VOLUME 3 GENERAL TECHNICAL ADMINISTRATION

CHAPTER 60 PROCEDURES FOR AVIATION SAFETY INSPECTOR DECISIONMAKING

Section 1 Safety Assurance System: Aviation Safety Inspector Decisionmaking Regarding Airworthiness Directive Compliance

3-4863 REPORTING SYSTEM(S).

A. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS). Use activity codes 3649 and 5649.

B. Safety Assurance System (SAS). Use the SAS Business Process and Tools, Analysis, Assessment, and Action (AAA), risk management process (RMP), and Action Item Tracking Tool (AITT).

NOTE: This section is related to SAS Element 4.2.3 (AW), AD Management.

3-4864 OBJECTIVE. This section provides guidance to aviation safety inspectors (ASI) to determine if a product complies with an Airworthiness Directive (AD). It also provides guidance for ASIs when they are unable to clearly determine the compliance status of the product.

3-4865 GENERAL. The Federal Aviation Administration's (FAA) policies and procedures require all ASIs to determine what resources are needed to solve difficult and controversial issues, which will eliminate single-person and subjective determinations. ASIs are directed to seek guidance from internal FAA resources, including the certificate-holding district office (CHDO), principal inspectors (PI), Aircraft Evaluation Group (AEG), Aircraft Certification Office (ACO), Regional Office (RO), and/or appropriate FAA headquarters (HQ)-level branch. ASIs should rely on these resources to gather the appropriate information on which to determine AD compliance and applicability.

3-4866 INTRODUCTION. The FAA is responsible for announcing and enforcing adequate standards and regulations. Title 49 of the United States Code (49 U.S.C.), § 44702(b)(1)(A) specifies, in part, that when prescribing standards and regulations and when issuing certificates, the FAA will give full consideration to "the duty of an air carrier to provide service with the highest possible degree of safety in the public interest." Thus, § 44702(b)(1)(A) should be clearly understood to mean that this responsibility rests directly with the air carrier, irrespective of any action taken, or not taken, by an FAA inspector or the FAA.

3-4867 DEFINITIONS.

A. Airworthiness. Title 49 U.S.C., § 44704(d) best defines airworthiness by imposing a two-pronged definition. In order to be Airworthy, an aircraft must:

- Conform to its type design certificate, and
- Be in condition for safe operation.

B. Airworthiness Directives (AD). ADs are substantive regulations that the FAA issues in accordance with Title 14 of the Code of Federal Regulations (14 CFR) part 39, § 39.5. ADs are issued when:

1) An unsafe condition has been found to exist in particular aircraft, aircraft engines, propellers, or appliances installed on an aircraft; and

2) The condition is likely to exist or develop in other aircraft, aircraft engines, propellers, or appliances of the same type design. Once an AD is issued, a product may be operated only after it meets the requirements of that AD.

NOTE: Sensitive Security Information (SSI) AD guidance is located in Volume 6, Chapter 2, Section 36.

C. Alternative Method of Compliance (AMOC).

1) An AMOC is an FAA-approved method of compliance, other than the one specified in an AD, that resolves an unsafe condition on a product and provides an Acceptable Level of Safety (ALoS). An AMOC may also change the time required to accomplish an AD.

2) In August 2002, the FAA made Amendment No. 39-9474 to part 39. The amendment incorporates several standard provisions previously included in individual ADs. One standard provision specifies that an AD applies to a product even if the product is modified, altered, or repaired in the area addressed by the AD. In such cases, an AMOC may be required. Another standard provision identifies procedures for asking the FAA to approve AMOCs to an AD.

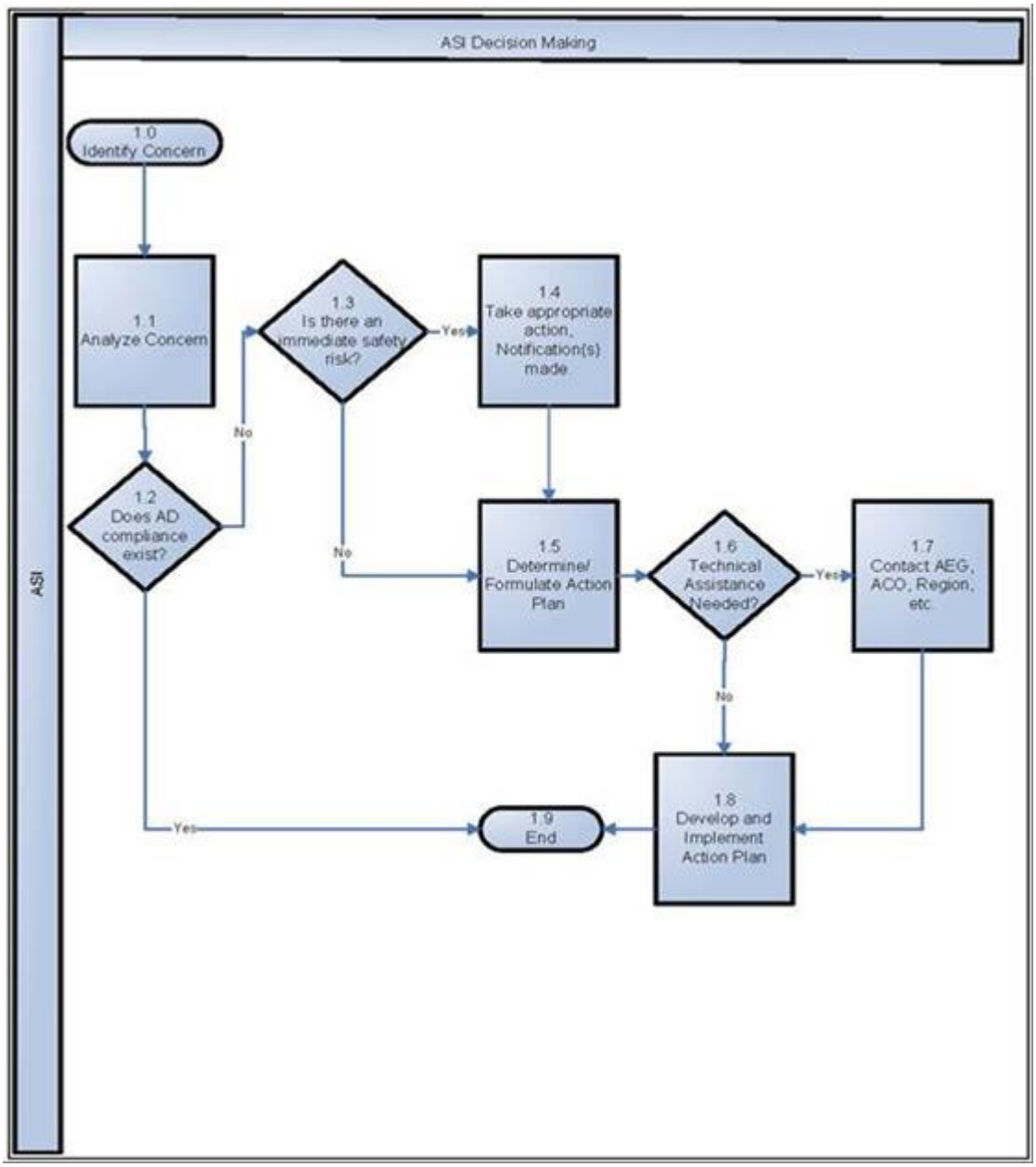
D. Product. Per § 39.3, the term “product” means an aircraft, aircraft engine, propeller, or appliance.

E. Method of Compliance Letters. Method of compliance letters involve an approval when an AD contains statements similar to the following example: “If cracked skin is found, before further flight, repair the cracked skin and replace the loose or missing fasteners with new fasteners, as applicable, in accordance with a method approved by the Manager, Seattle ACO, FAA.” The Transport Airplane Directorate uses a method of compliance letter to approve these requests. Method of compliance letters are not covered in the current edition of FAA Order 8110.103, Alternative Methods of Compliance (AMOC); however, the Transport Airplane Directorate uses the AMOC letter requirements of Order 8110.103 as a baseline for preparing method of compliance letters.

F. Change in Compliance Time. Section 39.19 distinguishes an AMOC from a change in compliance time when it states, “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.” However, a change in compliance time must be requested and approved using the AMOC process.

3-4868 ASI DECISIONMAKING PROCESS. See Figure 3-174, ASI Decisionmaking Regarding Airworthiness Directive Compliance, for the following steps.

Figure 3-174. ASI Decisionmaking Regarding Airworthiness Directive Compliance



A. Identify Concern (Step 1.0).

1) When ASIs suspect noncompliance with an AD, they must determine whether actual noncompliance exists. The ASI should obtain and review all documents that pertain to the area of the suspected noncompliance. Service documents may contain information to determine

the nature and extent of an unsafe condition and what actions are required to correct the condition. ASIs should consider the following data sources:

- Copy of the complete AD, Service Information/Service Bulletin (SB), and any referenced documents. SBs may contain general notes that ASIs should review.
- Copy of any Engineering Orders (EO) or other operator or certificate holder documents that describe how the AD (or referenced document) should be accomplished.
- Minimum equipment lists (MEL)/Master Minimum Equipment Lists (MMEL).
- Copies of any AMOCs (including global AMOCs) that may have been issued for the AD.
- Copies of any maintenance records that apply.

1) If the ASIs need technical clarification or assistance to determine whether suspected AD noncompliance exists, the ASIs should first contact the AEG. The AEG will act as liaison with the ACO, and will assist the ASI to determine and understand the technical requirements of the AD.

2) After reviewing all pertinent documents and facts, the ASI must define the concern so that the matter may be appropriately analyzed under Step 1.1.

B. Analyze Concern (Step 1.1).

1) After gathering and confirming the facts in Step 1.0, ASIs must use their experience, ability, knowledge, skills, and professional judgment to analyze and assess the identified concern. By doing so, ASIs may determine the severity and impact on safety. For parts 121 and 135 certificate holders, the ASI should follow the SAS process.

2) ASIs should visually inspect the aircraft, aircraft engine, propeller, or appliance to which the suspected noncompliance applies in order to determine the exact extent or nature of the noncompliance. For example, determine if an AD was accomplished. If so, then determine if the accomplished work was unintentionally altered or partially altered.

3) When technical issues arise, ASIs should seek assistance by first contacting the appropriate AEG (Transport, Rotorcraft, Small Aircraft, Engine, and Propeller) for assistance. The field office may also coordinate with its respective region for assistance if a particular problem arises with an operator. ASIs should consider that the problem may be more widespread and could be a fleet problem that needs to be addressed at a broader level and be coordinated with the AEGs.

C. Does AD Compliance Exist? (Step 1.2). After analyzing the data from Step 1.1, the ASI should determine if noncompliance exists. If AD compliance exists, proceed to Step 1.9. However, if AD compliance does not exist, proceed to Step 1.3 to determine if there is an immediate safety risk.

NOTE: ASIs should consult with the operator throughout the decisionmaking process. ASIs who are not on the operator's oversight certificate should also consult with the oversight ASI. When first noting the unsafe condition, the ASI should immediately contact the air carrier's station manager or any other person in the air carrier's chain of command; the responsibility for the airworthiness of the aircraft rests with the air carrier (refer to part 121, § 121.363), and they must correct any unsafe condition before the aircraft returns to service.

NOTE: Section 121.363 states, "(a) Each certificate holder is primarily responsible for—(1) The airworthiness of its aircraft, including airframes, aircraft engines, propellers, appliances, and parts thereof; and (2) The performance of the maintenance, preventive maintenance, and alteration of its aircraft, including airframes, aircraft engines, propellers, appliances, emergency equipment, and parts thereof, in accordance with its manual and the regulations of this chapter. (b) A certificate holder may make arrangements with another person for the performance of any maintenance, preventive maintenance, or alterations. However, this does not relieve the certificate holder of the responsibility specified in paragraph (a) of this section."

D. Is There an Immediate Safety Risk? (Step 1.3).

1) ASIs should consider the following questions to base their recommendations or decisions of an immediate safety risk. This list, which is not all-inclusive, will be determined on how an individual operator functions:

- Is this a single aircraft or fleet of aircraft?
- Is the concern an imminent safety hazard?
- Is the aircraft prepared and available for flight?
- Is the aircraft undergoing major overhaul?

NOTE: Analyzing the concern in Step 1.1 will assist the ASI in answering these questions.

2) The PI may use the RMP, which provides procedures to manage hazards and their associated risks. The RMP provides a means to document and track hazards, and to oversee and evaluate the disposition of associated risks to continue adjusting the risk assessment.

3) If the objective evidence shows an immediate safety risk, proceed to Step 1.4, Take Appropriate Action.

4) If the objective evidence does not show an immediate safety risk, proceed to Step 1.5, Determine/Formulate Action Plan.

NOTE: An example of determining a safety risk would be that an AD and associated manufacturer's SB called for a clamp to be installed at a specific angle or position in the aircraft wheel well. After several aircraft cycles the clamp then rotated to a position that was not in accordance with the AD and SB. This

condition would most likely not create a safety hazard if the clamped item did not cause chafing or interfere with other lines, ducts, or clamps in the area.

E. Take Appropriate Action (Step 1.4).

1) Notification. After identifying the noncompliance as an immediate safety risk, ASIs notify the CHDO, PI, and their Front Line Manager (FLM). The responsible CHDO PI will take the steps for notification within airline management, region, AEG, ACO, and office manager.

2) Inspector Action. If the affected aircraft is allowed to continue in service, the ASI takes the appropriate steps to mitigate the safety risk. This step can be as simple as notifying responsible operator personnel (e.g., captain, station manager, and lead mechanic) of the concern and observing operator/air carrier action. The ASI may also exercise FAA authority contained in Volume 8, Chapter 5, Sections 5 and 12.

F. Determine/Formulate Action Plan (Step 1.5).

1) The CHDO PI, in collaboration with the finding ASI, will start gathering data and start formulating an action plan that would help operators bring their aircraft into compliance. The CHDO PI may elect to continue the action plan within the CHDO. In this case, the finding ASI will gather all relevant data, documents, and pictures, and provide them to the CHDO PI.

2) The CHDO PI will formulate a strategy for correction and/or mitigation. Consideration should be given to the data sources identified in Step 1.0.

3) ASIs should review all documents to determine the nature and extent of the unsafe condition and the nature and extent of the actions required to fix it. If the identified noncompliance does not affect safety, discuss with the AEG and ACO if an AMOC is appropriate.

4) CHDO PIs should contact the applicable AEG for technical assistance. The AEG acts as a subject matter expert (SME) for delegated type aircraft and will work with the applicable ACO to resolve compliance issues. If further technical clarification is needed with the content of an AD and its SBs, the AEG will act as a liaison with the appropriate ACO.

5) As information becomes available, the CHDO PI may use the RMP.

6) To understand the scope of noncompliance, ASIs should also use this step to:

a) Identify and analyze any hazards in the operator’s operating environment or systems to decide if noncompliance is an isolated incident, systemic problem, regulatory noncompliance, or airworthiness issue. Noncompliance could apply to ADs, engineering authorizations, etc.

b) Determine if the noncompliance may be more widespread (e.g., a fleet problem) that needs to be addressed at a broader level and be coordinated with the AEGs.

c) Determine if other aircraft have been transferred or sold to another operator for possible notification concerning the AD noncompliance.

G. Technical Assistance Needed? (Step 1.6). The CHDO PI from the previous step determines what technical assistance is needed. For all aircraft engine and propeller engineering assistance, including any question over technical compliance, the AEG will be the first organization contacted to liaise with the ACO and/or the manufacturer.

H. Contact AEG, ACO, Region, etc. (Step 1.7). The CHDO PI identifies each area of expertise required and initiates the contact to gather additional data and expertise to resolve the item of concern. In highly visible situations, all parties (AEG, CHDO, and ACO) should conduct conference calls to ensure information is understood and an action plan is agreed upon.

I. Develop and Implement Action Plan (Step 1.8).

1) The CHDO PI implements corrective and/or mitigation strategies to ensure that the operator/air carrier addresses the identified hazard and unacceptable levels of risk. At this stage and after consultations, the action plan is developed, finalized, and then implemented to correct or mitigate the AD noncompliance.

2) The operator carries out the corrective action or mitigation strategy with the CHDO. This process is usually an agreed-upon methodology with the operator and the CHDO. The PI must identify the necessary actions to oversee the operator's correction or mitigation of the hazard and associated levels of risk. The PI must also track and follow up on the operator's corrective actions and should use one or more of the following tools to do so:

a) PTRS.

b) SAS. Follow guidance on the use of these tools in Volume 10.

- RMP.
- AITT.

J. Task Outcomes, Document Findings (Step 1.9).

1) Complete the PTRS Record.

a) Use the appropriate Organizational Technical Administration or Aircraft and Equipment PTRS activity code.

b) Record the activity results.

2) Complete the SAS Process. Use the appropriate SAS business processes for recording the data collection activities (see Volume 10).

NOTE: ASIs will document any other information as determined by local, regional, or national guidance.

3) Complete Compliance and/or Enforcement Actions. Take and document other appropriate actions used to correct safety issues or deviations from a regulation or a standard.

- Compliance Action (see Volume 14, Chapter 1, Section 2, Compliance Action Decision Procedure);
- Administrative or Legal Enforcement Action, if deviations are caused by intentional, reckless, or criminal behavior, or if the person(s) is incapable, or unwilling to cooperate (see Volume 14, Chapter 1, Section 2 and FAA Order 2150.3, FAA Compliance and Enforcement Program).

3-4869 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- Advisory Circular (AC) 39-7, Airworthiness Directives.
- Aircraft Certification Service (AIR) Quality Management System (QMS) documents available on the AIR QMS Web site at https://my.faa.gov/org/linebusiness/avs/offices/air/qms/doc/master_index.html.
- FAA Order 8040.1, Airworthiness Directives.
- FAA-IR-M-8040.1, Airworthiness Directives Manual.
- FAA Order 8110.103, Alternative Methods of Compliance (AMOC) (refer to AMOCs and the 24/7 process).
- Volume 10, Safety Assurance System.
- Volume 14, Compliance and Enforcement.
- FAA Order 2150.3, FAA Compliance and Enforcement Program.

B. Forms. None.

C. Job Aids. None.

3-4870 FUTURE ACTIVITIES. If the inspectors noted deficiencies during the operator's corrective action, they should conduct followup inspections as necessary.

RESERVED. Paragraphs 3-4871 through 3-4874.