

Repair Station Tech Data Training

Guide for
Regulatory Compliance

Maintaining Technical Data

*This is what the
regulations state . . .*

FAR Part 43.13(a)

Performance rules (general).

(a) Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in Sec. 43.16. He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If special equipment or test apparatus is recommended by the manufacturer involved, he must use that equipment or apparatus or its equivalent acceptable to the Administrator.

FAR Part 43.16

Airworthiness Limitations.

Each person performing an inspection or other maintenance specified in an Airworthiness Limitations section of a manufacturer's maintenance manual or Instructions for Continued Airworthiness shall perform the inspection or other maintenance in accordance with that section, or in accordance with operations specifications approved by the Administrator under [Parts 121, 123, or 135,]or an inspection program approved under Sec. 91.409(e).

FAR Part 145

Section 145.109

ADs Type Certificate Data Sheets
Manufacturer's Tech Data
Maintenance Manuals, SBs,
Approved Engineering Data

Section 145.201

Section 145.211



DATA

This is what the regulations say about equipment, materials, and data requirements . . .

FAR Part 145.109

Sec. 145.109

Equipment, materials, and data requirements.

[(a) Except as otherwise prescribed by the FAA, a certificated repair station must have the equipment, tools, and materials necessary to perform the maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications in accordance with part 43. The equipment, tools, and material must be located on the premises and under the repair station's control when the work is being done.

(b) A certificated repair station must ensure all test and inspection equipment and tools used to make airworthiness determinations on articles are calibrated to a standard acceptable to the FAA.

(c) The equipment, tools, and material must be those recommended by the manufacturer of the article or must be at least equivalent to those recommended by the manufacturer and acceptable to the FAA.

(d) A certificated repair station must maintain, in a format acceptable to the FAA, the documents and data required for the performance of maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications in accordance with part 43. The following documents and data must be current and accessible when the relevant work is being done:

- (1) Airworthiness directives,
- (2) Instructions for continued airworthiness,
- (3) Maintenance manuals,
- (4) Overhaul manuals,
- (5) Standard practice manuals,
- (6) Service bulletins, and
- (7) Other applicable data acceptable to or approved by the FAA.]

FAR Part 145.201

Privileges and limitations of certificate.

[(a) A certificated repair station may--

(1) Perform maintenance, preventive maintenance, or alterations in accordance with part 43 on any article for which it is rated and within the limitations in its operations specifications.

(2) Arrange for another person to perform the maintenance, preventive maintenance, or alterations of any article for which the certificated repair station is rated. If that person is not certificated under part 145, the certificated repair station must ensure that the non certificated person follows a quality control system equivalent to the system followed by the certificated repair station.

(3) Approve for return to service any article for which it is rated after it has performed maintenance, preventive maintenance, or an alteration in accordance with part 43.

(b) A certificated repair station may not maintain or alter any article for which it is not rated, and may not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.

(c) A certificated repair station may not approve for return to service'

(1) Any article unless the maintenance, preventive maintenance, or alteration was performed in accordance with the applicable approved technical data or data acceptable to the FAA.

(2) Any article after a major repair or major alteration unless the major repair or major alteration was performed in accordance with applicable approved technical data; and

(3) Any experimental aircraft after a major repair or major alteration performed under Sec. 43.1(b) unless the major repair or major alteration was performed in accordance with methods and applicable technical data acceptable to the FAA.]

FAR Part 145.211

Quality control system.

- [(a) A certificated repair station must establish and maintain a quality control system acceptable to the FAA that ensures the airworthiness of the articles on which the repair station or any of its contractors performs maintenance, preventive maintenance, or alterations.
- (b) Repair station personnel must follow the quality control system when performing maintenance, preventive maintenance, or alterations under the repair station certificate and operations specifications.
- (c) A certificated repair station must prepare and keep current a quality control manual in a format acceptable to the FAA that includes the following:
- (1) A description of the system and procedures used for--
 - (i) Inspecting incoming raw materials to ensure acceptable quality;
 - (ii) Performing preliminary inspection of all articles that are maintained;
 - (iii) Inspecting all articles that have been involved in an accident for hidden damage before maintenance, preventive maintenance, or alteration is performed;
 - (iv) Establishing and maintaining proficiency of inspection personnel;
 - (v) Establishing and maintaining current technical data for maintaining articles;
 - (vi) Qualifying and surveilling non certificated persons who perform maintenance, preventive maintenance, or alterations for the repair station;
 - (vii) Performing final inspection and return to service of maintained articles;
 - (viii) Calibrating measuring and test equipment used in maintaining articles, including the intervals at which the equipment will be calibrated; and
 - (ix) Taking corrective action on deficiencies;
 - (2) References, where applicable, to the manufacturer's inspection standards for a particular article, including reference to any data specified by that manufacturer;
 - (3) A sample of the inspection and maintenance forms and instructions for completing such forms or a reference to a separate forms manual; and
 - (4) Procedures for revising the quality control manual required under this section and notifying the certificate holding district office of the revisions, including how often the certificate holding district office will be notified of revisions.
- (d) A certificated repair station must notify its certificate holding district office of revisions to its quality control manual.]

Advisory Circular 145-9

GUIDE FOR DEVELOPING AND EVALUATING REPAIR STATION AND QUALITY CONTROL MANUALS

4-9. CURRENT TECHNICAL DATA.

- a. References. Part 43, section 43.13(a), and part 145, sections 145.201(c) and 145.211(b).
- b. This section of the manual must contain the procedures for ensuring that current technical data is available for the scope of work the repair station is performing. Section 43.13(a) requires each person performing maintenance, alteration, or preventive maintenance to use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual, Instructions for Continued Airworthiness (ICA), or other methods, techniques, or practices acceptable to the Administrator. Section 145.201(c) states that a certificated repair station may not approve for return to service any article unless the maintenance, preventive maintenance, or alteration was performed in accordance with the applicable approved technical data or data acceptable to the FAA.
- c. The technical data used by repair stations could include any of the following:
 - FAA technical data (such as ADs, Type Certificate Data Sheets, etc.).
 - Manufacturer's technical data (such as maintenance manuals and SBs).
 - Engineering data (such as DER-approved data or data developed by the repair station and approved by the FAA).
- d. The data used by the repair station to perform a specific maintenance function must be current and available to maintenance and inspection personnel when the maintenance is being performed. The procedures should ensure that someone in the facility is responsible for maintaining the technical data in a current condition. Status of the manuals may be confirmed by making periodic phone calls to the manufacturer, etc. The procedures should ensure that any subscriptions to required technical data are renewed as necessary. The procedure should describe how the revised technical data will be inserted into existing documents and how the appropriate individuals in the repair station will be notified about revisions.
- e. In some repair stations, the technical data is issued in the form of controlled documents. Procedures for these facilities will need a complete description of the document control system, including distribution, accountability, and availability. Document control procedures may include:
 - Approval of the documents before distribution.
 - Identification of changes.
 - Provisions to ensure that relevant versions of applicable documents are available at points of use.
 - Provisions to ensure that documents of external origin are identified and controlled.
 - Procedures to prevent the use of obsolete documents.

AC 145-9 *continued*

- f. Larger repair stations may include provisions for distributing data from a master library to individuals or shop libraries throughout the facility. The procedure must ensure accurate and timely distribution of the material. Additional procedures will need to address who revises the shop library documents, how the documents are revised, and how the information is distributed.
- g. Repair stations that are associated with or part of a production approval holder facility often use the manufacturer's drawings and data to perform maintenance. This data may not meet the requirements of section 43.13(a). These facilities should also be cautioned that the parts manufactured by the production side of the facility cannot be used by the repair station unless the parts are FAA-approved through a Parts Manufacturer Authorization (PMA), Technical Standard Order (TSO), Type Certification (TC), or other means.
- h. Technical data used by repair stations located outside the United States may be translated into the national language. If the data requires translation before distribution, the procedures must ensure an accurate, timely, and complete translation. Provisions should be made for quality control personnel to review and approve the translated material before distribution. The technical data that needs to be translated may include graphs, diagrams, or other visual aids. The repair station must retain in English any data that demonstrates compliance with the requirements of part 43.
- i. Those facilities that use computer software for component testing (of airborne systems or equipment, avionics systems, engines, etc.) will need to include procedures describing how revisions/updates are made and how the current software is distributed. The procedures will need to address system security to prevent inadvertent changes to the software and methods to ensure that only the current revision/version of the software is used. Distribution and revision of software is often handled by a group other than those responsible for revision and distribution of paper documents.
- j. The following questions or concerns are offered as a guide and are intended to help initiate the procedures in the manual. They should not be considered all-inclusive. Each facility is unique and may require additional procedures to verify regulatory requirements and the needs of the repair station.

What is the title of the person responsible for revising and maintaining the technical data?

How does the repair station ensure that the data is current?

How is the technical data distributed throughout the company?

How does the repair station ensure that current technical data is available to the staff?

What is the title of the person responsible for control and distribution of the documents from a master library to the shop/office libraries located in the facility?

If the technical data requires translation, who is responsible for performing the translation and quality checks? How will the data be revised and distributed?

If the repair station uses computer software for component testing, who is responsible for maintaining the software, and how are revisions made and distributed?

When there are questions about the regulations check the FAA website for currency and accuracy.