

**VOLUME 6 SURVEILLANCE****CHAPTER 11 OTHER SURVEILLANCE****Section 2 Conduct a Detailed Process/Task Inspection****6-2171 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.**

**A. Maintenance:** 3651.

**B. Avionics:** 5651.

**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 and air operators.

**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, the overhaul manuals, the current revisions and dates, and the process specifications);
- Major repair, alteration, and airworthiness (MRA) Organization Designation Authorization (ODA);
- The current edition of Order 8100.15, Organization Designation Authorization Procedures;
- Engineering Orders (EO);
- Required Inspection Items (RII);
- Supplemental Type Certificates (STC) and Parts Manufacturer Approval (PMA);
- Federal Aviation Administration (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 (Aircraft Evaluation Group (AEG), Aircraft Certification Office (ACO), Flight Standards District Office (FSDO), etc.), for clarification of procedures and processes.

NOTE: Geographic units need to establish close coordination with their certificate-holding district office (CHDO).

**6-2175 COORDINATION REQUIREMENTS.** This task must be coordinated between an Airworthiness ASI and the operator.

**6-2176 REFERENCES, FORMS, AND JOB AIDS.**

**A. References:**

- OpSpecs.
- Process specifications, if applicable.
- Applicable maintenance manuals.

**B. Forms:**

- FAA Form 8110-3.
- FAA Form 337.

**C. Job Aids.** None.

**6-2177 PROCEDURES.**

**A. Prepare for the Inspection.** Accomplish the following:

- Identify the process/task to be inspected;
- Identify those documents, which will verify the use of approved or accepted data, materials, tools, etc;
- Inform the appropriate personnel as to what particular process/task will be observed during the inspection;
- Verify the inspection criteria to be used; and
- During this inspection, pay particular attention to any deviations from approved data or procedures. (Do not let them continue.)

**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 repair station or operator. 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, reinspections/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 cognizant ACO 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. Complete the PTRS Record.**

##### **B. Complete the Task.** Successful completion of this task may result in the following:

- Satisfactory inspection, and/or
- Requirement for a followup inspection for a particular discrepancy.

**C. Document the Task.** Document the task, and file all supporting paperwork in the operator's office file.

#### **6-2179 FUTURE ACTIVITIES.** Normal surveillance.

**RESERVED.** Paragraphs 6-2180 through 6-2195.