

VOLUME 6 SURVEILLANCE**CHAPTER 9 PART 145 INSPECTIONS****Section 8 Safety Assurance System: Inspect a Part 145 Repair Station's Housing and Facilities**

6-1773 REPORTING SYSTEM(S). For Title 14 of the Code of Federal Regulations (14 CFR) part 145, use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT).

6-1774 OBJECTIVE. This section provides guidance for inspecting the adequacy of repair station facilities.

6-1775 GENERAL.

A. Certificated Repair Station (CRS) Accommodations. The CRS must provide facilities to accommodate equipment, materials, and personnel needed to properly perform maintenance, preventive maintenance, alterations of articles, or the specialized services for the rating it receives. When inspecting the repair station, the aviation safety inspector (ASI) should determine which items apply, based on the complexity of the facility and the level of ratings.

B. Line Maintenance Authorization Locations. Repair stations with line maintenance authorization locations must also meet these requirements, except for part 145, § 145.205(d) exempting repair stations from § 145.103(b).

6-1776 REFERENCES, FORMS, AND JOB AIDS.**A. References (current editions):**

- Part 145.
- Volume 10, Safety Assurance System Policy and Procedures.
- Advisory Circular (AC) 43-15, Recommended Guidelines for Instrument Shops.
- AC 43-214, Repairs and Alterations to Composite and Bonded Aircraft Structure.

B. Forms. None.

C. Job Aids. None.

6-1777 PROCEDURES.

A. Review Applicable Information. Before the inspection, the principal inspector (PI) should carefully review:

- 1) Part 145.
- 2) The Repair Station Manual (RSM)/Quality Control Manual (QCM).

- 3) Operations specifications (OpSpecs), to include OpSpec A101, if applicable.
- 4) The Safety Performance Analysis System (SPAS). For additional information on SPAS data, see Volume 6, Chapter 9, Section 1, paragraph 6-1630.
- 5) The enhanced Vital Information Database (eVID).
- 6) The certificate-holding district office (CHDO) file.

B. Verify Segregation and Protection of Parts. Verify that each workspace has areas for the proper segregation and protection of parts and subassemblies during all phases of maintenance, preventive maintenance, or alterations. Verify the following:

- 1) The differences between serviceable and unserviceable components, parts, and material must be clearly distinguishable throughout each process. Repair stations may accomplish this with suitable racks, hoists, trays, stands, or other means of segregation for storing and protecting all articles.
- 2) Repair stations should situate environmentally hazardous or sensitive operations so they do not adversely affect other maintenance or alteration of articles or activities. Examples of these operations are: avionics work, battery maintenance, painting, cleaning, welding, and machining.
- 3) If the facility deals in non-aircraft parts, materials, or maintenance activities outside those normally performed at the repair station, the facility should segregate the aircraft function from other functions to preclude a repair station using unapproved parts or materials on an aircraft.
- 4) Repair stations must segregate articles and materials stocked for installation from articles and materials undergoing maintenance, preventive maintenance, or alteration.

C. Determine Adequacy of Environmental Conditions. The repair station must have sufficient ventilation, lighting, and control of temperature, humidity, and other climate conditions to ensure personnel perform maintenance, preventive maintenance, or alterations to required standards. In addition to reasonable heating, air conditioning, and lighting requirements, verify the following maintenance environmental conditions:

- 1) Instrument shop environmental conditions are in accordance with manufacturer standards.
- 2) Composite layup and clean rooms are environmentally and operationally controlled per the Original Equipment Manufacturer (OEM) or other Federal Aviation Administration (FAA)-approved repair process.
- 3) Storage areas include proper storage for such items as flammables, sealants, chemicals, tires, or tooling.
- 4) Lighting is adequate for the type of processes performed in each area.

5) While physically inspecting the repair station, verify that facility diagrams and descriptions in the RSM are accurate. This includes any facilities used for spray painting, avionics, engine or airframe repair, or any other work that would have special requirements. Pay close attention to specific information detailed in the manual, such as:

- The type of heating,
- Lighting,
- Equipment location,
- Electrical, and
- Compressed air outlets.

D. Check Human Factors. Repair stations must create a safe working environment that will help prevent personnel injury and damage to customer property. The housing and facilities should provide adequate security and fire protection. The PI should review the repair station's safety procedures. The PI should also consider that poor housekeeping, or improper maintenance of safety devices such as eyewash stations and fire extinguishers, is a good indicator of the repair station's corporate culture.

NOTE: This inspection focuses on how the repair station follows its safety policies and procedures. Outside the PI's jurisdiction are safety and health rules, codes, and regulations, which vary from one state or county to another.

E. Inspect General Housekeeping. Inspect the repair station to determine that general housekeeping will not contaminate component parts and subassemblies undergoing maintenance. Repair stations should maintain all shops in a clean and orderly manner.

6-1778 TASK OUTCOMES. Follow SAS Volume 10 guidance for Module 4 for Data Collection, Data Reporting, and Data Review. PIs follow Analysis, Assessment, and Action procedures for Module 5.

6-1779 FUTURE ACTIVITIES. Follow SAS Volume 10 to plan future risk-based surveillance in SAS.

RESERVED. Paragraphs 6-1780 through 6-1794.