

VOLUME 6 SURVEILLANCE

CHAPTER 11 OTHER SURVEILLANCE

Section 2 Conduct a Detailed Process/Task Inspection

Source Basis:

General
<ul style="list-style-type: none"> • § 1.1, General Definitions. • § 43.3, Persons Authorized to Perform Maintenance, Preventive Maintenance, Rebuilding, and Alterations. • § 43.5, Approval for Return to Service After Maintenance, Preventive Maintenance, Rebuilding, or Alteration. • § 43.7, Persons Authorized to Approve Aircraft, Airframes, Aircraft Engines, Propellers, Appliances, or Component Parts for Return to Service After Maintenance, Preventive Maintenance, Rebuilding, or Alteration. • § 43.13, Performance Rules (General). • § 43.16, Airworthiness Limitations. • § 43.17, Maintenance, Preventive Maintenance, and Alterations Performed on U.S. Aeronautical Products by Certain Canadian Persons. • § 119.59, Conducting Tests and Inspections. • Title 49 U.S.C. § 44701, General Requirements.
Part 91K
§ 91.1425(a), CAMP: Maintenance, Preventive Maintenance, and Alteration Programs
Part 121
§ 121.367(a), Maintenance, Preventive Maintenance, and Alteration Programs
Part 135
§ 135.425(a), Maintenance, Preventive Maintenance, and Alteration Programs
Part 145
§ 145.205(a), Maintenance, Preventive Maintenance, and Alterations Performed for Certificate Holders Under Parts 121, 125, and 135, and for Foreign Air Carriers or Foreign Persons Operating a U.S.-Registered Aircraft in Common Carriage Under Part 129

6-2171 REPORTING SYSTEM.

A. Safety Assurance System (SAS) Activity Recording (AR). For Title 14 Code of Federal Regulations (14 CFR) part 91 subpart K (part 91K), use activity code 3628 or 5628, as appropriate.

B. SAS. For 14 CFR parts 121, 135, or 145, use SAS automation and the associated Data Collection Tools (DCT).

6-2172 OBJECTIVE. This section provides guidance for conducting a detailed process/task inspection by analyzing the data, materials, and parts used in the maintenance/alterations processes by air agencies, program managers, and air carriers.

6-2173 GENERAL. A detailed process/task inspection is a surveillance activity that will examine one or more specific tasks that are associated with the overhaul maintenance/alterations of a part or product. This inspection will evaluate the data, tooling, equipment, and processes used to complete one or more tasks.

6-2174 INSPECTOR RESPONSIBILITIES.

A. Preparation. Prior to performing an inspection, it is important that aviation safety inspectors (ASI) and air agencies are well prepared. ASIs should be familiar, when applicable, with the following:

- Operations specifications (OpSpecs) (including the ratings, the specifications listed for limited specialized services, and the process specifications);
- Maintenance documentation (including the required work cards, the inspection forms, and the sign-off sheets);
- Applicable maintenance manuals (including the inspection procedures manuals, the air carrier manuals and work instructions, the overhaul manuals, the current revisions and dates, and the process specifications);
- Major repair, alteration, and airworthiness (MRA) Organization Designation Authorization (ODA);
- Federal Aviation Administration (FAA) Order 8100.15, Organization Designation Authorization Procedures;
- Engineering Orders (EO);
- Required Inspection Items (RII);
- Supplemental Type Certificates (STC) and Parts Manufacturer Approval (PMA);
- FAA Form 8110-3, Statement of Compliance with Airworthiness Standards; and
- FAA Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).

B. Coordination. A detailed process inspection will involve varying degrees of complexity. At times, there may be a need for coordination with other offices (e.g., Aircraft Evaluation Group (AEG), Aircraft Certification Service office, Flight Standards District Office (FSDO), etc.) for clarification of procedures and processes.

NOTE: Geographic units need to establish close coordination with their responsible Flight Standards office.

6-2175 COORDINATION REQUIREMENTS. This task requires coordination between the principal inspector (PI) or ASI, and as applicable, the program manager, air carrier, and repair station.

6-2176 REFERENCES, FORMS, AND JOB AIDS.**A. References (current editions):**

- OpSpecs.
- Process specifications, if applicable.
- Applicable maintenance manuals.
- Volume 1, Chapter 3, Section 1, Safety Assurance System: Responsibilities of Aviation Safety Inspectors.
- Volume 10, Safety Assurance System Policies and Procedures.
- Volume 14, Chapter 1, Section 2, Flight Standards Service Compliance Action Decision Procedure.

B. Forms:

- FAA Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).
- FAA Form 8110-3, Statement of Compliance with Airworthiness Standards.

C. Job Aids. None.**6-2177 PROCEDURES.****A. Prepare for the Inspection.** Accomplish the following:

- 1) Identify the process/task to be inspected;
- 2) Identify those documents, which will verify the use of approved or accepted data, materials, tools, etc.;
- 3) Inform the appropriate personnel as to what particular process/task will be observed during the inspection;
- 4) Verify the inspection criteria to be used; and
- 5) During this inspection, pay particular attention to any deviations from approved data or procedures.

B. Perform the Inspection. The following steps are to serve as a guide on performing a process/task inspection. Certain steps may not be appropriate, depending on the complexity of the process/task being performed. Inspect/review the following, as applicable:

- 1) Work instructions, to verify that:
 - Work instructions have been prepared for all processes;
 - Work instructions reflect the technical data contained in appropriate maintenance manuals or other approved documents;

- Work instructions define accept/reject criteria, required tools, test equipment, inspection equipment, details of method of inspection to be performed, and tolerance limits, as applicable;
- Work instructions denote and detail the function to be performed, sequence of operations, and inspection points to verify proper handling of products from one station to another through all phases;
- Revisions to work instructions have been approved, controlled, and documented; and
- Traceability is maintained for the completion of all operations.

2) Inspection instructions, to verify that:

- Inspection records, indicating the number of inspections made, conformance or nonconformance, and the action when the product is nonconforming, are maintained;
- When required, re-inspections/retests are performed following additional maintenance;
- Assemblies are inspected for conformity before closure;
- All required inspections and tests have been satisfactorily accomplished prior to final acceptance of the completed products/parts;
- Personnel performing RII inspections for an air carrier are identified and authorized by the carrier; and
- Inspection personnel are not exceeding their area of authority.

3) Data, to verify that:

- Personnel are provided with current technical data and changes;
- Inapplicable, inappropriate, illegible, or obsolete data is removed from areas of potential use;
- Nondestructive inspection (NDI) processes are reviewed for conformance with FAA-approved data;
- Process specification changes are submitted to the FAA for evaluation and approval; and
- Tags, forms, and other documents used are controlled.

4) Major repairs and alterations, to verify that:

- If the task involved a major repair or major alteration, that FAA-approved data was used to accomplish the task;
- MRA ODA data used for major repairs has been approved by authorized individuals referenced in the operator's MRA ODA procedures manual;
- The scope of the MRA ODA authority has not been exceeded;
- The Designated Engineering Representative (DER)-approved data has been documented on FAA Form 8110-3; and
- The DER is authorized by the responsible Aircraft Certification Service office to approve the data.

5) Materials/parts, to verify that:

- The materials, test records, and standards used in NDI are identified and controlled;
- When required, special identification and controls for materials or parts are identified and are in place prior to the materials/parts being used;
- When required, special handling and storage requirements for materials and parts are identified and being used; and
- There is traceability of material or parts received from distributors and that the records of receiving inspection data are retained and list the name, part number, quantity, and inspection results.

6) Tools and test equipment, to verify that:

- When required, special tools and test equipment are identified and used for an operation or process;
- Calibration records are maintained for all tools and test equipment requiring calibration; and
- The facility's personnel are trained appropriately for their assignments.

6-2178 TASK OUTCOMES.

A. Conduct Debriefing. Brief the certificate holder (CH) on the results. Discuss all deficiencies, CH corrective actions, and FAA actions. The ASI can find instructions for conducting briefings in Volume 1, Chapter 3, Section 1.

B. Compliance and Enforcement Action. If safety issues and/or regulatory noncompliance are identified, follow the process contained in Volume 14, Chapter 1, Section 2 to determine the appropriate FAA compliance or enforcement action.

C. Complete the Task. Follow Volume 10 for completion of SAS AR or DCT.

6-2179 FUTURE ACTIVITIES. Follow Volume 10 to plan future risk-based surveillance in SAS.

RESERVED. Paragraphs 6-2180 through 6-2195.