# Repair Station's Housing & Facilities

## Guide for Regulatory Compliance



#### Resources include:

AC 145-9

Airworthiness Inspector's Handbook, Order 8300.10 - Volume 3 - Chapter 85

FAR Part 145 Sections 103 & 105

#### AC 145-9 para 4-2 pg. 23

## Advisory Circular 145-9

This Advisory Circular (AC) provides information and guidance material for all repair station certificate holders or applicants under Title 14 of the Code of Federal Regulations (14 CFR) part 145 to develop and evaluate a repair station manual (RSM) and quality control manual (QCM).

This AC provides valuable guidance in the prepration of the Repair Station Manual per the new rule. Various sections address issues specifically for requirements pertaining to FAA Certificated Repair Station housing and facilities. Those pertinent sections are included here.

#### AC 145-9 para 4-1 pg. 21, 22

Housing and Facilities. This section should include a description of the housing and facilities, and a drawing showing the floor plan of the facility. The drawing could include the entrance(s), parking areas, and street locations. The drawing and description may include the type of heating, lighting, equipment location, shop areas, electrical, and compressed air outlets.

A description of any facilities used for spray painting, avionics, engine or airframe repair, or any other work that would have special requirements should be included.

The following questions or concerns are offered as a guide and are intended to help initiate the procedures for describing the housing, facilities, and equipment in the manual(s). They should not be considered all-inclusive. Each facility is unique and therefore may require additional procedures to verify regulatory requirements and needs of the repair station.

\*Does the manual include a description of how the repair station operates?

\*Does the manual include a drawing of the housing, identifying the various work facilities within the building(s) and giving a narrative description of the construction of the housing and facilities?

\*Does the description and/or layout identify areas with special requirements?

\*Does the description include a generic overview of the equipment?

\*When leasing or renting equipment, does the manual contain procedures describing the lease/rent process and who is responsible for managing the program, including the required calibration/verifications?

\*How does the repair station ensure that the equipment is in place and under the facility's control when the work is performed?

\*If the repair station is using special equipment or tools other than those recommended by the manufacturer, does the manual include procedures for determining equivalency?

\*Does the manual include a description of the stock room/area, how inventory is requisitioned for particular jobs, and how shelf life inventory is maintained?

## Airworthiness Inspector's Handbook, Order 8300.10 - Volume 3 - Chapter 85

This chapter in the Inspector's Handbook provides FAA Inspectors provides guidance for inspecting the adequacy of the repair station facilities.

Sections of the Inspection Procedures section referred to during the training.

Physical Inspection. While physically inspecting the repair station, verify that the facility diagram(s) and description in the repair station manual are accurate. This includes any facilities used for spray painting, avionics, engine or airframe repair, or any other work that would have special requirements. Close attention should be given to specific information detailed in the manual, such as the type of heating, lighting, equipment location, electrical, and compressed air outlets.

Segregation and Protection. 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. Inspect for the following:

- (1) The differences between serviceable and unserviceable components, parts, and materials must be clearly distinguishable throughout each process. This may be accomplished with suitable racks, hoists, trays, stands, and/or other means of segregation for the storage and protection of all articles.
- (2) Environmentally hazardous or sensitive operations, such as avionics work, battery maintenance, painting, cleaning, welding, and machining, should be situated in such a manner that they do not adversely affect other maintenance or alteration of articles or activities.
- (3) If the facility deals in non-aircraft parts, materials, or maintenance activities, outside the realm of the repair station, they should segregate the aircraft function from other functions to preclude unapproved parts or materials from being used on an aircraft.

(4) Articles and materials stocked for installation must be segregated from those undergoing maintenance, preventive maintenance, or alteration.

Environmental Conditions. Ventilation, lighting, and control of temperature, humidity, and other climatic conditions must be sufficient to ensure that personnel perform maintenance, preventive maintenance, or alterations to the required standards. In addition to reasonable heating, air conditioning and lighting requirements, verify the following:

- (1) Instrument shop environmental conditions are in accordance with the manufacturer's standards.
- (2) Composite lay-up and clean rooms are environmentally and operationally controlled in accordance with the Original Equipment Manufacturer (OEM) or other FAA-approved repair process. (
- 3) Storage areas include proper storage conditions for flammables, sealants, chemicals, tires, tooling, etc.
- (4) Lighting is adequate for the type of process being performed in each area.

Safe Working Environment. Repair stations are responsible for creating a safe working environment that will prevent personnel injury and damage to customer's property. The housing and facilities should provide for adequate security and fire protection.

Keep in mind that poor housekeeping or improper maintenance of safety devices, such as eye wash stations and fire extinguishers, are good indicators of the repair station's corporate culture.

### FAR Part 145 Sections 103

Subpart C--Housing, Facilities, Equipment, Materials, and Data

Sec. 145.103

Housing and facilities requirements.

- [(a) Each certificated repair station must provide--
- (1) Housing for the facilities, equipment, materials, and personnel consistent with its ratings.
- (2) Facilities for properly performing the maintenance, preventive maintenance, or alterations of articles or the specialized services for which it is rated. Facilities must include the following:
- (i) Sufficient work space and areas for the proper segregation and protection of articles during all maintenance, preventive maintenance, or alterations;
- (ii) Segregated work areas enabling environmentally hazardous or sensitive operations such as painting, cleaning, welding, avionics work, electronic work, and machining to be done properly and in a manner that does not adversely affect other maintenance or alteration articles or activities;
- (iii) Suitable racks, hoists, trays, stands, and other segregation means for the storage and protection of all articles undergoing maintenance, preventive maintenance, or alterations;
- (iv) Space sufficient to segregate articles and materials stocked for installation from those articles undergoing maintenance, preventive maintenance, or alterations; and
- (v) Ventilation, lighting, and control of temperature, humidity, and other climatic conditions sufficient to ensure personnel perform maintenance, preventive maintenance, or alterations to the standards required by this part.
- (b) A certificated repair station with an airframe rating must provide suitable permanent housing to enclose the largest type and model of aircraft listed on its operations specifications
- (c) A certificated repair station may perform maintenance, preventive maintenance, or alterations on articles outside of its housing if it provides suitable facilities that are acceptable to the FAA and meet the requirements of Sec. 145.103(a) so that the work can be done in accordance with the requirements of part 43 of this chapter.]

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## FAR Part 145 Sections 105

Subpart C--Housing, Facilities, Equipment, Materials, and Data

Sec. 145.105

Change of location, housing, or facilities.

- [(a) A certificated repair station may not change the location of its housing without written approval from the FAA.
- (b) A certificated repair station may not make any changes to its housing or facilities required by Sec. 145.103 that could have a significant effect on its ability to perform the maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications without written approval from the FAA.
- (c) The FAA may prescribe the conditions, including any limitations, under which a certificated repair station must operate while it is changing its location, housing, or facilities.]

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