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QAP043 Rev.: AH QR01892







# **QAP043 REV AH**

# Supplier Quality Assurance Requirements

Revised by Zeljko Tolo	Date: 3/28/19
Approved By AFP Dir. of Quality of Gary Peters	Date: 4/8/19
Approved By ACX Dir. of Quality of Gary Peters	Date: 4/8/19
Approved By Director of Quality Gary Peters	Date: 4/8/19
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# **REVISION PAGE**

For earlier revisions, see Rev AD.

REV	<u>DESCRIPTION</u>	DATE	<u>BY</u>
	New Issue	May 6, 1997	
AA	Added Paragraph 3.8 Revised ACX to ACX/AFP in all Locations Added AFP and ACX Logos to cover page Added "The corrective action shall address containment, root cause analysis, mistake proofing and corrective action" to Para 4.2. Ref. QR01132	6/26/2012	GJP
AB	Revised Para. 9.0 DFAR 252.225-7014 Alt 1 to DFAR 252.225-7009 Alt 1 Added AC1007, AS9100, AS6174 and EXP001 to Para. 2.1 Added AS6174 to Paragraph 11.1 Added Paragraph 3.1.7 Deleted Paragraph 3.5.2 and 3.5.3 Added Paragraph 3.6.3 Added Paragraph 6.7 Ref. QR01212	5/7/2013	GJP
AC	Revised Para. 6.0 Title to include Customer and Government Owned Tooling Para 6.1-6.7 changed references from ACX/AFP owned tooling to buyer owned tooling. Reference QR01265	11/6/13	JKP
AD	Revised para. 3.3.1 added time to furnish records and length of record retention Added para.13.0 Flight Safety; Added Para 3.6.2 C; Added AS9102 and AS9103 to Para. 2.1 Corrected formatting and grammatical errors throughout document. Ref. QR01401	12/8/2014	GJP
AE	Revised Para. 3.5.1 to include the features on all listed specifications (MS, AN, AND, SAE). Revised Para. 3.6.1b Allowing sampling plan as long as they are statistical valid and do not allow acceptance of non-conformances. Ref. QR01617	12/5/2016	GJP
AF	Removed Para. 9.0 DFARS requirements. All paragraphs after were renumbered. Added QAP019 back to Para 3.6.1 for sampling inspection. Ref. QR01622	1/11/17	QJ
AG	Paragraph 3.8, Revised Supplier Score Card rules, corrected Gov't Spec MIL-STD- 973 to EIA-649. Ref. QR01736.	8/7/2017	GJP
AH	Paragraph 3.6.2 (c) revised. Ref. QR01892	<u>3/28/19</u>	ZT

#### 1.0 PURPOSE

This document describes the general and special product assurance requirements that are in addition to the requirements in the ACX/AFP Purchase Order and AC1007. The requirements specified herein will be used by the AeroControlex Group, Inc. and will be included on the Purchase Order, Contract or other formal agreement (hereafter referred to as the Contract) between a Supplier and AeroControlex Group, Inc. The purpose of this document is to clearly define for each purchase of products or services, all of the necessary and applicable technical and quality requirements with which the Supplier must comply to meet the requirements of AeroControlex Group, Inc., its customers and/or regulatory authorities. For the purpose of this document, the term ACX/AFP means the AeroControlex Group, Inc. which has entered into a Contract with the Supplier.

#### 2.0 SCOPE

This procedure applies to Aero Fluid Products and AeroControlex. This procedure shall be adhered to by all suppliers. Monitoring will be done by ACX/AFP.

# 2.1 Applicable Documents

# **Industry Specifications**

AS9100 Quality Management Systems

AS9102 First Article Inspection

AS9103 Variation Management

NAS-412 Control of FOD

AS9006 Deliverable Aerospace Software

AS5553 Counterfeit Electronic Parts

AS6174 Counterfeit Material

ARP9005 Aerospace Guidance for Non-Deliverable Software

J-Std-001 Requirements for Soldered Electrical and Electronic Assemblies

#### **AFP / ACX Specifications**

AC1007 AeroControlex Group Standard Terms and Conditions

**EXP001 Export Control** 

MPS-192 Control of Customer or Government Owned Tooling and Equipment.

QAP012 First Article Inspection

QCF-426 Pre Material Review Board Approval Form

**OAP019** Sample Inspection Plan

#### **Government Specifications**

EIA-649 Configuration Management Standard

Code of Federal Regulations 22 CFR International Traffic in Arms Parts 120 thru 130

FAR 52.219-9 Utilization of Small Business Concerns

#### 3.0 SUPPLIER RESPONSIBILITIES

#### 3.1 Prohibited Practices

The following acts and practices are prohibited, unless approved by ACX/AFP in writing. Any violation by the Supplier may result in disqualification of the Supplier for future business with ACX/AFP. In addition, the Supplier shall invoke (flow-down) the requirements of sections 3.1.1 through 3.1.5 to all of the Supplier's sub-tier sources performing work for the Supplier that is scheduled for delivery to ACX/AFP on the Contract.

# 3.1.1 Unauthorized Facility Changes

During performance on the Contract, the Supplier shall give ACX /AFP written notice before relocating any production, inspection or processing facilities; or, transferring work between different facilities; or, when applicable, prior to initiating any changes in the source of major components procured by the Supplier and designated for use in or for installation on products scheduled for delivery to ACX/AFP or, making any other changes which may affect product quality, reliability or integrity. Such changes are subject to approval/disapproval by ACX/AFP. A change in ownership or a change in the individual designated as the management representative with respect to the Suppliers Quality / Inspection System shall be construed as a facility change and requires the Supplier to notify ACX/AFP.

#### 3.1.2 Unauthorized Product Repairs & Salvage

The Supplier may not perform any repairs such as welding, brazing, soldering, plugging, peening, bushing, or, use of paints, adhesives or plating, or use any standard or other repair practice or method, on products damaged or found to be discrepant during fabrication or processing, or, on defects in castings or forgings, unless such repairs are specifically permitted by the applicable drawing or specification, or are specifically authorized by ACX/AFP in writing for each occurrence. Unless specifically authorized by ACX/AFP, this prohibition also applies to reworking products by removing plating (stripping) and re-plating. In those cases, where ACX/AFP authorized product repair, salvage or stripping has been accomplished, the Supplier shall include on the packing Iist / shipper or on a separate attached document a list of the products that have been subjected to such ACX/AFP approved repair, salvage or stripping, and the method used.

#### 3.1.3 Unauthorized Product Changes or Substitutions

The Supplier may not make any changes or substitutions to any products or services required by the Contract, drawing, specification, standard, or other applicable document without prior written authorization by ACX/AFP. Authorization may be contingent on ACX/AFP conducting an on-site review of the proposed product or service changes at the Supplier's facilities, or the facilities of the Supplier's sub-tier sources.

# 3.1.4 Use of Non-Conventional Manufacturing Methods

Unless required by the drawing, specification, or Contract, the Supplier may not use Electrical Discharge Machining (EDM), Electro Chemical Machining (ECM), laser, or abrasive water jet cutting or drilling, flame spray coatings, or any other non-conventional manufacturing method or process on products scheduled for delivery to ACX/AFP without prior written authorization by ACX/AFP. This prohibition also applies to the use of such processes by the Supplier's sub-tier sources. Authorization by ACX/AFP may be contingent on ACX/AFP conducting a review and approving the method, facilities, equipment, and qualified personnel at the Supplier's facilities or the facilities of the Supplier's sub-tier sources that will perform the operation or process. In addition, when authorized, such operations and processes may only be performed by ACX/AFP approved sources.

# 3.1.5 Altering Data on Documents

The use of any method that causes the original data on documents to be obliterated and unreadable (i.e. the use of correction fluids, correction tape, write-over, or other methods) to correct, modify or otherwise alter the data and/or entries on any certifications, test reports or other documents required by the Contract, is strictly prohibited. Corrections may be made on reports such as FIRST Article Inspection Reports (FAIR), test reports, and routers, providing it is clearly obvious that a correction was made and it is signed/dated or stamped by an authorized individual. Upon receipt at ACX/AFP, products or services represented by documents that show evidence that they have been corrected or altered in an unauthorized manner are subject to return to the Supplier at Supplier's expense.

#### 3.1.6 Special Process Suppliers

Special process suppliers must hold active NADCAP accreditations(s) for the special process performed, regardless of tier. There are **no exceptions unless otherwise specified by ACX/AFP.** This requirement is to be flowed down to your suppliers in contractual documentation at all times.

Special processes shall be defined as the following processes:

Non-Destructive Testing	Magnetic Particle, Fluorescent Penetrant, X-ray, Ultra Sonic Inspections	
Pre Penetrant Etch	All types	
Plating	Chrome, Nickel, Electroless	
	Nickel, Copper, Etc.	
Chemical Processing	Anodize Type I, Type II, Type	
	III, Chemical Film	
Heat treat / Brazing	Heat Treat of all materials and	
	alloys, including stress relieving.	

Coating	Paint, Dry Film Lube	
Welding / Brazing	All welding operations	

# 3.1.7 Electrical Soldering

Electrical/Electronic soldering shall be performed per J-Std-001. Personnel performing soldering shall be trained per J-Std-001.

# 3.2 Contract Changes & Their Effectivity

# 3.2.1 AeroControlex Initiated Changes

The Supplier shall incorporate, at the specified and agreed upon effectivity points, all changes initiated by ACX/AFP and communicated to the Supplier through a formal Contract change and/or amendment. Such changes may be in the form of revised drawings, specifications, tests, inspection or fabrication methods, etc., and may apply to products as well as to the Supplier's management and administrative systems. The Supplier's business management system shall include appropriate controls and records, including controls at the Supplier's sub-tier sources, which provide objective evidence that changes were incorporated as required by the Contract. Objective evidence may be in the form of date, lot, serial number, revision letter, or other positive identification. Such records are subject to on-site verification by ACX/AFP at the Supplier's facilities or the facilities of the Supplier's sub-tier sources.

# 3.2.2 Supplier Initiated Changes

#### **3.2.2.1** Source Controlled Products

The Supplier may not make any changes in product design, drawings, performance specifications, materials or processes that will result in a Class I change (as defined by MIL-STD-973) without specific approval by ACX/AFP in writing prior to making such changes in products or data. When applicable, the Supplier shall flow-down this requirement to the supplier's sub-tier sources. The Supplier may make changes on products under Supplier's proprietary engineering design control that result in a Class II change (as defined by MIL-STD-973). The Supplier shall furnish a copy of the Class II change to ACX/AFP prior to the initial delivery of the (changed) products, so that ACX/AFP can verify that the change does not violate the above requirements.

# **3.2.2.2** Non Source Controlled Products

No changes in product design, drawings, specifications, materials, or processes are permitted without prior approval by ACX/AFP.

# 3.2.2.3 All suppliers

In addition to paragraph 3.2.2.1 or 3.2.2.2, changes in the availability of parts and products must be submitted to ACX/AFP in writing.

# 3.3 Certifications/Documentation

# 3.3.1 Delivery Certification

By delivering products or services to AeroControlex Group, Inc. required by the Contract, the Supplier certifies that such products or services are in compliance with all applicable requirements of the Contract, and objective evidence of compliance is available and will be furnished within 48 hours to ACX/AFP for review upon request. The supplier shall retain all records for 10 years after close of the purchase order (FLIGHT SAFETY items see Para. 12) and make available for review on request by ACX/AFP, regulatory agencies or customers. The Supplier shall furnish with each delivery of products and/or services on the Contract, all certifications, test reports, and other documents (hereafter certifications), issued by the Supplier, or by the Supplier's sub-tier sources that are required by Appendix A of this procedure and/or the Purchase Order or Contract. The Supplier is responsible to ensure that all certifications furnished by the Supplier, or by the Supplier's sub-tier sources, are complete, legible and reproducible, accurate and in compliance with all Contract requirements. ACX/AFP reserves the right to return all products to the Supplier at Supplier's expense when the certifications that support the products and/or services are not properly executed.

# 3.3.3 Certification Language & Content

All certifications shall be in the English language and as a minimum include the following information and data:

- a. name of the issuing organization (Supplier and/or Supplier's sub-tier source)
- b. part number and revision.
- c. quantity processed and/or delivered
- d. lot or batch number (when applicable)
- e. ACX/AFP Contract number / purchase order number
- f. title and signature that meets the requirements of 3.3.4 and 3.3.5, of the authorized official of the issuing organization.
- g. certifications issued by Supplier's sub-tier sources shall include information and data required by (a), (b), (c), (d), and (f) above

# 3.3.4 Acceptable & Authorized Signatures

All certifications and test reports shall include the title and acceptable signature of the authorizing company official. The following methods are the only ACX/AFP approved and acceptable methods for applying signatures to certifications: (a) actual signatures rendered in ink by the signing official; (b) facsimiles of actual signatures such as rubber stamps; or (c) machine or computer graphics generated facsimile signatures. The title of the authorizing company official may be in a printed or hand written format. When quality or inspection stamps are used in lieu of actual signatures, such stamps shall clearly identify the issuing organization and the authorized individual to whom the stamp is assigned. The issue, use, and control of such stamps shall be governed by documented procedures in the Supplier's Quality Management System.

# 3.3.5 Electronic Signatures

When the Supplier elects to use electronic signatures on electronic documents, the following rules apply:

- a. application of electronic signature must be under the direct control of the person whose name appears on the document,
- electronic signature may only be applied at the location or facility where the individual is located and the individual must have direct access to the products or services, and supporting data to monitor the process, perform inspections and ensure that the products or services conform to all Contract requirements,
- c. the preparation of electronic documents and application of electronic signatures is governed by documented procedures in the Suppliers Quality Management System to ensure the validity and integrity of all electronic documents, and
- d. by application of an electronic signature, the Supplier certifies that the signature was applied by the authorized company official in compliance with (a), (b) & (c) above

#### 3.4 Nonconforming Products & Material Review

#### 3.4.1 Identification, Segregation & Control

Any products found to be nonconforming to ACX/AFP drawings, specifications, contract, or other applicable requirements either by the Supplier or the Supplier's sub-tier sources, shall be identified, segregated and reworked or replaced with conforming products prior to delivery to ACX/AFP. ACX/AFP reserves the right to reject and return any nonconforming products to the Supplier at the Supplier's expense.

# 3.4.2 Supplier Material Review Authority

Unless the Supplier is granted Material Review authority by inclusion of a written Quality Assurance Approval, all nonconforming material shall be submitted to ACX/AFP for disposition in accordance with 3.4.3. Suppliers of Source Controlled Items (supplier design) are permitted Material

Review Authority for items that do not affect form, fit, function, or safety or violate the Source Control Drawing (SCD) any specification on the SCD or any Purchase Order requirement.

# 3.4.3 Submittal to AeroControlex MRB for Disposition

Product found to be nonconforming to the drawing or specification must have written approval from ACX/AFP prior to submittal. This written approval shall be the Pre-Shipment MRB Approval (form # 129 OCF-426 Latest Rev.). The form is to be completed and forwarded to the cognizant buyer with all pertinent information completed. The buyer shall Design Engineering and Quality for disposition nonconformance. If the nonconformance has been accepted, the form is faxed/e-mailed back to the supplier and becomes part of the certification package that accompanies product. MRB will not accept for review and disposition any products that can be reworked to meet drawing or specification requirements, or, are obviously scrap. After review and disposition by ACX/AFP MRB, a copy of the form describing the MRB disposition will be returned to the Supplier. A 'use-as-is' or 'repair' (salvage) disposition by MRB does not relieve the Supplier of the legal responsibility and liability for such products. A root cause analysis and corrective action plan may be requested by AFP / ACX prior to approval of the Pre-shipment MRB.

# 3.4.4 Supplier Notification of Nonconforming Products Delivered to ACX/AFP

When the Supplier has determined that nonconforming product(s) have been delivered to ACX/AFP, the Supplier shall notify the ACX/AFP Buyer within twenty-four (24) hours of the initial discovery. The Supplier shall use receipt acknowledged e-mail or other positive notification method. The notification shall include the following information:

- a. Supplier name
- b. ACX/AFP Contract number
- c. part number and description
- d. affected quantity and serial numbers (if known)
- e. dates delivered (if known)
- f. brief description of the nonconforming condition

The initial notification shall be followed by a formal "Disclosure Letter" delivered to the ACX/AFP Buyer within five (5) days of the initial notification. The Disclosure Letter shall include the following information:

- 1. Complete description of the nonconforming condition(s).
- 2. The affected quantity of products (including serial numbers when applicable) and dates delivered to ACX/AFP.
- 3. Potential effect of the nonconformance on the performance, reliability, safety, and/or usability of the product(s) if known.
- 4. Recommendations for ACX/AFP action including for products that ACX/AFP may have already delivered to its customers.
- 5. Immediate action taken by Supplier to contain the nonconformance and nonconforming products.
- 6. Root cause analysis of the nonconforming condition.
- 7. Root cause corrective action plan and schedule.

8. The plan and schedule for verifying the effectiveness of the corrective action in those cases where (1) through (7) above are under investigation and incomplete, the Supplier may request, from the ACX/AFP Buyer, authority to submit an interim disclosure letter. The interim letter shall include as much information as available and identify the due date for completion of the investigation and the date final disclosure letter that includes all (1) though (7) data will be submitted to ACX/AFP. ACX/AFP reserves the right to participate in the nonconforming product investigation at the facilities of the Supplier or its sub-tier sources.

# 3.4.5 Re-Submittal of Products Previously Rejected by AFP / ACX

Products returned to the Supplier by ACX/AFP and re-worked or replaced by the Supplier and re-submitted to ACX/AFP shall be clearly identified as re-submitted products. The Supplier's packing list/shipper shall include a statement that the products delivered are:

- a. replacement, or
- b. reworked to meet all applicable requirements, and
- c. include reference to the ACX/AFP rejection document serial number.

# 3.5 First Article Inspection

# 3.5.1 FIRST Article Inspection Requirements (FAIR)

The Supplier shall perform a First Article Inspection (FAI) in accordance with the requirements of the current revision of ACX/AFP QAP012 and SAE AS9102. In addition to the completed AS9102 form the FAIR data package shall include a ballooned drawing, all required Certificates of Conformances, test data, and lab reports as required by the drawing. AS9100 Form 3 shall list actual dimensions from the drawing and shall also list the requirements from listed specifications. Excess products, remaining from a previous production lot, may not be used to fulfill the FAIR requirements. The Supplier shall furnish a copy of the completed FAIR results with the initial delivery of products and for any changes or lapses in production per QAP012.

# 3.6 Inspection

# 3.6.1 Inspection Sampling

- a. Sample Inspection consists of the random selection of product from a lot in such a manner that each part has an equal chance of being selected and verified for compliance to requirements.
- b. Sample inspection shall be performed in accordance with ACX/AFP Sample Inspection Plan QAP019 or equivalent plan Approved by ACX/AFP Quality Assurance. The Accept criteria shall be zero defects. If a defect is found, a 100% inspection for the failed characteristic will be conducted for the lot.

- c. Sample inspection or 100% inspection shall be done for **each lot** of product **shipped** to ACX/AFP.
- d. Raw material sampling: the initial lot, and every tenth lot thereafter, of a material type, received shall be evaluated for the chemical and physical properties of the material received to the correct specification (if the 10<sup>th</sup> lot cannot be evaluated, no more than minus 2 lots or plus three lots from the 10<sup>th</sup> lot shall be evaluated.

# 3.6.2 Inspection Documentation

- a Inspection records shall be available for all lots of material purchased by ACX/AFP. All inspections including required certifications and tests shall be documented and retained on file for a period of 10 years. These files must be readily retrievable (within 48 hours) and forwarded at the request of ACX/AFP. Documents shall be legible.
- b All documentation required by the purchase order shall be submitted with each lot shipped.
- When Key characteristics are a requirement of the Purchase order and/or the drawing Key Characteristic Data shall be supplied in a format to be determined ACX/AFP Quality Assurance. Key Characteristics are 100% required. Key characteristic shall be provided to the AFP/ACX assigned Quality Engineer.
- d Required documentation shall be per Appendix A

#### 3.6.3 Inspection vision requirements

- a All inspection personnel shall be given a visual acuity test annually by medically qualified/trained personnel. Personnel performing soldering or inspecting soldering shall be given a Color Perception test.
- b Personnel are required to meet the minimum standards in at least one eye. Minimum standards are:
  - Near vision shall be meet the requirements of Snellen 14/18, (20/25), Jaeger 2 at 14 inches, or Ortho-Rater 8.
- c Color Perception testing is required one time only.
- d When prescribed, corrective lenses must be worn during the performance of inspections/soldering functions.
- e Personnel failing to meet the visual acuity or when required, the color blindness criteria shall be prohibited from performing inspection/soldering functions until successfully meeting the requirements.

# 3.7 FOD (Foreign Object Debris/Damage Prevention)

The seller shall maintain a FOD prevention program per the requirements of NAS-412. Sellers FOD prevention program shall include the review of design and manufacturing processes to identify and eliminate foreign object entrapment areas and paths through which foreign objects can migrate. Seller shall ensure work is accomplished in a manner preventing foreign objects or material in deliverable items. Seller shall maintain work areas and positive control of tools, parts, and materials in a manner sufficient to preclude the risk of FOD incidents. Seller shall document and investigate each FOD incident and ensure elimination of the root cause of each such incident. Seller shall ensure this requirement is flowed down to subcontractors where required to ensure FOD incidences are prevented.

# 3.8 Quality and Delivery Requirements

The supplier shall maintain a minimum average Quality Rating of 98% (20000 PPM Defective) and 90% on-time delivery. Failure to maintain acceptable Quality and Delivery scores (Gold, Bronze, or Silver) may lead to Corrective Actions, Suspension of ACES Status, Supplier funded source inspection or removal from ACX /AFP approved supplier list.

Quality

Quanty				
<u>Gold</u>	<u>Silver</u>	<u>Bronze</u>	<u>Yellow</u>	<u>Red</u>
0 PPM	<2000 PPM	<4500 PPM	<20000 PPM	>20000 PPM
100%	99.8%	99.55%	98.00%	98%
	Or Greater	or Greater	or Greater	or Less
			Corrective Action Plan,	
			Yearly Audits,	Blocked
	5 Year		Suspension of ACES	from New
5 Years Audits	Audits	5 Year Audits	Status	Orders

Delivery

Gold	<u>Silver</u>	<u>Bronze</u>	<u>Yellow</u>	<u>Red</u>
100%	>98%	>96%	>90%	<90%
			Corrective Action Plan,	
			1	Disaload
			Yearly Audits,	Blocked
	5 Year		Suspension of ACES	from New
5 Years Audits	Audits	5 Year Audits	Status	Orders

#### 4.0 REJECTION

#### 4.1 ACX/AFP Rejected Material

Any product failing to meet the above criteria may upon inspection, be rejected, and returned to the supplier. An engineering and quality evaluation will be required on any non-conforming part to determine whether the part can be reworked or processed as a Use As Is item.

# 4.2 Root Cause / Corrective Action

When a Root Cause / Corrective Action is required for rejected product it shall be submitted to ACX/AFP within the time specified on the Corrective Action Request. If additional time is required an extension may be requested by contacting the ACX/AFP Quality Department. The corrective action shall address containment, root cause analysis, mistake proofing and corrective action. Corrective actions not answered shall be grounds for removing your approved vendor status.

#### 5.0 VERIFICATION

# 5.1 Right of Entry

ACX/AFP and/or its customer or regulating agency is afforded the right of entry at the supplier for product verification and to assure product conforms to the specified requirements (source inspection), as well as all facilities and records involved in the order.

# 5.2 Quality Assurance

Verification by ACX/AFP does not relieve the supplier of the responsibility to effectively control quality.

# **5.3** Acceptable Product

Verification by ACX/AFP and/or its customer does not absolve the supplier of the responsibility to provide acceptable parts.

# 5.4 Supplier Responsibility

Inspection approval during verification, or at ACX/AFP, during or after manufacturing does not constitute final acceptance nor absolve the supplier of responsibility for subsequent rejection by the customer.

# **5.5** Customer Rejection

Inspection approval during verification, or at ACX/AFP, during or after manufacturing does not constitute final acceptance nor absolve ACX/AFP of responsibility for subsequent rejection by the customer.

# 6.0 AFP / ACX, CUSTOMER & GOVERNMENT OWNED TOOLING

#### **6.1** Buyer Owned Tooling

It shall be the suppliers' responsibility to maintain buyer owned tooling in a condition to prevent damage, misuse, and/or deterioration. Reference MPS-192, Control of Customer or Government Owned Tooling and Equipment.

# 6.2 FAIRS for Parts Produced with Buyer Owned Tooling

Samples and First Article Inspection Reports are required prior to first run of product produced using buyer owned tooling.

# 6.3 Maintenance of Buyer Owned Tooling

The supplier shall notify ACX/AFP when tooling has become worn, damaged, or cannot meet the drawing or specification requirements.

# 6.4 Storage and Deterioration

It is the suppliers' responsibility to audit buyer owned tooling for damage, proper storage, and/or deterioration if said tooling has not been used for two (2) years or more.

# 6.5 Tooling Reports

The supplier shall be responsible for completing and forwarding an inventory for buyer owned tooling. This will be sent in conjunction with the self-survey, or as requested by ACX/AFP. This does not apply to tooling or gauging that suppliers have on a short-term basis.

# 6.6 Tooling used as a Media of Acceptance

For ACX/AFP Customers or supplier supplied tooling a process shall be in place for tooling to be either periodically validated to a calibration standard or its control media.

# 6.7 Tooling used as a Media of Acceptance

At no time shall a supplier modify, or cause to be modified, a buyer owned casting tool without written permission from ACX /AFP.

NOTE: ACX/AFP must receive government approval for any modification to government owned tooling.

# 7.0 SOFTWARE QUALITY ASSURANCE

# 7.1 Software Control Plan (Machine Tools, Automated Test and Inspection equipment)

The supplier shall have a software control plan established and in effect. The plan shall include machine tool programs, measuring equipment and automated test equipment.

# 7.2 Software Control Plan (Software embedded in products)

Where product contains embedded software the supplier shall submit their software Quality Management plan to ACX/AFP for concurrence. The software Quality Management plan shall meet the requirements of AS9006.

# 8.0 Flow down of FAR 52.219-9(d) (9)(10)

All Large Business concerns awarded subcontracts that offers further subcontracting opportunities, for the "Utilization of Small Business Concerns" where the purchase order exceeds \$650,000 will be required to adopt a plan in compliance with FAR clause 52.219-9 and will be required to submit the plan and a SF295 to ACX/AFP.

# 9.0 ITAR Requirements

The Code of Federal Regulations 22 CFR International Traffic in Arms Parts 120 thru 130 apply to all items on this order that meet the requirements of 22 CFR 120. When the ACX/AFP Contract or Purchase Order defines that the product being purchased is for a military program or is being developed for a military program the supplier shall ensure he has a procedure in place to meet the ITAR requirements. AeroControlex Group procedure EXP001

#### 10.0 Counterfeit Parts

#### 10.1 Counterfeit Parts Program

Supplier **shall** develop a counterfeit parts program using AS6174 and/or AS5553 as a guide.

### **10.2** Definitions for purposes of this requirement:

- (i) "Counterfeit Parts" shall mean a part, component, module, or assembly whose origin, material, source of manufacture, performance, or characteristics are misrepresented. This term includes, but is not limited to, (A) parts that have been (re)marked to disguise them or falsely represent the identity of the manufacturer, (B) defective parts and/or surplus material scrapped by the original manufacturer, and (C) previously used parts pulled or reclaimed and provided as "new".
- (ii) As used herein, "authentic" shall mean (A) genuine; (B) from the legitimate source claimed or implied by the marking and design of the product offered; and (C) manufactured by, or at the behest and to the standards of, the manufacturer that has lawfully applied its name and trademark for that model/version of the material.
- (iii) "Independent Distributor" shall mean a person, business, or firm that is neither authorized nor franchised by an Original Component Manufacturer ("OCM") to sell or distribute the OCM's products but which purports to sell, broker, and/or distribute such OCM products. Independent Distributors are also referred to as unfranchised distributors, unauthorized distributors, and/or brokers.

# 10.3 Seller Represents and Warrants

SELLER represents and warrants that only new and authentic materials are used in products required to be delivered to AEROCONTROLEX GROUP, INC. (ACX/AFP). or any of its subsidiaries or affiliates (hereinafter "AEROCONTROLEX GROUP, INC.") and that the work delivered or products sold contain no Counterfeit Parts, or the individual materials sold to AEROCONTROLEX GROUP, INC. are not Counterfeit Parts. No other material, part, or component other than a new and authentic part is to be used unless approved in advance in writing by AEROCONTROLEX GROUP, INC. To further mitigate the possibility of the inadvertent use of Counterfeit Parts, SELLER shall only purchase authentic parts/components directly from the Original Equipment Manufacturers ("OEMs")/OCMs or through the OEM's/OCM's authorized distribution chain. SELLER must make available to AEROCONTROLEX GROUP, INC., at AEROCONTROLEX GROUP, INC. request, OEM/OCM documentation that authenticates traceability of the components to that applicable OEM/OCM. The documentation that authenticates traceability must be available for at least 7 years past the date of SELLER's receipt. Purchase of parts/components from Independent Distributors is not authorized unless first approved in writing by a AEROCONTROLEX GROUP, INC. Procurement Representative. SELLER must present complete and compelling support for its request and include in its request all actions to ensure the parts/components thus procured are legitimate parts. AEROCONTROLEX GROUP, INC. approval of SELLER request(s) does not relieve SELLER's responsibility to comply with all Purchase Order requirements, including the representations and warranties in this requirement.

#### 10.4 Sellers System

SELLER shall maintain a documented system (policy, procedure, or other documented approach) that provides for prior notification and AEROCONTROLEX GROUP, INC. approval before parts/components are procured from sources other

than OEMs/OCMs or through the OEM's/OCM's authorized distribution chain. SELLER shall provide copies of such documentation for its system for AEROCONTROLEX GROUP, INC. inspection upon AEROCONTROLEX GROUP, INC. request.

(d) If the SELLER is providing electronic components/devices only, the following certification applies:

Certification of Origin of Product: Acceptance of this Purchase Order constitutes confirmation by the SELLER that it is either the Original Equipment Manufacturer (OEM), Original Component Manufacturer (OCM), or a franchised or authorized distributor of the OEM/OCM for the product herein procured. SELLER further warrants that OEM/OCM acquisition documentation that authenticates traceability of the components to that applicable OEM is available upon request. If the SELLER is not the OEM/OCM or a franchised or authorized distributor, the SELLER confirms by acceptance of this Purchase Order that each product supplied to AEROCONTROLEX GROUP, INC. has been procured from the OEM/OCM or a franchised or authorized distributor of the OEM/OCM. The supplier further warrants that OEM/OCM acquisition traceability documentation is accurate and available to AEROCONTROLEX GROUP, INC. upon AEROCONTROLEX GROUP, INC. request.

#### 10.5 Seller Flow Down

SELLER shall flow the requirements of this provision to its subcontractors and suppliers at any tier for the performance of this Purchase Order.

# 11.0 Packaging and Delivery

#### 11.1 Packaging

Parts shall be package in such a manner that no damage shall occur during the shipping process. Parts should be package such that they cannot contact other parts and will not break out of the shipping container. Packaging shall protect parts from FOD.

#### 11.2 Electrostatic Sensitive Parts

Electrostatic sensitive parts shall be packaged using appropriate materials to protect products from electrostatic discharge. The shipping and unit containers shall be identified as ESD sensitive devices.

#### 11.3 Delivery

Delivery of products shall meet the PO shipping methods and be adequate for the product being shipped.

#### 12.0 Flight Safety

#### 12.1 Requirements

Where FLIGHT SAFETY is a contract requirement to ACX/AFP this will be flowed down to the supplier on the drawing and noted in the Purchase Order. The processing of Items Identified as FLIGHT SAFETY is considered LOCKED. All processing changes must be approved by ACX/AFP and our customer. You must provide ACX/AFP with your processing plans for approval and maintain the approved plans for review. All records pertaining to the processing of FLIGHT SAFETY must be maintained for 40 years. If you find you cannot maintain all

manufacturing records associated with FLIGHT SAFETY, then these records must be supplied to ACX/AFP. These records include all certifications (material and special processes) Manufacturing Routers, Test Records and Inspection Records.

# **Appendix A**

Traceability and Documentation Requirements

	Item	Definition	Status
Α	First Article Inspection Report. To the requirements of AS9102	Required for First shipment or any change in Revision Level or Manufacturing process including change of manufacturing location.	Supplied with Shipment <sup>2</sup>
В	Inspection Records	Documented inspection records that ensure all characteristics have been inspected and the results of the inspection.	Maintain on File <sup>1, 2</sup>
С	Shop Router	Parts manufactured must have a manufacturing plan and records to support that the plan was followed.	Maintain on File
D	Material Certifications	Raw material certifications for all of the raw material used in the manufacture of the product	Supplied with Shipment <sup>2</sup>
E	Special Process Certifications	Special process Certifications for all special processes used in the manufacture of the product. Example: Heat Treat, Plating, Anodize, NDT, etc.	Supplied with Shipment <sup>2</sup>
F	Certificate of Conformance	Certificate of conformance stating all the requirement of the purchase order have been met. The C of C must be signed by an authorized individual of your organization and must contain the Part number on the AFP / ACX Purchase Order, P/N Revision, quantity, PO# and special requirements per the PO.	Must be Supplied with Shipment
G	Test Data	Performance test data as required by the specification, drawings or purchase order.	Must Be Supplied with Shipment

# <sup>1</sup>Suppliers utilizing delegated inspection

Where a supplier utilizes sub tier suppliers that self release product, the supplier shall provide a means of ensuring that this documentation is available if requested by ACX/AFP Group.

# <sup>2</sup>Source Controlled Suppliers (Supplier Design)

Where Source Controlled suppliers are producing assemblies or sub assemblies made up of multiple components these individual components must meet all of the above requirements (A thru G). First Articles must be performed per the Requirements of SAE AS9102. This data can either be supplied to ACX/AFP or made available for review at the supplier facilities