



**Alta Avionics, LLC**

**QUALITY CONTROL MANUAL  
(QCM)**

**CRS# JN1R0210  
1887 SOUTH 1800 WEST  
Woods Cross, UT 84087**

*This page intentionally left blank*

Alta Avionics, LLC  
Quality Control Manual (QCM)

---

## 1 List of Effective Pages

PAGE NO.	REV.	DATE
COVER PAGE-1	1.0	04/2021
COVER PAGE-2	1.0	04/2021
1-1	1.0	04/2021
1-2	1.0	04/2021
2-1	1.0	04/2021
2-2	1.0	04/2021
3-1	1.0	04/2021
4-1	1.0	04/2021
4-2	1.0	04/2021
5-1	1.0	04/2021
6-1	1.0	04/2021
7-1	1.0	04/2021
8-1	1.0	04/2021
9-1	1.0	04/2021
10-1	1.0	04/2021
11-1	1.0	04/2021
12-1	1.0	04/2021
12-2	1.0	04/2021
13-1	1.0	04/2021
14-1	1.0	04/2021
15-1	1.0	04/2021
16-1	1.0	04/2021
17-1	1.0	04/2021
18-1	1.0	04/2021
19-1	1.0	04/2021
20-1	1.0	04/2021
21-1	1.0	04/2021
22-1	1.0	04/2021
23-1	1.0	04/2021
23-2	1.0	04/2021
24-1	1.0	04/2021
25-1	1.0	04/2021

FAA Acceptance: \_\_\_\_\_ Approved: \_\_\_\_\_  
FAA Inspector/Date Quality Assurance Manager/Date

Alta Avionics, LLC  
Quality Control Manual (QCM)

---

PAGE NO.	REV.	DATE
26-1	1.0	04/2021
26-2	1.0	04/2021
26-3	1.0	04/2021
26-4	1.0	04/2021
26-5	1.0	04/2021
26-6	1.0	04/2021
26-7	1.0	04/2021
26-8	1.0	04/2021
26-9	1.0	04/2021
26-10	1.0	04/2021
27-1	1.0	04/2021
28-1	1.0	04/2021
29-1	1.0	04/2021

FAA Acceptance: \_\_\_\_\_ Approved: \_\_\_\_\_  
FAA Inspector/Date Quality Assurance Manager/Date

## **2 Table of Contents**

1	List of Effective Pages.....	1-1
2	Table of Contents .....	2-1
3	Introduction.....	3-1
4	Acronyms and Definitions .....	4-1
4.1	General Acronyms.....	4-1
4.2	Definitions.....	4-2
5	Manual Control.....	5-1
6	Record of Revision.....	6-1
7	General Inspection Procedures .....	7-1
7.1	Inspection Stamps.....	7-1
8	Incoming Parts and Materials Inspection.....	8-1
9	Stock Control, Segregation and Identification.....	9-1
10	Shelf Life Program .....	10-1
11	Handling of Units/Appliances.....	11-1
12	Work Process.....	12-1
13	Work Order .....	13-1
14	Inspections.....	14-1
14.1	Preliminary Inspection.....	14-1
14.2	In Progress Inspection.....	14-1
14.3	Hidden Damage Inspection.....	14-1
14.4	Inspection Continuity.....	14-2
14.5	Final Inspection and Approval for Return to Service .....	14-2
15	Parts .....	15-1
15.1	Parts Ordering .....	15-1
15.2	Preservation of Parts .....	15-1
15.3	Rejected Parts.....	15-1
15.4	Scrapped Parts .....	15-1
16	Tagging and Identification.....	16-1
17	Corrective Actions .....	17-1

Alta Avionics, LLC  
Quality Control Manual (QCM)

---

18	Record of Work Inspections .....	18-1
19	Record of Test, Repair and/or Calibration .....	19-1
20	Service Difficulty Reporting (SDR).....	20-1
21	Inspection Personnel.....	21-1
22	Procedures for Insuring Technical Data Currency .....	22-1
23	Calibration Of Test Equipment, Tools, Special Tools.....	23-1
24	Qualifying & Surveillance Of Non-Certificated Persons .....	24-1
25	Taking Corrective Action on Deficiencies.....	25-1
26	Continuing Analysis And Surveillance (CAS).....	26-1
26.1	Audit Program.....	26-1
26.1.1	Description.....	26-1
26.1.2	Responsibility and Authority of Audit Personnel.....	26-1
26.1.3	Audit Experience.....	26-2
26.1.4	Audit Forms.....	26-3
26.1.5	Audit Records And Files.....	26-3
26.1.6	Departments/Areas of Audit And Frequency.....	26-4
26.1.7	Pre-Audit Procedures .....	26-4
26.1.8	Audit Requirements.....	26-5
26.1.9	External Audits.....	26-6
26.1.10	Internal Audits .....	26-9
26.1.11	Audit Follow-Up Procedures .....	26-10
27	Hazardous Materials .....	27-1
28	Test Equipment and Test Equipment Equivalency .....	28-1
29	Electronic Records.....	29-1

### **3 Introduction**

Alta Avionics, LLC is an avionics repair facility providing maintenance, repair, and installation of avionics systems for various types of aircraft.

This Quality Control Manual has been prepared in accordance with the current Code of Federal Regulations (CFR's), and the policies of Alta Avionics, LLC.

This manual describes the Quality Control system including; inspection procedures, proficiency of inspection personnel, technical data, qualifying and surveillance of vendors/contractors, final inspection and return to service, electronic signature and electronic storage, calibration of equipment/tools, and internal audits used by this repair station to comply with 14 CFR Part 145.

The general repair, overhaul, or alteration of products will be performed in accordance with the current Code of Federal Regulations, manufacturer's data, drawings, specifications, and bulletins, or other technical data approved by the administrator.

This repair station will not maintain or alter any article for which it is not rated, and will not maintain or alter any article for which it is rated if it requires technical data, equipment, materials, facilities, or trained personnel that are not available.

This Quality Control Manual, required for operation of this repair station, will be maintained in a current status.

Each supervisor and inspector working for this repair station will have access to the current copy of this Manual. It will also be available to other repair station personnel. All personnel are required to understand its contents and applicable FAA regulations.

## 4 Acronyms and Definitions

### 4.1 General Acronyms

Table 1 Acronyms

Acronym	Meaning
CAS	Continuing Analysis and Surveillance
CFR	Code of Federal Regulations
CHDO	Certificate Holding District Office
CI	Chief Inspector
ESDS	Electro Static Discharge Sensitive
FAA	Federal Aviation Administration
FSDO	Flight Standards District Office
IT	Information Technology
LLC	Limited Liability Company
OEM	Original Equipment Manufacturer
PDF	Portable Document Format
PMA	Parts Manufacture Approval
QCM	Quality Control Manual
QCM	Quality Control Manual
ROV	Repair/Overhaul Vendor
SDR	Service Difficulty Reporting



## 4.2 Definitions

This manual will follow definitions as provided in 14 CFR § 1.1 - General Definitions but emphasizes the following definitions for clarity and ease of reading.

**Table 2 Important Definitions**

<b>Word</b>	<b>Meaning</b>
Product	Aircraft, Aircraft Engine or Propeller
Article	A material, part, component, process or appliance.
Appliance	Appliance means any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, engine, or propeller.

## 5 Manual Control

This manual will be stored on Alta Avionics main computer server. Alta Avionics, LLC will supply a direct link on every computer terminal for manual access for all employees. A link or Uniform Resource Locator (URL) will also be made available to all employees to enable access to manuals from any mobile device (phone, tablet, laptop, remote computer). A computer system data backup will be performed once each month, with rolling data 'snapshots' each day, and that data will be used to restore repair station data in the event of computer failure. Each employee will be trained on the procedure to access all the manuals at the time of hiring.

The General Manager will be notified by a department supervisor in the event this manual is not current, and valid for that department's use, and will identify needed changes using form AA-MCR (Manual Change Request). A sample of this form is found in the Alta Avionics Forms Manual. The General Manager will have the revisions found necessary, produced in a final form. The proposed revisions will be submitted to the FAA/CHDO (Certificate Holding District Office) for acceptance in electronic form (PDF).

The FAA Coordinator will revise manuals as required, and explain the revisions to all employees. An entry into each employee's training record will be added after each employee has been trained to verify and acknowledge the understating of each revision. Upon approval by an authorized Repair Station representative, the repair station will commence operating within the guidelines of the new revision. The "List of Effective Pages" will reflect the Approval/Acceptance of the current revision. A file will be maintained, showing on a continuous basis, the disposition of each manual change. The FAA/CHDO will be notified each time a revision to this manual is needed. Revised areas will be identified by a vertical bar in the margin.

Revisions found "not acceptable" to the FAA/CHDO, which do not conform to applicable regulations, will be addressed by this repair station as a top priority. The identified procedure or action will cease, and acceptable changes implemented immediately. The maintenance/administrative actions that were performed under revisions found "unacceptable" by the FAA/CHDO will be addressed in the following order:

- Safety of Flight: Aircraft operator to be notified immediately, and advised that aircraft is to remain on the ground until this repair station can correct the problem, or coordinate with another certified repair station to correct the problem.
- Procedure/Record Keeping: Aircraft operator to be notified immediately, and advised of the problem. The operator will have the option to operate the aircraft until the problem can be corrected.
- Problems that do not affect aircraft and/or appliances will be dealt with internally and immediately to correct them.

## 6 Record of Revision

Revision Identification	Revision Date	Description of Revision	Repair Station Approval
1.0	3/2021	Initial Version Complete	See 'List of Effective Pages'

## **7 General Inspection Procedures**

All supervisors, inspectors, and technicians are required to be thoroughly familiar with the inspection requirements, and procedures described in this manual, Code of Federal Regulations (CFR's), airworthiness directives, advisory circulars, manufacturer's service letters, bulletins, and engineering orders.

The general inspection system requires technicians to sign their initials for work performed by them on the appropriate inspection form, checklist, tag, or sticker, prior to submitting the article to inspectors for final acceptance. Inspectors will indicate their acceptance of work performed with their signature, or initials on the appropriate work forms.

Authorized handwritten signatures and initials are contained in the Roster of Repair Station Personnel. All authorized electronic signatures and initials will be stored on Alta Avionics, LLC's computer system and will be password protected. The Quality Assurance Manager is responsible to the Chief Inspector for full compliance with all procedures outlined, as appropriate to any article being inspected, repaired, overhauled, or altered by this repair station.

### **7.1 Inspection Stamps**

Alta Avionics, LLC will still use incoming parts stamp labeled "Received" as part of the incoming parts and materials inspections procedure.

## **8 Incoming Parts and Materials Inspection**

Alta Avionics, LLC designated inspection personnel shall inspect all incoming parts, standard parts, and raw materials for; identification, traceability to an FAA approved or authorized repair organization or manufacturer, and/or an established industry or U.S. specification, lot or batch numbers traceable to supplier's documentation, shelf life status, contamination, shipping damage, and state of preservation (ref. AC 20-62 as revised).

Upon completion of the incoming inspection, the documents used to establish acceptability for use will be marked "Received" and retained by the Repair Station.

Repaired articles received from contracted facilities will be inspected as described above.

Section of this manual provides procedures for parts or materials found to be unacceptable following inspection may be returned to the vendor.

Aeronautical articles which are subject to life limits as defined by the article's manufacturer, shall be handled in accordance with 14 CFR Part 43; § 43.10, *Disposition of life-limited aircraft parts*. That part and subsection establishes that it is the responsibility of all persons removing and transferring (offering for sale or trade) an aeronautical article subject to life-limits, to transfer with it the article's remaining life status (hours, cycles, calendar date).

Upon receipt of any affected life-limited article, Repair Station employees with responsibility for incoming parts and materials inspection shall ensure that appropriate data is provided with the article, showing its status relative to its published life-limits. If such records are not provided, the inspector shall treat that article as a Suspected Unapproved Part (SUP).

Suspected Unapproved Parts will be segregated in a special holding area designated by the QA Manager awaiting disposition. Detailed procedures for Suspected Unapproved Parts are found in the Alta Avionics Detailed Procedures Manual. Electro Static Discharge Sensitive (ESDS) procedures shall be complied with as described in the Alta Avionics Detailed Procedures Manual.

Detailed procedures for receiving parts are found in the Detailed Procedures Manual.

Appropriate inspectors are required to be familiar with the contents of those procedures.

## **9 Stock Control, Segregation and Identification**

The system of stock control segregation and identification utilized is described herein to enable personnel to determine the adequacy of the stock, the location of parts, the proper identification of parts, and to assure that parts do not deteriorate, or become contaminated with foreign matter prior to use.

Items which have shelf life will be so arranged that the items with the shortest remaining shelf life will be issued first. The more recently procured items will be placed in the rear portion of the storage bin/area. These parts will be dated to ensure that the shelf life is not exceeded.

All parts and materials utilized for Alta Avionics, LLC shall be classified as to TYPE as described herein. Detailed procedures for disposition of these parts are described in the Detailed Procedures Manual.

TYPE "A" Parts and Materials:

- Piece parts and material
  - non-serialized

TYPE "B" Parts and Materials:

- Parts and materials that have a return to service and/or certification;
  - i.e.: modules, circuit cards.
    - Parts and Materials will typically have a serial number.

TYPE "C" Parts and Materials:

- Aircraft parts that have not been returned to service but are repairable.
  - Parts and Materials not intended for use in aircraft.

TYPE "D" Parts and Materials

- Expendable parts
  - Window splices, terminals, screws, hardware, etc.

## **10 Shelf Life Program**

Items having a specific shelf life will be assigned and tagged with a control number as part of the Shelf Life Item tag (Form AA-SLI), and be listed in the Shelf Life Log, which will be kept by the Quality Assurance Manager. The expiration date and the control number will be clearly marked on Form AA-SLI (Shelf Life Item), and placed on each item, (a sample of this form is found in the Forms Manual).

The Quality Assurance Manager will review the Shelf Life Log monthly. Any items that will expire during the next month will be re-ordered, if deemed necessary, and any expired items shall be removed from stock.

The Quality Assurance Manager is responsible to the Chief Inspector for the shelf life program. In the absence of the Quality Assurance Manager, the Chief Inspector, or his/her designee will administer the program.

## **11 Handling of Units/Appliances**

All units/appliances in process through the repair station will be properly identified by the use of appropriate tags/stickers as found in Alta Avionics Forms Manual, or placed in identified cabinets, racks, or bins (whichever is appropriate).

Parts for each unit shall be appropriately segregated from other units, and protected from damage, or contamination.

ESDS Procedures shall be complied with as described in the Detailed Procedures Manual.



## **12 Work Process**

Individual work processes are described in the Detailed Procedures Manual.

### **13 Work Order**

This repair station will utilize a company work order, created in Alta Avionics, LLC. The work order shall be identified by a number, and therein contain the customer's name, date, and appropriate identification required to identify any part, unit, or aircraft. This work order will list on the main page ,all work that is to be accomplished, in sufficient detail, that it will be readily understandable to the technician. The work order will contain all related documentation pertaining to the listed items. It will be retained for not less than two (2) years after completion. (Sample in the Forms Manual (AA-WO))

## **14 Inspections**

### **14.1 Preliminary Inspection**

All appliances or aircraft to undergo maintenance will be given a preliminary inspection upon receipt by an inspector to determine; the state of preservation, life-limit status if applicable (if performing inspections required by 14 CFR parts 91, 125, or 135), compliance status with applicable airworthiness directives (if performing inspections required by 14 CFR parts 91, 125, or 135), and current operational status, noting any obvious defects;

- 1) For appliances, a visual inspection and functional test will be performed, and any obvious defects will be noted on Form AA-WO (Work Order);
  - a) All equivalent test equipment used will be noted on Alta Avionics from AA-WO (Work Order);
  - b) The noted defects authorized for repair by the customer will be resolved prior to approval for return to service.
- 2) For aircraft, a general visual inspection and functional test of the system, or systems to undergo maintenance or alteration will be performed, and any obvious defects will be noted on Form AA-WO;
  - a) The noted defects authorized for repair by the customer will be resolved prior to approval for return to service.

### **14.2 In Progress Inspection**

In progress inspections will be performed by inspection personnel during the maintenance, repair, or alterations as determined by the Chief Inspector or designated inspection personnel, based on the complexity or criticality of the work performed;

- 1) In progress inspections will be documented on Form AA-WO;
- 2) Defects noted during these inspections will be resolved prior to approval for return to service.

### **14.3 Hidden Damage Inspection**

Prior to the commencement of any work, all units or components that have been involved in an accident will be given a thorough inspection for hidden damage by an inspector, and will include areas adjacent to the obviously damaged member or components;

- 1) The results of this inspection will be recorded on Form AA-WO;
- 2) The General Manager or his/her designee will communicate the inspection results to the customer as necessary.

#### **14.4 Inspection Continuity**

Inspections will include incoming material, preliminary, in progress, hidden damage, final, and where applicable, will be accomplished on all articles as they progress through the various stages of repair, or overhaul at Alta Avionics, LLC.

In the event a given task may see personnel change due to unforeseen events, shift changes, personnel change, etc., the technician will debrief the service department supervisor and will record all labor on Form AA-WO.

All inspections, tests, and calibrations, as appropriate, will be accomplished in accordance with applicable manufacturers' recommendations, or approved methods and procedures acceptable to the administrator.

Records of all inspections, tests, and calibrations, as appropriate, will be made by the inspector performing the inspection, and recorded on Form AA-WO, and retained by the repair station.

#### **14.5 Final Inspection and Approval for Return to Service**

Final inspection and airworthiness determination will be made by the Chief Inspector or his/her designee in accordance with 14 CFR Part 43, and the manufacturer's specifications. The final inspection will include a review of the documents used during the task, as well as inspecting the article. The forms will be completed, and signed. In the case of work performed for air carriers, it will be performed in accordance with the manufacturer's specifications, or by the air carriers' specific repair procedures. The inspector will make the determination in accordance with 14 CFR Part 43, 14 CFR Part 145, and the air carrier's specific requirements. A Logbook entry for Maintenance Release shall be supplied that fulfills the requirements of 14 CFR Part 43, Appendix B.

Maintenance record entries shall contain a description of the work performed, date completed, the name of person completing the work, certificate number, and kind of certificate held by the person approving the work. The entries may be in different formats such as; handwritten, handwritten sticker, computer-generated sticker, in various sizes. All entries must contain the above referenced information. Examples of the format of these entries are found in the Forms Manual.

Each item specified on a work order that shall be approved for Return to Service by one or more of the following instruments; FAA Form 337, Alta Avionics, LLC Form AA-WO, or other approved documents as directed and approved by the Administrator. An authorized inspector will document major alterations on FAA Form 337. The repair station will retain these records for not less than two (2) years.

## **15 Parts**

### **15.1 Parts Ordering**

When parts are needed, a parts request is made and given to the Parts Inspector or his/her designee. When ordered parts arrive, and the incoming inspection requirements are completed, they will be forwarded to the appropriate technician.

### **15.2 Preservation of Parts**

All units repaired or overhauled by Alta Avionics, LLC will be preserved in accordance with manufacturer's recommendations, or standard procedures. The preservation procedures used depending upon the units; wrapping, sealing by use of plastic bag, sealed jars, racks with covers, or other methods appropriate to the parts, or units to assure protection until part or unit is placed into service.

### **15.3 Rejected Parts**

Individual rejected parts, or units to be returned to the vendor or customer at their request, will be tagged with Form AA-RIT (Reject Item tag). In the case of large quantities of rejected parts, items will be placed in special containers marked "rejected parts", and returned. All other rejected parts will be placed in a container marked "rejected parts", and scrapped, (sample of AA-RIT Reject Item Tag is available in the Forms Manual).

### **15.4 Scrapped Parts**

All rejected parts to be scrapped will be identified by a part number and serial number, if present, and documented on Form AA-ST (Scrapped Tag), attached to the part, and entered in the Scrapped Parts Log (Form AA-SPL). Samples of these forms are in the Forms Manual. The Scrapped Parts Log will be kept on file for not less than two (2) years.

Rejected parts will be placed in a quarantine area until disposition (return to customer or mutilated). All scrapped parts will be mutilated to prevent further use.

The Chief Inspector is responsible for the verification of mutilation of scrapped parts. In the absence of the Chief Inspector, the Service Department Supervisor, or his/her designee, will administer the program.

## **16 Tagging and Identification**

All units will be properly identified by the use of Alta Avionics Form AA-WO (Work Order). Form AA-WO will be properly executed for all units requiring repair or test. An FAA Form 8130-3 will be attached to the completed unit, which has received final inspection, and found serviceable (Information on how to obtain a Form 8130-3 is located in the Forms Manual). Form AA-WO and 8130-3 will be properly executed and signed by an authorized inspector. An Form 8130-3 will remain attached to the unit being returned to the customer.

Serviceable items in storage, or received from certificated facilities, will be accompanied with Form 8130-3, or other serviceable document, tag, or sticker. A copy of the Form 8130-3 will be kept by Alta Avionics, LLC.

## **17 Corrective Actions**

Discrepancy (scope of work) will be recorded on the Form AA-WO under “Complaint”.

Work performed will be recorded on the Form AA-WO under “Corrective Action”.

## **18 Record of Work Inspections**

The Work Order (AA-WO) and each item addressed on the front of the Work Order, will be a permanent record of all work accomplished. It will contain the signature of the technician who accomplished the work, and the inspector who inspected the work.

This record will reflect in detail what work was accomplished, and the parts used, and will be maintained on file for a period of not less than two years in the Alta Avionics, LLC's records system

Inspections conducted may include one or more of the following; Preliminary, Hidden Damage, In-Progress, and Final. They shall be recorded on the appropriate Form AA-WO.



## **19 Record of Test, Repair and/or Calibration**

The records of all tests, repairs and/or calibrations (as required), will be entered or referred to on AA-WO that is undergoing test, or calibration. Such records will be completed by the technician and inspector, and made part of the appropriate work order in the Alta Avionics LLC's records system.

## **20 Service Difficulty Reporting (SDR)**

During performance of maintenance, repair, inspection and alteration activities, the Repair Station may discover conditions of wear, corrosion, system failure, ground faults and electrical shorts, discrete component failure, integrated circuit failure, or other defects of a nature which is unexpected based on the guidelines of the manufacturer's maintenance data, or on the basis of industry experience.

FAA Data Systems Branch (AFS-620) has developed the Service Difficulty Reporting System as an industry reporting website for service difficulty reporting. 14 CFR §145.221 requires all repair stations to report such findings within 96 hours of their discovery.

The Chief Inspector is primarily responsible for ensuring reports to the FAA are created within that time period.

These reports are not to be sent to the FAA/Flight Standards District Office; they are to be filed via the Service Difficulty Reporting site at: <http://av-info.faa.gov/SDRx/>

For aircraft operated under 14 CFR 91 rules, the Repair Station is responsible for Service Difficulty Reports, not the aircraft operator.

For aircraft operated under 14 CFR 121 and 135, the operator is responsible for Service Difficulty Reports. However, when the Repair Station performs maintenance for a part 121 or 135 operator, the Repair Station is responsible for notifying the operator of a reportable condition in the most expeditious manner possible. The operator may instruct the Repair Station to file the report on his behalf, or may choose to file a report himself. Whether or not the responsibility is assumed by the operator, or the Repair Station, the 96 hour rule applies regardless.

Each Chief Inspector, Quality Assurance Manager, and Facility Manager will have a user ID with which to log into the FAA Service Difficulty Reporting System, and following the instructions on that website will submit a report of the apparent malfunction or defect. Paper or electronic copies of the report are not required to be maintained with the Repair Station. The Repair Station's Principal Inspectors have access to those records online.

## **21 Inspection Personnel**

The qualifications of inspection personnel are based on previous experience, classroom training, on the job training (OJT), and other factors as determined by the Chief Inspector and Alta Avionics, LLC General Manager.

Inspection personnel will have a working knowledge of, and be proficient with all inspection methods, techniques, and equipment used in their specialty to determine the quality, or airworthiness of an article undergoing maintenance, or alteration. Inspection personnel are required to have a working knowledge of the applicable CFR's. Manufacturer specifications regarding tolerances, limits, and maintenance procedures of the product undergoing inspection are available to all inspection personnel, as well as other forms of inspection information, such as FAA Airworthiness Directives, and manufacturer's bulletins and service information. Maintenance manuals, engineering letters, service letters, FAA regulations, Airworthiness Directives, and other pertinent information, is available to all inspection personnel in current form.

Inspection personnel will have available, and be familiar with, current specifications involving inspection tolerance, limits, and procedures, as set forth by the manufacturer of the product undergoing inspection, or other forms of inspection information, such as; Airworthiness Directives, bulletins, etc.

Inspection personnel must remain current with changes in equipment, technical data, inspection equipment, and techniques. This will be accomplished through OJT, and recurrent training, as directed by the Chief Inspector, or his/her designee. All training will be documented in the employee's Training Records.

Proficiency of inspection personnel is determined by the Chief Inspector through the evaluation of experience (inspections performed) on the type of equipment undergoing inspection, and the types of inspection methods used. Changes in inspection types, inspection methods used, and equipment types, will dictate the need for further evaluation of inspection personnel by the Chief Inspector. When such needs arise, the evaluation will be documented and maintained in the employee's training records.

Inspection personnel need not to have performed the type of repair or alteration which they are required to inspect; only that they are familiar with, and proficient in the interpretation and application of the processes and procedures used to perform that work.

Inspection personnel and their authority will be listed in the Roster of Repair Station Personnel. Personnel authorized to approve an article for return to service must be certificated under 14 CFR Part 65, and must read, write, and understand English.

## **22 Procedures for Insuring Technical Data Currency**

Alta Avionics, LLC technical and inspection personnel have the following sources of technical information available; online, CD ROM, or ATP microfiche library, provided by, or approved by the manufacturers as well as printed publications.

Each printed manual will be labeled with a manual label AA-ML showing it as the working manual for Alta Avionics, LLC (sample of label in the Forms Manual). This label will also state that it is the responsibility of the individual performing the maintenance/repair of an appliance or aircraft to verify the currency of the manual being used. If approved current data is not available, the repair will be suspended until appropriate current data is obtained.

Current publication indexes are available online, or on manufacturer's CD ROM. For publication indexes not available online, the Quality Assurance Manager will contact each manufacturer annually and verify that these indexes are current. If such indexes are not available, verify that the manuals being used at Alta Avionics, LLC. are current editions. If the manufacturer no longer issues updates to a technical manual, it shall be dated and identified as "Static" on the label.

The Quality Assurance Manager is accountable to the Chief Inspector to ensure that revisions received for repair/maintenance manuals are inserted in a timely manner.

The Quality Assurance Manager is responsible to the Chief Inspector for the Technical Data Program. In the absence of the Quality Assurance Manager, the Chief Inspector, or his/her designee, will administer the technical data program.

## **23 Calibration Of Test Equipment, Tools, Special Tools**

Alta Avionics, LLC will maintain records to assure that all inspection tools, special tools, and precision test equipment are kept within tolerance. Calibration intervals shall be determined by purpose, stability, and degree of use. The maximum interval shall be twelve (12) months, including the last day of the month in which the calibration is due, unless specified by the manufacture as greater or recommended as otherwise.

Records of equipment test and calibration will contain calibration dates, methods, software status (when appropriate) and time periods used. Records will be found either by hardcopy or digitally. Alta Avionics will require software accuracy checked and verified on all applicable test equipment at time of calibration.

Each piece of test equipment will maintain calibration traceable to the National Institute of Standards and Technology, or other standards acceptable to FAA, with the exception of equipment identified as "Reference Only". "Reference Only" equipment will not be used for approval to Return to Service any component or system that is repaired, overhauled, or installed by Alta Avionics, LLC.

Equipment requiring calibration before use will be identified with a placard.

"Special tools" are calibrated per manufacturer's recommendations, and records will be found in Alta Avionics, LLC's software and available on all computer terminals.

Changes to the calibration interval beyond that recommended by the manufacturer will require FAA approval. The Chief Inspector or his/her designee will submit a letter with historical calibration results attached, to the FAA/CHDO requesting FAA approval.

Each piece of test equipment will have a unique "Identification No." attached to it, and a "Calibration" sticker clearly displayed with current calibration vendor and date, and next "Cal Due" date.

Alta Avionics, LLC has identified a need to implement a test equipment equivalency during the overhaul/repair bench procedure. A procedure has been implemented to ensure all personnel have a resource for determining equivalent test equipment suitability. See Detailed Procedure manual for procedure reference.

Employee owned tools and test equipment that require calibration must be identified, calibrated, and documented in the same manner as company owned equipment. The tool/equipment must remain under the owner's control at all times.

Equipment calibration facilities are qualified, and surveillance performed, with the Vendor Audit process described in this manual.

Equipment that is due calibration will be scheduled for calibration. Overdue equipment will be removed from service, and placarded "Out Of Calibration—Do Not Use".

Alta Avionics, LLC  
Quality Control Manual (QCM)

---

Test equipment that is rented or leased must be equivalent to manufacturer's recommendations and in current calibration. The FAA Coordinator or his/her designee will obtain the required equipment.

The FAA Coordinator is responsible to the Chief Inspector for the Equipment Calibration Program. In the absence of the FAA Coordinator, the Chief Inspector or his/her designee will administer the program.

In the case work was performed using equipment that was out of calibration, or calibration interval, that work will be recalled and reworked.

Lost or misplaced equipment that is overdue calibration will be reported to the General Manager. When located, the equipment will be calibrated prior to use.

## **24 Qualifying & Surveillance Of Non-Certificated Persons**

Non-certificated persons or organizations with which the Repair Station contracts to perform 'FAA approved maintenance functions', will be qualified through the Vendor Audit process, and documented on Repair Station Form AA-VA.

The non-certificated person must follow a quality control system equivalent and acceptable to that of Alta Avionics, LLC, and must allow the FAA to make inspections of their facilities and observe the work being done by them.

Surveillance audits will be conducted every 2 years, or less if deemed necessary by the Chief Inspector.

Audit records, and any other pertinent information concerning non-certificated personnel, will be kept in the Vendor Audit records located at Alta Avionics, LLC's OR in the computer system and available on all computer terminals. Audit records will be kept for three (3) years.

The Chief Inspector, or his/her designee, is responsible for qualifying, and the surveillance of non-certificated persons.

## **25 Taking Corrective Action on Deficiencies**

The primary means of detecting and correcting deficiencies is through the Continuing Analysis and Surveillance (CAS) program utilized by Alta Avionics, LLC. The CAS program is designed to monitor, and improve the operation of Alta Avionics, LLC.

Procedures are described in this manual for evaluating Alta Avionics, LLC functions, and the corrective action of problems found. Audits are scheduled on a continuing basis, or may be conducted by the Chief Inspector(CI) or his/her designee anytime a problem is discovered.

Corrective action is documented, and monitored to ensure that any identified problems have been corrected.

Company meetings are held to discuss audit findings, their root cause, corrective action, and follow-up of corrective actions.



## **26 Continuing Analysis And Surveillance (CAS)**

Alta Avionics, LLC has established a CAS program in order to monitor the performance, and effectiveness of the inspection and maintenance functions, and the overall operation of Alta Avionics, LLC.

The CAS program accomplishes two functions:

- 1) The qualification and surveillance of vendors utilizing a vendor audit program.
- 2) Continuous evaluations of the inspection, maintenance, and operations.

The evaluation, or audit function, of the CAS system encompasses operational matters such as; repair scheduling, control and accountability of work forms, conformance to technical instructions pertaining to work, and other technical instructions, as well as compliance with procedural requirements. It also addresses the adequacy of equipment and facilities, parts stocking, protection and competency of technicians, and housekeeping.

To be effective, audits should be divorced from other functions.

Audits are normally on-the-scene observations, and monitoring should be a scheduled ongoing activity. A thorough continuing analysis and surveillance system should encompass periodic audits of all departments at Alta Avionics, LLC.

All company personnel will support the Quality Assurance department in establishing and maintaining the CAS program using the following steps as a guide:

- Read, understand, and follow the Repair Station Manual, and Quality Control Manual
- Read your duties and responsibilities, and follow them
- Think quality, and how you can improve Alta Avionics, LLC operations
- Verify all documents you work with are current, and correct
- Verify all manuals you are using are in good repair, and current
- Notify the Chief Inspector or Quality Assurance Manager of any discrepancies found while performing your duties and responsibilities
- Notify the Chief Inspector of any safety of flight, or CFR violation, so immediate corrective action can be taken

The purpose of the audit function of the CAS program is to:

- Perform internal and external audits to assure that all work is in compliance with the Alta Avionics, LLC Repair Station Manual, Quality Control Manual, and all applicable CFRs.
- Audit outside vendor overhaul/repair agencies for compliance with overhaul/repair manuals, and applicable regulations.

Alta Avionics, LLC  
Quality Control Manual (QCM)

---

- Assess the performance of Alta Avionics, LLC programs.
- Ensure the capability of the inspection, and production organizations to carry out the repair concept.

The Quality Assurance Audit System is administered and controlled by the Quality Assurance Manager.

Quality Assurance will hold a CAS meeting each month, to discuss audit discrepancies placed on the Audit Findings/Corrective Action form using the following method:

- Is the finding new, or a repeat?
- What is the root of the finding.
- Corrective action taken.
- Root cause, and corrective action to prevent recurrence.

## **26.1 Audit Program**

### **26.1.1 Description**

The audit program provides for a continuing audit of all areas under Alta Avionics, LLC facilities to assure that everyone connected with it is in compliance with the Alta Avionics, LLC Repair Station Manual, Quality Control Manual, and applicable CFRs. Audits will be performed by the Chief Inspector, or his/her designee, and will address the following:

- Ensure all publications and work forms are current and readily available to the user
- Repairs are, performed in accordance with the methods, standards, and techniques specified in the Alta Avionics, LLC manuals.
- Maintenance forms are screened for completeness and proper entries
- When required, records pertaining to tracked components are cross-referenced to equipment/parts records, etc., to minimize errors
- Personnel are adequately trained
- Receiving inspection of parts and materials is thorough
- The efficacy of calibrated equipment and tool control program
- The efficacy of the shelf life materials program
- Facilities and housekeeping

### **26.1.2 Responsibility and Authority of Audit Personnel**

The responsibilities and authority of audit personnel are;

- To probe, and investigate any function of the company departments, and/or areas.
- To discuss findings and objectives with the company supervisors and department heads involved with the audit.
- Develop, document, and disseminate all company investigative findings.
- To request written response from the appropriate company supervisors, or department heads outlining corrective action planned to correct deficiencies noted in the audit reports.

**Note:** All audit reports generated prior to the adoption of this audit program, and the forms used for reporting those audits, are acceptable as valid historical reports.

### 26.1.3 Audit Experience

An audit shall always be conducted as a completely professional process. The auditor's demeanor shall be one of "no nonsense" fact finding, of the subject vendors operation. This applies equally to internal audits of Alta Avionics, LLC.

The auditor shall be sensitive to the needs of the subject vendors, or departments work operations. All questions required on the applicable audit form, and any issues needing attention, shall be addressed with minimal disruption of the subject's operation, while being thorough.

All vendor, or department officials, shall be treated with professionalism and courtesy. Ensure that all affected parties have the opportunity to address questions, and concerns before the completion of the auditing visit. Be efficient with your time and theirs.

Distribute findings, and/or results of the audit, to all concerned parties as soon as they become available.

#### 26.1.4 Audit Forms

Audit forms, their use, and methods of completion are found in Alta Avionics LLC Forms Manual. The Forms Manual is accepted by the FAA, and will be maintained in a current condition at all times

#### 26.1.5 Audit Records And Files

Files containing internal audits, and vendor audits, will be maintained by the Quality Assurance Manager, and located in Alta Avionics, LLC computer system. The latest audit will be kept on file, and past audit reports will be sent to the archives.

Responses concerning corrective actions for internal, and vendor audits will be attached to the respective audit form. Internal and vendor audit records will be kept for three (3) years. Repair Station Certificates, and any other data obtained from a vendor, may be kept in its respective file for reference indefinitely.

Changes to the Approved Vendor List will be made after a vendor audit has been accomplished and approved by the Quality Assurance Manager.

The Audit Findings Control Log, (form AA-AUD-AFCL), will be maintained by the Quality Assurance Manager. Each audit will be filed, which will provide a means of tracking, and follow-up of open audits. (A sample of this form is in the Forms Manual).

## 26.1.6 Departments/Areas of Audit And Frequency

### 26.1.6.1 *Departments and Areas*

#### 26.1.6.1.1 External Audits (See Section 26.1.9)

- Vendors
- Calibration Vendors
- Maintenance Providers (as required)

#### 26.1.6.1.2 Internal Audits (See Section 26.1.10)

- Service Department
- Installation Department
- Instrument Department
- Parts/Shipping Department

### 26.1.6.2 *Frequency*

- Internal audits will be scheduled annually
- External audits will be scheduled according to the category assigned to the vendor (see External Audits in this manual)
- Scheduling frequency may be adjusted by the Chief Inspector to allow for problems in manpower, workload, or time limitations, however, every attempt will be made to adhere to the established schedule
- In addition to scheduled audits, the Chief Inspector may direct additional audits of any phase of operation

## 26.1.7 Pre-Audit Procedures

Before the auditor contacts the vendor or department manager concerning an audit, the auditor should perform the following:

- 1) Research the audit files for previous audits on the vendor or department'
- 2) If a previous audit is found, take notes on discrepancies found, and corrective action taken to prevent a recurrence, if any;
- 3) If an audit history does not exist for a vendor, ask the vendor for the name of an existing customer; contact that customer to see if they are satisfied with the vendor's performance

#### 26.1.8 Audit Requirements

- 1) The auditor will review the requirements in this manual for the type of audit to be performed;
- 2) The appropriate audit forms should be obtained (see Forms Manual);
- 3) An appointment should be made with the vendor, or department manager, unless a situation dictates otherwise.
- 4) If time and availability permit, determine if a Alta Avionics, LLC component is at the repair/overhaul vendor for maintenance. While at the vendor, the identified component(s) may be used to verify the agencies program;
- 5) The auditor will be experienced, and/or trained in the subjects included in the audit. If not, a company technical specialist may be needed to evaluate specialty areas;
- 6) Auditors will be trained in the use of audit checklists, and completing audit reports;
- 7) The end result of an audit should not be limited to the identification of areas that need improvement;
  - a) The audit process should also be extended to include corrective action, the root cause of the problem, and procedures to prevent a recurrence of the problem
- 8) Follow-up evaluations should be conducted in a timely manner to assure that the corrective action(s) have been effective, and have solved the problem(s)
- 9) Auditors will be mindful that capabilities and maintenance programs vary greatly in complexity and application among various vendors;
  - a) The key element to evaluate is compliance with the program described in the vendor's own manual;
  - b) Failure to follow published procedures, is a "significant non-compliance" finding.

#### 26.1.9 External Audits

Scheduled audits shall be conducted on the following types of vendors conducting business with Alta Avionics, LLC, utilizing Form AA-AUD-VA (Vendor Audit), or Form AA-AUD-CVA (Calibration Vendor Audit) as applicable. (Samples of these forms are found in the Forms Manual).

- 1) Repair Stations certified under 14 CFR Part 145
- 2) Repair facilities not certified under 14 CFR Part 145, such as equipment/tool calibration facilities, or contract maintenance facilities
- 3) Original Equipment Manufacturers (OEMs) such as FAA Part Manufacture Approval (PMA) holders
- 4) New and overhaul/repair parts vendors

If Alta Avionics, LLC intends to utilize a vendor on a continuing basis that is not on the Approved Vendor List, the Chief Inspector, or his/her designee, must be notified using Form AA-AUD-AR (Audit Request) (sample found in the Forms Manual).

The Chief Inspector, or his/her designee, will forward the applicable Vendor Audit form to the vendor for completion within thirty (30) days. All questions shall be addressed as required, to assess the capabilities of the vendor to meet the standards established in this manual. Upon return of the audit, the vendor may be temporarily added to the Approved Vendor List, and scheduled for an on-site audit, if required. If the vendor is found acceptable as a result of the audit questionnaire, or on-site audit, it may be permanently added to the Approved Vendor List.

An interim update of a vendor's capabilities and personnel may be made phone, FAX, or mail by using the Vendor Audit form. Completed updates will be placed in the vendor's file, and will be kept until the on-site audit is performed again, if necessary.

The Chief Inspector will assign a category to each vendor based on an evaluation of the function and/or materials they provide. Vendors are classified as follows:

##### 26.1.9.1 *Category A:*

Vendors in this category will receive and complete a Vendor Audit form biennially, or have an on-site audit performed. If no discrepancies are noted, the vendor is placed on the Approved Vendor List pending the next audit. Category A vendors will include, but are not limited to the following:

1. Repair/Overhaul Vendors (ROV)
2. Airframe maintenance repair stations
3. New rotatable parts distributor
4. Calibration vendors



*26.1.9.2 Category B:*

Vendors in this category are required to complete the Vendor Audit form, or have an on-site audit performed. If no major discrepancies are noted, the vendor is placed on the Approved Vendor List. No further audits are required unless deemed necessary by the Chief Inspector, or his/her designee. Category B vendors will include, but are not limited to the following:

1. Mechanical hardware distributors
2. Electrical hardware distributors
3. Avionics sub-component parts distributors

*26.1.9.3 Category C:*

Vendors in this category are requested to complete Vendor Audit form. An onsite audit is not required. Upon completion of the audit, the vendor is placed on the Approved Vendor List. No further audits are required unless deemed necessary by the Chief Inspector, or his/her designee.

Category C vendors will include, but are not limited to:

1. Distributors of non-critical/non-safety of flight items such as, paints, primers, cleaners, etc.
2. Factory authorized distributors of electrical/mechanical hardware
3. Factory authorized distributors of adhesives, and sealants
4. Manufacturers of paints
5. OEM who manufactures parts under TSO (Technical Standard Order) or PC (Production Certificate)
6. Manufacturers of raw material such as aluminum, electrical wire, adhesives, etc.

Vendor audits will be scheduled according to the following priorities:

**Priority I:**

1. Category A vendors with reliability or warranty problems
2. New Category A vendors
3. Category A audit updates

**Priority II:**

1. Category B vendors with reliability or warranty problems
2. New Category B vendors

**Priority III:**

1. All remaining vendors

Alta Avionics, LLC  
Quality Control Manual (QCM)

---

Audits that reveal serious discrepancies may be increased in frequency, until such time that continuing audits indicate corrective action has been implemented. The Chief Inspector, or his/her designee will determine this audit frequency.

#### 26.1.10 Internal Audits

The following departments/areas of Alta Avionics, LLC shall be subject to ongoing scheduled audits utilizing Form AA-AUD-IA (Internal Audit). (A sample of this form is found in the Forms Manual).

- Service Department
- Installation Department
- Instrument Department
- Parts/Shipping Department

The Internal Audit form shall be used as a guide to determine, and correct, any existing deficiencies in the operation of Alta Avionics, LLC, relating to the procedures in the manuals used by Alta Avionics, LLC.

All questions shall be addressed, as required, for the department/area being audited. Any question that is not applicable to the particular department/area being audited will be marked N/A.

The audit will be an “on-the-scene” observation by the Chief Inspector, or his/her designee.

The auditor should inform the appropriate supervisor at least one day in advance of the scheduled audit.

The audit will be conducted using the audit standard for that department. The auditor will also check to see how the procedures of the Alta Avionics, LLC repair station manuals are followed, to confirm compliance with the CFRs, and company policies.

After completing the audit, the auditor will issue Form AA-AUD-AFCA (Audit Findings/Corrective Action) (sample found in the Forms Manual) to the department supervisor for follow-up, comments, and/or corrective action.

Department supervisors shall respond within ten (10) working days from receiving the report of the audit. A copy of the report will be forwarded to the Chief Inspector for follow-up reporting and tracking.

#### 26.1.11 Audit Follow-Up Procedures

The Alta Avionics, LLC audit program has been designed to quickly and efficiently identify discrepancies found during audits of different operational areas, and facilities.

The Chief Inspector, or his/her designee, will review the discrepancies, and prepare a letter, or memo, to the department, agency, or vendor involved to ensure corrective actions are being implemented if required. He/she will determine the depth of any discrepancy, and how it directly affects, or could affect, the airworthiness of customer aircraft. He/she will notify the General Manager of the audit results as required.

Company departments/areas must implement corrective action within ten (10) days following notification of a discrepancy. All discrepancies and corrective actions will be given to the General Manager for review.

Vendors must respond within thirty (30) days after receipt of the information outlining the discrepancy, advising what corrective action is being taken.

A re-audit may be scheduled to determine if the vendor corrected the problem. A very serious problem may result in the vendor or agency being removed from the Approved Vendor List.

If a re-audit of a department/area shows that no corrective action was taken, or the corrective action taken did not fix the discrepancy, the problem will be sent to the General Manager for resolution.

## **27 Hazardous Materials**

Alta Avionics LLC will adhere to all requirements set forth under CFR145; §145.165(a), and §145.165(b).

All employees will be trained during initial training and will be responsible to know and understand these requirements while employed by Alta Avionics LLC.

## **28 Test Equipment and Test Equipment Equivalency**

All new test equipment will be assigned an ID by Alta Avionics, LLC at the time of acquisition.

All Documentation required for currency of calibration and calibration requirements will be found at Alta Avionics, LLC. Proper documentation will be recorded in logbook labeled "Test Equipment Equivalency Log" and will be stored in main repair facility area for documentation and reference

Alta Avionics, LLC reserves the right to use equivalent test equipment when deemed necessary..

Procedures for the evaluation and suitability of equivalent test equipment are contained in the Repair Station's Detailed Procedures Manual.

## 29 Electronic Records

To ensure compliance of all FAA requirements for electronic recordkeeping, the following procedures will be implemented:

- Alta Avionics, LLC will make all required records available to both the NTSB and the FAA personnel if requested.
  - The accountable manager or his/her designee will be made available to the NTSB and/or FAA personnel to assist in accessing the necessary information including computerized information.
  - Any computerized documentation requested will be supplied in either electronic form (PDF), or paper copy.
- To ensure security for electronic signature and records, the computer system will automatically require each individual to change their password every 30 days.
  - Alta Avionics, LLC computer system will not permit personal identification duplication.
- Alta Avionics' computer system is designed to conduct a weekly back up and a monthly system analysis. If during the system analysis a problem occurs the audit is sent to the IT department and is addressed immediately.
  - A report of this audit is kept on file and is will be available on request.
- Procedures addressing transmission of computerized records to customers or another operator are described in the Quality Control Manual under inspection procedures.
- Training procedures for authorized personnel are addressed in the Training Manual, under initial training.