

REV	DATE	DESCRIPTION	APPD
A	5/27/2016	NEW RELEASE	BAR
B	9/1/2017	Added Clause 1 – FOD, 16 Shelf Life	Leyna Marban
C	3/14/18	Added Clause 24,25,26 Amended 66	Leyna Marban
D	02/06/19	Removed Aeroflex references.	B. Mills
E	05/06/19	Modified QC 56	B. Mills
F	10/18/21	Modified and clarified QC-9, QC-15, QC-52	B. Mills
G	06/14/22	Removed Cobham. references.	M. Kelso
H	09/14/22	Updated Clause 62	M. Kelso
J	10/27/2023	Add Clause 73	M. Kelso
K	03/21/2024	Updated Clause 9,18 & 21. Deleted QC 19-20	M. Kelso
L	05/14/2024	Add Clause 74	M. Kelso


# Supplier Quality Assurance Requirements

## Quality Clauses

**PROPRIETARY:** Except as otherwise agreed in writing, the information and design disclosed herein are the property of EVERAXIS-USA. and must not be copied or distributed outside EVERAXIS-USA except to authorize persons with a genuine need-to-know who by the use hereof acknowledge EVERAXIS-USA ownership and agree to maintain this information and design in strict confidence.

DATA  
MARKINGS AND  
ITAR NOTICE

WARNING: This document contains information EXEMPT FROM MANDATORY DISCLOSURE under the FOIA. Exemption 2 applies.

Reviewed By	05/14/2024	MK	Title:  <b>EVERAXIS-USA, Inc. Quality Clauses</b>	 <b>EVERAXIS™</b>
Reviewed By	10/27/2023	MK		
Reviewed By	09/14/2022	MK		
Reviewed By	06/14/2022	MK		
Reviewed By	10/18/2021	WM		
Reviewed By	02/06/2019	WM		
Reviewed By	03/14/2018	LM		
Written By	02/23/2016	BAR		
	Date	By		
			Cage Code <b>99200</b>	<b>EUS-QS-AL-008</b>
			Rev. <b>L</b>	Sheet <b>1</b> Of <b>12</b>

PROPRIETARY: Use or disclosure is subject to the restrictions shown on sheet 1. Document Number QS-AL-008, Rev L

The following items, when specifically referenced in the purchase order by number, form a part of the purchase order in addition to all other clauses, terms and conditions, and drawings and specifications, which are, made a part of the purchase order. Unless otherwise specified, specifications referenced herein shall be of the issue in effect on the date of request for quotation. Failure to comply with stated clauses will jeopardize acceptance of the shipment and invoice payment. A negotiated partial acceptance or shared responsibility for a flowed down requirement may be considered by EVERAXIS-USA, Inc. if a written deviation or waiver is completed and accepted by Engineering and Quality prior to signing a purchase order.

- 1) **FOD (Foreign Object Damage) - NAS412 compliant.** Maintain an internal procedure and practices to eliminate foreign object damage and debris.
- 2) **INSPECTION SYSTEM** – The Seller shall provide and maintain an inspection system acceptable to the Buyer for all supplies and services covered by this purchase order. The inspection system shall be in accordance with ANSI/ASQC Z1.4 or equivalent. The Seller, in addition, shall establish and maintain a system, which complies with ANSI/NCSLZ540, for the calibration of all measuring, and test equipment used in fulfillment of the purchase order requirements. The application of this requirement to the purchase order does not imply authorization for independent MRB action. Requests for use of non-conforming material must be made at each specific occurrence, and approval obtained from the Buyer's Quality Assurance Department.
- 3) **NHB 5300.4** – The Seller shall provide and maintain an inspection system acceptable to the Buyer for all supplies and services covered by this purchase order. The inspection system shall be in accordance with NASA Specification NHB5300-4. The Seller, in addition, shall establish and maintain a system which complies with MIL- ANSI/NCSLZ540, for the calibration of all measuring and test equipment used in fulfillment of the purchase order requirements. The application of this requirement to the purchase order does not imply authorization for independent MRB action. Requests for use of non-conforming material must be made at each specific occurrence, and approval obtained from the Buyer's Quality Assurance Department.
- 4) **GOVERNMENT SOURCE INSPECTION** – “Government inspection is required prior to shipment from Seller's plant. Upon receipt of this order, Seller shall promptly notify and furnish a copy to the Government Representative normally servicing Seller's plant so that Government Inspection can be appropriately planned. If a Government Representative does not service a Seller's plant, Seller shall contact the cognizant Department of Defense Regulating Agency for direction. If Seller cannot locate the Government Office, Seller shall notify Buyer's Purchasing Agent immediately.”
- 5) **BUYER SOURCE INSPECTION** – Source inspection by Buyer is required for all material covered by this purchase order, prior to shipment from the Seller's plant. The Seller shall notify the Buyer's Quality Assurance Department at least seven (7) days prior to the date material will be ready for inspection. Buyer may reject the material if non-conforming and require that full corrective action be complete prior to shipment.
- 6) **STANDARDS OF WORKMANSHIP** - The Seller shall provide and maintain written and thoroughly descriptive standards of workmanship directly applicable to the nature and level of work to be performed under this purchase order. A copy shall be furnished to the Buyer upon request. The Buyer may disapprove standards of workmanship considered inconsistent with the work to be performed, and request correction of deficiencies. Standards of workmanship must satisfy as a minimum the requirements of MIL-HDBK-454 and any other specifications applicable to the purchase order. The Buyer may impose his own standards of workmanship if the Seller is unable to comply with this requirement.
- 7) **GOVERNMENT ACCESS** – During performance of this order, Seller's Quality Control or Inspection System and Manufacturing processes are subject to review, verification, and analysis by authorized Government Representatives. Government inspection or release of product prior to shipment is not required unless Seller is otherwise notified. A copy of this order will be furnished to Seller's Government Representative upon request.
- 8) **SPECIAL PROCESS CONTROL** – Buyer approval of Seller's special processes, operating personnel, equipment and process procedures is required. Seller shall provide copies of procedures and personnel certifications upon request. If the Seller uses a facility other than his own, that facility is subject to the same conditions of Buyer approval. All certifications supplied as objective evidence must indicate the name and location of the facility performing each special

PROPRIETARY: Use or disclosure is subject to the restrictions shown on sheet 1. Document Number EUS-QS-AL-008,

process.

**9) CASTING REQUIREMENT** – Castings shall meet all applicable drawing requirements and shall also be certified to MIL-2175, Class 4, Grade D. An inspection report listing actual measurements of all cast dimensions must be supplied with the first article of the initial order. Test bars and material certifications representing each melt and heat shall be supplied with each shipment. All castings supplied shall not exceed applicable limitations of porosity, distortion, shifts, corrosion and shall meet dimensional requirements. Repairs shall not be made to defective items without prior approval from the Buyer's Quality Assurance Department.

**10) CERTIFIED WELDERS** – All fusion welding must be performed by welders certified in accordance with SAE AMS- STD-1595. Welders who may be certified to another welding specification may be used upon specific approval from the Buyer. Any alternate specification used must meet the minimum requirements of SAE AMS- STD-1595.

**11) MAGNETIC PARTICLE/PENETRANT INSPECTION** – Magnetic particle/penetrant inspection shall be performed in accordance with applicable drawing requirements. Where specific requirements are not otherwise identified, the following specifications apply: a) Penetrant inspection per ASTM-E-1417, b) Magnetic particle inspection per ASTM-E-1444. Personnel performing inspections shall be qualified in accordance with NAS-410. A report of the results of inspection shall accompany each lot shipped.

**12) RADIOGRAPHIC INSPECTION** – Radiographic inspection shall be performed in accordance with applicable drawing requirements. Where specific requirements are not otherwise identified, ASTM-E-1742 shall apply. The Seller shall furnish X-Ray film identifiable to each part, and two copies of the X-Ray laboratory report with each shipment.

**13) TEST BARS** – Two (2) test bars and material certification must be submitted with each shipment of castings, for each melt and heat.

**14) SHEAR SPECIMENS** – The Seller shall furnish three (3) shear specimens in accordance with SAE-AMS-W-6858, for each lot of material on which resistance welding (Spot or Seam) is performed. Samples shall be prepared for each lot concurrently with the performance of welding. Welding machines shall be qualified to SAE-AMS-W-6858.

**15) PRINTED CIRCUIT REQUIREMENTS –**

**A)** Multilayer printed wiring boards or other PWB's with plated through holes delivered against this purchase order, unless otherwise specified by the detail drawing, shall be accompanied by a micro- sectioned sample in accordance with IPC-TM-650, Method 2.1.1 from either the coupon specimen A or B of every panel produced in the lot. The coupon shall meet the requirements IPC-2221 and IPC-6011. Coupon specimens are to be thermally stressed and microsectioned only after final processing of the panel. Thermal stress testing shall be in accordance with IPC-TM-650, Method 2.6.8.

**B)** A lab report is to be supplied indicating the panel number and circuits on the panel that the coupons represent. All the printed wiring boards delivered against this purchase order shall be capable of passing the structural integrity requirements specified in:

- 1) MIL-P-5110.
- 2) IPC-6013 Performance Specification for Flex Printed Boards.
- 3) IPC-6012 Performance Specification for Rigid Printed Boards.

**16) SHELF LIFE** – The Seller shall furnish with each shipment made against this purchase order complete information in accordance with applicable military specifications, relative to the limited life of the material supplied. Each unit package or container shall be marked. Rubber products, whether individually supplied or in assemblies, shall be identified as to cure or mold date. Containers of life-limited materials shall be marked with the date of manufacture and/or the expiration date. In no case shall material be supplied with more than 25% of its useful life expired.

**17) IDENTIFICATION/SERIALIZATION** – Each item delivered against this purchase order shall be identified by a

PROPRIETARY: Use or disclosure is subject to the restrictions shown on sheet 1. Document Number EUS-QS-AL-008,

unique part or type number. Control of individual items or lots shall be maintained by use of one or more of the following methods: date codes, lot numbers, and serialization. Where individual items are furnished with inspection/test acceptance reports, each item shall be serialized and traceable to the data.

**18) CHEMICAL/PHYSICAL CERTIFICATION (Certificate of Analysis-C of A)** – The Seller shall furnish certificates of physical tests and/or chemical analyses for material delivered against the purchase order. The heat, batch, melt number, etc., applicable to the material shall be included in the certificates.

**19) Delete.**

**20) Delete.**

**21) CERTIFICATE OF COMPLIANCE (C of C)** – The Seller shall furnish with each shipment against this purchase order a certificate indicating full conformance to all purchase order requirements and approved by Seller's Quality Assurance. The certificate shall identify Buyer's purchase order number, Seller's name and location, item delivered, date codes or lot numbers or serial numbers, applicable drawings/specifications (including revisions) and quantity delivered. The certificate shall further state that test reports and certifications for all material, parts, and processes used in manufacture are on file and available for examination.

Manufacturers and suppliers including distributors shall provide written certification that all product being provided to EVERAXIS-USA, Inc. to satisfy this Purchase Order contains only new product and the supplier has in their possession acquisition traceability documentation provided by the Original Equipment or Component Manufacturer and all previous distributors for all material contained in this shipment. Military compliant microcircuits and discrete semiconductors shall adhere to the acquisition traceability requirement in MIL-PRF-38535 and MIL-PRF-19500. These documents require that manufacturer certifications follow the parts throughout the supply chain. In no case shall the acquisition traceability documentation be altered or shows signs of alteration. This is grounds for immediate rejection of the lot/shipment. The original component manufacturer's certification shall include (at a minimum):

- Manufacturer's name and address
- Device type
- Lot identification code (including plant code)
- Conformance inspection acceptance date
- Quantity of devices in shipment from manufacturer
- Statement certifying product conformance and traceability
- Signature and date of transaction
- Customer or Distributors name and address

Other material should include the documentation cited above for military parts as available and applicable. At a minimum, the supplier shall have documentation (for example, packing slips, invoices) that confirms acquisition traceability back to the device OEM/OCM.

Acquisition traceability also includes distributor documentation for each distributor in the supply chain:

- Distributor's name and address
- Name and address of customer as involved in the chain of custody
- Quantity of devices in shipment
- Lot/Date code

Copies of acquisition traceability documentation must be maintained by the supplier for a minimum of 5 (five) years.

The shipment record provided with each delivery of parts shall identify the Original Equipment Manufacturer (OEM)/ Original Component Manufacturer (OCM) CAGE code/ manufacturer identification, device part number and lot number/ date code if applicable. In addition, each container shall be marked with the OEM/OCM identification, device part number and lot number/ date if applicable.

**22) QUALIFICATION DATE** – For each item on the purchase order, the Seller shall furnish with the first shipment against this purchase order, a copy of the latest completed lot evaluation performed on any device within the same family of devices. The Buyer may disapprove data considered not relevant to current production, or to the device supplied.

**23) OTHER** – To be defined by the purchase order. “See P.O. for details.”

**24) PRODUCT SAFETY** - Seller shall establish a communication method that ensures all personnel are aware of their contribution to product safety. This method shall establish a frequency of communication that is appropriate to the organization.

**25) PRODUCT CONFORMITY** - Seller shall establish a communication method that ensures all personnel are aware of their contribution to Product or Service Conformity. This method shall establish a frequency of communication that is appropriate to the organization. The supplier is required to notify the buyer within forty-eight (48) hours of previously delivered material that is discovered to be nonconforming.

**26) ETHICS** - EVERAXIS-USA, Inc. values relationships that are grounded in a shared commitment to performing in accordance with the highest standards of professional business conduct and encourages all suppliers to implement an effective ethics program, including adopting a written code of conduct.

**27) Delete.**

**28) Delete**

**29) Delete**

**30) CALIBRATION** shall be in accordance with: a) with ANSI/NCSLZ540 (Latest Revision) or, b) ANSI/NCSL Z540-1, American National Standard for Calibration, Calibration Laboratories and Measuring and Test Equipment, General Requirements and ISO10012-1, Quality Assurance Requirements for measuring Equipment (Latest Revision).

**31) POLYMERIC ADHESIVES** shall have been evaluated and accepted per MIL-STD-883 Method 5011 for: a) Type I-electrically Conductive, b) Type II-electrically insulative, unless otherwise specified by the adhesives' detail drawing (SCD). A Certificate of Compliance shall be provided for each adhesive order and shall contain the actual test data for the suppliers testing as prescribed in Method 5011 or MIL-STD-883. (Effective date – May 29, 1988).

**32) NOTIFICATION OF CHANGE** – The seller/supplier of material on this purchase order/contract shall not make any changes to the material in the design, manufacturing processes and construction. This includes location change of the manufacturing facility and location change of production lines or significant process equipment within the facility. This shall include any Class 1 change that would affect performance, quality, reliability, or interchangeability of the material to be delivered. Notification of the change must be made prior to shipment of the material and be approved by EVERAXIS-USA, Inc. Quality Assurance Department in writing to the seller/supplier of the material. EVERAXIS-USA, Inc. must be notified when the seller/supplier changes their (lower level) suppliers.

**33) PACKAGING OF MATERIAL** – a) Best commercial practices shall be use by the supplier when shipping to prevent damage, deterioration, or degradation of the material, b) Electrostatic sensitive devices/material must be package in antistatic materials or containers, consistent with the electrostatic discharge sensitivity range as described in DOD-HDBK- 263 & DOD-STD-1686. All packaging shall be clearly labeled as to ESD warning or caution as required as per MIL- STD-129, c) All components shall be packaged in conductive materials or containers consistent with the electrostatic discharge sensitivity range as described in DOD-HDBK-263 and DOD-STD-1686. All packaging shall be clearly labeled as to ESD warning or caution as required per MIL-STD-129. All components shall be protected from static damage by the supplier during processing, packaging and shipment in accordance with DOD-STD-1686, d) All parts shall be free of contaminants and packaged in a manner to prevent packaging residue from contaminating the parts, e) Each individual

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container shall be marked with its –40°C storage expiration date.

**34) MIL-STD-1535, SUPPLIER QUALITY ASSURANCE PROGRAM REQUIREMENTS** – a) This is a Group I Procurement in accordance with MIL-STD-1535 (Latest Revision), b) This is a Group II Procurement in accordance with MIL-STD-1535 (Latest Revision), c) This is a Group III Procurement in accordance with MIL-STD-1535 (Latest Revision), d) This part has been designated as a Registered Component as per MIL-STD-1535 (Latest Revision)

**35) SOLDERABILITY REQUIREMENTS** – All devices and/or material supplies shall meet as applicable the following requirements:

- a) MIL-STD-202 Method 208 for other parts not covered by item (b) and (c),
- b) Delete
- c) Delete
- d) J-STD-003, Category 2 for Rigid Printed Circuit Boards
- e) MIL-P-50884 Paragraph 3.4.6 for Flexible and Rigid Flex Printed Circuit Boards,
- f) IPC-S-804 Solderability Test Methods for Printed Wiring Boards,
- g) J-STD-002 for Electronic / Mechanical Components and Wires.

**36) MOISTURE RESISTANCE TEST** – Moisture resistance performed per MIL-STD-883 Method 1004 shall include performance of insulation resistance as specified in Method 1004. Evidence of this shall be included on the Certificate of Compliance.

**37)** As applicable per OSHA requirements of 29 CFR 1910.1200, the supplier of this material shall furnish a material safety data sheet with the first shipment against this purchase order, on any shipments against this order occurring more than a year from supplying the last material safety data sheet, or upon any change in the material safety data sheet.

**38)**

**39) Delete**

**40) Delete**

**41) SOFTWARE QUALITY ASSURANCE** – Supplier must use ISO 9000-3 as a guide for any new development of software or major software change. Software includes (1) software delivered to Everaxis-USA (2) software used to determine final acceptability of parts delivered to Everaxis-USA and (3) software used to control the manufacturing and production process of parts delivered to Everaxis-USA. Major software change is defined as any effort that results in 20% or more of the code being changed. A SQAPP (Software Quality Assurance Program Plan) is not required as a deliverable data item; however, supplier is required to have documented procedures for development and change of software with records maintained and available upon request.

**\*42) QUALITY SYSTEM** – The Supplier shall maintain a Quality System in accordance with **ISO 9001 or AS9100** or an equivalent system acceptable to the buyer for all supplies and services covered by this purchase order.

**43) Delete**

**44) Delete**

**45) Delete**

**46) TO SUPPLIERS** - All suppliers of rigid printed boards shall be qualified manufacturers and the boards shall be selected from the Qualified products List (QPL) for MIL-P-55110 or from the Qualified Manufacturers List (QML) for MIL-PRF-31032. Additionally, only those suppliers qualified for the laminate materials as specified on the PWB Master Drawing shall supply to this order.

**47) PRINTED BOARDS** - All rigid printed boards applicable to all NASA Goddard Space Flight Center (GSFC)

programs and contracts shall be in accordance with GSFC specification S312-P-003 requirements.

**48) PROHIBITED MATERIALS** – Prohibited Parts, Processes and Materials – as identified below are banned from use in the manufacture of products intended for space and military applications. The supplier shall provide a Certificate of Compliance specifically attesting compliance to this quality clause

- a) **TIN:** The used of pure unalloyed tin shall be prohibited as a surface finish including the surface finish on components or parts or encapsulated within an assembly. Solder dipped tin alloy finishes shall contain at least three percent lead or at least three and a half percent silver. All other tin and tin alloy finishes shall contain at least three percent lead.
- b) **CADMIUM:** The use of pure cadmium shall be prohibited as a surface material. Unplated alloys containing greater than five percent cadmium shall be prohibited. Alloys containing greater than five percent cadmium shall be acceptable if they are overplated with a minimum of 50 micro inches of nickel, or 100 micro inches of either copper or gold. Alloys containing cadmium that is sealed with in a hermetic cavity shall be acceptable provided there is no functional impact to the hermetic device for cadmium sublimation if the hermetic cavity is breached.
- c) **ZINC:** The use of pure zinc shall be prohibited as a surface material. Unplated brass (an alloy containing copper and zinc as the main constituents) containing greater than 21 percent zinc shall be prohibited. Brass with greater than 21 percent zinc shall be acceptable if the brass is overplated with either a minimum of 50 micro inches of nickel; an minimum of 100 micro inches of either copper or gold; or any combination nickel, copper, and gold such that the thickness of nickel plus half the thickness of copper, plus half the thickness of gold add up to a minimum of 50 micro inches. Unplated zinc alloys other than brass that contain greater than 10 percent zinc shall be prohibited. Alloys other than brass that contain 10 percent zinc shall be acceptable if they are overplated with a minimum of 50 micro inches of nickel , or 100 micro inches of either copper or gold. Alloys containing zinc that are sealed within a hermetic cavity shall be acceptable provided there is no functional impact to the hermetic device form zinc sublimation if the hermeticity is breached.
- d) Mercury and compounds of Mercury
- e) Vinyl (polyvinylchloride) as insulation for electrical hook up wiring.
- f) Vinyl (polyvinylchloride) for use for packaging electronic components or within shipping containers.
- g) Uranium, potassium, radium, thorium, and/or alloys thereof.
- h) Corrosive silicone sealants, adhesives, or coatings (acetic acid evolving silicone). Use of silicone greases as a thermally conductive material.
- i) Asbestos, including that contained within adhesives, sealants, coatings, and encapsulants.
- j) Any non-vented honeycomb core structures.

**49) TRANSMITTING DATA** – When any kind of objective evidence or certification or test is required by this P.O. (Ref. Clause 18), the data shall be transmitted electronically (i.e. Adobe Acrobat (.PDF), etc.) by Internet, e-mail or physically in disk or CD media. The media shall be identified with the purchase order, part number and line item. This includes, but not limited to: inspection/test acceptance reports, chemical/physical certifications, attribute summary, etc. Contact the buyer for name, number or e-mail of the Incoming Inspector. Since incoming inspection must verify that the data is present upon receipt, it is imperative that the data be supplied punctually.

**50) OBSOLETE REQUIREMENTS** – This purchase order flows down obsolete requirements (i.e. MIL-I & MIL-Q, MIL-STD's, etc.) because these requirements are specified for the end item. The supplier shall abide by these requirements to the extent necessary to assure the necessary quality and reliability.

**51) SMALL FACILITY QUALITY SYSTEMS** – The supplier shall maintain a quality system that best provides for compliance to the requirements of this purchase order, commensurate with the scope and complexity of the work or

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service to be performed, relative to the size and limitations of the facility. (Ref.: clause 42)

**52) WITNESS SAMPLES FOR CONFORMAL COATING – PAINT PROCESSES, CHEMICAL CONVERSION PROCESSES AND OTHER SURFACE TREATMENTS & FINISHES** – The supplier performing this service shall perform the following actions and then deliver the requested data indicating full compliance to the process performed as applicable.

a) A record of each mix batch date or lot of material and procedure number and the revision used utilized shall be furnished as part of the shipment of the completed finishing process.

b) Two (2) witness samples shall be maintained for each mix batch or lot of material unless otherwise specified in the Everaxis-USA Purchase Order. The size and material type of the sample must be the same as the item having the conformal coating, paint process, chemical conversion processes and other surface treatments & finishes. These samples shall be processed at the same time and under the same conditions as the item(s) being finished. These witness samples shall be kept and maintained by the supplier performing the process.

**53) SINGLE LOT/DATE/OR BATCH CODE** – Items supplied on this purchase order shall be from a single lot, date or batch code ( single element) as defined being manufactured at the same time form the same homogeneous lot of material, parts, components and/or elements.

**54) FIRST ARTICLE INSPECTION REPORT** is required on this purchase order. The following requirements are required to be performed, listed and delivered with the item being supplied on this purchase order in hard copy or electronic media (disc/CD-ROM) in Microsoft Word, Excel Format and/or CMM format. It is suggested to use AS9102 as a guide.

- a) Everaxis-USA Purchase Order
- b) Everaxis-USA Purchase Order Line Item Number (In the event of Multiple Line Items/Part Numbers)
- c) Inspection Signature/Stamp
- d) Drawing Number and Revision
- e) 100% Read and Record Dimension Values of the Drawing obtained during the supplier inspection. This shall reference Drawing Zone for the characteristic to be measured, the actual dimensional requirement stated on the drawing, tolerances and all drawing notes.
- f) Material Chemical/Physical Certifications from the original supplier of the material used to manufacture the specific part number (i.e. aluminum, steel, titanium, etc.)
- g) Material Finishing Certifications (Plating, Coating, Painting) specifically citing the specification and procedure required to perform the process.
- h) Assembly parts list with individual piece parts and Drawing Revision Levels. Date/Lot/Batch Code of each part contained therein (applicable to Assemblies Only).

**55) SUBCONTRACTED SERVICES CERTIFICATE OF COMPLIANCE (SOURCE OF ORIGIN) -** The supplier of the item being procured by Everaxis-USA shall deliver a copy of the original manufacturer's certificate of compliance for any and all processes performed in the manufacturing of this item. This pertains to but is not limited to processes such as heat-treating, welding brazing, painting, plating, finishing, conformal coating, machining, micro sectioning, outside services, etc.

**56) APPROVED SOURCES** – Supplier of any special processes for items on this purchase order must be customer approved or **NADCAP** Certified for the process being performed. Certificate of Compliance from the outside process source to be included with shipment.

Supplier shall contact the buyer if further information is needed.

If sources other than customer approved or **NADCAP** Certified are utilized, the items supplied shall be deemed as Noncompliant to the purchase order requirements and shall not be accepted for use.

**57) RETENTION OF RECORDS** - Inspection and/or test records of the supplier submitting parts proving compliance

PROPRIETARY: Use or disclosure is subject to the restrictions shown on sheet 1. Document Number EUS-QS-AL-008,



to all of the Everaxis-USA purchase order, drawing, and statement of work and/or specifications shall be actively maintained for a period of seven (7) years for the purposes of data review upon request by Everaxis-USA unless otherwise stated in the purchase order.

**Note:** Record retention requirement for Commercial orders is one (1) Year on site.

**58) OBSOLESCENCE/END OF LIFE** – The supplier of the product, material, component, process, circuit or other items deliverable on this purchase order shall notify EVERAXIS-USA, Inc. Purchasing Department if one or any combinations of the following conditions exist:

- a) Product, material, component, process, circuit or other items deliverable are known to have Obsolescence or End of Life Issues.
- b) The product, material, component, process, circuit or other items deliverable is currently no longer in production.
- c) Product, material, component, process, circuit or other items deliverable are nearing the end of their life cycle and are to be discontinued from manufacturing/processing within the next five (5) years.
- d) Product, material, component, process, circuit or other items that Do Not have Obsolescence/End of Life issues and will be deliverable and will be available for the next five (5) years.

This notification to Everaxis-USA Purchasing Department shall be performed once on the execution of this purchase order with the following provisions: If the purchase order delivery cycle/schedule requires more than a twelve (12) month performance period, then the supplier/vendor shall notify the Everaxis-USA Purchasing department as a minimum every twelve

(12) Months of this delivery cycle/schedule for part Obsolescence/End of Life issues.

In addition, supplier shall provide options and recommendations regarding the Obsolescence/End of Life conditions noted and notify Everaxis-USA Purchasing Department.

Resolution of Obsolescence/End of Life issues may include a onetime purchase of all End of Life items or the Qualification of an alternate supplier item or change/redesign of the product, material, component, process, circuit or other items deliverable on this purchase order.

**59) SUBCONTRACTED SERVICES** - Vendors that provide sub-contracted services (i.e. lead forming, tinning, printed wiring board assembly, marking, etc.) shall provide a quality program plan that describes how the vendor's quality organization plans to control the product for this specific purchase order or program. The program plan shall be based on the quality system specified by the PO, the source control drawing and/or statement of work.

**60) Delete**

**61) Delete**

**62) DFARS-PREFERENCE FOR DOMESTIC SPECIALTY METALS** – (Defense Federal Acquisition Regulation Supplement) Domestic Specialty Metals are applicable on this order. Any specialty metals used in any deliverable products must be melted in the United States or a qualifying country. Refer to DFARS 252.225-7001 (if applicable), DFARS 252.225-7002 (if applicable), DFARS 252.225-7003, DFARS 252.225-7008, and DFARS 252.225-7009 for the definitions of specialty metals. Source materials supplier must list the appropriate DFARS clause on the Certificate of Compliance/Certificate of Analysis.

**63) CERTIFICATE OF COMPLIANCE** – For resistors procured to specification 25JX55342, the supplier's certificate of conformance (C of C) shall state that resistors supplied on this order do not contain Nickel Chromium Film.

**64) SAMPLES INSPECTION/TEST REPORT – DEFINED SELLER PERFORMANCE/ACTION:** One (1) line item/part of the specific part number shall have 100% of the inspection, parameters measured/tested with applicable limits and conditions, quantitative data recorded against each parameter.

The balance of the line item/part quantity of the specific part number shall have a sample inspection performed per ANSI Z 1.4, Normal Sample, Level II, 1 % AQL on the critical dimensions/parameters as defined by the EVERAXIS-USA, Inc.

PROPRIETARY: Use or disclosure is subject to the restrictions shown on sheet 1. Document Number EUS-QS-AL-008,

drawing and/or specification. The inspection, parameters measured/tested with applicable limits and conditions, quantitative data recorded against each parameter, and a summary of results shall be noted.

The above actions do not relieve the supplier with the full compliance to the drawing, specification and purchase order requirements.

**65) NONCONFORMING MATERIAL:** Delivered material must conform to all drawing, specification, workmanship and flow down requirements specified by the purchase order. Acceptance of material by Everaxis-USA at the supplier's facility or at destination does not constitute a waiver if the material is subsequently determined to be nonconforming. Unless specifically authorized in writing by EVERAXIS-USA, Inc. the supplier is not authorized to make use-as-is and repair dispositions on non-conforming material. Should you discover non-conforming material that can be used to fulfill the requirements of the purchase order or sales order, contact Everaxis-USA's buyer immediately for instructions.

**66) GIDEP Notification:** For a period of 10 years after date of last shipment, the supplier is required to notify the buyer within forty-eight (48) hours of previously delivered material that is discovered to be nonconforming or is the subject of a released Government-Industry Data Exchange Program (GIDEP) Alert or Problem Advisory. and/or any other type of notification or concern regarding product authenticity, quality, safety, process integrity, and/or specification compliance.

**67) RED PLAGUE MITIGATION:** Silver coated copper wire can become corroded with cuprous oxide ("red plague") when moisture is absorbed and penetrates through pinholes or other breaks in the silver plating and invades the silver-copper interface. Therefore, the methods used to produce, store and use silver plated wire shall be controlled as described below. Wire manufacturers and distributors shall provide methods and processes for the control, transportation, and storage to mitigate the formation of "red plague". These controls should also include testing of wire (conductor only) for red plague susceptibility in accordance with ECSS Q70-20 for the lot to be supplied. The results of the testing shall be provided and so noted on the C of C.

- 1) Wire manufacturing controls shall:
  - a. provide traceability to the plating batch for each lot of wire.
  - b. have environmental controls to provide dry processing of insulation and dry electric testing to prevent introduction of moisture inside the insulation.
  - c. ensure that the wire ends are protected to prevent the diffusion of air and water vapor into the wire. The preferred protection method includes placing the wire in a heat sealed, moisture inhibiting plastic bag with appropriate quantity of desiccant.
  - d. prohibit quenching with water. Only oil, dry processing, and sealing shall be used.
  - e. note that conformance with the above controls is certified on the C of C provided.  
In the event that item "e" above cannot be obtained from the wire manufacturer, a six-foot sample from each end of the wire shall be cross-sectioned and a metallographic inspection performed for the presence of cuprous oxide BY THE SUPPLIER.
- 2) Cable Harness Assembly Controls
  - a. The cable harness fabricator shall conduct the assembly process in a controlled environment. The temperature and humidity on the controlled environment shall be monitored, documented, and maintained within the limits defined below:
    - i. Temperature: 68 - 85°F
    - ii. Humidity: 70% maximum
  - b. If at any time the dew point is reached, the fabricator shall halt the assembly process and immediately relocate the cable harness to dry environment to avoid damage to the hardware.
  - c. Before harness fabrication, the fabricator shall perform a visual inspection of the wire for pit, voids, cracks, evidence of red plaque, or other defects.
  - d. The fabricator shall minimize the exposure of the silver plating by ensuring the insulation remains on the wire until assembly.
  - e. The fabricator and subsequent handling personnel shall ensure the bend radius of two (2) cable diameters is not exceeded.
  - f. Completed cable harnesses shall be placed in a non-opaque, heat-sealed, plastic bag with the appropriate amount of desiccant, a humidity indicator clearly visible, and stored in a controlled

PROPRIETARY: Use or disclosure is subject to the restrictions shown on sheet 1. Document Number EUS-QS-AL-008,

environment where the dew point is not attained.

- g. The fabricator shall not use aqueous solvent for flux removal or any other operation that subjects silver-plated wire to an aqueous solution. Only non-aqueous solvent are allowed.

**68) WIRE AND CABLE CERTIFICATION:** Wire shall be certified through testing by a suitably qualified lab. NASA Approved test facility may be used.

- 1) Certification Testing
  - a. 100-Percent Testing
    - i. Insulated single conductor wires and cable basic wires
      - a. Impulse dielectric test (no greater than 80% of military specification)
    - ii. Testing for insulation flaws of cable's basic wires shall be done prior to cable assembly.
    - iii. Cable
      - a. Dielectric withstand of component wires
      - b. Jacket flaws for shielded cables
  - b. Sample Testing: As a minimum, a sample or samples of each lot of wire/cable shall be subjected to the following quality conformance inspections (as applicable in accordance with the wire or cable specification).
    - i. Insulated single-conductor wires and cable basic wires
      - a. Conductor resistance
      - b. Wrap test
    - c. Shrinkage (heat resistance)
    - d. Cold bend followed by wet dielectric
    - e. Visual and mechanical examination (finished wire outer diameter, identification of product, conductor diameter, strand diameter, conductor stranding, wire base metal, and plating material)
    - f. Polyimide cure test (for modified aromatic polyimide coatings only)
    - g. Crosslink proof testing (for cross-linked insulation materials)
    - ii. Cable
      - a. Shield coverage
      - b. Identification of product
      - c. Jacket wall thickness
      - d. Cold bend
      - e. Thermal shock
      - f. Stress-crack resistance testing (MIL-C-17 Cable only)

Objective evidence of total conformance shall be provided by the supplier in the form of a screening traveler or by noting successful completion of the tests listed above on the certificate of conformance.

**69) FRANCHISED DISTRIBUTOR CHANGE NOTIFICATION REQUIEREMENT** (applies to Franchised Distributors only): All changes to the distributors OEM/OCM franchise status must be reported to the EVERAXIS-USA, Inc. Buyer within 7 days. Change status includes but is not limited to, the following examples:

- a. Loss of OEM/OCM Franchise in total or limited to certain products or product lines.
- b. Additions of new OEM/OCM Franchise Authorizations.

**70) FACILITIES ACCESS:** Seller shall provide or obtain for EVERAXIS-USA, Inc. , EVERAXIS-USA, Inc. customers & regulatory personnel access to any and all facilities where work is be performed or is scheduled to be performed, including those facilities of Sellers sub-tier suppliers. In order to perform item inspections, surveys, of systems, process surveillance as part of verification of conformance to the requirement of the applicable purchase order or sales order. Seller denial of any such access may result in termination of purchase order or sales order. Seller shall flow this quality requirement for facility access to its subtier suppliers with instructions that it is to be flowed down sub tier suppliers at every level.

**71) COUNTERFEIT PART PREVENTION:** Parts and material furnished on this purchase order must be purchased by the Seller directly from the Original Equipment Manufacturer (OEM) or from an OEM's authorized franchised distributor. EVERAXIS-USA. requires the following documentation to be provided along with the product:

- a) Copy of the OEM Certification of Conformance containing the OEM name
- b) Authorized distributor name (as applicable)
- c) Part Number
- d) Lot Number
- e) Serial Number (as applicable) and or date code

EVERAXIS-USA, Inc. requires our Suppliers to ensure that their supplier adhere to this requirement when providing material that will be used in the manufacture of our products. All purchase orders generated by Sellers sub-tier suppliers for product to be used in or on EVERAXIS-USA product, must contain this flowdown.

If efforts to find a component from an OEM or Authorized Distributor are unsuccessful, the supplier must contact the EVERAXIS-USA, Inc. Buyer to obtain assistance.

**72) COUNTERFEIT MITIGATION PLAN:** For those Suppliers that are not an authorized/franchised distributor but are approved Everaxis-USA Suppliers for business continuity reasons, documentation of the procured part shall be traceable to the original manufacturer.

**73) Customer specific Quality Note Flow Down-** Raytheon quality note matrix for reference and application as appropriate: <http://qnotes.raytheon.com>. Following

- CT-XX, JY-XX, CX-XX

**74) Customer specific Quality Note Flow Down** – GDLS quality note matrix for reference and application as appropriate:

[QUALITY CLAUSES \(gdl.com\)](http://gdl.com) and [CHEMICAL AGENT RESISTANT COATING \(wpengine.com\)](http://wpengine.com)

**QL46 - CARC PAINT Process Certification per GDLS-C Form 4707**