No. 25704, Foundation for Principal Inspectors (T2, R8, B2 [SB1 and SB2])
2. Create new guidance in Order 8900.1, as discussed in this summary sheet. The new guidance has been drafted and is currently in the AD ARC coordination process. The estimated publication date is June 2011. The guidance will consist of the following:
 - a. Order 8900.1, Volume 3: A new chapter titled *ASI Decision Making*, which will:
 - Provide guidance to ASIs for addressing situations in which the compliance of an aircraft is in question. (T2, R8, B2 [SB1] and T1, R1, B1, B2, and B6)
 - Provide guidance on how and when to determine coordination with AEG and ACO. (T2, R8, B3 and T1, R1, B9)
 - Include a logic flowchart that provides step-by-step procedures that can be followed to eliminate single-person determination and to elevate concerns regarding AD compliance. (T2, R8, B3 and T1, R1, B1, B3, B4, and B8)
 - Re-emphasize the RMP that provides ASIs with procedures on how to manage hazards and their associate risks (see Order 8900.1, Vol. 10, Ch. 3). (T2, R8, B2 [SB2] and T1, R1, B1, B5, and B8)
 - b. Order 8900.1, Volume 3. A new section will provide guidance to ASIs regarding their role in the AMOC process. (T2, R8, B2 [SB2])
3. Based on the above changes, AFS-900 will revise the following ATOS DCTs to correlate with Order 8900.1:
 - DCT Element 1.3.1
 - DCT Element 1.3.3
 - DCT Element 1.3.4
 - DCT Element 1.3.6
 - DCT Element 1.3.1
 - DCT Element 2.1.1

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

FAA Organization-Procedures Working Group

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ASSUMPTIONS/CONSTRAINTS

The Independent Review Team (IRT) recommended that training be developed to assist the ASIs in correctly determining noncompliance. This recommendation was based on the assumption that there was a lack of policy and guidance for ASIs in determining AD noncompliance.

The development of guidance, as proposed in this summary sheet, has been evaluated and current training has been determined to be adequate. Specifically, the foundation for PI's Training Course No. 25704, which is open to all ASIs, provides adequate training in determining compliance. The FAA WG determined that this course should be mandatory for all part 121/135 airworthiness ASIs, which should be completed by the end of FY 2012.

ISSUES FOR WORKING GROUP CONSIDERATION

The FAA WG and the ASI Decision Making subgroup identified no issues for the FAA WG to consider.

ISSUES FOR ARC CONSIDERATION

These new policies and procedures for the FAA community may be considered a paradigm shift. As with all major changes, it will take time for people to embrace, accept, and act upon these changes. Also, the ACO and AEG work load is expected to increase due to the introduction of new guidance proposed in this summary sheet.

The Aviation Rulemaking Committee (ARC) approval of the FAA WG's proposals and the follow-through support regarding proposed guidance publication is needed for closure.

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

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PRIMARY RECOMMENDATION: TASK 2, RECOMMENDATION NO. 8, B2 [SB1 AND SB2] AND B3

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

The Team found that during the events precipitating this review, FAA administration of the AMOC process was reported to be inconsistent and sound technical judgment did not always govern decisions.

Bullet 2

- “The Independent Review Team made a recommendation that inspectors should not be required or expected to conduct any type of risk-assessment before taking action on AD non-compliance.” The Team agreed with this finding as supporting the necessary enforcement needed once an airplane has been determined to be noncompliant. However, the Team developed a supplemental process to help the ASI first coordinate a valid determination of compliance in cases where the condition is not obvious. The Team recommends that the FAA:
 - Develop further guidance and training to assist FAA staff in correctly determining noncompliance.
 - Develop a formal policy regarding ASI decision-making. The policy should emphasize the technical authority of the ACO and the FAA’s position on the authority of ASIs to use professional judgment when determining compliance. To eliminate single-person determinations, the policy should address any conflicts that arise on an AD or AMOC by requiring the CMO to elevate its concerns first to the AEG for resolution. The team addressed the concern of using professional judgment and avoiding single person determinations in the ASI Decision making procedures

Bullet 3

- “The FAA should develop a decision-making flowchart as a guide for ASIs making compliance determinations. The following ASI decision flowchart is provided to demonstrate the notion the Team wishes to convey.” (*See Appendix C of the CRT Task 2 Report for the flowchart.*)

SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee

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SECONDARY RECOMMENDATION: TASK 1, RECOMMENDATION NO. 1, B1 – B6, B8, AND B9

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

Based on the findings in section 5.0 of this report, the Team developed the following recommendations, which it categorized by process areas. Because a number of the recommendations cover multiple findings, the Team is presenting its findings separately. See appendix D for a cross-reference of the recommendations to the specific findings in this report. The Team will investigate a number of the recommendations during task 2.

Recommendation No. 1—Compliance Versus Noncompliance
Decisionmaking Process

The FAA should—

- Develop a more objective, deliberative decisionmaking process for determining compliance versus noncompliance that can be used in any situation.
- Reemphasize to ASIs that they have the authority to use professional judgment to determine whether noncompliance exists.
- Develop a decision tool for use by ASIs to assist in using professional judgment when making compliance determinations.
- Streamline and improve the process for making compliance determinations and make it impervious to external influence.
- Eliminate single-person decisionmaking.
- Clarify the roles and responsibilities of the Flight Standards Service, Aircraft Certification Service, OEM, and air carrier in the compliance decisionmaking process.

- Develop a process to raise ASI concerns on compliance determinations to a higher level.
- Define and strengthen the communication process flow and make it impervious to external influence.