



FAR Part 145 Overview
and
North American Aircraft Services
Repair Station Manual
/
Quality Control Manual

Topic One

- FAR Part 145

Agenda

- Subpart A—General
- 145.1 Applicability.
- 145.3 Definition of terms.
- 145.5 Certificate and operations specifications requirements.

Agenda FAR Part 145

- Subpart B—Certification
 - 145.51 Application for certificate.
 - 145.53 Issue of certificate.
 - 145.55 Duration and renewal of certificate.
 - 145.57 Amendment to or transfer of certificate.
 - 145.59 Ratings.
 - 145.61 Limited ratings

Agenda FAR Part 145

- Subpart C—Housing, Facilities, Equipment, Materials, and Data
 - 145.101 General.
 - 145.103 Housing and facilities requirements.
 - 145.105 Change of location, housing, or facilities.
 - 145.107 Satellite repair stations.
 - 145.109 Equipment, materials, and data requirements.
- Subpart D—Personnel
 - 145.151 Personnel requirements.
 - 145.153 Supervisory personnel requirements.
 - 145.155 Inspection personnel requirements.
 - 145.157 Personnel authorized to approve an article for return to service.
 - 145.159 Recommendation of a person for certification as a repairman.
 - 145.161 Records of management, supervisory, and inspection personnel.
 - 145.163 Training requirements.

Agenda FAR Part 145

- Subpart E—Operating Rules
 - 145.201 Privileges and limitations of certificate.
 - 145.203 Work performed at another location.
 - 145.205 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.
 - 145.207 Repair station manual.
 - 145.209 Repair station manual contents.
 - 145.211 Quality control system.
 - 145.213 Inspection of maintenance, preventive maintenance, or alterations.
 - 145.215 Capability list.
 - 145.217 Contract maintenance.
 - 145.219 Recordkeeping.
 - 145.221 Reports of failures, malfunctions, or defects.
 - 145.223 FAA inspections.

Overview FAR Part 145

Subpart A—General

- 145.1 Applicability.
- This part describes how to obtain a repair station certificate. This part also contains the rules a certificated repair station must follow related to its performance of maintenance, preventive maintenance, or alterations of an aircraft, airframe, aircraft engine, propeller, appliance, or component part to which part 43 applies. It also applies to any person who holds, or is required to hold, a repair station certificate issued under this part.

Vocabulary FAR Part 145

Definition of terms.

- 145.3 Definition of terms.
- For the purposes of this part, the following definitions apply:
- (a) Accountable manager means the person designated by the certificated repair station who is responsible for and has the authority over all repair station operations that are conducted under part 145, including ensuring that repair station personnel follow the regulations and serving as the primary contact with the FAA.
- (b) Article means an aircraft, airframe, aircraft engine, propeller, appliance, or component part.

Vocabulary FAR Part 145

Definition of terms.

- 145.3 Definition of terms.
- For the purposes of this part, the following definitions apply:
- (c) Directly in charge means having the responsibility for the work of a certificated repair station that performs maintenance, preventive maintenance, alterations, or other functions affecting aircraft airworthiness. A person directly in charge does not need to physically observe and direct each worker constantly but must be available for consultation on matters requiring instruction or decision from higher authority.
- (d) Line maintenance means—
- (1) Any unscheduled maintenance resulting from unforeseen events; or
- (2) Scheduled checks that contain servicing and/or inspections that do not require specialized training, equipment, or facilities.

Overview FAR Part 145

Subpart A—General

- 145.5 Certificate and operations specifications requirements.
- (a) No person may operate as a certificated repair station without, or in violation of, a repair station certificate, ratings, or operations specifications issued under this part.
- (b) The certificate and operations specifications issued to a certificated repair station must be available on the premises for inspection by the public and the FAA.

Overview FAR Part 145

Subpart A—General

- 145.5 Certificate and operations specifications requirements.
- (a) No person may operate as a certificated repair station without, or in violation of, a repair station certificate, ratings, or operations specifications issued under this part.
- (b) The certificate and operations specifications issued to a certificated repair station must be available on the premises for inspection by the public and the FAA.

Overview FAR Part 145 Subpart B—Certification

- 145.51 Application for certificate.
- (a) An application for a repair station certificate and rating must be made in a format acceptable to the FAA and must include the following:

Overview FAR Part 145 Subpart B—Certification

- 145.101 General.
- A certificated repair station must provide housing, facilities, equipment, materials, and data that meet the applicable requirements for the issuance of the certificate and ratings the repair station holds.

Overview FAR Part 145

Subpart D—Personnel

- 145.151 Personnel requirements.
- Each certificated repair station must—
 - (a) Designate a repair station employee as the accountable manager;
 - (b) Provide qualified personnel to plan, supervise, perform, and approve for return to service the maintenance, preventive maintenance, or alterations performed under the repair station certificate and operations specifications;
 - (c) Ensure it has a sufficient number of employees with the training or knowledge and experience in the performance of maintenance, preventive maintenance, or alterations authorized by the repair station certificate and operations specifications to ensure all work is performed in accordance with part 43; and
 - (d) Determine the abilities of its non certificated employees performing maintenance functions based on training, knowledge, experience, or practical tests.

Overview FAR Part 145

Subpart D—Personnel

- 145.153 Supervisory personnel requirements.
- (a) A certificated repair station must ensure it has a sufficient number of supervisors to direct the work performed under the repair station certificate and operations specifications. The supervisors must oversee the work performed by any individuals who are unfamiliar with the methods, techniques, practices, aids, equipment, and tools used to perform the maintenance, preventive maintenance, or alterations.
- (b) Each supervisor must—
 - (1) If employed by a repair station located inside the United States, be certificated under part 65.

Overview FAR Part 145

Subpart D—Personnel

- 145.153 Supervisory personnel requirements
 - (2) If employed by a repair station located outside the United States—
 - (i) Have a minimum of 18 months of practical experience in the work being performed; or
 - (ii) Be trained in or thoroughly familiar with the methods, techniques, practices, aids, equipment, and tools used to perform the maintenance, preventive maintenance, or alterations.
 - (c) A certificated repair station must ensure its supervisors understand, read, and write English.

Overview FAR Part 145

Subpart D—Personnel

- 45.155 Inspection personnel requirements.
 - (a) A certificated repair station must ensure that persons performing inspections under the repair station certificate and operations specifications are—
 - (1) Thoroughly familiar with the applicable regulations in this chapter and with the inspection methods, techniques, practices, aids, equipment, and tools used to determine the airworthiness of the article on which
 - maintenance, preventive maintenance, or alterations are being performed; and
 - (2) Proficient in using the various types of inspection equipment and visual inspection aids appropriate for the article being inspected; and
 - (b) A certificated repair station must ensure its inspectors understand, read, and write English.

Overview FAR Part 145

Subpart D—Personnel

- 145.157 Personnel authorized to approve an article for return to service.
- (a) A certificated repair station located inside the United States must ensure each person authorized to approve an article for return to service under the repair station certificate and operations specifications is certificated under part 65.
- (c) A certificated repair station must ensure each person authorized to approve an article for return to service understands, reads, and writes English.

Overview FAR Part 145

Subpart D—Personnel

- 145.159 Recommendation of a person for certification as a repairman.
- A certificated repair station that chooses to use repairmen to meet the applicable personnel requirements of this part must certify in a format acceptable to the FAA that each person recommended for certification as a repairman—
 - (a) Is employed by the repair station, and
 - (b) Meets the eligibility requirements of 65.101.

Overview FAR Part 145 Subpart D—Personnel

- 145.163 Training requirements.
- (a) A certificated repair station must have an employee training program approved by the FAA that consists of initial and recurrent training.
- (1) An applicant for a repair station certificate must submit a training program for approval by the FAA as required by 145.51(a)(7).
- (b) The training program must ensure each employee assigned to perform maintenance, preventive maintenance, or alterations, and inspection functions is capable of performing the assigned task.

Overview FAR Part 145 Subpart E—Operating Rules

- 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 noncertificated person follows a quality control system equivalent to the system followed by the certificated repair station.

Overview FAR Part 145

Subpart E—Operating Rules

- 145.201 Privileges and limitations of certificate.
- (a) A certificated repair station may—
- (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.

Overview FAR Part 145

Subpart E—Operating Rules

- 145.201 Privileges and limitations of certificate. (cont)
- (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 §43.1(b) unless the major repair or major alteration was performed in accordance with methods and applicable technical data acceptable to the FAA.

Overview FAR Part 145

Subpart E—Operating Rules

- 145.203 Work performed at another location.
- A certificated repair station may temporarily transport material, equipment, and personnel needed to perform maintenance, preventive maintenance, alterations, or certain specialized services on an article for which it is rated to a place other than the repair station's fixed location if the following requirements are met:
 - (a) The work is necessary due to a special circumstance, as determined by the FAA; or
 - (b) It is necessary to perform such work on a recurring basis, and the repair station's manual includes the procedures for accomplishing maintenance, preventive maintenance, alterations, or specialized services at a place other than the repair station's fixed location.

Overview FAR Part 145

Subpart E—Operating Rules

- 145.205 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.
- (a) A certificated repair station that performs maintenance, preventive maintenance, or alterations for an air carrier or commercial operator that has a continuous airworthiness maintenance program under part 121 or part 135 must follow the air carrier's or commercial operator's program and applicable sections of its maintenance manual.
- (b) A certificated repair station that performs inspections for a certificate holder conducting operations under part 125 must follow the operator's FAA-approved inspection program.
- (c) A certificated repair station that performs maintenance, preventive maintenance, or alterations for a foreign air carrier or foreign person operating a U.S.-registered aircraft under part 129 must follow the operator's FAA-approved maintenance program.

Overview FAR Part 145

Subpart E—Operating Rules

- 145.205 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. (cont.)
- (d) Notwithstanding the housing requirement of §145.103(b), the FAA may grant approval for a certificated repair station to perform line maintenance for an air carrier certificated under part 121 or part 135, or a foreign air carrier or foreign person operating a U.S.-registered aircraft in common carriage under part 129 on any aircraft of that air carrier or person, provided—
 - (1) The certificated repair station performs such line maintenance in accordance with the operator's manual, if applicable, and approved maintenance program;
 - (2) The certificated repair station has the necessary equipment, trained personnel, and technical data to perform such line maintenance; and
 - (3) The certificated repair station's operations specifications include an authorization to perform line maintenance.

Overview FAR Part 145

Subpart E—Operating Rules

- 145.207 Repair station manual.
- (a) A certificated repair station must prepare and follow a repair station manual acceptable to the FAA.
- (b) A certificated repair station must maintain a current repair station manual.
- (c) A certificated repair station's current repair station manual must be accessible for use by repair station personnel required by subpart D of this part.
- (d) A certificated repair station must provide to its certificate holding district office the current repair station manual in a format acceptable to the FAA.
- (e) A certificated repair station must notify its certificate holding district office of each revision of its repair station manual in accordance with the procedures required by 145.209(j).

Topic Two

- NAAS Repair Station Manual

Topic Two: NAAS Repair Station Manual

- 2.1 TRAINING INTRODUCTION
- As this repair station and its satellite facilities supplies a maintenance service to air carriers or commercial operators having a continuous airworthiness program under FAR Part 121, 125, 135 or part 127, the maintenance training program recognizes the requirements of FAR 121.375 and 127.137 and as a minimum standard, has developed its maintenance and preventative maintenance training programs to satisfy these regulations, to wit: "Each certificate holder or person performing maintenance or preventative maintenance functions for it shall have a training program to ensure that each person, including inspection personnel, who determines the adequacy of work performed is fully informed about procedures, techniques and new equipment is use and is competent to perform his duties."

Topic Two: NAAS Repair Station Manual

- 2.1 TRAINING INTRODUCTION
- Air carriers or commercial operators having a continuous airworthiness program under Parts 121, 125, 135 or Part 129 must provide all training necessary to meet the requirements of Parts 121, 125, 135 or Part 129 for all line maintenance personnel, i.e. RII Training, GMM Training, Engine Run and Taxi etc.
- It is the responsibility of the department heads or their designated representatives to ensure that personnel scheduled are available and present for training, except when the presence of those personnel would cause a severe hardship to the individual or greatly disrupt the production schedule
- Training performed by another certified repair station or air carrier, that meets the requirements of this section and North American Aircraft Services, inc. Repair Station will be accepted by North American Aircraft Services Quality Control Department.

Topic Two: NAAS Repair Station Manual

- 2.7 DESIGNATED INSTRUCTORS
- Authorization to designate Training Instructors rest solely with the Director of Quality Control, Designated Training Instructors authorization will be designated in writing, stating the specific areas of expertise that each person receiving authorization is designed to instruct or certify in. The original designation letter will be forwarded to the individual, with copies of the designation letter placed in the individual's training record and given to the individual's department head.

Topic Two: NAAS Repair Station Manual

- 2.9.2 Initial Training
- Employee initial training will consist of formal training covering all topics listed in paragraph 2.9.2.1. Initial training is the responsibility of the Director of Quality Control and may be given by the Director of Quality Control, Managers or designated training instructors.
- Respirator physical and pulmonary function test, if required, will be accomplished as part of the initial training to determine the ability of the employee to wear a respirator.
- Due to regulatory requirements, Initial training as listed in Paragraph 2.9.2.1 is mandatory for all Fuel Systems mechanics, Inspectors, Supervisors and Managers and will be completed prior to starting work. Line Maintenance personnel shall complete items 3, 4, 5, 6, and 7.

Topic Two: NAAS Repair Station Manual

- | <u>Initial Training Consists of:</u> | <u>Applies to:</u> |
|--|---|
| • (1). Confined Space Training | (Fuel Systems Mechanics, Supervisors, and Inspectors) |
| • (2). Respirator Training | (Fuel Systems Mechanics, Supervisors, and Inspectors) |
| • (3). Safety Training | (All Mechanics, Supervisors, Inspectors and Managers) |
| • (4). Hazard Communication | (All Mechanics, Supervisors, Inspectors and Managers) |
| • (5). Repair Station and Quality Control Manual, and Forms | (All Mechanics, Supervisors, Inspectors and Managers) |
| • (6). Company Drug Program | (All Mechanics, Supervisors, Inspectors and Managers) |
| • (7) Supervisor Drug Training | (All Managers and Selected Supervisors) |
| • (8) Respirator fit and Respirator Physical although not a training function will be accomplished as part of initial training and applies to all Fuel Systems Mechanics, Supervisors, and Inspectors. | |

Topic Two: NAAS Repair Station Manual

- 5.1 PURPOSE

- This Repair Station Manual has been prepared in accordance with the current Federal Aviation Regulations (FAR) and the policies of North American Aircraft Services, Inc (NAAS). This manual outlines the inspection policies and procedures, and individual responsibilities required to maintain the repair station certificate and ratings that have been accepted and authorized by the Federal Aviation Administration (FAA). This Repair Station Manual incorporates the Repair Station Manual, Quality Control Manual, and Capability List in a one manual format.
- This repair station will not maintain or repair any item for which it is not rated, and will not maintain or repair any article for which it is rated if it requires technical data, equipment, materials, facilities or trained personnel that are not available.

Topic Two: NAAS Repair Station Manual

- 5.1 PURPOSE (cont)

- Each supervisor and inspector working for this repair station will have a current copy of the Repair Station Manual and should thoroughly understand its contents. Repair Station and Quality Control Manual and Manual Supplements may be assigned to more than one supervisor or inspector designee provided they have access to the manual and supplements while performing their assigned duties. All Quality Control Inspectors and Managers shall be issued a manual assigned to that inspector or Manager. The Repair Station Manual shall be available to all North American Aircraft Services Repair Station personnel.
- All necessary maintenance manuals needed to perform the work are required for operation of this repair station will be supplied by the aircraft owner/operator for aircraft and by this repair station for Bladder Fuel Cell Repair.

Topic Two: NAAS Repair Station Manual

- 5.2 GENERAL

- The North American Aircraft Services, Inc. Repair Station is authorized to perform fuel tank maintenance, alterations and repairs, fuel cell bladder repairs, and Line Maintenance within the ratings as indicated on North American Aircraft Services accepted Capabilities List located in Section 3 of the Quality Control Manual.
- The performance of any required inspections, maintenance or repair for an air carrier or commercial operator having a continuous repair program under FAR part 121, 135 and 129 will be performed in accordance with the air carriers or commercial operator's manuals.
- North American Aircraft Services shall comply with the Duty Time Limitations as referenced in FAR part 121.377. Each person performing maintenance or preventive maintenance shall be relieved from duty for a period of at least 24 consecutive hours during any seven consecutive days or equivalent thereof within any one calendar month.

Topic Two: NAAS Repair Station Manual

- 5.7 WORK_PERFORMED AT REPAIR STATION LOCATIONS

- North American Aircraft Services, Inc. Repair Station performs fuel cell bladder repair, overhaul in the fixed location at 11502 Jones Maltsberger, San Antonio, Texas and Line Maintenance at locations listed in Section 3, Housing and Facilities of the Repair Station Manual
- Only an inspector, supervisor or manager listed and authorized on the supervisor and inspection personnel roster for appropriate return to service may supervise and initiate the forms associated with performing work at North American Aircraft Services fixed base locations. A work order package is initiated prior to starting work and completed after the maintenance has been accomplished and will include all forms applicable to the job work scope.

Topic Two: NAAS Repair Station Manual

- 5.7 WORK PERFORMED AT REPAIR STATION LOCATIONS
- Line Maintenance Operations shall maintain and have on hand all equipment necessary to perform aircraft line maintenance, inspection, repair, preventive maintenance and alterations. If specialized tooling or equipment is required that is not located at the line maintenance facility, the line maintenance organization may share this equipment with other North American Aircraft Services operations, or use equipment and tooling supplied by the customer or air carrier. All tools, Equipment and material used to perform maintenance, repair, preventive maintenance and alterations will be those recommended by the manufacturer or be at least equivalent to those recommended by the manufacturer and acceptable to the Federal Aviation Administration.
- All personnel assigned to perform line maintenance for North American Aircraft Services are permanently assigned to the line maintenance locations listed in section 3, Housing and Facilities. Supervisory, and maintenance personnel are available or on call when required at the airport locations by the customers or air carriers.

Topic Two: NAAS Repair Station Manual

- 5.8 WORK PERFORMED AT A PLACE OTHER THAN THE REPAIR STATION
- North American Aircraft Services, Inc. Repair Station, from time to time, provide fuel tank maintenance for customers at locations other than the repair station on a one time special circumstance and in some instances on a recurring basis. The work described in this section does not include maintenance performed under the auspices of the customer's certificate. However, the work performed under the customers authority may be recorded on the forms and in the manner described in North American Aircraft Services, Inc. Repair Station Manual. North
- American Aircraft Services Repair Station Manual is assigned to all supervisors, managers and Inspectors and must be available at the work site. All work performed at a place other than the Repair Station shall be accomplished in the same manner and following North American Aircraft Services policies and procedures and FAR Part 145 and FAR part 43.9 as if performed at the fixed location.

Topic Two: NAAS Repair Station Manual

- 5.8 WORK PERFORMED AT A PLACE OTHER THAN THE REPAIR STATION
- The work scope shall be limited to those maintenance or inspections actions that can be accomplished with housing, facilities, personnel, equipment, materials, tooling and technical data that can be transported to or are available at the location the maintenance will be performed. Therefore, upon initiation of off-location work, the inspector, supervisor, or manager shall request that the customer provide as detailed a description as possible of the discrepancy as well as the location of the aircraft. North American Aircraft Services form NAAS QC-035, Work Site Verification Report, shall be completed verifying adequate housing, facilities and work space for the type of work to be performed as well as verification of current technical data available for the type of work to be performed. All specialize and common tooling and equipment required to perform the work and not available at the work site shall be transported to the work site by North American Aircraft Services prior to work accomplishment.

Topic Two: NAAS Repair Station Manual

- 5.9 CURRENT TECHNICAL DATA
- A Worksite Report NAAS QC-035 will be accomplished for work performed at a place other than the repair station and a Worksite Report NAAS QC-035 will be accomplished for all line maintenance work when a contractual agreement has not been established between North American Aircraft Services, Inc and the operator or air carrier to provide current maintenance manuals and adequate facilities. The worksite report will include the name of the customer, the aircraft registration number, location where the work is to be performed and shall also include appropriate and current date is available for operators under Part 121, 129, and 135. Maintenance data provided by Part 91 and 125 shall be verified as current on the Work Site Verification Report and signed by the authorized customer representative prior to any maintenance being performed.
- For line Maintenance when a contractual agreement has not been established between North American Aircraft Services and an operator or air carrier operating under FAR Parts 121, 129, or 135, a Work Site Verification Report may have the word "Continuous" in the date blocks. If this is accomplished, a work site verification report does not have to be completed for each aircraft worked. There must be at least one work site verification report for each air carrier or operator. This report will not be filed with the work package but shall be on file in the office of the Director of Quality Control

Topic Two: NAAS Repair Station Manual

- 5.10 LINE MAINTENANCE
- North American Aircraft Services, Inc. Line Maintenance Operations performs aircraft maintenance for air carriers or commercial operators having a continuous airworthiness program under Parts 121, 135, and 129. Therefore, North American Aircraft Services, Inc. Line Maintenance Operation shall allow the Federal Aviation Administration to audit its facilities, equipment, personnel, and records pertaining to the services provided to the air carrier, at any reasonable time.
- All aircraft line maintenance and repairs will be performed in accordance with current FAR's, manufacturer's data, drawings, specifications and bulletins, or other technical data approved or accepted by the Administrator
- All necessary maintenance manuals needed to perform the work required for operation of Line Maintenance will be supplied by the aircraft owner/operator for the aircraft. All documents and technical data will be current and available when work is being accomplished..

Topic Two: NAAS Repair Station Manual

- 5.10 LINE MAINTENANCE
- 5.10.2 Line Maintenance Performed at Airport Locations
- The work scope shall be limited to those maintenance or inspections actions that can be accomplished with housing, facilities, personnel, equipment, materials, tooling and technical data that is available at the airport location the maintenance will be performed. Upon initiation of work, the supervisor, or manager shall request that the customer provide as detailed a description as possible of the discrepancy as well as the location of the aircraft. If a contractual agreement has not been established between North American Aircraft Services, Inc and the operator or air carrier to provide current maintenance manuals and adequate facilities, North American Aircraft Services Work Site Verification Report, NAAS QC-0035 shall be completed to verify adequate housing, facilities and work space for the type of work to be performed as well as verification of current technical data available for the type of work to be performed.

Topic Two: NAAS Repair Station Manual

- 5.10 LINE MAINTENANCE

- 5.10.3 Current Technical Data

- If a contractual agreement has been established between North American Aircraft Services Inc and the operator or air carrier to provide current maintenance manuals and adequate facilities, a Work Site Verification Report NAAS QC-035 does not have to be accomplished. However, if a contractual agreement has not been established between North American Aircraft Services, Inc and the operator or air carrier to provide current maintenance manuals and adequate facilities, a Work Site Verification Report NAAS QC-035 must be accomplished and will include the Name of the Customer, the Aircraft Registration Number and the location where the work is to be performed. The Work Site Verification Report shall also include appropriate and current date is available for operators under Part 121, 129 and 135.

Topic Two: NAAS Repair Station Manual

- 5.13 MAINTENANCE DOCUMENTATION

- The repair station shall maintain adequate records of all work performed by the repair station and will retain such records on file for a minimum of five (5) years.
- The completed work order package will be filed in record/invoice files. A master locator listing by customer work order number, date and aircraft registration number will be maintained to facilitate records retrieval.

Topic Two: NAAS Repair Station Manual

- 5.13.2 Recording Maintenance on NAAS Work Order or Line
- Maintenance Service Order Forms
- Upon receiving a work request for aircraft maintenance covered by the repair station operations specification, and capability list, the maintenance department will issue a repair Work Order or Service Order form to authorize that work to be accomplished. For on-the-aircraft Integral Fuel Tank or Bladder Fuel Cell work use work order form NAAS QC-009A1 and Work Order Continuation form NAAS QC-009A2. For aircraft component repair or overhaul use work order form NAAS QC-009B. For Line Maintenance work NAAS LM-001, Line Maintenance Service Order Form will be used.
- The work order number will be the basic reference for the aircraft maintenance record. The work order will specify the work to be accomplished. The work order will be supplemented as necessary with detailed inspection instructions along with applicable forms, to assure proper inspection and repair of the articles involved.

Topic Two: NAAS Repair Station Manual

- 5.16.1 Return To Service
- Final Inspection and return to service of an aircraft, or component shall be accomplished only by NAAS inspector, manager or supervisor authorized to perform return to service and listed on North American Aircraft Services, Supervisory and Inspection Personnel Roster. Personnel Authorized to return aircraft and aircraft components to service shall be certified as Airframe, Airframe and Powerplant or hold a repairmen certificate for fuel tank and fuel cell maintenance.
- Prior to final acceptance of work accomplished, irrespective of the method to be used to indicate such approval, the Director of Quality Control or his designee (inspector) will audit the records "package" (all maintenance documents involved with the work), to determine that all work has been completed and inspected as required for compliance with this inspection system. The Director of Quality Control or his designee (inspector) will indicate affirmative findings approving the form per the requirements of this manual.

Topic Two: NAAS Repair Station Manual

- 5.16.1 Return To Service

No articles will be approved by the repair station until the work order, service order and other records have been reviewed for completeness and final acceptance cleared by the inspection department.

- Only employees certificated under part 65 are authorized to sign off final inspections and maintenance release for North American Aircraft Services Repair Station.

Topic Two: NAAS Repair Station Manual

- 5.20 CAPABILITY LIST

- North American Aircraft Services, inc. has established a Capability List to perform aircraft integral fuel tank maintenance, fuel cell bladder repairs, and Line Maintenance.
- The Director of Quality Control is responsible for revising the Capability List and notifying the Certificate Holding District Office of all revisions, additions and deletions to the Capability List.
- North American Aircraft Services may perform aircraft integral fuel tank maintenance, bladder fuel cell repairs, and line maintenance when a change is made to the Capability List after 72 hours of the revision taking effect (not to include Saturday, Sunday or Federal Holidays) prior to the receipt of the acceptance letter from the Certificate Holding District Office.

Topic Two: NAAS Repair Station Manual

- 5.22 WORK PERFORMED AT A HOST REPAIR STATION.
- North American Aircraft Services, when working aircraft integral fuel tank maintenance and bladder fuel cell field repairs at a host repair station under the auspices of that repair station, shall assign management, supervisory, and maintenance personnel acceptable to that repair station.

Topic Two: NAAS Repair Station Manual

- 5.22 WORK PERFORMED AT A HOST REPAIR STATION.
- The host repair station shall provide housing and facilities, materials, equipment and technical data required to perform aircraft integral fuel tank maintenance and bladder fuel cell field repairs. The host repair station shall provide "buy back" and RII Inspections as required by the host repair station's Repair Station and Quality Control Manual, operator or air carrier's policy and procedures, and will approve maintenance and return to service under the authority of the host repair station air agency certificate and operations specifications. All maintenance shall be recorded on the host repair station, operator or air carrier paperwork and forms and in accordance with the procedures of the host repair station, operator or air carrier. North American Aircraft Services Repair Station forms shall not be used when working under the certificate of another repair station, operator or air carrier.

Topic Two: NAAS Repair Station Manual

- 5.23 Maintenance, preventive maintenance, alterations performed by North American Aircraft Services Personnel
- Maintenance, preventive maintenance, or alterations for an air carrier or commercial operator having a continuous airworthiness program under Part 121 shall comply with subpart L of Part 121 except 121.363, 121.369, 121.373 and 121.379. In addition, the repair station shall perform that work in accordance with the air carriers or commercial operators manual.

Topic Two: NAAS Repair Station Manual

- 5.23 Maintenance, preventive maintenance, alterations performed by North American Aircraft Services Personnel
- Work performed on aircraft governed by Part 125 or 135 will be accomplished in accordance with the inspection program approved for the operator of the aircraft.
- Work performed on aircraft for a foreign air carrier or foreign person operating a U.S. Registered aircraft governed under Part 129 will be accomplished in accordance with the inspection program approved for the operator of the aircraft.
- The above paragraphs have been taken from North American Aircraft Services Repair Station Manual.

Topic Two: NAAS Repair Station Manual

- 5.23 Maintenance, preventive maintenance, alterations performed by North American Aircraft Services Personnel
- What these paragraphs mean in part: All work Performed by North American Aircraft Services will be in accordance with FAR Part 121 and FAR Part 43
- No maintenance will be performed on an aircraft or any part of an aircraft without a documented discrepancy or a routine task card assigned to aircraft to perform the inspection or maintenance task.
- No work will be performed on an aircraft or any part of an aircraft with the proper maintenance manual to perform the task. In the case of a Part 121 Operator, The maintenance manual will be issued by the operator for the aircraft.

Topic Two: NAAS Repair Station Manual

- 5.23 Maintenance, preventive maintenance, alterations performed by North American Aircraft Services Personnel
- When maintenance is being accomplished, and can not be completed by the mechanic. The mechanic will document on the task card all the steps he/she has accomplished and sign for the work he/she has performed. When the task is completed, the mechanic will sign for the work he or she accomplished to complete the task and sign off the task card as being complete. The individual completing the task card is not responsible for the work completed and signed for by another mechanic.

Topic Three

- NAAS Quality Control Manual

Topic Three: NAAS Quality Control Manual

- 1.0 INTRODUCTION:
- This Quality Control Manual has been prepared in accordance with current Federal Aviation Regulations and the policies of North American Aircraft Services, Inc. This Quality Control Manual is incorporated into the Repair Station Manual in a one manual format.
- This section outlines the Quality Control Policies and Procedures, and individual responsibilities required to maintain the repair station certificate in section 1. All forms used by the repair station in section 2 and the capability list is section 3 to perform aircraft integral fuel tank maintenance, bladder fuel cell repairs, limited specialized services, and line maintenance.

Topic Three: NAAS Quality Control Manual

- 1.1 INSPECTION PERSONNEL:
- The Director of Quality Control is responsible for insuring all inspection and inspector designees are qualified to perform, supervise or inspect all tasks assigned. Inspector qualification is based on previous experience, formal training documentation and on the job training (OJT). Inspectors must have a minimum of 18 months experience and be appropriately certified holding an Airframe and Powerplant certificate to perform line maintenance or a Repairmen Certificate, Airframe, or Airframe and Powerplant for Fuel Tank Maintenance in accordance FAR Part 65.
- The Repair Stations inspection personnel must be thoroughly familiar with all inspection methods, techniques, and equipment used in their specialty to determine the quality or airworthiness of an article being maintained or altered.

Topic Three: NAAS Quality Control Manual

- 1.2 INSPECTORS, SUPERVISORS AND MECHANICS
- All supervisors, inspectors and mechanics are required to be thoroughly familiar with the requirements of this manual, FAA regulations, air worthiness directives and advisory circulars, manufactures service letters and bulletins and engineering orders applicable to the work authorized by the Operations Specifications and Capabilities List of this Repair Station.
- All non certificated maintenance personnel shall be under the direct supervision of a certificated supervisor or mechanic while performing maintenance on any aircraft or aircraft component.
- Records of maintenance functions performed by non certificated maintenance personnel, all on-the-Job (OJT) forms and training documents completed by NAAS or customer training programs by shall be forwarded to North American Aircraft Services Quality Control Department to be entered into their training documents for future qualification for a repairmen certificate for fuel tank maintenance.

Topic Three: NAAS Quality Control Manual

- 1.3 INSPECTION STAMPS
- A controlled stamp will be issued to all maintenance inspection personnel. Its use will verify each operation and identify acceptance of work and is traceable to the person(s) who accomplished the inspection.
- Issuance and control of the stamps will be through the Director of Quality Controls office. A list of personnel and stamp numbers is maintained and kept current by the Director of Quality Control with copies distributed as appropriate.

Topic Three: NAAS Quality Control Manual

- 1.4 MAINTENANCE STAMPS
- A controlled stamp will be issued to all maintenance personnel. Its use will verify each operation and identify. This stamp shall be used to sign off work performed and is traceable to the person(s) who accomplished the work.
- Issuance and control of the stamps will be through the Director of Quality Controls office. A list of personnel and stamp numbers is maintained and kept current by the Director of Quality Control with copies distributed as appropriate.
- A lost or stolen stamp will be reported to the Director of Quality Control immediately. The number of the lost stamp will not be reordered as protection to the individual. A list of lost stamps is maintained in the office of the Director of Quality Control. Situations may arise where the employee has inadvertently left his stamp at home. In this case, he/she may sign in lieu of his stamp. An employee shall not use a stamp issued to another person nor shall he permit another person to use his or her stamp.

Topic Three: NAAS Quality Control Manual

- 1.6.1 Non-Routine Task Card
- Non-Routine task card NAAS-QC-037 shall be used to document discrepancies found during the performance of routine tasks. Non-Routine task card NAAS-QC-037 will be initiated when the customer or air carrier's non-routine task cards are not available or when the customer or air carrier requires NAAS to document all non-routine discrepancies discovered by NAAS personnel. NAAS Form QC-009A3 may be used if requested or required by the customer or air carrier. Discrepancies discovered by NAAS personnel that are not within the scope of NAAS's Operations Specifications shall be entered on the customer or air carrier forms and will not be documented on NAAS non-routine work card.

Topic Three: NAAS Quality Control Manual

- 1.6.5 Required Inspections (RII)
- Any maintenance operation which, if improperly performed, could be critical to the safe flight of an aircraft will be required to be inspected prior to release for service. A qualified and authorized inspector, familiar with the inspection methods, techniques, and equipment will be assigned to determine the quality of the airworthiness of the article involved. When work is performed for an operator under continuous airworthiness requirements of FAR Parts 121, 125, and 135, the required inspection items requirements will be specified by the operator.
- North American Aircraft Services, Inc. will perform inspections in accordance with the customers RII Program. All Personnel authorized to perform RII inspections shall be trained and authorized by the air carrier in accordance with the air carrier's procedures.
- When the Customer RII listing is to be utilized, inspection personnel will indicate those tasks affected by entering "RII" adjacent to the task signed off.

Topic Three: NAAS Quality Control Manual

- 1.7 MALFUNCTION OR DEFECT REPORT
- This repair station will report to the FAA within 72 hours after it discovers any serious defect in, or other recurring un-airworthy condition of an aircraft or any component thereof. The report will be made on an FAA Form 8010-4, Malfunction or Defect Report, describing the defect or malfunction completely without withholding any pertinent information.
- In any case, where the filing of a report under the preceding paragraph might prejudice the repair station, it will be referred to the Administrator for a determination as to whether it must be reported. If the defect or malfunction could result in an imminent hazard to flight, the repair station will use the most expeditious method it can to inform the FAA Administrator.

Topic Three: NAAS Quality Control Manual

- 1.8 MECHANICAL RELIABILITY REPORTS
- When work is being accomplished for an air carrier and a defect as described under the malfunction or defect report is found, the air carrier will be notified in order that a mechanical reliability report may be issued by the air carrier.
- The Director of Quality Control is responsible for preparing and submitting a malfunction or defect report to the FAA Flight Standards District Office.

Topic Three: NAAS Quality Control Manual

- 1.10.1 Calibration of Tools and Test Equipment

- Precision measurement tools, gauges and other inspection and test equipment used by the repair station will undergo periodic maintenance and calibration to ensure accuracy. All calibration will be to a standard traceable to the National Institute of Standards and Technology (NIST) and applicable U.S. government standards. In the case of foreign equipment, the standard of the country of manufacturer may be used, if approved by the FAA. In all cases calibrated equipment shall be re-calibrated at the manufacturer's recommended calibration intervals or at a least every 12 months.
- All repair station personnel, before using test equipment, are responsible to check that the testing unit has a current calibration label attached. Any piece of test equipment found in the repair station without a current calibration label attached shall be given to the inspection department for re-calibration.

Topic Three: NAAS Quality Control Manual

- 1.10.1 Calibration of Tools and Test Equipment

- At no time will any person be permitted to perform work on aircraft or components using test equipment which is out of calibration. The test equipment labels will be checked by supervisors at random to assure that equipment in use is in calibration. The calibration record shall be reviewed at least once each month by the inspection department to identify equipment coming due calibration.
- At no time will personal owned tools or test equipment, requiring calibration be used. Only those tools and test equipment supplied by North American Aircraft Services, Repair Station or Customer/Air Carrier and controlled under the procedures outlined in this chapter for NAAS tooling and Customer/Air Carrier procedures for tool owned by the Customer/Air Carrier may be used.

Topic Three: NAAS Quality Control Manual

- FORMS INTRODUCTION:
- All forms illustrated in this section are not to scale and are for reference only. These forms are not to be copied out of this manual for use.
- North American Aircraft Services, Inc. may use forms not illustrated in this manual when it becomes necessary to create new forms or change and revise existing Repair Station Forms.
- North American Aircraft Services Repair Station shall use customer forms or air carrier forms when requested or required by the customer or air carrier.
- When using North American Aircraft Services form or Customer forms, all entries must be legible and the form completely filled out as much as possible with the information available.

Topic Four

● Capability List

5.20 CAPABILITY LIST

- North American Aircraft Services, inc. has established a Capability List to perform aircraft integral fuel tank maintenance, fuel cell bladder repairs, limited specialized services and Line Maintenance.

Topic Four: Capability List

- 5.20 CAPABILITY LIST

A revision to the Capabilities List shall not be made until a self evaluation has been conducted and it has been determined that the work to be performed meets the requirements of North American Aircraft Services Repair Station Manual and Quality Control Procedures to insure tooling, equipment, training and qualified personnel required to perform maintenance on the article to be added has been satisfied and all technical data and suitable facilities are available to perform the type maintenance.

North American Aircraft Services may perform aircraft integral fuel tank maintenance, bladder fuel cell repairs, limited specialized services, and line maintenance when a change is made to the Capability List after 72 hours of the revision taking effect (not to include Saturday, Sunday or Federal Holidays) prior to the receipt of the acceptance letter from the Certificate Holding District Office.

Topic Five: Forms

- INTRODUCTION:

- All forms illustrated in the Forms section of the Quality Control Manual are not to scale and are for reference only. These forms are not to be copied out of this manual for use.
- North American Aircraft Services, Inc. may use forms not illustrated in this manual when it becomes necessary to create new forms or change and revise existing Repair Station Forms.
- North American Aircraft Services Repair Station shall use customer forms or air carrier forms when requested or required by the customer or air carrier.
- When using North American Aircraft Services form or Customer forms, all entries must be legible and the form completely filled out as much as possible with the information available.