



## Part 145

# Repair Station Manual (RSM) and Quality Control Manual (QCM)

*Ref §145.207, §145.209 and §145.211*

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## Part 0 Introduction

This Repair Station (RSM) and Quality Control Manual (QCM) have been prepared in accordance with the current Federal Aviation Regulation (14 CFR) FAR) Part §145, Advisory Circular (AC) 145-9 and Aviocraft Policies.

This manual explains the internal inspection system in detail, including the continuity of inspection responsibility. This manual gives a detailed explanation of the following portions of the inspection system, Incoming materials, preliminary inspection, hidden damage, inspection continuity and final inspection of the article being repaired or altered by this facility.

The general repair, overhaul or alteration of products will be performed in accordance with the current Federal Aviation Regulations, manufacturer's data, drawings, specifications and bulletins, or other technical data approved for limited rating specialized service. FAA regulations will be kept current by utilizing the FAA Web Site [faa.gov](http://faa.gov). Biweekly AD's will be monitored by the Chief Inspector or his/her designee on the FAA web site.

This repair station will not repair or alter any item for which it is not rated and will not repair or alter any article for which it is rated if it requires technical data, equipment, materials facilities or trained personnel that are not available (14 CFR) FAR.§145.201).

The technical library and this repair station and quality manual are required for operation of this repair station, and will be maintained in a current status at all times.

Each supervisor and inspector working for this repair station will have a reference copy of this manual and should thoroughly understand its contents. The manual will also be available to other repair station personnel.

The performance of any repair, preventive maintenance, alteration or required inspections for an air carrier or commercial operator having a continuous airworthiness program under (14 CFR) FAR Part §121, §125, §127 or §135, will be performed in accordance with the requirements of (14 CFR) FAR Part §145, and §145.205.

This repair Station and Quality manual is the top-level manual for supporting this repair station. There are various sub-tier instructions, procedures and manuals that supplement and provide detailed support to this repair station and quality manual.

Items repaired under Aviocraft; Limited Ratings are detailed in the Aviocraft capability listing which is routinely forwarded to the Federal Aviation Administration (FAA) Certificate Holding District Office for their acceptance.

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**0.2 List of Effected Pages (LEP)**

§145.209

The LEP (**table 1**) is used to control and provide a record of revision at the RSM/QCM page level. Each page receiving a revision shall be listed in the LEP along with the date of the revision. The LEP is signed by the both the President/Accountable manager and the FAA indicating acceptance and the most recent authorized revisions level.

Page	Revision	Revision Date	Page	Revision	Revision Date	Page	Revision	Revision Date
1	3	05-06-2019	32	3	05-06-2019	63	3	05-06-2019
2	3	05-06-2019	33	3	05-06-2019	64	3	05-06-2019
3	3	05-06-2019	34	3	05-06-2019	65	3	05-06-2019
4	3	05-06-2019	35	3	05-06-2019	66	3	05-06-2019
5	3	05-06-2019	36	3	05-06-2019	67	3	05-06-2019
6	3	05-06-2019	37	3	05-06-2019	68	3	05-06-2019
7	3	05-06-2019	38	3	05-06-2019	69	3	05-06-2019
8	3	05-06-2019	39	3	05-06-2019	70	3	05-06-2019
9	3	05-06-2019	40	3	05-06-2019	71	3	05-06-2019
10	3	05-06-2019	41	3	05-06-2019	72	3	05-06-2019
11	3	05-06-2019	42	3	05-06-2019	73	3	05-06-2019
12	3	05-06-2019	43	3	05-06-2019	74	3	05-06-2019
13	3	05-06-2019	44	3	05-06-2019	75	3	05-06-2019
14	3	05-06-2019	45	3	05-06-2019	76	3	05-06-2019
15	3	05-06-2019	46	3	05-06-2019	77	3	05-06-2019
16	3	05-06-2019	47	3	05-06-2019			
17	3	05-06-2019	48	3	05-06-2019			
18	3	05-06-2019	49	3	05-06-2019			
19	3	05-06-2019	50	3	05-06-2019			
20	3	05-06-2019	51	3	05-06-2019			
21	3	05-06-2019	52	3	05-06-2019			
22	3	05-06-2019	53	3	05-06-2019			
23	3	05-06-2019	54	3	05-06-2019			
24	3	05-06-2019	55	3	05-06-2019			
25	3	05-06-2019	56	3	05-06-2019			
26	3	05-06-2019	57	3	05-06-2019			
27	3	05-06-2019	58	3	05-06-2019			
28	3	05-06-2019	59	3	05-06-2019			
29	3	05-06-2019	60	3	05-06-2019			
30	3	05-06-2019	61	3	05-06-2019			
31	3	05-06-2019	62	3	05-06-2019			

**Table 1- List of Effective Pages**



David E. Campbell  
President / Accountable Mgr.

Accepted

FAA: Signature On file

Date: On File



### 0.3 List of Manual Holders

§145.207

The master (original) RSM/QCM is an electronic document maintained by the President/Accountable manager or his authorized designee. The RSM/QCM is not distributed in paper form except as specifically directed by the FAA. **Table 2** lists the key repair station personnel which have specific electronic access to the RSM/QCM. Other maintenance personnel also have “read only” access to foster compliance and awareness. Maintenance personnel can access the current RMS/QCM by company computers which are available throughout the facility. Aviocraft does not issue “controlled copies” of this RSM/QCM.

Personnel	Format	Access Level
President/Accountable Mgr.	PDF or DOC	Full access
Quality Manager	PDF or DOC	Limited access
Production Mgr.	PDF	Read only
FAA PMI	Paper or (PDF)	Read only
All Maintenance Personnel	PDF	Read only
Air Carrier, operators, owner or Customer Auditors	PDF	Read only

**Table 2- Manual Holders**

### 0.4 Manual Control

§145.209, §145.211

The RSM/QCM is strictly controlled by the President/Accountable manager or his designee. The RSM/QCM is electronically stored in Doc/PDF format on the company’s secure server and is password protected. In addition, the signature of the President/Accountable manager is digitally secure. Aviocraft does not issue “controlled copies” of this RSM/QCM. The RSM/QCM is viewable electronically by means of a computer or other mobile devices.

### 0.5 Record of Revisions and Control Policy

§145.209, §145.211

Aviocraft manages the RSM / QCM using a “record of revision” method. Each revision is recorded below (**table 3**) with the revision letter, revision date, and type of revision (minor or major) and a complete description of the change. A vertical line will be present at the far-left margin of the revised page(s) near the changed paragraph. The vertical line shall represent the most recent change. The RSM/QCM is an electronic and password protected document. Upon revision, the complete RSM/QCM is electronically updated and immediately available to all authorized users in a PDF or DOC format.

This manual is a controlled document and is subject to recall or revision as mandated by the FAA or to meet the requirements of Aviocraft, LLC. Revisions to this manual require the approval of the President/Accountable Manager prior to submission to the FAA Principal Maintenance Inspector

(PMI/PAI) assigned to Aviocraft for acceptance prior to its implementation. FAA acceptance of the manual will be noted at the bottom of the record of revisions page or by a letter of acceptance or email from the FAA. Revisions to this manual found not acceptable to the FAA will be revised to satisfy the FAA's requirement and re-submitted for acceptance.

Revision Number	Revision Date	Revision Type Minor/Major	Reason for change
I.R	5/26/2016	Re-format	Update and re-format
1	12/31/2017	Minor	Revised pages /sections I, II, III, IV, 3-2, 3-5, 3-6, 4-1, 4-2, 4-3, 4-4, 5-1, 6-1, 6-2, 7-1, 7-2, 7-3, 7-4, 7-5, 7-7, 7-8, 7-9, 7-10, 7-13, 7-14, 8-1, 9-1, 10-1
2	4/1/2018	Re-format	Update and re-format
3	5/6/2019	Re-format	RSM/QCM completely reformatted to new standard

**Table 3- Record of Revisions**

**0.5.1 RSM/QCM revision procedure**

This RSM/QCM and associated procedures/ forms are electronic documents password protected and safeguarded from un-authorized revision by means of digital signature control.

The RSM/QCM is amended from time to time by the President/Accountable manager or his authorized designee to comply with regulatory amendments / regulations or to correct minor erroneous content. In any event, revisions to the RSM/QCM will require the principle maintenance inspectors (PMI) acceptance evidenced by an acceptance acknowledgment letter/ email or signature on the "record of revisions" page herein.

Amendments to this RSM/QCM are evidenced by a revision letter located at the upper right corner of each page and each revision is recorded and described record of revision section herein. Any revision to the RSM/QCM causes a complete reissue of the RSM/QCM insuring the RSM/QCM is current at all times for authorized use. RSM/QCM content with a vertical line located at the far-left margin will identify the most recent change location. In addition, the list of effective pages (LEP) records the revisions at the page level. Upon review/acceptance by the FAA of the revision, The LEP page shall be signed by both the President/Accountable Manager and the FAA acknowledging acceptance and authorized release of the revision. The LEP reflects the most current revisions of the RSM/QCM to be released and utilized by the repair station.

Any revision to the RSM/QCM deemed necessary to comply with changes to overseeing authority regulations shall be incorporated into the RSM/QCM within 90 days after the change has been published, unless otherwise specified by the overseeing authority.

## 0.5.2 Acceptance Process

The President/Accountable manager or his designee shall coordinate the approval of those documents and procedures requiring FAA PMI acceptance. **Table 4** identifies those documents / procedures which require specific PI acceptance.

All applicable documents and revisions shall be submitted to the PMI for acceptance. The document(s) shall be transmitted in PDF form via email or by mail to the PMI authority for review, acceptance. Once accepted by the PMI the documents can be released for use by the repair station.

Document category	File Type	Document Number	Accepted by	Remarks
RSM/QCM	Doc/PDF	RSM-0419	Accountable Mgr. FAA PMI.	All revisions require PMI acceptance
Capability listing	Sys	WOREP09	Accountable Mgr. FAA PMI.	Only additions to the "limited" category require PMI acceptance
Subcontractors list/Program	Doc/PDF	SCP-1210	Accountable Mgr. and FAA PMI	Additional subcontractor functions require PMI acceptance

**Table 4- Required FAA Acceptance Documents**

## 0.6 Statement of Authority and Management Policy

Aviocrافت, LLC repairs products for the Aerospace Industry. The products repaired by Aviocrافت, LLC are listed on the Repair Station Operations Specification sheets. The inspection procedures Program was specifically developed for the aerospace industry and complies with Federal Aviation Regulations (14 CFR) FAR) part §145 and Advisory Circular (AC) 145-9. This Repair Program does comply with other specifications and requirements and is applicable to any industry requiring an assured quality repair system.

Quality Assurance and Quality Control are recognized as management functions affecting all organization levels and everyone within the organization. This Quality Program establishes a uniform program for Aviocrافت, LLC. Each Manager, Supervisor and departmental employee identified in this manual will be responsible for implementing the requirements of this manual in the areas of their responsibility.

The President/Accountable manager is responsible for establishment of the Quality Program. The Chief Inspector's authority extends to all Quality Control activities performed by or for Aviocrافت, LLC. Decisions made by the Chief Inspector on all quality matters are made in the name of the company, and may be overruled only by the President/Accountable manager. The Chief Inspector has the authority to stop work if necessary, to correct an unsatisfactory quality problem. The Chief Inspector will keep the President/Accountable manager advised to the implementation status and adequacy of Aviocrافت, LLC Quality Control Program.

Individuals or groups assigned the responsibility of checking; auditing, inspecting or otherwise verifying that an activity has been performed will be independent of the individual or group directly responsible for performing the specific activity.

All equipment and test equipment are listed in the Aviocrافت, LLC calibration program and owned by Aviocrافت, LLC. The Equipment in this facility has maintenance schedules and operating procedures and the personnel operating the equipment are well trained in its use.

In the event Problems, differences of opinion and /or non-conformances arise between parties within Aviocrافت, LLC. Which cannot be resolved within provisions of this manual, will be resolved by the President/Accountable manager.



---

David E. Campbell  
President & Accountable Mgr.

## Part 1 Management and Facilities

### 1.0 Safety and Quality Policy

a) Aviocraft maintains a training program that ensures each employee assigned to perform maintenance, preventive maintenance, or alternations, and inspection functions can perform the assigned task and that the required individual employee training includes human factors.

b) The training enables the employee to detect and rectify maintenance errors that may endanger the safe operation of the aircraft. The Human Factors training provided will address resources, human performance limitations, shift changeover (if applicable) and an understanding of the application of the human factor's principles. Recurring Human factors training is required for all maintenance and quality personnel.

This training program establishes the standards and procedures for training all employees employed by the repair station. These employees must be qualified and trained under the policies and procedures set forth in this document.

c) Aviocraft maintains a workplace culture which insures employees understand both quality and safety are of the utmost importance. Employees are encouraged to identify safety concerns, maintenance errors or shop floor incidents to upper management immediately. Company employees are required to comply with all technical work instructions, quality standards, internal procedures and regulations. Each employee acknowledges compliance is mandatory and a condition of employment.

d) The company maintains an internal self-audit program to insure quality systems, company procedures and regulatory requirements are complied with. Employees are expected to support and cooperate with both internal and external auditors during quality audits. Auditors play an extremely important role in regulatory compliance which is recognized by all maintenance and quality personnel.

e) The Accountable manager and support staff promote a high-quality standard throughout the organization and mandate compliance to regulatory and quality standards over financial gain. The core principles of the operation are centered on safety and insuring every component is serviced properly the first time, company resources are used properly, all related technical orders/ work instructions are adhered to and the customer receives a quality product. This focus on quality insures a commitment to safety and regulatory compliance.

### 1.1 Housing and Facilities

§145.209, §145.103, §145.105

The Aviocraft repair station is located at the R.L Jones Airport at the following address. Aviocraft shall not release changes to its facilities or equipment that would significantly affect the company's ability to properly carry out maintenance.



2675 E. Cessna Drive  
Chandler, AZ 85286

Contact Email: [DCampbell@Camtronicsllc.com](mailto:DCampbell@Camtronicsllc.com)

Contact Phone: 480-306-5073

Web Site: <http://www.Aviocraft.com/>

As an overview, Aviocraft is a maintenance facility, approximately 8000 square feet. Shop area, storage area, computer server/phone area, break area, bathrooms, shipping & receiving area and office spaces. The facility is climate control by external mounted central heat and air condition systems. Interior light is provided by 2'x 4' overhead fluorescent lighting panels. The building is protected by a security and fire alarm system. The protection incorporates a sprinkler system throughout the building with certified fire extinguishers at various location

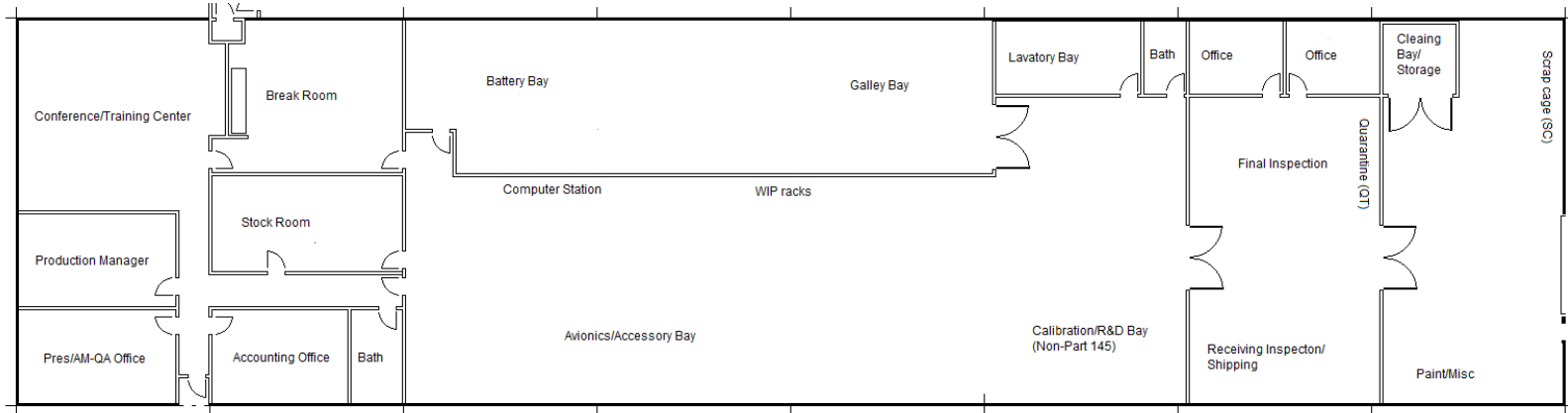
Aviocraft, provides secure, clean, safe and spacious facilities for its employee's, equipment, materials and customer property (including shipping containers). The noted building is environmentally controlled to ensure a comfortable work environment for employees and the best possible conditions for physical efficiency and production. Eating, drinking and the use of tobacco is not allowed in work areas but are allowed in designated areas of the facility.

### 1.1.0 Security/Fire protection

This repair station maintains a 24-hour, 365 day a year automated security system to protect the company's facilities, customer's parts, inventory and employees from both thief and fire. The building is connected to a central security system. In the event of breach of security or signs of fire the police and /or fire department are dispatched immediately to the facility and the company's management is contacted. The security system contractor monitors the functionality of the system at all times to insure it is in working order. Firefighting equipment is also inspected annually by an outside contractor. All firefighting equipment is properly identified and free from obstacles which may hinder access. The company utilizes a "sign-in" procedure for visitors and assigns a visitor badge to identify non-employee personal to Aviocraft staff. Upon completion of the visit the badges are returned to the receptionist and re-used.

### 1.1.1 Layout of Premises

The below *figure 1* illustrates the floor plan/ repair station layout of the Aviocraft facility.



**Figure 1- Facility Layout**

## 1.1.2 Equipment

§145.109, §145.103

Aviocraft shall possess and maintain in good working order all equipment, material & tooling required for each category/rating it holds. All inspection and test equipment shall be maintained and calibrated in accordance with the calibration control procedures. All equipment & tooling required shall be located on the Aviocraft premises and shall be under full control of the Repair Station.

All equipment, material & tooling required by Aviocraft for support of its ratings shall be suitable for the intended function, and shall be the equipment, material & tooling recommended by the manufacturer for maintaining or altering the applicable article. Aviocraft may substitute equivalent equipment, materials & tooling for those recommended by the manufacturer or operator provided the equivalent equipment, materials & tooling are suitable for the intended function, and the equivalency is validated by qualified personnel, and is acceptable to the overseeing authority. A listing of said Non- OEM equipment (test equipment) shall be maintained summarizing each of the pieces of equipment. Equipment noted on this listing shall be considered acceptable to the oversee authority and confirmed to adequately perform the tests required by the OEM component maintenance manual (CMM) or other approved data as applicable. This equipment will have operating instructions and maintenance schedules available for each piece of equipment.

## 1.1.3 Safety Equipment (PSE)

All safety equipment is maintained in sound working order and use of PSE is required to be used by maintenance personnel as applicable for the specific task.

## 1.2 Management and Support Personnel

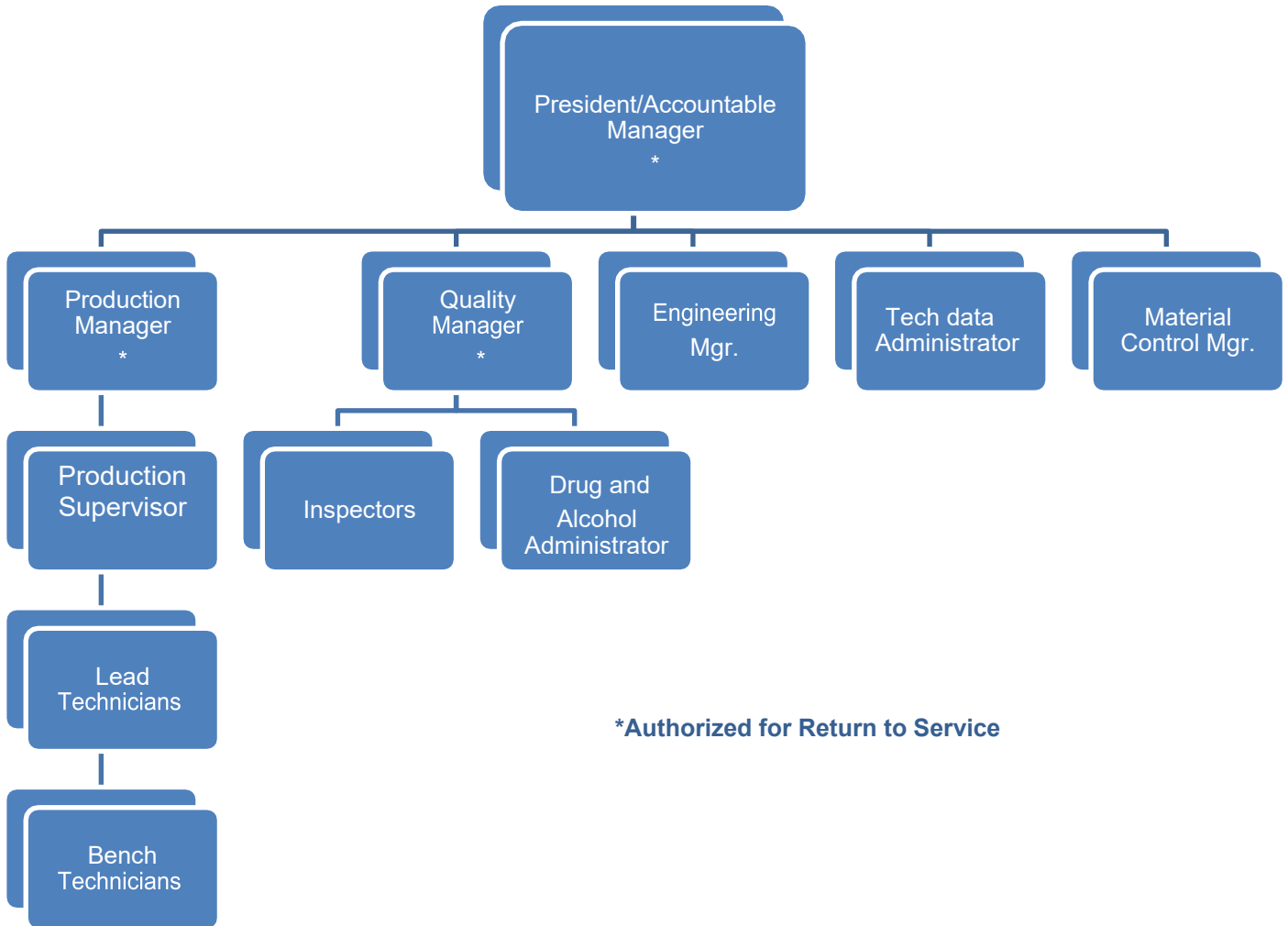
§145.151

### 1.2.0 Organization Chart

§145.209

**Figure 2** illustrates the company's organization chart, each key position and title for this Part 145 repair station. A current listing of names associated with these top-level positions/tiles are maintained electronically by means of a Key Personnel Roster and updated within 5 days should changes occur.





**Figure 2- Organization Chart-Company**

### 1.2.1 Key Personnel/Roster-Return to Service Staff

§145.209, §145.161, §145.157, *KMR-1222*

The President/Accountable Manager and or his designee will maintain and update electronic list(s) or computer-generated report(s)/ forms identifying return to service staff (Key Personnel Roster, *KMR-1222*), and support staff. These lists may be consolidated into one or more comprehensive report(s)

The President/Accountable Manager and or his designee insure that each person authorized to approve an article for return to service under the repair station certificate and operations specifications is certificated under (14 CFR) FAR part 65 and be fluent in the English language.

Any necessary revisions to the Key Personnel Roster will be made by the President/Accountable Manager or his designee within five (5) working days.

The following **table 5** lists the repair station key personnel, employment summary, title, and return to service authorization. Those maintenance personnel with return to service authorization are listed in electronic form *KMR-1222*.

Key Personnel Title *	Deputy	Employment Summary	Return to Service authorized
Pres/Accountable Mgr.	Quality Mgr./ Chief Inspector	Ref Electronic system file	Ref <i>KMR-1222</i>
Quality Mgr.	Final Inspector	Ref Electronic system file	Ref <i>KMR-1222</i>
Production Mgr.	Production Supervisor	Ref Electronic system file	Ref <i>KMR-1222</i>
Engineering Mgr.	Assistant Engineering Mgr.	Ref Electronic system file	No
Material Control Mgr.	Material Control Supervisor.	Ref Electronic system file	No
Inspectors	N/A	Ref Electronic system file	Ref <i>KMR-1222</i>
Lead Technicians	N/A	Ref Electronic system file	No
Tech Data Admin	Quality Mgr.	Ref Electronic system file	No
Drug/Alcohol Admin	Quality Mgr.	Ref Electronic system file	No

**Table 5- Roster of Key Management & Supervisory Personnel**

**Note-** The names of key maintenance personnel are maintained electronically via the company's operating/training software and are also listed in the *KMR-1222* form/report.

### 1.2.2 Content of the Lists(s)

The list(s) will at a minimum contains the information required per FAA regulation. In addition, employment summaries will be maintained for all maintenance personnel along with a record of completed training. The record of training, employment summaries and the list of management and supervisory personnel are available electronically either in PDF format or system generated via the Aviocraft training software <http://145training.com/Index.aspx>

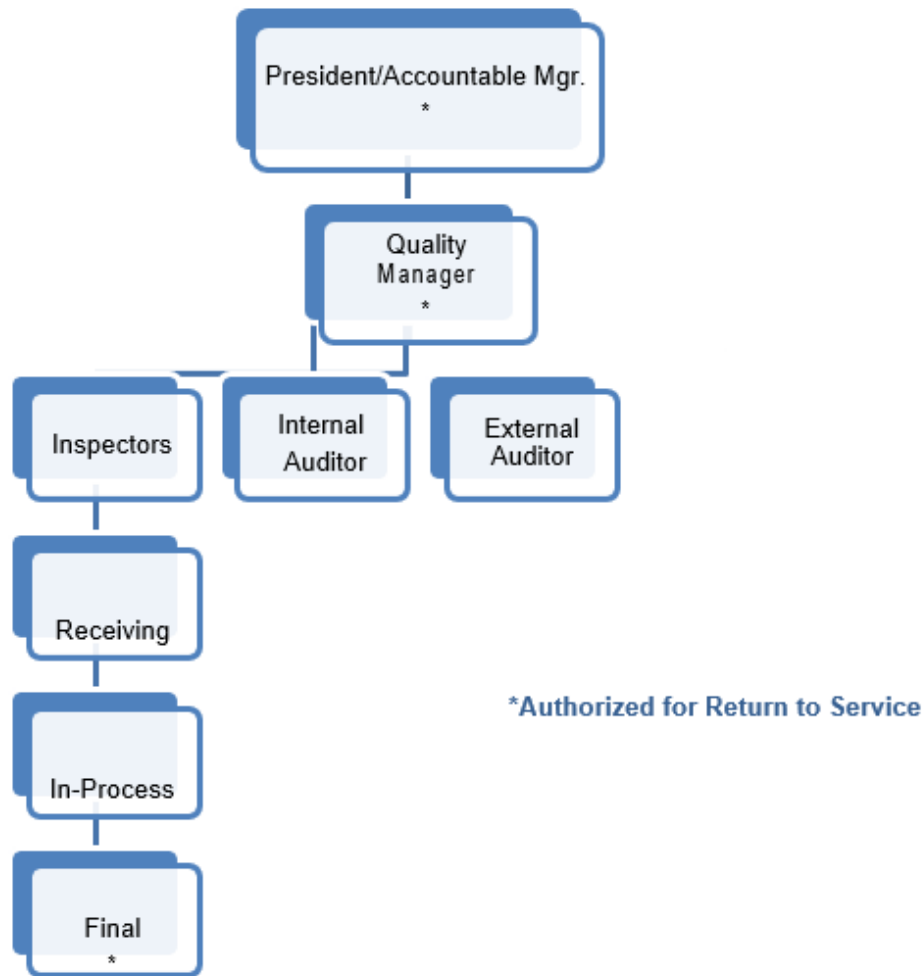
**1.2.3 Management of the List (s)**

A complete and current list(s) will be maintained on the company operating server for access by the President/Accountable manager or his designee. Any changes to the list(s) will be made by the President/Accountable Manager or his designee within five (5) working days of notice of change. A current and accurate version of the list(s) will be available to the overseeing authority upon request.

**1.2.4 Quality Organization Chart**

§145.209

**Figure 3** illustrates the organization chart for the Aviocraft quality department. The quality manager or his designee shall maintain an electronic listing of names associated with these top-level positions/tiles and shall update the listing within 5 days should changes be necessary. Employment summaries and training records shall be on file and maintained as described herein.



**Figure 3- Organization Chart-quality**

**1.4 Duties and responsibilities of management and support personnel**

§145.151, §145.209

The following section describes the key maintenance, supervisory, support staff personnel (positions) which may be utilized by the repair station and their over-all duties and responsibilities. All personnel are adequately trained in methods, techniques, practices, aids, equipment and tools to properly perform their assigned function. All Aviocraft employees read and write in the English language. Supervisors are appropriately certificated as a mechanic or repairman under part 65.

#### **1.4.0 President/Accountable Manager**

§145.151

The President/Accountable Manager is responsible for the overall operation of the repair station. He is responsible for assuring that all tests, inspections, examinations, and services performed conform to contractual requirements.

He is responsible for providing adequate equipment, materials and competent, qualified personnel, as necessary, pertinent to the operation of the repair station, in order that it may comply with all applicable Federal Aviation/EASA Regulations and service instructions.

The President/Accountable manager has structured the Quality organization such that its function is not influenced by operations or production and the responsibility of the quality manager is authorized via the President/Accountable Manager. The quality manager reports directly to the President/Accountable manager.

All duties of the President/Accountable Manager may be delegated by the President/Accountable Manager to any qualified assistant he deems necessary. However, such delegation does not relieve the President/Accountable Manager of all responsibilities.

#### **1.4.1 Quality Manager/Chief inspector**

§145.155, §145.151, §145.157

The quality manager is directly responsible to the President/Accountable Manager for the overall operation of the Inspection department.

He/she is responsible for directing, planning, and laying out details of inspection standards, methods, and procedures used by the repair station in complying with all applicable Federal Aviation regulations, applicable manufacturers' recommendations and other FAA approved data. He is also responsible for conducting the company's self-audit/internal audit program.

It shall be his duty to assist, supervise, and direct all personnel assigned to the Inspection department. It shall be his duty to ascertain that all inspections are properly performed on all completed work before it is released to the public, and that the proper inspection records, reports and forms used by this repair station are properly executed.

It shall be his duty to collect and maintain on file repair orders and inspection forms in such a manner that specific files pertaining to an assembly or unit can be located within a reasonable length of time.

It shall be his duty to maintain an access to pertinent FAA Specifications and Airworthiness Directives via the FAA web site [http://www.faa.gov/regulations\\_policies/](http://www.faa.gov/regulations_policies/). It shall be his duty to secure and maintain technical data on all units overhauled or repaired by the repair station. This material will consist of manufacturer's component maintenance manuals, service bulletins, repair specifications and other approved data.

He is responsible for making periodic checks on all inspection tools and calibration of precision test equipment. He shall devise and maintain a system of keeping records of checks and calibration of inspection tools and precision test equipment, taking steps to ensure that the established check periods are not exceeded.

It shall be his responsibility to ensure that no defective or un-airworthy parts are installed in any component or unit released by the repair station. He is responsible for the proper execution of Malfunction or Defects Reports when required. These reports shall be filed within 96 hours after the malfunction of defect has been discovered to both the FAA and the customer.

He is responsible for the final acceptance of all incoming materials including new parts, supplies, and the airworthiness of articles on which work has been performed outside the station by contract. He is responsible for preliminary, hidden damage, progressive, and final inspections of all units processed by the repair station.

He is responsible for maintaining and updating the employment summaries and rosters and to ensure that each person authorized to approve an article for return to service under the repair station certificate and operations specifications is certificated to do so.

He is responsible for the proper tagging and identification of all parts. It is his duty to see that rejected and unserviceable parts, after proper marking, are returned to the owner or, with his permission, are mutilated or disposed of.

He is responsible for submitting applications for additional repairman certificates for those individuals that are qualified and for surrendering repairman certificates to the FAA for employees that leave the employment of the company. He is responsible for ensuring that individuals holding repairman certificates are kept current as to addresses and rating changes.

The Quality manager reports to the President/Accountable Manager. The duties of the Quality manager may be delegated by him to any qualified assistant inspector in his absence as he deems necessary; however, such delegation does not relieve the Quality manager of the overall responsibility.

All Inspection personnel report to the quality manager and maintain the responsibility for all inspection steps to include; in process inspection, acceptance inspections, and final return to service inspections. Inspection personnel are required to be thoroughly familiar with all inspection methods, techniques and equipment used in their area of responsibility to determine the quality of airworthiness of an article undergoing maintenance, repair or alterations. All personnel must maintain proficiency in the use of

the various types of inspection aids to be used for inspection of the items undergoing inspection. Available to all inspection personnel are current specifications involving tolerances, limits and procedures as set forth by the manufacturer of the product undergoing inspection.

Files of maintenance manuals, engineering letters, and FAA regulations (etc.) are maintained electronically for use by any employee. It is the Inspector's responsibility to ensure all products are repaired or overhauled in accordance with applicable technical documentation and that the product meets the inspection criteria imposed by the company and Satisfactory Aerospace Inspection standards. Inspection personnel authorized for return to service must be certificated under FAR part 65 and understands, reads and writes the English language.

Proficiency of inspection personnel will be maintained through the Aviocraft FAA approved Training program.

#### **1.4.2 Occurrence Reporting**

The quality manager or his designee shall also monitor maintenance incidents/issues for incorporating additional training points/curriculum into the overall continuous training program.

#### **1.4.3 Auditing**

The quality manager or his designee shall also implement the company's internal-audit program insuring regular audits are conducted validating regulatory compliance. The auditor shall identify non-conformances and work with production personnel to ensure all non-conformances are rectified. Audits shall be to adequate detail to ensure that regulatory compliance is validated at the component type/category level.

#### **1.4.4 Inspection Personnel**

§145.155

All Inspection personnel report to the Quality Manager and maintain the responsibility for all inspection steps to include; in process inspection, acceptance inspections, hidden damage inspections and final return to service inspections. Inspection personnel are required to be thoroughly familiar with all inspection methods, techniques and equipment used in their area of responsibility to determine the quality of airworthiness of an article undergoing maintenance, repair or alterations. All personnel must maintain proficiency in the use of the various types of inspection aids to be used for inspection of the items undergoing inspection. Available to all inspection personnel are current specifications involving tolerances, limits and procedures as set forth by the manufacturer of the product undergoing inspection. Files of maintenance manuals, engineering letters, and FAA regulations (etc.) are maintained in the facility for use by any employee. It is the Inspector's responsibility to ensure all products are repaired or overhauled in accordance with applicable technical documentation and that the product meets the inspection criteria imposed by the company and Satisfactory Aerospace Inspection standards.

Inspection personnel authorized for return to service must be certificated under FAR part 65 and understands reads and writes the English language.

Proficiency of inspection personnel will be maintained through the Aviocraft FAA approved Training program.

### **1.4.5 Production Manager**

§145.153

The Production Manager is directly responsible to the President/Accountable Manager (or his designee) for the overall operations of all shop departments. It is his responsibility to plan, direct, layout, and coordinate the activities of all shop departments within the repair station to minimize delays and increase production and efficiency.

He is responsible for ensuring and maintaining all shop equipment and tools in a serviceable and working condition. He is responsible for ascertaining that all necessary work records are properly executed by the responsible personnel and providing surveillance and qualification of non-certificated personnel who perform maintenance for the repair station. He is responsible for maintaining the premises of the repair station in a clean and orderly manner. He is responsible for the proper handling of all parts while in the repair process.

He is responsible for the preservation of all units or parts during process through the shop and after work is completed. He is responsible for all stock storage, control, segregation, and identification of all items or units.

He is responsible for training and assisting his subordinates in proper procedures, methods of practices to be followed in each respective duty. He/she is responsible for ensuring that their department has the necessary maintenance manuals, service bulletins, Airworthiness Directives, and any other required technical data required in performance of the work to be carried out. He/she is responsible for maintaining all shop equipment and tools in a serviceable and working condition. He/she is responsible for ascertaining that all necessary work records are properly executed by the responsible personnel and provide surveillance and qualification of non-certificated personnel who perform maintenance for the repair station. He/she is responsible for the preservation of all units or parts during process through the shop and after work is completed. He/she is responsible for initiating requisitions for stock and material as required.

All duties of the Production may be delegated by him to any qualified assistant, as he deems necessary; however, such delegation does not relieve him from the overall responsibility.

Bench Technicians are responsible for the repair or overhaul in accordance with applicable technical documentation and company directives. All technicians report to the production manager or his designee.

#### **1.4.6 Production Supervisor**

§145.153

The Production Supervisor reports to the Production Manager and is responsible for the supervision of technicians, providing technical oversight, compliance with instructions for continued airworthiness (ICA), monitoring and scheduling work flow, ensuring work order instructions are properly carried out, training subordinate technicians in technical matters and other duties as assigned. The Production Supervisor is in affect a deputy to the Production Manager and shall also, carry out the duties of the production manager as described above during his absence of the Production Manager.

#### **1.4.7 Lead Technician**

§145.153

The Lead Technicians is directly responsible to the Production Manager (or his designee) for the overall operations of their departments. It is their responsibility to plan, direct, layout, and coordinate the activities of their departments.

He/she is responsible for training and assisting his subordinates in proper procedures, methods of practices to be followed in each respective duty. He/she is responsible for ensuring that their department has the necessary maintenance manuals, service bulletins, Airworthiness Directives, and any other required technical data required in performance of the work to be carried out. He/she is responsible for maintaining all shop equipment and tools in a serviceable and working condition. He/she is responsible for ascertaining that all necessary work records are properly executed by the responsible personnel and provide surveillance and qualification of non-certificated personnel who perform maintenance for the repair station. He/she is responsible for the preservation of all units or parts during process through the shop and after work is completed. He/she is responsible for initiating requisitions for stock and material as required.

#### **1.4.8 Bench Technicians**

The Bench Technicians (mechanics) are responsible for performing maintenance in accordance with applicable technical documentation and company directives. All Bench Technicians report to the production manager, production supervisor or lead technician depending on departmental assignments.



### 1.4.9 Engineering Manager

The engineering manager or his designee is responsible for insuring necessary maintenance data is available and properly stored, maintained and secured. The engineering manager shall be watchful of erroneous, ambiguous or incomplete information and report same back to the author. The engineering manager shall insure there is a common and consistent work order system in place to record all maintenance performed.

The engineering manager in conjunction with the quality manager is responsible for maintaining the capability list insuring adequate tooling, equipment and trained personnel are in place to properly carry out maintenance.

### 1.4.10 Material Control Manager

The material control manager or his designee is responsible for insuring inspection of components, parts, material, tools and equipment, the related classification, segregation and storage per the manufacture's recommendations. The material control manager is also responsible for purchasing functions, inventory control (including shelf life items) obtaining materials certifications from suppliers for goods purchased, adding new suppliers/ removing suppliers (with approval by this repair stations Quality department), procuring components and materials necessary to support the company's production and receiving goods into the company's material "stores" department.

### 1.4.11 Drug & Alcohol Administrator

The Drug & Alcohol Administrator reports to the President/Accountable Manager (or designee) and is responsible for the repair stations compliance with the company's FAA approve Drug & Alcohol program as listed in Part 7 herein.

### 1.4.12 Technical Data Administrator

The Technical Data Administrator (Tech Pubs) reports to the President/Accountable Manager (or designee) and is responsible for the repair stations compliance with Technical Data management program as described in the Technical Data Management procedure noted in Part 7 herein.

### 1.4.13 Supervisory Personnel Requirements

§145.153

All supervisory maintenance personnel shall read and write the English language, be certificated as a repairman or A&P mechanic be thoroughly familiar with the methods, techniques, practices, aides, equipment and tools to perform the maintenance, preventative maintained or alterations. The supervisor shall also be familiar with the interpretation of technical data to carry out the maintenance function.

### 1.4.14 Repairman Certification-Recommendation

§145.159, §65.101

Maintenance personnel recommended for a repairman's certificate shall first be employee at this repair station and meet the requirements of §65.101. The maintenance person must be at least 18 years of age, have at least 18 months of practical experience and be familiar with the use of tools, procedures,

inspection methods and other applicable equipment. The maintenance person must also be able to read and write the English language, be capable of adequately interpreting maintenance instruction manuals and be recommended by the President/Accountable Manager for the issuance of a repairman's certificate.

## 1.5 Personnel Assignments/Back-up personnel

In addition, the following **table 6** illustrates key subjects of the repair station and the associated primary and secondary (back up) personnel assigned for a specific topic.

Subject	Primary Responsibility	Back up person
AD Program	Final Inspector	Production Mgr.
Calibration Program	Quality Mgr.	Final Inspector.
Contract Review	Customer Service Mgr.	Quality Mgr.
Drug and Alcohol Program	Drug and Alcohol Admin	Human Resource Mgr.
Electronic record keeping	Quality Mgr.	President/Accountable Mgr.
ESD program	Production Mgr.	Quality Mgr.
Scrap program	Final Inspector.	Quality Mgr.
Self-Audit Program	Quality Mgr.	Final Inspector
Shelf Life Program	Material Control Mgr.	Quality Mgr.
Subcontracting Program	Material Control Mgr.	Quality Mgr.
SUP Program	Receiving Inspector	Final Inspector
Technical Data Program	Tech Data Administrator	Quality Mgr.
Training Program	Production Mgr.	Engineering Mgr.

**Table 6- Back Up Personnel**

## 1.6 Certifying Staff and Support Staff Qualification

§145.157

### 1.6.0 Certifying Staff (CRS)

Section 1.2.1 herein describes the certifying staff and support staff authorized to issue return to service certifications for this repair station. Certifying staff are qualified in accordance with section 1.7 herein and continued training is achieved in accordance with the Aviocraft training program as described herein.

All personnel authorized for return to service have received appropriate / adequate training or have at least 18 months of practical experience, are familiar with applicable regulations, can read / write the English language and are properly certificated under part 65.

### 1.6.1 Records of Management, Supervisory and Inspection Personnel

§145.161

All certifying staff, management/supervisors, inspection personnel and support personnel records are stored electronically for easy access. Records are retained for a period of 24 months (minimum) and are secure/managed in accordance with company's electronic record keeping system. Records i.e. Key

Personnel Roster, employment summaries, identity, DOB, training records, experience, certifications etc. are created by the operating software or electronically retained in DOC or PDF format.

Change to maintenance personnel records i.e. change in duties, reassignment or termination will be made to the appropriate record within 5 working days of the change.

## **1.7 Qualifying Inspection and Maintenance Personnel**

§145.151, §145.155, §145.211

All maintenance staff/personnel (certificated and non-certificated) are identified in the training program as described in section Part 4 herein. Minimum position standards, Job assessment, qualifications, supervisor/trainer, examinations, schedule and records are described (for each maintenance individual) in the training program.

The appropriate department manager (quality, engineering, production etc.) is responsible for accessing the qualifications and experience for individuals in their department and for insuring the training and continuous training (as applicable) is completed. In addition, the department manager shall insure that remedial training is accomplished for those individuals requiring subsequent and specific instruction.

All Inspection and maintenance personnel are qualified and trained to carry out inspections and maintenance practices which are compliant with this RMS/QCM and regulatory guidelines. Proficiency recurrent training is maintained by means of the Aviacraft training program

### **1.7.0 Inspection Personnel**

§145.211

Inspection personnel are required to be thoroughly familiar with all inspection methods, types/categories, (receiving inspection, preliminary inspection, in-process inspection, hidden damage inspection, final inspection/return to service inspections) techniques and equipment used in their area of responsibility to determine the quality of airworthiness of an article undergoing maintenance, repair or alterations.

All personnel must maintain proficiency in the use of the various types of inspection aids to be used for inspection of the items undergoing inspection. Proficiency of inspection personnel will be maintained through the Aviacraft approved Training program and assessment process as described in sections herein.

### **1.7.1 Qualifying Mechanics**

§145.151

The experience and qualifications of mechanics are specified in the training program and assessment process as described herein. Mechanics are expected to carry out repairs in accordance with approved maintenance data and perform such tasks / operations as described by the company's work order / planning instructions.

Mechanics are trained to follow and comply with work instructions and are qualified for the assigned product type/department (i.e. accessory, avionics, galley etc.) As required to insure compliance with work / maintenance instructions.

### **1.7.2 Qualification Specialized Activities - Non-Destructive testing/Welding**

The experience and qualifications of specialized personnel i.e. NDT inspectors and welders are specified in the training program and assessment process as described herein. Specialized personnel are expected to perform their respective function in accordance with approved maintenance data and accomplish such tasks / operations as described by the company's work order / planning instructions. Specialized personnel are identified in the company's computer-based training program. Each specialized individual is qualified and certified in their respective field in accordance with associated standards.

### **1.7.3 Assessment of Maintenance Personnel**

§145.151

Maintenance personnel (both non-certificated and certificated) are assessed (by their direct manager, supervisor or lead) to determine their ability to perform the assigned task or maintenance position. The assessment is based past job experience, existing training, prior certifications and on the job performance evaluations.

## **1.8 Drug and Alcohol Program**

§120

This repair station shall maintain and comply with an FAA accepted drug and alcohol program. The companies "Drug/Alcohol Administrator" shall be responsible for the administration of the drug/alcohol program and the Human Resource Manager is the backup person should the Administrator be unable to perform this function. The company shall utilize a third party "consortium" to ensure full compliance with the requirements of the FAA.

An employee that test positive on a drug/alcohol test will be subject to disciplinary action in accordance with Aviocraft LLC Code of Business Conduct and Employee Manual, page 19, paragraph 25 and an evaluation of suspect product will be conducted. The Quality Manager will be notified of the test results and an investigation will be conducted to determine if the results could have resulted in a non-conforming product. The Quality Manager will initiate the appropriate action to correct the possible defects on all suspected products in house and notify the customer of any defective product that may have been shipped.

## **1.9 Manpower Resources**

§145.151

The President/Accountable manager insures there are adequate and qualified staff levels of maintenance personnel as needed to support the organizations production demands/requirements.

Staff levels shall be maintained as needed to insure proper maintenance practices are upheld at all times.

## 1.10 Capability Listing

§145.215, §145.209

Aviocraft shall perform maintenance only on those part numbers specifically listed in the company's capability list as described herein. The listing is maintained by the quality manager in conjunction with the engineering manager. The capability listing is accepted by the overseeing authority and maintained using a record of revision method. The capability listing is electronically generated and controlled by the company's operating software.

Aviocraft utilizes a separate "capability listing" program to manage the list of components authorized for service at the repair station. The listing is computer generated based on the companies operating software. The listing describes the authorized ratings, ATA no, part number, part description, and associated technical documentation (i.e. a CMM or Repair specification) utilized to reestablish component/part airworthiness.

The Quality Manager or his designee is responsible to ensure that the receiving department properly identifies items not authorized or contained in the company's capability listing. New items are defined as those part numbers, which are not already listed in the company's capability listing or are not entered the company's computer database.

New items received from a customer that are not listed in the Aviocraft capability listing will automatically be rejected by the company's computer data base and be held in quarantine. The new item will be added to the accepted capability listing in accordance with the capability procedure or returned to the customer should Aviocraft decide it cannot obtain the necessary capabilities to add the new item to the accepted capability listing.

In accordance with the companies accepted "Capability Procedure No *NCP-120705*", the repair station shall maintain a current detailed listing of each part number covered in the repair station authorized ratings. The listing shall reflect each item the repair station is authorized to service along with appropriate information such as described above. No end item part number shall be serviced by this repair station without first being listed on the company's capability list.

A self-evaluation of the capabilities list will be conducted by the President/Accountable Manager or authorized delegate. Any additions will be submitted to the overseeing authority within 30 business days for acceptance or as previously agreed with the overseeing authority.

## Part 2 Quality Control Inspection System and Procedures

### 2.0 Inspection System-General

§145.211

The Q.A. Manager is responsible for full compliance with all procedures outlined in this system as appropriate to any item being inspected, repaired, overhauled, or altered by this repair station. An event that may affect the company's performance and or the quality of any product will be reported to the customers purchasing and quality department for review and evaluation

### 2.1 FAA Inspection

§145.223

Aviocraft extends to the FAA full access to inspect the repair station at any time to determine compliance with this RMS/QCM and appropriate FAA regulations. This access also extends to Aviocraft subcontractors (certificated and non-certificated) and is so stipulated in the associated repair/purchase orders to the subcontractor(s).

### 2.2 Hidden Damage Inspection

§145.211

Prior to the commencement of any work, all units that have been involved in an accident will be inspected for hidden damage. This inspection shall be made by the Quality Manager (or he/her designee) and shall include areas adjacent to the obviously damaged member or components. The results of this inspection shall be recorded in the hidden damage on the company repair work order Form. This information will be communicated to the customer by the Quality Manager and / or the Quality. Manager will notify the appropriate Aviocraft Customer Service representative who in turn will notify the customer.

### 2.3 Preliminary Inspection

§145.211

The Q.A. Manager ( or he/her designee) is responsible for the performance of appropriate inspections including functional and nondestructive test if required to assure that all units delivered to the repair station for maintenance, alteration or repair under the privileges of the repair station certificate are subject to a preliminary inspection to determine the state of preservation and any defects on the items involved. This inspection will also be an evaluation of the unit to determine the customer requested work scope and the required maintenance or alteration actions to include SBs and Ads time since overhaul and traceability of life limits listed on the customer purchase orders. This inspection will be recorded on the work order Form along with any discrepancies noted. It will remain with the applicable inspection records until the unit is released for service. Appropriate supplemental forms will be used to record the results of functional test. Those forms will show the work order number and will be attached to the work order.

## 2.4 Tear down Inspection

§145.211

The Q.A. Manager (or he/her designee) is responsible to ensure that the repairman performs a functional test (if applicable) that is witnessed by an inspector before tear down inspection. After disassembly, the unit will be inspected to ensure discrepancies are listed on the work order Form in accordance with applicable overhaul manual, customer specific manual or FAA approved repair/overhaul procedures. This inspection will be used to communicate to the customer defects that are outside the scope of repair and if any corrective actions should be taken during the maintenance. The inspector's initial shall be placed on the work order indicating tear down inspection has been accomplished in accordance with the appropriate documentation.

## 2.5 In-process Inspection

§145.211

All units undergoing repair will be inspected in accordance with manufacturer's recommendations, approved methods and procedures and/or company FAA accepted documentation. The Quality Manager (or he/her designee) is responsible to see that these inspections are conducted by designated inspectors listed on the roster and authorized to perform these functions. The work order operations form describes in detail the repair/overhaul and inspection requirements of each individual component by part number. The in-process inspections will be listed on the work order operations Form that is a permanent attachment to the work order.

In-Process inspections shall include inspection after teardown and cleaning, during build-up and assembly, after completion of assembly and shall include all special test and calibration if appropriate. These inspections will be recorded on the work order operations Form or additional test sheets that will be attached to the work order Form. The repairman will initial and date the work order and the inspector will initial and the work order showing acceptance. If the in-process inspection is not satisfactory, the inspector will note the reason for rejection on the work order and the unit will undergo rework in accordance with the manufacture's maintenance manual and or other FAA approved documentation.

After the rework is accomplished, these parts shall be returned to the inspection department for re-inspection. If found satisfactory, the in-process inspection will be accepted showing the inspectors initial/stamp and date and attached to the repaired part.

All units which require a special test or calibration after assembly will be given such a test by the supervising personnel witnessed by the inspector. The records of this test shall contain all required readings, signature of the supervising personnel, and signature of the inspector witnessing the test and approving the unit.

## 2.6 Final Inspection

§145.211, §43.9

The Quality Manager is responsible to see that final inspections are conducted by qualified inspectors that are listed on the roster and authorized to perform this function. This inspection shall be conducted after all other operations have been performed and the unit is submitted to final inspection for acceptance and return to service.

The final inspector will visually and dimensionally inspect the unit if required and conduct a documentation review of the work order to ensure all items required in the repair/overhaul of the unit was completed. If the inspector is satisfied with the unit and the paperwork, the inspector will initial and date the final inspection block and the documentation review block of the work order showing acceptance. Should the inspector reject the unit, the inspector will note the reason for rejection in the work order data base which will generate a red reject flag in the lower right-hand corner of the work order in the data base. Anyone that should view the work order in the data base will visually be able to see that the unit was rejected and is pending rework and re-inspection.

The unit and work order will be returned to the department responsible for the rework, where it will be performed in accordance with approved or acceptable technical data. Upon final acceptance of the rework by the inspection department the work order will be accessed and an acceptance entered to clear the reject. The inspection department will generate FAA Form 8130-3 (Airworthiness Release Certificate) along with a teardown report describing the maintenance performed and a listing of parts required in the repair/overhaul process. The completed units will be tagged with the teardown report and original 8130-3 form, signed and dated by the authorized inspector certificated under (14 CFR) FAR part 65. The 8130-3 Form shall include appropriate identification of the unit such as serial number, part number, customer EO's, SBs or Ads the companies work order number, and customers purchase or repair order number.

## 2.7 Record of Special Inspections

§145.211, §145.219

Each inspection conducted - preliminary, hidden damage, progressive, 100-hour, periodic, dimensions, condition, hydrostatic, functional test or test required by the manufacturer and any other appropriate Information obtained during various stages of these inspections shall be recorded in the appropriate space on the work order Form.

## 2.8 Record of Test

§145.211, §145.219

The records of all tests and/or calibrations shall be entered on the company work order Form as appropriate to the unit undergoing test or calibration and such records will also be signed by the workman and inspector and made a part of the maintenance record.



## 2.9 Inspection Personnel / Inspection Signatures/Stamps

§145.55

This repair station shall keep on file a current roster of key management, supervisory, and technical personnel responsible for the management of the repair station and inspection personnel who will make final airworthiness determinations prior to releasing an article to service. This roster of key personnel shall be kept in the quality department and will identify the individuals authorized to sign-off inspection steps and / or issue "Return to Service" documentation.

A current signature, initials and/or inspection stamp shall be affixed next to everyone authorized to perform an inspection function. The inspector's initials, signature, or stamp shall be acceptable for sign off on company work orders.

The President/Accountable manager or his authorized delegate shall be responsible for maintaining the proficiency of the inspection team through verbal and written communication with said inspectors. Updates to training records will be made as required. Certification of repairman will be accomplished in accordance with (14 CFR) FAR 65.101.

## 2.10 Inspection Stamp Control

Inspection stamps will be controlled by the Quality Manager. Inspection stamps issued by inspectors will be listed on the roster of key personnel along with the inspector's signature and initial. Should a stamp become lost that number will be removed from service and a new stamp issued with a different number. Inspectors that leave the company will have their stamps held for a period of six months before it can be re-issued to another inspector.

*Note- Aviocraft does not currently use stamps for inspection purposes. Only signatures, electronic signatures or initials are used.*

## 2.11 Required Inspection Items (RII)

§145.205

Any maintenance operations which, if improperly performed, could be critical to the safe flight of an aircraft will be given a required inspection. A qualified inspector, familiar with all inspection methods, techniques, and equipment will be assigned to determine the quality of airworthiness of the article involved. When work is performed for an operator under the continuous airworthiness requirements of FAR Parts 121, 125, 127, and 135, the RII items specified by the operator will be maintained as RII items. Aviocraft does not typically perform maintenance on RII items.

## 2.12 Airworthiness Directives Procedure

§145.109

It is the quality manager's responsibility or his deputy to insure all maintenance performed is compliant with known airworthiness directives (AD) as directed by the air carrier, owner or operator. The quality

manager or his deputy shall review customer repair orders for AD directives and insure compliance is achieved prior to returning the component to service.

The quality manager or his deputy shall access relevant and current airworthiness directives via [http://www.faa.gov/regulations\\_policies/airworthiness\\_directives/](http://www.faa.gov/regulations_policies/airworthiness_directives/) other viable and available sources. Those AD's which apply to components being serviced by Aviocraft shall be reviewed to insure full compliance and will be dully noted on the 8130/Form 1 maintenance release certification.

The company shall maintain a monthly log (electronic or paper) recording that an "AD review" was performed. For record will site the date the review was performed and the individual who performed the review.

## **2.13 Return to Service (CRS)**

§43.9, §42 Appendix B and §145.213

Only authorized personnel as listed/maintained in the return to service/key personnel roster are permitted to execute the return to service certifications. The return to service certification (8130) shall be properly completed and executed in accordance with current regulatory (FAA) guidelines and shall refer to the Aviocraft work order/ maintenance records for maintenance carried out. All maintenance records are stored electronically and easily accessible to air carriers, operators, owners, customer or regulatory agencies.

Prior to the execution of the return to service certification all required information (i.e. details of the work completed, date and location where maintenance was completed and the person issuing the release) shall be first verified by the quality manager or his deputy. In addition, the quality manager or his deputy shall verify that all required tasks / operations were properly completed and that work records are accurate.

In no event, shall a release to service authorization be issued if known discrepancies exist i.e. missing AD compliance, work not in compliance with approved data or other discrepancies which may have consequences to airworthiness.

In the event the maintenance release is found to be erroneous in any way (i.e. issued mistakenly, incorrect information etc.) the quality manager or his deputy shall contact the air carrier, operator, owner or customer as necessary to correct the discrepancy or cancel the maintenance release.

Form 8130-3 Authorized Release Certificate will be utilized by this repair station in accordance with aviation regulations. This form will be used for return to service for completed maintenance and will list in block 12 the work performed in accordance with applicable maintenance manual along with the revision and date of the manual used. The 8130-3 form will be attached to the unit along with teardown report that will provide the following information; Customer name, customer R.O. number, OEM manufacture, incoming part number and serial number, incoming work required by the customer and customer specific documentation to be used in the repair/overhaul process, outgoing part number and

serial number, maintenance manual with revision date and revision number and file location used in the repair/overhaul.

The work order will have the customers reason for removal listed (if furnished), preliminary inspection, pretesting information, hidden damage inspection, teardown findings, corrective actions performed, modifications/service bulletins/AD's incorporated, a description of the work performed with the technician and inspector initials involved in the repair process.

The form will also list the maintenance manual with revision number and date used in the repair, a listing of parts required in the repair of the unit and a maintenance release with the inspector name authorized to return the unit to service. Each 8130-3 shall is signed only by persons certificated under part 145 regulations as authorized by the President/Accountable manager or is deputy. The 8130-3 is a computer-generated form.

In all cases where major alteration is involved, Form 337 will be completed per (14CFR) FAR Part 43.9 and (14CFR) Far Part 43, Appendix B. The quality manager or authorized inspector in those areas will be responsible for establishing that the repair or alteration was made in accordance with the requirements of (14 CFR) FAR Part 43 and will sign the FAA Form 337.

## 2.14 Internal / Self-Audit

§121.363, §135.413, FAA AC 145-9

internal audits are conducted and managed using the company's [145Audit.com](http://145Audit.com) software program as described herein and may include an audit sample at the product/component or by department level. Product/department audits may be performed at the discretion of the quality manager should audit focus be required at such level.

The quality manager shall maintain a self-audit program, which periodically reviews the inspection programs of the company (to include proper traceability of materials) and verifies all operations and procedures are being performed as required by this quality manual. A planned 12-month internal audit schedule will be established and maintained by the Quality Department. These self-audits shall be performed at a minimum of two audits a year and shall not exceed 7 months between internal audits.

These audits shall identify all discrepancies (at a product level as necessary) along with corrective action. Should similar non-conformance exist the President/Accountable manager or is deputy shall establish the "root" cause of the problem and initiate corrective action plan. The bi-annual audit reports shall be recorded and electronically stored for easy access. The audit shall be performed from a "check list" type inspection evaluation listing key areas of the inspection system.

The quality manager or his designee will perform the internal audit or will select the internal auditor which may include outside inspection consultants. Auditors will be appropriately qualified and thoroughly familiar with the area and or requirements of the category or department they are auditing. Auditors will not be allowed to audit an area they are directly in charge of. Auditors may be selected based on: In-house training, Qualification by an outside agency, nationally known certification, previous experience or Familiarity with the overall operation and processes of Aviocraft. Continued

qualification will require that auditors participate in at least one audit per year (internal or supplier).

The Auditor will, summarize all conclusions and checklist findings, discrepancies and unsatisfactory items shall be sufficiently detailed on the audit finding and corrective action form. Discrepancies and unsatisfactory items shall be classified minor or major for corrective action purposes based on the definitions section of the Internal Audit Procedure.

The Self-Audit Procedures consist of the following steps:

- Audit of areas noted on the "Audit Check List"
- Auditor meets and review findings
- Corrective Actions are listed and action item assigned
- An Audit Report is created and issued to the President/Accountable Manager.
- After the issuance of the corrective action, the Quality Manager (or designee) is responsible to ensure the corrective action is completed within (15) days for Major Findings and within 30 days for Minor findings.

## 2.15 Corrective Action procedure and Quality Audit

§145.211

Internal audits and issuance/follow-up of corrective actions are carried out as described in this section using the [145Audit.com](http://145Audit.com) software program. All related forms, documents, records, and signatures are electronic and available for review using the 145Audit software program. Corrective actions are issued to the responsible department manager for determination of root cause and method for correction. Corrective action reports are reviewed by the quality manager and the President/Accountable manager to insure adequate resolution has been achieved. The quality manager shall brief the President/Accountable manager on corrective actions and corrective action resolutions by means of a formal meeting. Once the corrective action is settled to the satisfaction of the Accountable manager, he shall sign the corrective action form.

The quality manager or his designee will, summarize the discrepancies and unsatisfactory items and they shall be sufficiently detailed on the Corrective Action form. Discrepancies and unsatisfactory items shall be classified, using the Aviocraft Risk Assessment Matrix, as **minor** or **major** for corrective action purposes based on the definitions note in the self-audit program.

Corrective actions will be submitted to the responsible individuals for review and corrective action if necessary. The responsible individual may choose to assign the corrective action process to others or may provide the corrective action himself.

Regardless of whom the action is assigned to, corrective action should be completed within the following guide lines:

- Minor Findings – 30 Working Days
- Major Findings – 15 Working Days
- Observations –No Corrective Action Required

Response to a corrective action request should be completed within the time indicated unless specified

otherwise by the Quality Manager. If a response to a corrective action is not received within the specified time, the Chief Inspector must be contacted for a one-time extension. Extensions must be given in e-mail or written format. For response's not given in a timely manner, the Quality Manager will notify management, up to and including the President/Accountable manager, when necessary, until acceptable action is taken.

### *Corrective Action Review*

Once the responsible person or in the case of a subcontractor has responded to the Corrective action (CAR), it shall be returned to the manager for review of the following:

- Review of proposed corrective action
- Indication if the corrective action is satisfactory
- Inspector's signature signifying completion and implementation of corrective action or rejection by the Quality Manager signifying that proposed corrective action is not acceptable.

An acceptable corrective action is that which addresses each of the following concerns: the root cause of the nonconformance has been identified, action has been taken to correct the nonconformance, and action has been taken to correct the root cause of the nonconformance to ensure that it will not re-occur.

Once all issues have been resolved and the CAR has been approved, the inspector and or auditor shall then forward all original documentation to the quality manager for final analysis and approval. Final acceptance of the corrective action will be indicated by the quality manager's signature and date on the corrective action form.

In some instances, it may become necessary for a follow-up audit to confirm the corrective action has been implemented and it was sufficient to prevent recurrence. Aviocraft conducts this follow-up during each subsequent self-audit by reviewing the previous 2 self-audits conducted by authorized Aviocraft Internal Auditors. The follow up includes a review of the audit report, findings, and corrective actions to verify the corrective actions remain effective and sufficient to prevent recurrence. Completion of this follow up is documented in accordance with internal audit procedures.

Upon completion, of the corrective action process, the complete internal audit and associated forms will be electronically filed for easy access. Internal audit records and corrective actions shall be maintained for a minimum of 2 years.

Outside agency audits may be arranged and scheduled as necessary to accommodate future quality requirements or new programs.

The corrective action forms and processes listed may be used to address external audit issues found during audits performed by customers, or other agencies Records of external audits and corrective actions shall be maintained for a minimum period of 3 years.

## **2.16 Suspected Un-Approved Parts (SUP)**

§145.211

The Suspected Un-approved parts program (SUP) is the responsibility of the accountable manager and or his authorized designee. All incoming customer units (work product) will be checked by a receiving inspector for conformity to repair orders authenticity. The customer documentation shall validate the authenticity of the unit received. Any parts suspected as “Bogus” or “SUP” shall be quarantined immediately and reported to the FAA using Form 8120-11 “Suspected Unapproved Parts Report”. Refer to other section(s) elsewhere herein for inspection procedures regarding incoming raw materials, subcontracted items and parts required to carry out maintenance.

## **2.17 Audit Records**

§145.219

All external and internal audit records shall be retained electronically for a period not less than 36 months.

## **Part 3 Maintenance System and Procedures**

### **3.0 Work Processing**

§43.7, §65.81, §65.103, §121.375, §135.433, §145.151, §145.153, §145.155, §145.157, §145.163, §145.211 & §145.219

All maintenance personnel performing work at Aviocraft are properly trained in accordance with the companies FAA approved training program, are certificated (if applicable) and are furnished the appropriate tool/equipment (calibrated as necessary), current technical data, traceable materials and adequate facilities to properly carry out maintenance. In the event said items are not in place (for a work product) employees are encouraged to bring the deficiency to the attention of the President/Accountable Manager or his designee for appropriate corrective action. No work product shall be processed unless the deficiency is corrected. If for some reason the deficiency cannot be corrected the work product shall be returned to the Air carrier, owner, operator or customer.

### **3.1 Maintenance Data**

§145.109

Aviocraft shall perform maintenance in accordance with maintenance work instructions which have been previously approved by the overseeing authority (FAA) i.e. component maintenance manuals (CMM), technical orders, service instructions, service bulletins, repair specifications or other previously approved technical data.

#### **3.1.0 DER RS repairs- new approved data**

In the event the required repairs exceed the scope of or deviate from previously approved data (i.e. a CMM) Aviocraft may develop additional repair methods i.e. repair specifications (RS), engineering drawings, work instructions, schematics or other data. These additional repair methods/data shall be first approved by the FAA by means of a DER/ Form 8110-3 approval prior to use. Approval of Repair specifications shall also include a RS cover sheet signed by the authorizing DER. Aviocraft maintains an electronic data base of all DER approved data which is controlled, updated and made available to repair station staff in accordance with electronic record keeping procedures.

In the event the repair data deviates from OEM data or customer data, the customer shall first approve the use of such data by means of a letter, email or phone call. Upon approval, the data (i.e. DER approved repair specifications) shall be used during the repair of customer products and the 8130/ EASA form 1 shall refer to the data used to perform the maintenance. Customers don't always issue formal approval documents but Aviocraft endeavors to secure same either by means of a reference in the customer's repair order or via some other formal means; email, letter etc.

The companies operating software creates a flag for part numbers having a DER program available and then creates a link between the DER, the part number and the customer number assigned by the system. If the customer flag is set to yes, the system will not allow the issuance of an 8130-release

form unless the capability file includes a customer approval for a given part number / DER. This is controlled by the President/Accountable Manager or his authorized designee.

### 3.1.1 Fabrication of Parts

Ref; FQCS-110711

During the process of maintenance Aviocraft may fabricate/manufacture parts in accordance with approved data (DER repair specifications or OEM work instructions). All fabricated parts are controlled, inspected and identified in accordance with Aviocraft Fabrication Quality Control System FQCS- 110711.

### 3.2 Work Orders

§145.311, §145.219

A company work order, Form (electronic form), containing the customer's name, date and appropriate identification (S/N, Repair order number, etc.) required to identify any part or unit will be utilized by this repair station. The work order and associated forms/work records shall record completed maintenance. This work order shall describe work that is to be accomplished (in the English language), meet regulatory information requirements, list the technical data (and revision) utilized to carry out the maintenance. Work to be accomplished shall be in sufficient detail that it will be readily understandable to the assigned technician. Space will be provided for the electronic signature/initial, signature or initial of the repairman who supervised the work and for the electronic signature/ initial, signature or initial of the inspector who inspected the work as applicable.

The work order may also include sub-work instructions (operations/router/planning or additional maintenance instruction) providing additional details and guidance to the repairman to insure proper maintenance is carried out. Instructions may include specific test instructions, special use of tools and equipment, critical inspection points, illustrations etc.

Maintenance performed shall be reflected on the work order form and the work order number shall be affixed to the work product (tracking number/tag) to ensure proper identification of the unit throughout the maintenance process. All maintenance records shall be clearly legible and retained for a minimum of 24 months.

#### 3.2.0 Scope of work

Work performed will first be approved by the customer and any work scope required which would go beyond the initial scope shall be approved by the customer. All performed maintenance shall be accomplished in accordance with approved data. In the event the maintenance required goes beyond customer specified work instructions (i.e. "repair IAW CMM") the customer shall so be notified. An alternative work scope (i.e. DER repair) will be offered (if available) for approval.



### 3.2.1 Handling of Parts (including non-repairable items)

All parts in process through the shop will be properly identified by work order number either etched on the part (if appropriate) or with a bar code tag attached to the part or placed in identified covered stands, baskets, racks, or bins (whichever is appropriate) in order that all parts for each unit will be appropriately segregated from other units and protected from damage or contamination. Workorders for each part will either be with the part or maintained in a rack located in each shop pending work processing.

The teardown report and maintenance release FAA form 8130-3 will be attached to completed units, which have received final inspection and found serviceable. Red tags shall be attached to rejected parts that are awaiting customer disposition.

### 3.2.2 Non-Conforming parts/Quarantine (QT)

§145.101 §145.103

The company maintains a “quarantine” area to control non-conforming incoming parts. This area is named as “QT” and is the step used in the company’s operating software to track parts held in quarantine. Parts that are received without customer documentation are not in the company’s current capability list, have the incorrect S/N or do not match the documentation received from the customer (such as the P/N on the part does not match the P/N on the repair order) are directed to the “QT” area.

The “QT” area is monitored and maintained by the quality manager in conjunction with the engineering department. Parts held in this area are tagged with a distinguishing colored tag noting the customer, s/n, part description, customer repair order number and the Aviocraft work order number. The tag is removed when the discrepancies are cleared and the part is authorized to be place into work in progress (WIP). Either the quality manager or receiving inspector shall remove the unit from the QT step when the unit is cleared for WIP.

### 3.2.3 Scrap Program

§145.211, SPP-020710

In accordance with Aviocraft Scrap Parts Program, Individual rejected parts or non- repairable parts will be processed through final inspection where they will be tagged with a properly executed rejected parts tag, Form ST106 (Red Scrap Tag) attached to the part and held in the bond room pending customer notification and disposition to either return as is or scrap in house. The red tags shall be appropriately completed to identify the part number, serial number, and customer and include the reason for rejection. It is the responsibility of the President/Accountable Manager. (The backup person is the Quality Manager) to manage the control and verification and disposal of scrap parts.

The red tags will be properly executed and initialed and or signed by the appropriate inspector only and remain attached to the parts or units being returned to customer. All rejected parts shall be segregated from work in process and held in the bond room and separated from work in process. All parts dis-positioned as scrap in house shall be mutilated in such a way as to lend them unusable for its intended use. A record of scrapped parts will be maintained in the work order data base that can

be reviewed electronically or printed as a hard copy. The information contained on this report is the work order number that will give traceability to the serial number, description of the part, its part number the name of the customer and the status (Scrap in House or returned to the customer). This information will be retained in the work order data base for a minimum of two years.

Parts are considered scrap when they cannot be returned to service in accordance with FAA approved data. After test and evaluation or visual inspection, this repair station will make the scrap determination based on maintenance criteria stipulated by the OEM's technical data, customer technical data or Aviocraft technical data as approved by the FAA.

#### *Operating Software:*

Aviocraft uses software to track and process its scrap parts program. Based on inspection and /or test data, a part may be determined as scrap and not fit for return to service. Should this occur, the technician shall record his/her findings in the teardown section of the applicable shop work order and flag the work requested and sub step fields as "SC" (scrap).

#### *Inspection procedure:*

The scrap parts shall be presented to the inspection department for disposition. Upon inspection and verification, the part is scrap; the "red" scrap tag shall be affixed to the part. The part number, serial number, work order number, customer name and reason for scrap shall be recorded on the tag. The tag shall be affixed to the part and routed to the secure scrap bond room for retention pending customer disposition. The inspector shall confirm the sub step and work requested fields of the work order are populated with "SC". This denotes the part was scrap. A Scrap notice form (system generated) shall be printed and presented to the customer for disposition. Upon direction of the customer the part shall be returned and/or scrapped on site.

If the customer disposition is scrap on site, the unit will be mutilated IAW FAA Order 8120.11. A picture will be taken of the mutilated part and stored to the work order record. A scrap certificate will be issued to the customer after mutilation of the unit has been accomplished.

If no direction is received from the customer over a 6-month period, the company shall scrap the part locally in accordance with this procedure.

#### *Records:*

The scrap record will be available for a minimum of two years in the company's operating software. Reports can be generated at any time summarizing those units that have been scrap over any period and for every customer.

#### *Storage:*

All scrap units shall be secured and stored in the Aviocraft scrap bond area. This location is kept locked always except when opened by an authorized inspector.

### *Customer Disposition:*

Upon a notice of scrap, the customer shall be formally notified (email or letter) and requested to furnish a disposition; scrap locally or return the part. If the part is to be returned, it will be returned as stipulated by the customer and a shipping notice created in the system. The scrap notice shall be affixed to the part along with the red scrap tag. Upon shipment, the work order shall be closed.

### *Scrap on-site:*

Should a customer elect to have their part scrapped at this repair station, the inspection department shall insure the part is mutilated in such a way to render the part clearly scrap. A scrap certificate will be issued to the customer after mutilation of the unit has been accomplished. The red scrap tag shall remain affixed to the part until it is permanently thrown away (i.e. melted down by a local recycling company).

## **3.2.4 Preservation of Parts**

§21.130, §39.15, §43.2, §43.11

All work product repaired or overhauled by this repair station shall be preserved in accordance with the manufacture's recommendations or other applicable standard procedures. The procedures used, dependent upon the units, can consist of preservation, wrapping, sealing, etc. By methods which would be appropriate to the parts or units to assure protection until the unit or part is placed into service.

All units repaired or overhauled by this repair station shall be issued directly to shipping for shipment to the customer. All units will be shipped IAW ATA 300 Specification for Packaging of Airline Supplies, unless the unit is awaiting shipping instructions from the customer or there is a special circumstance, then the unit shall be stored in the company "shipping area" until the part is ready to ship.

## **3.2.5 Shipping**

§43.9, §121.367, §135.425, ATA300

All air carrier, operator, owner or customer units (work product) shall be returned in the appropriate shipping container (or a customer supplied container) insuring the work product is well protected to minimize the potential for shipping damage. Units shall be properly identified with the work order number, part number (including dash numbers or letters), serial number, customer repair order number, 8130 maintenance release (if applicable) or Return as is (RAI) documentation. The shipping department shall insure that the unit's original identification matches the maintenance record documentation. The Receiving & Shipping procedure further describes the shipping routine.

## **3.3 Maintenance Program Compliance- Air Carrier**

§145.205

Before any work is performed, the quality manager or his designee will, in the case of work to be performed for an air carrier under the continuous airworthiness requirements of (14 CFR) FAR Parts 121, 125, 127, or 135 shall review air carriers repair orders to ensure that all necessary current information, equipment, technical data and trained personnel are available and specifications are

included and listed on the work order that will accompany the article through the repair process. All air carriers' manuals will be maintained and controlled by the tech data control administrator as noted in the documentation control section of this manual. The company will ensure that the air carrier's customer specific technical data is listed on the work order form. Audits will be conducted on air carrier's manuals as required by the air carrier and revised as new instruction is supplied by the air carrier.

The identification of any component received for maintenance that does not coincide with the air carriers R.O., components received without proper documentation or which will require maintenance which will deviate from the air carrier's manual or OEM specification if called for on the customer's repair order (such as a Aviocraft DER approved process) will require customer notification prior to any further work being performed. Aviocraft Customer service representative(s) will be notified of the discrepancy and they shall contact the customer for further instructions. The component will be placed the quarantine (QT) area and held until the discrepancy is resolved by the customer and Aviocraft.

The Aviocraft customer service department shall review the air carriers repair order to determine specific repair order requirements or specific instructions. Any unique or specific instructions i.e. special reporting requirements, data capturing, reliability reporting programs etc...shall be so noted and complied with.

Specific instructions shall be delineated in the work order via the Aviocraft operating software via the "customer specific-EO" routine. This feature allows for customer specific requirements to be permanently recorded in the customer database for a specific part number. This causes the requirements to be displayed in the "EO" section of the work order. Technicians, planners, engineers and other staff members then insure compliance with customer specific requirements. In addition, the customer repair order, upon receipt of the repair component, is digitally scanned into the customer repair order database. The repair order is then viewable by all maintenance staff to insure repair order compliance.

As a normal course of business Aviocraft advises air carriers (our customers) of recurring failure modes observed while performing maintenance. This information is used to offer alternate repair solutions (such as DER programs) or assist in improving the air carrier's maintenance program.

In addition, the air carrier is advised (as necessary and for example) of recurring errors in air carrier documentation, missing documentation, shipping damage or apparent poor workmanship on previous repairs. The Aviocraft customer service and marketing departments routinely communicate with air carriers repair coordinators / staff to insure awareness of noted deficiencies.

### **3.4 Optional Modification Procedure**

Aviocraft shall incorporate regulatory approved manufacturer, air carrier / customer modifications (i.e. service bulletins, air carrier's technical data) if so, directed by the air carriers / customer work instructions/repair order. Modifications will be incorporated in accordance with approved technical

data and the completed modifications shall be recorded in the associated work order form 100 as described in section 2.9 herein.

In addition, Aviocraft shall incorporate internal modifications (i.e. approved DER repairs) to work product in accordance with approved technical data. The completed modifications shall be recorded in the associated work order as described elsewhere in this RSM. Only air carrier/customer directed modifications shall be incorporated into work product as directed/approved by the air carriers/customers repair order / work instructions.

### **3.5 Maintenance Documentation-Work Records**

§145.211, §145.219

Aviocraft utilizes a paperless / electronic operating system to generate; use and complete maintenance documentation i.e. work orders, teardown reports, test records, record of inspection and shop routers/planning/operations. The work records describe the work and inspections performed; the name of the person completing the work, the technical data used to complete the work (including revision level), test records and other applicable information i.e. minor/major alterations performed, service bulletins incorporated etc. The work record also includes the properly executed return to service record (8130). All maintenance records are clearly legible in the English language and are retained electronically for a minimum of 24 months. The following further describes the maintenance record system.

#### **3.5.0 Conception and Update of the Template/form**

Work maintenance record templates are pre-defined by the companies operating software. Work order, teardown records, inspection records, shop routers/operations and release forms are generated electronically based on a pre-established format. Each record type is uniquely electronically identified. Revision control is accomplished by means of software updates/control. Certain computerized forms contain user defined information i.e. the operational/task based on part number specific work requirements. The engineering department in coordination with production creates modified operations (if required) to achieve customized operations/tasks.

#### **3.5.1 Maintenance documents in Use-Complete Quality package**

The following **table 7** summarizes the various standard maintenance documents (electronic) utilized by the repair station forming the complete work package. The complete work package (quality package) is system generated upon completion of maintenance / issuance of the maintenance release certification(s). In some cases, air carrier or OEM work cards/sheets may be attached to work records as necessary to comply with maintenance instructions.

Description	Purpose
Work Order	Record customer, repair order, date of receipt, technical data completed maintenance; receiving inspection, pre-test/inspection, scope of repair, record of final inspection, return to service, date work completed, corrective actions, modifications completed and maintenance release record
Teardown report	To record teardown findings, hidden damage and parts/materials consumed during maintenance
Operations/tasks	Details the operations for a given part number. Describes the detailed in process inspection / test points and tasks to be accomplished during maintenance
8130/Form 1	Maintenance release certification

**Table 7- Quality Final Work Package**

### 3.5.2 Completion of Maintenance Documentation

Maintenance forms as described herein are primarily computer generated and completed via the companies operating software by the appropriate staff personnel. All required electronics signatures or initials for key tasks (inspection, dimensional verification or test) are system applied. Tasks which do not apply to a given work order/part number are so indicated by “N/A”.

In the event a job task/operation has been signed off pre-maturely or has erroneous content the operation is revised by the lead technician or the production manager by means of a specific security password. Once corrected, the operation/task is signed off by the system application of an electronic signature. All inspection tasks/operations identified as “INSP” (inspection) are signed off electronically by only authorized inspectors.

A record of “consumed” parts and or materials used during the repair process is electronically created/stored and displayed in the “teardown” report. A computer link is then created to traceability documents confirming the origin of consumed parts/materials.

Aviocraft does not use “personal stamps (ink) to document completed operations/tasks. Only electronic stamps / signatures are utilized.

In some cases, paper forms are used to record maintenance (i.e. scrap tags). In those cases, forms are executed in accordance with part 5.1 herein.

The following **table 8** summarizes the authorized personnel for specific “sign-off”

Type of operation/task	Work Center	Authorized “sign-off” personnel	Return to service
Normal operations/Tasks	MECH	Authorized / qualified person for the type of task	Return to service Properly authorized/approved
Preliminary /Receiving inspection	INSP	Authorized Inspectors	
In-process inspection	INSP	Authorized Inspectors	

Type of operation/task	Work Center	Authorized "sign-off" personnel	Return to service
Hidden Damage inspection	INSP	Authorized Inspectors	staff.
Final Inspection	INSP	Authorized Final inspector	
Pre-Test	TEST	Authorized Bench technicians/mechanics	
Final Test	TEST	Authorized Bench technicians/mechanics + inspectors	

**Table 8- Authorized Signatory Personnel**

*Note- Maintenance personnel in a "trainee" status cannot sign off completed operations/tasks*

### 3.6 Technical Records Control

As described herein all technical maintenance records are stored, managed, secured and maintained electronically. Records are retained for a minimum of 24 months and secured through password protection. All data is backed up daily to the company server and by a secured off-site cyber location. All applicable maintenance records are accessible to management staff, air carriers, operators, owner and regulatory agencies via secured computer access.

### 3.7 Rectification of Defects Arising during base maintenance

The quality manager or his deputy is responsible for correcting erroneous content in maintenance records found prior to return to service certification. It is the quality manager or his deputy whom holds the security password which allows access to previously sign-off maintenance records. The quality manager or his deputy in coordination with the production manager shall correct such deficiencies and properly complete the maintenance record.

Those operation(s) which contain improper information or where a task was not properly completed shall be re-opened, corrected and once again electronically signed off by the appropriate technician or inspector.

All work products shall be completed in accordance with air carrier, owner or customer repair orders in accordance with approved technical data. If it is discovered that a maintenance item was not accomplished or was improperly carried out or recorded, said oversight/error will be corrected prior to the work product being released for return to service.

In the event, it is discovered that defects are discovered on the work product (prior to airworthiness release) this shall be brought to the attention of the air carrier, operator or customer for disposition. Aviocraft does not permit the use of an abbreviated maintenance release option. Therefore, should the air carrier, operator, owner or customer choose not to carry out all maintenance required (per the technical data) or correct known or suspected defects for a given work product, said work product shall be returned without the return to service certification.

### 3.8 Not Used

### 3.9 Reporting of Defects to the Competent Authority/Operator/Manufacturer

Aviocrift and its maintenance personnel are committed to safety and regulatory compliance always. All potentially unsafe conditions / known discrepancies in maintenance which become evident (after return to service release or prior) shall be immediately reported to the appropriate authority. The report shall identify the suspect component; describe the potentially unsafe circumstance and details of the matter.

#### 3.9.0 Internal Occurrence Reporting System

All maintenance personnel are encouraged to openly communicate and identify a potential un-safe maintenance practice, suspected design flaw or inadequate maintenance procedure to management. The quality manager or his deputy shall gather such information and provide a detailed report to the President/Accountable manager.

#### 3.10 Service Difficulty/Malfunctioning and Defect Report

§145.221

If a defect or malfunction is found that could result in an imminent hazard to flight, the repair station shall use the most expeditious method at hand to inform the local supervising flight operations airworthiness inspector and the customer. In any event, the repair station shall file a report within 96 hours after the defect or malfunction has been found. Such a report shall completely describe the nature of the defect or malfunction. The required regulatory form will be completed in accordance regulatory guidelines. In cases where the filing of such reports may result in a situation prejudicial to the interest of the repair station, each case in question shall be reported to the local responsible flight operations and airworthiness inspector who will rule if a report shall be submitted by the repair station as required

##### 3.10.0 Reportable Occurrences

The President/Accountable manager or his deputy shall effectively communicate potentially or known un-safe circumstances (relating to work product serviced or being serviced at Aviocrift) to the appropriate competent authority (FAA, air carrier, operator/owner, customer or manufacture) as applicable for the case. The report shall be in sufficient detail and format to comply with FAA guidelines.

#### 3.11 Return of Defective Aircraft Components to Stores

All known defective components/parts or materials identified during maintenance shall be appropriately identified and returned to the material manager (stores) for segregation. The material control manager shall appropriately identify the discrepant item(s) and immediately remove the item from inventory. The item(s) shall be placed in quarantine "QT" pending disposition to the vendor, customer, air carrier, operator or owner for correction or replacement.

#### 3.12 Defective Components to Outside Contractors

Items received from subcontractors which are found to be defective shall be immediately removed from inventory by the material control manager or his designee and returned to the vendor for correction or



placement. Items identified as defective shall be placed in the quarantine “QT” area pending dispatch to the vendor. An inspection report shall be prepared and provided to the subcontractor describing the defect and details to effectively communicate the deficiency.

### 3.13 Record Keeping System- Electronic Media

§145.211, §145.219 (AC No: 120-78)

Aviocraft utilizes a computer software program to record and electronically store its maintenance records (work orders, teardown reports, and inspection records purchase orders, component maintenance manuals/technical data, calibration records and material certifications) among other related documents. These records are scanned to a .PDF file format or other file extensions viewable by most computer document reader programs. Each system control number is unique to the specific document being electronically filed.

The software is password protected (Security) and the security structure of the software is controlled by the system administrator (President/Accountable Manager) and or / his designee. The quality manager is the back up for the management of the electronic record keeping system. The system security features which control access to information and records are set depending on the security assignment required for a given function / employee. The System administrator sets the security level for all aspects of the system.

Upon completion of a work order, the quality manager or his authorized designee shall scan the work order/quality package electronic file using the work order number as the system control number. The work order package consists of the original work order, teardown report and 8130.

The original copy of the company work order, Form, will be electronically filed as a permanent record of all work accomplished. This work order shall contain the name of the repairman who accomplished the work and the inspector who inspected the work performed. This record will describe what work was accomplished and the parts used for the rework. These electronic records will be maintained electronically for a period of no less than two years and stored electronically to the company’s primary computer server. Aviocraft will maintain trained personnel in the retrieval of electronic records as well as generating hard copies (when requested by the FAA or the customer) for related work records. This data base is backed up electronically daily and maintained in a secure and environmentally controlled area off site.

*Calibration certificates* related to measuring devices used for return to services purposes shall be scanned into the tool calibration electronic file using the tool number as the system control number.

*Material certifications* for material consumed during the repair processes shall be scanned into the electronic file using the purchase/repair order number or part number as the system control number.

*The Customer repair order* and/or work instructions shall be scanned into the electronic database using the work order as the system control number.

All computer work stations are connected to a single company server which records and stores applicable records. Each computer station is linked to the companies operating software which is

password protected.

The distribution of electronic documents is controlled by the President/Accountable manager and or his authorized designee. Documents will be transmitted over a secure network by means of various email or document messaging programs.

The companies operating software performs a monthly self-audit and re-indexing routine insuring all operating modules are interfacing correctly and no files have become corrupted. The backup files remain available to restore historical records as needed.

**Training** for use of the electronic record keeping is included in the companies training curriculum and is normal basic operating procedure for all administrative personnel. The companies training manuals for the use of the companies operating system is available to all applicable employees by means of the company's server. Each company computer work station does have access to these operating manuals.

The database is backed up automatically by the companies operating software and server settings. The database is also backed up nightly by a remote server (off premises) via the internet for added protection from fire or catastrophic damage to the company's server /database.

#### *Electronic Component Maintenance Manuals/Tech data*

In addition to paper masters which might be maintained at this repair station, the company uses electronic manuals stored in its operating system. The "maintenance Manuals" module of the software records the manual, revision level, revision date, OEM and the component parts the manual supports. The manuals are controlled by the technical data administrator. Access to the documents is made through computer stations and the manuals are viewed in PDF file format displaying the exact image of the original document. The control of technical data is managed by the company's technical data control program noted elsewhere in this RSM.

All technical data stored electronically is backed up daily by the company's server in addition to being backed up remotely to a secure site via the internet.

#### *Electronic Signatures*

In addition to manual signatures which may be used by the company, the company software uses an encrypted system with password protection. Each repairman, inspector and mechanic are issued a unique employee number /image which is set up by the system manager (President/Accountable manager or designee) specific to that employee. Each employee is issued a unique password which is used to confirm the completion of a specific work order task or inspection. This becomes a permanent record of the work order. The system date and electronic signature is auto embedded to the specific task/inspection point when the employee inters his/her passwords into the system. Passwords are secured by the employee and remain in the employee's possession at all times. Employees are instructed to safeguard their passwords.

### **3.14 Staff Levels and Planning**

#### **§145.109**

The President/Accountable Manager insures there are adequate staff levels of maintenance personnel as needed to support the organizations production demands/requirements. Man-power allocations shall be made based on customer delivery requirements and departmental backlog. Staff levels shall be maintained as needed to insure proper maintenance practices are upheld at all times

### 3.15 Control of Critical Tasks

Aviocraft uses standard maintenance practices to carry out maintenance in accordance with approved data i.e. Component maintenance manuals, technical orders, repair specifications etc. In the event, critical tasks are identified in the associated repair instructions such tasks are identified in the work order task/operations to insure compliance.

### 3.16 Corrective Action on Deficiencies

§145.211

Maintenance personnel are encouraged to highlight and report documentation errors, oversights or deficiencies in maintenance practices to their supervisor or the quality manager. Once identified, said discrepancies are investigated and resolved by the quality manager in cooperation with the production manager. Additional training, documentation revisions and procedural updates are adopted to ensure the deficiency is not repeated.

In addition, the company utilizes independent self-audit practices as described herein to assist in identifying errors in maintenance practices or documentation. Once identified the root cause is verified and corrective action performed to permanently resolve the discrepancy.

### 3.17 Shift/Task handover Procedures

Aviocraft generally operates only one 8-hour shift. As such, there is no occasion for shift changes requiring hand over procedures. However, should additional shifts be required, maintenance personnel will follow hand over procedures which clearly communicate the status of a work order at the shift change.

Personnel will communicate with each other to insure an awareness of work in progress, inspections completed, work to be completed and currency of maintenance work records. Each maintenance person involved in shift changes will first be trained in the procedures to follow to insure a seamless transition from one shift to another. The training program will include a “shift/task handover procedure” course as required.

### 3.18 Duty Time Limitations

§121.377

Within the United States, each Certificate holder (or person performing maintenance or preventive maintenance for it) shall relieve each person performing maintenance or preventive maintenance from duty for a period of at least 24 consecutive hours during any seven consecutive days, or the equivalent thereof within any one calendar month.

### 3.19 Production Planning Procedures

§43.13, §121.369, §135.427, §145.109, §145.201, §145.211, §145.219

The engineering department in cooperation with the production manager and other departments as needed are responsible for creating production planning / task card/operations for a give work scope/part number. The operations (shop router) are created in sufficient detail to insure the maintenance / tasks contained in the maintenance data is achieved. Critical tasks (if any) are identified, required inspection points noted and test steps are identified. In the event customer, specific / unique tasks are required they are described either in the operational router or in he “EO” section of the work order. Air carrier, operator, owner or customer specifications are reviewed and incorporated (required inspection points, checks tests) into the work package as applicable insuring compliance with repair order requirements.

The engineering manager in conjunction with the quality manager is responsible for ensuring all necessary resources i.e. technical data, tooling, test equipment, tools, facilities etc. are in place prior to the commencement of work. In the event outsourcing or subcontracting of a specific maintenance item are necessary this is also described as a task / operation within the work order/operational router. Engineering works in conjunction with the material control/purchasing manager to coordinate outsourced items.

### 3.20 Technical Data Control

§145.211, §145.109, *TDP-010510*

Reference the company’s Technical Data Program *TDP-010510* which supplements this RSM/QCM. The Tech Data Control Administrator under the direction of the President/Accountable Manager (or his authorized delegate) is responsible for the security, maintenance and accuracy of all company technical documentation to include drawings, overhaul manuals, processes specifications, etc. Such documentation is electronically stored and managed by means of the companies operating software.

Should the Tech Data Control Administrator become unavailable to perform this function the quality manager or his designee shall assume the interim roll.

#### 3.20.0 Maintenance Data coming from external Sources

All Technical data is obtained whenever possible from the original equipment manufacturer and other sources i.e. airlines customers and third-party revision services to supply the most current available data.

#### 3.20.1 Control of information

Ref; *TDP-010510*

The company maintains a technical library of electronic versions of manuals which are controlled by means of an electronic tracking system. Documents are logged into the data base and the revision level and date recorded and the document is listed as “on line”. Any revisions required to the technical data are updated in the database and the obsolete on line document is deleted from the data base and

replaced with the revised document as the on-line file. All technicians have access to the manuals by means of computer stations located throughout the facility and at work benches.

All documents are controlled by the Technical data administrator. The technicians on the shop floor will review the work order for the correct technical data and revision date prior to performing work on the component. Should there be a discrepancy in the revision or the date the technical data administrator will correct the discrepancy.

**Note-** *Aviocraft will use its overseas representatives to help in providing translation of any technical data that is not in English.*

#### *Operating Software:*

Aviocraft uses operating software to track and process its technical data control program. Each controlled document is recorded in the system under the document number (i.e. ATA number) listed as on line and assigned a revision date, revision level, last review and a scheduled date for periodic review. All technical data is entered using the “manual maintenance” module.

#### *Documentation identification:*

Each document shall be recorded using the control number assigned to the document by the originator (i.e. component maintenance manual or repair specification) and logged into the system immediately upon receipt.

Hard copies of technical data may be printed out by technicians and used during repair however the hard copies shall be marked on their “face” as (Reference Material / Check Revision before use).

If the CMM provides instruction to print a specific page for recording work performed, testing results, or other pertinent data, these pages do not require this verbiage to be annotated on their face.

#### *File number:*

The “file” field in in the operating software will reflect “on line” indicating the document can be viewed online vs. a paper copy.

### **3.20.2 Technical information amendment procedures**

Each revision received is updated in the system with the appropriate revisions level and revision date. The “on line master is completely removed and replaced with the new document incorporating the lasts revision.

#### *Periodic review:*

At a maximum interval of 90 days, the Technical Data (Tech Pubs) Administrator or his/her designee will review technical data scheduled for review on active part numbers. The OEM, revision service or customer will be contacted by phone, email or letter to confirm the latest revision available for a specific document. After review, the system will be updated reflecting the last review performed and the next

review scheduled. The company relies on revision services from various manual suppliers, customers and OEMs to insure the latest manual revision is held on file. In some cases, manuals have not been revised for many years (i.e. older aircraft) but the company endeavors to verify the latest revision that is on file is current.

#### *Viewing devices:*

The technical data is generally viewed through the company's server using PC work stations. The operating software allows for online viewing of all data recorded in the manual maintenance function of the software. Technicians can view the data directly from the work order via a pdf image; or view on line via the internet.

#### *Technical data storage:*

All technical data is stored on the company's server which is backed up throughout the day via a remote back up service. The data is secure and kept free from dirt and contamination.

### **3.20.3 Technical Data-Customer Supplied**

§145.109, §145.201, §145.211, §145.219

All customers furnished and controlled technical data is recorded and segregated in the system. The document is tagged to a specific customer (i.e. ESO, Policy sheet ECT) as numbered by the customers control system. The customer's technical data is controlled as noted herein. The customer data is automatically tagged to a given part number and associated to the assigned work order/shop router. Specific customer instructions are managed by the "ESO" feature of the system allowing specific instructions to be tagged to a given part number and customer. This information auto-populates to all associated work orders/shop routers.

#### *Technical Data verification:*

As the technical data is recorded in the system, the specific part numbers the manual addresses is tagged to the manual. When a work order is created to track the work through the repair station, the system auto-populates the manual, revision level and revision date to the work order insuring the technician is using the most current version during maintenance. The technicians are instructed to verify the manual noted on the work order (shop router) matches that which he/she is using to perform the maintenance. If there is a conflict, the technician reports it to the management for correction.

#### *Technical data deviation:*

Data which is created by the repair station (approved by the regulatory authority and the customer) such as "DER" repairs is controlled as noted herein. In the event the data deviates from OEM data or customer data, the customer shall first approve the use of such data by means of a letter, email or phone call. Upon approval, the data shall be used during the repair of customer products and the 8130 or Form 1 shall refer to the data used to perform the maintenance. Customers don't always issue formal approval documents but Aviocraft endeavors to secure same either by means of a reference in the

customer's repair order or via some other formal means; email, letter etc.

**DER-** The companies operating software creates a flag for part numbers having a DER program available and then creates a link between the DER, the part number and the customer number assigned by the system. If the customer flag is set to yes, the system will not allow the issuance of an 8130 or Form 1 release form unless the capability file includes a customer approval for a given part number / DER. This is controlled by the President/Accountable Manager or his authorized designee.

*Technical data accessibility:*

The technical data is available to applicable employees (technicians, planner's engineers etc.) by means of the operating software which is accessible via the PC work stations located throughout the company and within the associated departments of the company.

### **3.20.4 Documentation /Maintenance instructions issued by the Repair Station**

Aviocrift creates and issues internal technical documents i.e. engineering fabrication drawings, engineering orders, repair specifications (RS), engineering repair drawings, Master Data lists (MDL), equipment service manuals, instructional illustrations and a variety of other data which is utilized to carry out maintenance or to supplement existing maintenance instructional data. This information is released, revised, monitored and controlled as outlined elsewhere in this RSM. The Aviocrift engineering manager is responsible for the development, issuance, revision and approval of internally developed technical data.

### **3.21 Notification of Maintenance Data Ambiguities to Type Certification Holder**

Maintenance personnel are encouraged and required to report errors, ambiguities and oversights in approved maintenance data (internal or external) i.e. component maintenance manuals, technical orders, air carrier/operator work instructions, repair specifications, company work instructions, drawings etc. which are used to carry out maintenance on aviation components. Such ambiguities / discrepancies are communicated to the quality manager which reports the matter to the appropriate authority i.e. the manufacturer, air carrier, operator, owner, customer or regulatory authority as applicable. The commutation can be made by email, letter, phone or other appropriate effective means of communication as *may be* noted in section 2.18 herein.

In the event the ambiguity would negatively affect the completion of maintenance work, said work shall be suspended until the ambiguity is corrected or clarified by the appropriate authority

### **3.22 Cleanliness standards of Maintenance facility- "FOD" protection**

§145.101, §145.103

Aviocrift maintains a clean organized and efficient operation. Company department managers and technicians are required to clean their work spaces each day and secure all hand tools and repair materials prior to the end of shift. All waste containers are emptied, floors swept, work benches cleaned/organized and tools/equipment returned to their proper location each day. Departments are

segregated to prevent cross contamination between products / work groups which aides in cleanliness, product flow and organization.

Hazardous wastes / materials i.e. paint; oils great etc. are disposed of periodically through an outside and authorized waste management company. Said items are disposed in accordance with local regulatory regulations. Records are maintained verifying the waste pick up and chain of custody. Metal chips/shavings from machined processes are periodically collected and removed from the facility by a third-party metal recycling company.

### 3.22.0 FOD Prevention

Foreign object damage (FOD) prevention provides for application of preventive measures during the production, assembly, test and service phases of the Aviocraft process and provides for the training of employees. Examples of potential FOD are lost or unaccounted tools, hardware or where any materials foreign to the product within the areas where product hardware is being worked or where conditions of possible unplanned entry may exist.

FOD prevention will be implemented throughout the production, assembly, test and service processes to reduce FOD to an absolute minimum. Work instructions and or procedures will be provided within the appropriate facility areas to include the following elements.

FOD Prevention Training shall be administered through the companies training program and will include:

- Preventing FOD through the practice of good housekeeping.
- No eating or drinking in work areas
- Control of tools and personnel items in work areas.

### 3.23 ESD Program

Ref; *ESD-001*

ESD sensitive components shall be properly identified, stored in ESD packaging and managed / controlled in accordance with the companies ESD control procedure ESD-001.

### 3.24 Contract/Repair order review

Upon receipt of a new contract and or repair order, the companies contract administrator or his/her designee shall review the contract/repair order becoming familiar with the customer requirements. The following shall be specifically reviewed and understood:

- Verify the repair order matches the item(s) being received
- Verify the serial number matches the item(s) being received
- Verify the repair order has a clear work scope request
- Verify the customer's delivery schedule requirement
- Verify the delivery address and invoice requirements



- Review and note applicable terms and conditions. Bring any unusual or new terms to the attention of the President/Accountable manager
- Review document for work order instructions and/or special customer requirements.
- Verify that the stipulated / applicable service manual matches the customer's requirement.
- Check the document for applicable customer ESO, Policy sheets and / or other customer specific technical documentation.
- Note the required shipping method and customer shipping account number.

*System set up-* The contract administrator and / or his/her designee shall set up the company's operating system with the appropriate customer contact, email, remittance address, ship to address and other customer specific information. The customers established pricing schedule shall also be set up using the systems pricing table module.

*Technical information-* The contract administrator shall inform the companies engineering department of any unique or special customer specific instructions. The engineering/planning department shall write (if determined necessary) appropriate internal planning/routing documents to insure company compliance.

*Quality review-* The Quality Manager shall if determined by the contract administrator, review the R.O./contract for any special quality related requirements. Should the Quality Manager so determine, the shop router shall be written to insure compliance with said customer specific instructions.

## **3.25 Tools and Equipment**

### **3.25.0 Hand tools-general**

General hand tools i.e. screw drivers, pliers; wrenches etc. are not controlled or monitored. However, they are required to be in sound working order and stored in tool boxes when not in use. Technicians are permitted to utilize their own general hand tools if they so choose. However, the company provides all necessary tools to carry out maintenance.

### **3.25.1 Special tools- fixtures and equipment**

Special tools, fixtures, devices or equipment are either purchased (by part number) from vendors or internally fabricated in accordance with company drawings or design specification.

### **3.25.2 OEM Tools-Fixtures and Equipment**

Original equipment manufacturer (OEM) tools, fixtures or equipment are procured per OEM technical specification against a purchase order. Items are inspected and accepted as outlined in section 2.2 herein. Said tools, fixtures or equipment are identified with the assigned OEM part number and maintained as an inventory item with the appropriate product class (tool, fixture or equipment) noted. Those items deemed to be precision/sensitive calibrated devices are added to the Aviocraft tool and calibration program managed in accordance with the company's calibrated tools & equipment program.

All tool/equipment documentation received from the vendor shall be either retained or accessible electronically.

Tools, fixtures or equipment deemed to be out of tolerance, damaged or in non-working order shall be immediately removed from use and either returned to the OEM for replacement / repair or repaired internally. Repairs shall restore the item to proper working order. If repaired internally the repairs shall achieve the fit form and function originally intended.

### **3.25.3 Non-OEM Tools-Fixtures and Equipment**

§134.109, TE-022110

Aviocraft may use tools, fixtures or equipment internally designed and fabricated in accordance with company drawings or technical specifications to carry out maintenance on customer units. All such items are manufactured in accordance with released engineering drawings and / or technical specifications developed/ designed by the engineering department to achieve the intent of the maintenance instructions. All tools, fixtures or equipment fabricated internally or by outside subcontractors are inspected and confirm to meet the Aviocraft technical specification prior to release for use.

Tools, fixtures or equipment deemed to be out of tolerance, damaged or in non-working order shall be immediately removed from use and repaired internally. Repairs shall restore the item to proper working order to meet the original engineering drawing or technical specification.

In the event this repair station uses tools, fixtures or test equipment, which is not “OEM”, manufactured; equivalency will be determined by the technical requirements and / or intended function of the apparatus recommended by the OEM. The tool(s), fixture(s), equipment or test apparatus shall be capable of performing its intended use to achieve the required parameters of the article. The level of accuracy should be equal to or better than that recommended by the manufacture. Each special tool or fixture will be identified with the Aviocraft part / identification number and recorded.

Each piece of special test equipment will have a unique serial number to identify it and the item shall be listed within the repair station’s calibration system if used for return to services purposes. Aviocraft shall document that the non-OEM tooling /test equipment adequately performs and / or tests as required by the OEM service manual or other approved data. This documentation shall be signed and dated by the President /Accountable manager or his designee.

A listing of said Non-OEM equipment (test equipment) shall be maintained summarizing each of the pieces of equipment. Equipment noted on this listing shall be considered “certified” and acceptable to the overseeing authority to adequately perform the tests/function required by the OEM component maintenance manual (CMM) or other approved data as applicable. This equipment will have operating instructions and maintenance schedules available for each piece of equipment. Ref Aviocraft control procedure

### 3.25.4 Tools Service Providers-Tool Calibration

Aviocraft uses only NIST certified calibration laboratories or standards to calibrate and certify its precision measuring equipment. Vendors used to provide calibration services are listed in the company's vendor list as noted in part 4 herein. Calibration vendors who fail to meet the performance standards are removed from the vendor list.

## 3.26 Calibration of Tools and Equipment

§145.211, §145.219

The Quality manager or his authorized delegate is responsible for the Aviocraft calibration system to assure that all precision tools and test equipment are kept within tolerance. The President/Accountable Manager (or his authorized delegate) is responsible for this area of responsibility should the quality manager (or his authorized delegate) be unable to perform these duties. The Calibration program is further described in the company's calibrated Tools & Equipment procedure.

Standards used to calibrate test equipment and automated test equipment for Aviocraft must be traceable to the National Institute of Standards and Technology (NIST) or an accepted foreign country's standards by certificate from the testing facility.

Records of the test and calibration of the equipment, along with the methods and time periods used, are recorded as a readable electronic file. All equipment shall be identified with an Aviocraft serial number and or manufactures serial number for traceability and listed on a computer-generated Calibration Log. All Aviocraft and Aviocraft personnel precision test equipment shall be periodically calibrated through an outside calibration laboratory. Aviocraft does not allow personal tools, loaned tools, and calibrated tools or leased equipment requiring Calibration to be used to return to service purposes.

The Quality manager (or his authorized delegate) will maintain a computerized list of all precision tools and equipment using the tool control software program. During the last week of the month, a report will be run listing all tools and equipment that must be calibrated before the end of the next month. The Quality manager and or his designee will collect the tools and equipment due for calibration and hold them Quarantine until they can be calibrated. The Calibration Report shall list the location, calibration intervals, such as date of calibration and expiration date, serial number and description of the equipment. Tools not found will be considered lost or stolen. If they have not been accounted for,

by or during the next calibration period, they will be removed from the tool list. Records will be revised accordingly.

All test equipment or calibrated measuring devices shall be labeled with an Aviocraft calibration sticker or the outside calibration labs sticker indicating the calibration date and date last calibrated. Test equipment or measuring devices not used for acceptance purposes will not be listed on the Calibration Log and are considered "out of service" or "no calibration required" and will be identified as such. All calibrated tooling and equipment are elidable for use in the performance of maintenance until the last day of the month in which the calibration due date has been established. For example, if an item is due for calibration on the 15<sup>th</sup> day of any particular month then it is elidable to be used in the performance of maintenance until the last day of that particular month.

Any equipment or measuring devices found to be out of tolerance or damaged to a level to limit its purpose shall be pulled from active use and immediately sent out for repair or permanently removed from service. Whenever an out of tolerance condition is noted during calibration the quality manager will determine if the out of tolerance condition could have resulted in non-conforming products and if so, initiate the appropriate action to correct possible defects on all suspected non-conforming products including those that have already been shipped to the customer.

#### *Test equipment Calibration requirements:*

Calibration intervals shall be set on a biennial frequency unless a different frequency is established by the manufacturer or a calibration frequency is established by a component maintenance manual for the maintenance of a product being serviced by Aviocraft. New equipment being introduced into the system requires calibration before entering the system. When entering new equipment into the system, the quality manager and/or his deputy will include the purchase order number the new equipment was purchased on and the date of receipt in addition to the manufactures part number and serial number of the equipment. This will provide information when only one calibration cycle can be established on a piece of calibrated equipment.

#### *Operating Software:*

Aviocraft uses its operating software to track and process its calibration management program. Each calibrated tool is recorded in the system using the manufactures identification number and serial number. The system tracks the last calibration, next calibration due, calibration intervals and stores the certifications documents related for the equipment/tools. Records of calibration will be maintained for a minimum of two years or two calibration cycles (whichever is greater).

#### *Inspection procedure:*

The Quality manager and/or his back up person shall monitor the calibration log to ensure no calibrated tools become delinquent. The "Next Cal" report from the operating system shall be used to keep track of upcoming calibrations and record "logged out" equipment sent out for new calibration. Any equipment out of calibration shall be removed from service until such time that it has been properly calibrated and identified accordingly.

All calibration certificates shall be scanned into the operating system for easy access via PDF viewing.

*Tool/equipment list:*

A listing of all tools used to make airworthy determinations is maintained through the operating system and can be generated at any time. All appropriate information: tool identification, inspection intervals, last calibration, next calibration and reference information is noted on the tool/equipment list.

*Calibration status:*

Each tool/equipment is clearly listed in the “Next Cal”/ Tool list report with the calibration status noted. Calibration due dates are clearly noted.

*Out of calibration:*

Tools / equipment out of calibration shall be immediately removed from service (before the calibration expires) and sent out for re-calibration. The inspection department shall monitor the calibration due dates to ensure that no tool /equipment remains available for use after the calibration has expired.

*Personal tools:*

Aviocraft does not allow the use of personal tools to make return to service determinations.

*No calibration required:*

Tools that are not used to make return to service determinations (such as redundant tools) but which may be used in the troubleshooting process shall be marked as “no calibration required” or “not for return to service”. Test panels used to assist in the testing process / trouble-shooting process shall be marked as “no calibration required”. In the event a test panel has instruments that are used to make return to service determinations, said instrument shall be listed in the calibration program as required.

*Standards:*

All tools are calibrated in accordance with the National Institute of Standards and Technology (NIST) and appropriate records are maintained at this repair station and at the calibrating laboratory.

*Records:*

All calibration records are maintained in the company’s operating software to include; calibration dates, next calibration due, sub-contractor performing the calibration (if applicable) and the calibration certificates. Calibration certificates include the master calibration tool used to accomplish the calibration and test results as required for a given item. The company’s operating software. Reports can be generated at any time summarizing the calibration history of a given tool.

## Part 4 Material Control

### 4.0 Supplier Evaluation and Subcontract Control Procedure

The material control (purchasing) staff are responsible for the purchasing functions, inventory control (including shelf life items) obtaining materials certifications from suppliers for goods purchased, adding new suppliers/ removing suppliers (with approval by this repair stations Quality department), procuring components and materials necessary to support the company's production and receiving goods into the company's material "stores" department. The material control staff reports to the President/Accountable manager and / or his designee.

#### 4.1 Types of Suppliers

Aviocrift utilizes only legitimate sources (vendors) for materials, parts, components and services necessary to facilitate maintenance. These sources include original manufactures (OEM), distributors of OEM products, retailers, airlines part(s) distributors and other qualified sources. Genuine suppliers are identified from a variety of means; technical service instructions, parts locator services, OEM catalogs, internet searches and other resource materials.

A listing of providers/suppliers is generated and maintained by means of the Aviocrift operating software. The list is monitored and updated by the material control (purchasing) department with vendor oversight being performed by the quality department. Vendors are added or deleted as necessary to meet the supply requirements of Aviocrift. Those suppliers which fail to meet the performance or quality requirements of the Aviocrift purchase / repair orders are removed from the vendor listing.

The vendor listing is password protected with only authorized personnel having access. Only approved vendors are listed which forms the vendor database for Aviocrift. Purchase and repair orders are created using only these approved vendors.

Material or service providers (vendors) can be categorizing in one of two groups; a supplier or a subcontractor. Suppliers provide raw materials, standard parts, components and expendables. Supplier products are delivered against a purchase order. Subcontractors provide services and/or carry out maintenance work as directed by Aviocrift. Subcontractors provide services against a repair order.

#### 4.2 Subcontracted Maintenance & Approved Suppliers

*§145.217 & Part §120, SCP-1210*

Suppliers and subcontractors are initially evaluated and selected based on the vendors validated credentials and ability to deliver a certified and traceable product or service. The material control department in conjunction with both the engineering and quality departments (as necessary) performs vendor evaluation / acceptance.

Vendors shall demonstrate their ability to meet the Aviocraft purchase order or repair order requirements and provide material certifications that their product or service meet appropriate regulatory standards.

Upon receipt of supplies or services the Aviocraft receiving inspector shall inspect the items for compliance with the Aviocraft purchase order or repair order as appropriate. A record of inspection shall be made and recorded as a permanent receiving record. Parts or services not meeting the order requirements shall be rejected and returned to the vendor for correction or replacement.

Product or services received from vendors will be validated by an appropriate vendor material certification or certificate of conformance (C of C). These receiving documents along with the receiving inspection document shall form a permanent record and validate the traceability of the product/service received. These records shall be electronically scanned (PDF, JPEG or Doc) into the company vendor database and retained for a minimum of 24 months.

Aviocraft may on occasion utilize subcontractors to carry out certain maintenance functions. Reference the companies approved subcontracting program which supplements this RSM/QCM; Subcontractors will initially be approved through one of the following methods:

- On site evaluation by Aviocraft.
- Survey by Aviocraft, letter or telephone.

Industry recognized certifications, i.e. FAA certificated repair station, ISO, and Customers own developed supplier survey report may be used to validate the subcontractor's quality systems.

The subcontracted maintenance functions listing shall be the responsibility of the President/Accountable manager or his designee. The subcontract listing will be maintained in the Quality department. Revisions to the listing will be made by the President/Accountable Manager or his designee and forwarded to the overseeing authority for approval.

Any customer that Aviocraft provides service to that request notification of changes to the subcontractor listing will be notified of the change by the quality manager or his designee. Should the need arise for a maintenance function to be added on an emergency basis Aviocraft will coordinate closely with the overseeing authority regarding the fastest way to obtain acceptance in a short period.

Work performed by a subcontractor for Aviocraft, will be inspected by the quality manager, or an inspector delegated for such inspection. This inspection will be to verify that the work was performed in accordance with Aviocraft repair order requirements. Subcontractors will be required to furnish appropriate material /release certifications; maintenance release FAA Form 8130-3's Teardown reports, Certificates of conformance, packing list and material certifications as required by the Aviocraft repair order.

All repair orders issued to and accepted by certificated and non-certificated subcontractors are subject to the overseeing authority inspection of their facilities in accordance with Aviocraft repair order requirements. At no time, shall any part made by, or parts having had work performed on them by a

subcontractor be released, until the quality manager or his designee has approved the product/service performed as being airworthy.

All subcontractors' documents received shall be digitally scanned and saved to the company server for easy accessibility and validation of product/service traceability.

All subcontracted work shall be kept separate from regular stock until this inspection is performed and the material accepted for use. If for any reason subcontracted material is rejected as being un-airworthy, it will be identified as un-airworthy and the proper disposition made, such as scrap or return to subcontractor.

When a subcontractor's performance is deemed unacceptable, the subcontractor shall be placed on probation. If the subcontractor provides three acceptable deliveries, its status will be upgraded to an acceptable level. Should the performance of an approved subcontractor continue to be unacceptable, an alternate source will be investigated and the approved subcontractor removed from the approved list.

#### *Contracting to FAA Certificated Facilities:*

Before subcontracting a maintenance function to another certificated repair station, Aviocraft will verify the subcontractor is properly rated to perform the maintenance function by reviewing the certificated repair stations operation specifications for its authorizations, ratings and limitations. The subcontractor's capability listing shall also be reviewed and verified to list the part number or function being subcontracted.

The quality manager will maintain copies of the certificated subcontractors Air Agency Certificates, Operations Specifications and capability listing (if not available on line) in the Quality Office or company server. These certificates will be reviewed every Three years or as needed to ensure currency of the certificated subcontractor.

#### *Contracting to Non-FAA Certificated Facilities:*

Aviocraft will only subcontract functions to non-certificated facilities for which return to service can be determined by inspections or test performed by Aviocraft ensuring its airworthiness.

Non-certificated facilities will be required to allow the FAA and EASA access to make inspections and observe the non-certificated facilities work on that article. Aviocraft quality manager or a delegated assistant will accompany the FAA during these inspections if required.

Quality with support from material control (purchasing) shall maintain on file a periodic vendor audit mail survey and/or controlled copy of the quality manual of the non-certificated facilities that provide specific services to Aviocraft. The subcontractor's performance will be monitored and surveys updated every three years depending on the subcontractor's performance.



A digital (PDF or software generate) list of these subcontractors certificated and non – certificated will be maintained by the Material Control Department in conjunction with the quality manager (or designed) The list will be made available to the FAA in a format acceptable to the FAA with the following information. (Ref Part 7, Supplemental Procedures- FAA approved Subcontracting program)

- The maintenance function contracted to each outside facility.
- The name of each outside facility to whom the repair station contracts maintenance functions.
- The type of certificate and ratings, if any, held by each facility.
- All sub-contractors Certificated and non-certificated providing safety sensitive functions to Aviocraft are required to have an overseeing accepted drug and alcohol testing program. The subcontractor shall also be required to attest that it requires its subcontractors to have an accepted drug and alcohol testing program.

### **4.3 Acceptance / inspection of Components and Materials**

§145.211, SCP-1210

The procedures utilized to receive and accept aircraft components, materials and subcontracted services are described below. Aviocraft shall maintain a list of subcontractors in accordance the company's approved subcontracting procedure.

#### **4.3.0 Component/Material certification**

The following **table 9** illustrates the expected material certifications / receiving documents expected for a given category of product or service.

Category	Part/Material Type	Required material certification Document(s)
New Pats	Standard Parts  Materials (Raw materials/consumables)	<p><b>Option 1:</b> when the part/material is purchased directly from the manufacturer, the Certificate of Conformity issued by the manufacturer is expected;</p> <p><b>Option 2:</b> when the part/material is purchased thru a third party supplier (i.e. distributor, operator, Maintenance organization, etc.) the documentation accompanying the part/materials shall contain:</p> <ul style="list-style-type: none"> <li>• Conformity certification to the part/material applicable standard/specification, and</li> <li>• identification of the manufacturing source, and</li> <li>• Identification of the supplier source.</li> </ul> <p>For <b>Option 2</b>, the information above may be included in one single Certificate of Conformity issued by the Supplier (containing cross reference to the manufacturer C of C) or be composed by more documents, such as for example the C of C issued by the manufacturer plus a Statement from the supplier source. In any case, the manufacturer C of C shall be made Available upon request.</p>
	Aircraft parts	<p>Any of the following release documents as appropriate:</p> <p>EASA form 1, FAA Form 8130-3, EASA/FAA dual 8130-3 release, TCCA Form or ANAC form F-100-01 each with the status “new” marked and PMA approval number referenced.</p>
	PMA parts	<p>Any of the following release documents as appropriate:</p> <p>EASA form 1, FAA Form 8130-3, EASA/FAA dual 8130-3 release, TCCA Form or ANAC form F-100-01 each with the status “new” marked and PMA approval number referenced.</p>

Category	Part/Material Type	Required material certification Document(s)
Used Parts	Aircraft parts	FAA Form 8130-3 for a used part (e.g. overhauled)  TCCA Form One for a used part (e.g. overhauled)  ANAC Form F-100-01 (former Form SEGVOO 003) for a used part (e.g. overhauled) issued by an
Subcontracted maintenance	Subcontracted maintenance	C of C against regulatory approved data i.e. drawings repair specifications and other appropriate approved data

**Table 9- Required Material Certifications**

**4.3.1 Receiving inspection procedure**

Ref; MCP-001, FQCS-110711

*Incoming inspection- external sources-* All incoming product or service as noted in **table 9** will be checked by an inspector when received from manufactures, supply houses and subcontractors. The product or service shall be inspected for conformity to purchase orders repair orders, manufactures specifications, drawings and as applicable and for authenticity / compliance. Material control and inspection procedures are further described in the company’s Material Control Procedure.

The product/service shall be further inspected to confirm proper part number identification/ markings and shelf life limitations if applicable. Items shall be received in accordance with the companies operating software protocol which will create an inspection record, bar code inventory control label and traceability tracking control number. Batch or lot numbers will also be noted during the receiving routine as necessary. The quality receiving inspector shall also review the incoming vendor documentation to insure compliance with AD compliance as applicable.

The Receiving Clerk shall receive parts or subcontracted items using Aviocraft computer generated Receipts Report and forward the items and vendor documentation along with the receiving inspection report Form to the receiving inspector for inspection. This function may be accomplished electronically using the company’s electronic systems.

The incoming parts/materials shall be inspected to applicable purchase orders, drawings and/or technical documentation as appropriate to include verification of source inspection if applicable. Any deformities or errors such as damaged goods, missing documentation etc. shall be noted and reported to the supplier for corrective action. Rejected parts shall be marked accordingly and immediately returned to the vendor for corrective action. The quality manager shall be notified of any rejections. Any parts or material received that requires any special testing will be performed in accordance with the applicable specifications, customer requirements and or other appropriate technical orders.

All materials shall be certifiable and shall be received with material certifications or certificate of

conformance from the vendor. All completed orders and vendor supplied documentation regarding quality shall be kept on file (electronically) via the companies operating software and shall have the

name, title, and signature of the vendors authorized person. Should items be received without proper documentation the material shall be kept in the Receiving Dept. pending receipt of the required documentation. The Purchasing Agent shall be notified of any rejections or corrective actions needed by the vendor.

All "Accepted" supply material shall receive an Inspectors initial on the Receiver Tag indicating the material is approved for use. Goods shall be sent to the warehouse for storage until needed by the Repair Department.

*Incoming inspection- internal sources-* items which are received from internal sources (i.e. internal inventory transfers or work shop department transfers) shall be inspected for compliance with internal shop work instructions/ work orders and compliance with associated technical instructions. Traceability of parts shall be maintained at all times.

*Acceptance and inspection of internally fabricated parts-* Parts which are fabricated internally shall be inspected to verify compliance with associated engineering drawings, procedures and the Aviocraft fabrication quality control system manual.

*Storage limitation and or shelf life items-* Upon receipt and inspection all items shall be reviewed for any storage limitation which might apply. Shelf life items shall be identified with the appropriate shelf life expiration date and added to the Aviocraft shelf life list / program. All items shall be packaged to protect the product and stored in the companies environmentally controlled and secure inventory (stores) warehouse. Each part number shall be placed in an inventory bin or cabinet location for easy accessibility.

Material Control personnel (back up person is the quality manager) shall be responsible for stock control to include items, which have a "shelf life". A computer or other suitable system will be utilized to insure stock control segregation and identification in order that personnel will be able to determine the adequacy of the stock, the location of parts, and the proper identification of parts and to assure that parts do not deteriorate or become contaminated with foreign mater prior to use. Such items as diaphragms, seals, gaskets, hose, etc., which have shelf life shall be so arranged that the items with the least shelf life shall be issued first.

The more recently procured items will be placed in the aft portion of the storage bin. These parts shall be dated to ensure that the shelf life is not exceeded. A detailed listing of all "shelf life items" shall be kept current by the Material control department and reviewed at the end of each month.

*Material certifications-* As stipulated above, all parts, components or subcontracted items shall be received with proper and appropriate material certifications. Certifications shall be electronically scanned and stored via the company operating software for easy access. Product traceability shall be maintained always.

### 4.3.2 Traceability of Material

§145.109

All material, hardware, etc. used for maintenance shall be identified by purchase/repair order number and lot or batch number (where applicable) to maintain traceability to certificates and suppliers. The traceability of material will be maintained throughout the repair process and all material used in the part shall be recorded in the shop traveler or work order. Shop personnel will use a bar code system to scan material required in the repair process. Material control personnel will issue the requested material to the work order and deliver the material to the requesting technician. All material issued to the work order will become a permanent record of the work order listing the date issued and order number for the item issued.

Any material in inventory that loses traceability shall be segregated and tagged with the "Rejection and Disposition Tag pending verification of traceability. After traceability, has been secured the material can be returned to inventory for use. If the material does not have traceability it must be scrapped. Shelf life material that reaches its limitations will be removed from stock and held in quarantine pending disposal.

*AOG Situations*-Components/services related to "AOG" situations shall be received and inspected on expedited bases to support the urgent customer demand. These parts shall be internally prioritized / flagged

*Rejected parts or services*- Such parts or services shall be physically inspected for shipping damage, corrosion, rust or other deterioration/damage. Any obvious defects shall be called to the attention of the quality manager. If the quality manager deems it rejected, he will further check the parts and material. All rejected items shall be returned to the source of supply for correction.

*Quarantine*- Parts or services which have been rejected by the inspection department shall be immediately segregated to the quarantine area pending disposition of the quality manager. Quarantine items shall be segregated from normal accepted items and strictly controlled as to not allow quarantine items to enter the normal production flow.

### 4.3.3 Suspected Un-Approved Parts (SUP)-Consumable Items

§145.211

All incoming material, parts or subcontracted items will be checked by an inspector when received from manufactures, supply houses and subcontractors, and shall be inspected for conformity to purchase/repair orders, manufactures Specifications, drawings, specifications and for authenticity. Any parts suspected as "Bogus" or "SUP" shall be quarantined immediately and reported to the overseeing authority using FAA Form 8120-11 "Suspected Unapproved Parts Report".

The receiving inspector shall:

- Confirm that the packaging of the part identifies the supplier or distributor and is free from alteration or damage.
- Verify that the actual part and delivery receipt reflect the same information as the purchase order regarding part and serial number.

- Verify that the identification on the part has not been tampered with (e.g., serial number stamped over, label or part/serial numbers improper or missing, vibro-etch or serial numbers located at other than the normal location).
- Ensure that the parts' shelf life and/or life limit has not expired, if applicable.
- Conduct a visual inspection of the part and supporting documents to the extent necessary to determine if the part is traceable to an FAA-accepted source. For detailed guidelines on the identification of replacement parts refer to AC 20-62. The following are examples of positive forms of identification:
  - FAA Form 8130-3, Airworthiness Approval Tag.
  - Repair station work order from an FAA-certificated source.
  - European Aviation Safety Agency (EASA) Form 1 or Transport Canada Civil Aviation (TCCA) Form One, Authorized Release Certificates Maintenance records or release document with approval for return to service.
  - FAA Technical Standard Order (TSO) markings.
  - FAA Parts Manufacturer Approval (PMA) markings.
  - Shipping ticket/invoice from Production Approval Holder (PAH).
  - Direct ship authority letter from PAH.

The inspector shall also evaluate any visible irregularities (e.g., altered or unusual surface, absence of required plating, evidence of prior usage, scratches, new paint over old, attempted exterior repair, pitting, or corrosion).

## 4.4 Storage, tagging and release of components and materials

§145.101, §145.103

Aviocraft maintains an inventory control and issuing system that insures materials, rotatable, expendables, hazardous materials and or subcontracted items are stored, identified, and issued properly during maintenance. Manufacturers storage instructions are utilized to determine specific storage requirements for a given item.

All goods are stored in an environmentally controlled and secure warehouse and items are in numbered bins, shelves or cabinets based on their category. Hazardous / flammable items are stored in fire safe cabinets while shelf life items are segregated and controlled in specified locations in accordance with the company's shelf life control program. ESD items are packaged and marked in ESD packaging and protected in accordance with the Aviocraft ESD program.

### 4.4.0 Shelf life items/program

§145.103, Ref; AVI-1205

Material Control personnel (back up person is the Quality manager) shall be responsible for stock control to include items, which have a "shelf life". A computer or other suitable system will be utilized to insure stock control segregation and identification in order that personnel will be able to determine

the adequacy of the stock, the location of parts, and the proper identification of parts and to assure that parts do not deteriorate or become contaminated with foreign mater prior to use.

Such items as diaphragms, seals, gaskets, hoses, etc., which have shelf life shall be so arranged that the items with the least shelf life shall be issued first. The more recently procured items will be placed in the aft portion of the storage bin. These parts shall be dated to ensure that the shelf life is not exceeded. A detailed listing of all “shelf life items” shall be kept current by the Material control department and reviewed at the end of each month. Shelf life items shall be controlled in accordance with the Aviocraft shelf life control procedure. All shelf life items which have exceeded their shelf life date shall be immediately discarded and removed from stock.

#### 4.4.1 Tagging/Labeling of parts

The company operating software generates specific identification tags based on a given part type category. The label/bar code is attached to a paper tag and either affixed to the part or the packaging. The tag includes the condition of the item i.e. new, repaired, overhauled, bench tested, unserviceable, scrap or serviceable. In addition, the batch/lot number, shelf life expiration date, part number, part description and bar code tracing are included. In some cases, i.e. scrap parts a physically prepared paper tag is used. The following **table 10** summarizes each part category and the associated required labeling.

Part category	Tag format	Tag / required labeling
Rotable-serviced	Electronic generated paper tag/bar code and airworthiness release	8130 / EASA form 1 or dual release Customer, RO number, Part description, condition and date of service.
Raw materials	Electronic generated paper tag/bar code	Part number, description, Po/RO number, Bin location condition and bar code
Expendables	Electronic generated paper tag/bar code	Part number, description, Po/RO number, Bin location condition and bar code
Un-servable parts	Electronic generated paper tag/bar code	Part number, description, Po/RO number, Bin location condition and bar code. Condition must be marked <b>“un-serviceable”</b>
Scrap parts	Paper form/tag	<b>Red</b> scrap tag
Rejected parts	Electronic generated paper tag/bar code	<b>Blue</b> tag; Part number, description, Po/RO number, Bin location condition and bar code. If a rotatable unit;  Customer, RO number, Part description, and condition. Condition must be marked <b>“QT”</b>
Shelf life items	Electronic generated paper tag/bar code	Part number, description, Po/RO number, Bin location condition, bar code and shelf life expiration date

Part category	Tag format	Tag / required labeling
ESD items	Electronic generated paper tag/bar code	Part number, description, PO/RO number, Bin location condition and bar code
Serviceable items	Electronic generated paper tag/bar code	Part number, description, PO/RO number, Bin location condition and bar code. Condition must be marked " <b>Serviceable</b> "

**Table 10- Tagging/Labeling**

#### 4.4.2 Issuing / consuming parts/components

Aviocraft uses its operating software to issue parts, expendables, raw materials, shelf life items or any other material or components required to facilitate or carry out maintenance. Using the system protocol, items are tagged/flagged and issued/consumed from inventory to a work order. This routine creates a work order record of all parts/materials issued to a work order, the origin of the part/materials, the associated purchase / repair order, quantity consumed and a link to the material certifications.

When items are issued / consumed, inventory levels are reduced accordingly. Min / max set points insure that inventory is replenished to support production forecast/demand. In the event parts / materials are consumed erroneously, the system allows for a "UN-consume" process which reverses the issuance and restores the items to inventory. Part and materials are issued consumed by the material control department based on production demand.

#### 4.4.3 Hazardous /Flammable materials

§145.101, §145,103

Hazardous/Flammable materials shall be stored and safeguarded in cabinets designed to store such materials and which meet applicable safety regulations.

#### 4.4.4 High Pressure Bottles

High Pressure bottles i.e. oxygen/acetylene bottles shall be secure and properly labeled at all times.

#### 4.4.5 Fluid dispensers

Fluid dispensers used to store fluids shall be appropriately marked for its contents and secured to prevent spillage. All maintenance personnel are encouraged to insure fluids (i.e. alcohol, cleaning solvents, oils etc.) utilized at the work station are properly marked and secured during the maintenance process.



## Part 5 Training

### 5.0 Training Procedures-Maintenance Personnel

§145.163, §145.209, §145.51, AVI-1124

Aviocraft manages its training program by means of a web-based software program (<http://145training.com/>) which has been developed and designed to manage part 145 training requirements. The program is built around the Aviocraft training manual (ref Part 7, supplemental Procedures-Training Manual) which is FAA approved and electronically controlled. This manual is subject to recall or revision as mandated by the FAA or to meet the requirements of Aviocraft.

#### 5.1 Training Manual Revision

The company's training manual is revised from time to time to accommodate necessary manual updates reflecting changes to the training program procedures or corrections to the training manual. Revisions are submitted electronically to the FAA (Flight Standard Office) for review, comments and /or acceptance. Upon FAA acceptance/approval of the submitted changes, the training manual is released for use by the repair station. The Training manual is a controlled procedure under the control of the President/Accountable Manager or designee.

#### 5.2 Training

This manual requires all maintenance personnel to receive (OJT) on the job training as required by the production manager and or the specific qualifications for a given position. On the job training, will be scheduled as necessary for personnel to become familiar with their areas of responsibility and with new aviation products or product improvements. All training will be documented by a training form signed by the instructor and the employee. This OJT (or other type of training) training form is system generated and will list the number of hours a mechanic/employee received training, the date of the training and the content of the training. All maintenance personnel will be subject to human factors and recurrent training to ensure an understanding of the application of human factors principles.

Recurrent training shall be performed every 12 months or 24 months depending on the scheduled interval or course subject with a 30-day grace period before or after the previous training date. Additional training may be performed whenever a technician's supervisor or lead man becomes aware of a skill deficiency or a need for new skills to perform a specific job function. Also, if the quality manager notes a recurrent problem or defect in a technician's work, recurrent training may be required. This training shall be performed in a similar manner and recorded in the same manner as on-the job training.

Outside formal training will be conducted in those instances where it is necessary to train for a new process, improved basic skills or whenever deemed necessary. Records of outside training will be kept in the individuals' training records in the same manner as on-the-job training. OJT will be electronically documented and stored in the employees training file.

Current training records will be maintained for each employee by the training manager, quality manager

or designee using forms listed in the Aviocraft training manual. Training Records for employee's who are no longer with the company will be retained for a minimum of two years. The record will indicate the type of training (detailed), method, duration, date of completion, and name of instructor. Training records along with a complete training list of all courses/training completed for a given employee will be kept electronically by means of the 145training.com software.

### **5.3 Human Factors Training**

Human factors training is a permanent part of the companies training program as described in section 5.0 herein.

#### **5.3.0 Initial training**

All maintenance staff receives initial human factors training as part and as described in the training program.

#### **5.3.1 Continuous training**

All maintenance staff receive continuous human factors training as described in the training program. The human factors training curriculum applicable to recurrent training maybe updated from time to time to include content or discussion associated with the company's internal occurrence reporting system (ref section 3.9). This is to ensure human factors are considered in relation to inadequacies which may have been identified by mean of the internal occurrence reporting system.

### **5.4 Hazardous Materials and Training**

§145.165, §145.206

All maintenance personnel handling hazardous materials as defined by regulations shall receive HAZMAT training in accordance with the Company's FAA approved training program. In addition, all maintenance personnel or contractors are aware of hazardous materials and their location. Hazardous materials are stored in appropriately rated cabinets and are strictly safeguarded.

**Part 6 Forms/Reports**

§145.211, AVI-120209

The following **table 11** lists the various paper/digital forms utilized by this repair station. The Company's forms procedures manual further describes the associated forms/reports and their use. These forms/reports may be electronic documents either in .doc, PDF format or software generated.

Form number	Form/Report Description
Ref forms procedure Manual AVI-120209	Airworthiness Release Certificate (8130-3)
	AD Review log
	Calibration Log
	Aviocraft Test Stand / Equipment Certification Form
	Aviocraft Test Stand / Equipment Maintenance log/user guide
	Capability listing/New Capability Revision Form
	ESD log
	Key Personnel Roster- Return to Service Personnel
	Malfunction Defect Report
	Receipts Report form
	Receiving Inspection Report
	Receiving Materials Log
	Red Scrap Tag
	Repair Work Order
	Self-Audit " Check List"
	Self-Audit " Corrective Action Status Log"
	Self-Audit " Corrective Action"
	Self-Audit "Monitoring Schedule"
	Suspected Unapproved Parts Form
	Vendor listing
Vendor Survey	
Work Order Repair Operations	
Work Order Repair Receiving Log	

**Table 11- Forms and Reports**

## Part 7 Supplemental Procedures

The following **table 12** lists the procedures used by Aviocraft to supplement this RSM/QCM. These procedures are electronic documents either in .doc, PDF or software generated format and provide specific guidance and instruction to maintenance personnel.

Procedure Number	Procedure Description
AVI-0621	Soldering Station Verification and Maintenance Procedure
AVI-1124	Training Manual
AVI-120209	Forms Procedure
AVI-1205	Shelf Life Program
CP-022210	Tool & Equipment Calibration
DAPP-0204	Drug and Alcohol Prevention Program
EM-2013	Employee Manual/Guide
ESD-001	Electric Sensitive Devices (ESD)
MCP-001	Material Control Procedure
NC-120705	Capability Procedure
RSP-0801	Receiving and Shipping Procedure
SCP-1210	Subcontract Maintenance
SPP-020710	Scrap Procedure
TDP-010510	Technical Data Program
TE-022110	OEM and Non-OEM Test Equipment Program

**Table 12- Supplemental Procedures**

## Part 8 EASA Supplement

The Aviocraft approved/ accepted EASA supplement is retained separately in electronic format.