Q Clauses
External Provider
Quality Requirements

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1.0 Purpose

This document establishes the minimum quality requirements (Q Clauses), which MACROLINK will incorporate into the Procurement/Subcontract document. The requirements for each program and/or customer are unique, but the table below provides recommended guidance on the clauses to be flow down per procured item.

Procured Item	Q Clauses
Raw Material	1,2,10,23,26,27,28
Mechanical / Structural Parts	1,2,3,4,10,23,26,27,28
Electronic Parts	1,2,3,4,8,9,10,13,21,22,26,27,28
Mechanical Assemblies and higher-order levels of integration	1,2,3,4,10,11,12,20,23,26,27,28
Electrical/Electronic Assemblies and higher-order levels of integration	1,2,3,4,10,11,12,13,20,22,26,27,28
COTS Electronic Products procured from OCM/OEM	1,10,13,26,27,28
COTS Electronic Products procured from Distributer	1,5,10,13,23,26,27,28

2.0 Definitions

A. Buyer: Macrolink Procurement entity.

B. Seller (AKA External Provider, Supplier, Subcontractor): The legal entity that is the contracting party with the Buyer with respect to the procurement document.

C. Procurement Document: The Purchase Order or subcontract between the parties.

D. Item: The product or service contracted for by the procurement document.

E. Rework: Previously documented and approved process that brings the product into conformance with defined requirements.

F. Repair: A condition where the product cannot conform to engineering standards; however, a subsequent operation can be performed to return the product to a condition that **shall** meet fit, form, and function.

3.0 Supplier Quality Requirements

The following Quality (Q) Clauses, as applicable, are a requirement of the procurement document. Unless specifically identified, the revision of the applicable documents and standards referenced herein **shall** be the latest version that is in effect as of the date of the release of the Procurement/Subcontract document.

Q-1 General Quality Assurance Requirements

A. PROHIBITED PRACTICES

1. Unauthorized Repairs: Seller **shall** not repair any damaged item, or any item found to be faulty during manufacturing or that fails to meet Buyer specification/drawing requirements, without Buyer's written approval, except when the nonconformance is minor and Material Review Board (MRB) authorization has been granted by Macrolink. Seller is not authorized to perform MRB activities on non-conforming materials without Buyer authorization.

2. Change in Approval, Drawing, Processes, Materials, or Procedures: Seller **shall** not change any drawing, process, material (including sub-tier supplier parts), or procedure without prior Buyer's written approval, if such drawing, process, material, or procedure was used to qualify items or which was used by Seller to become a qualified source.

3. Seller **shall** notify Buyer in writing of any proposed change in design, fabrication method, or process prior to delivery of the item to the Buyer.

   a. Articles, which have incorporated approved changes, **shall** be appropriately identified.

4. Resubmittal of Rejected Items: Any item rejected by Buyer and subsequently resubmitted to Buyer **shall** be clearly identified as a resubmitted item, indicating the procurement document number and Buyer's reject document, NCR number in Seller's Certificate of Conformance.

5. Notification of Facility Change: Seller **shall** not use any production, manufacturing, and/or processing facilities that differ from facilities previously approved by Buyer without first notifying Buyer and affording Buyer an opportunity to examine and approve such facilities for compliance with procurement quality requirements. Seller **shall** not relocate any production, manufacturing, and/or processing facilities previously approved by Buyer without first notifying Buyer and affording Buyer an opportunity to examine and approve such facilities for compliance with supplier quality requirements.

6. Changing of Test Facility: Seller **shall** not change a test facility or use another test facility to meet specification/drawing requirements without prior Buyer's written approval, if a specific test facility was previously approved by Buyer as provided for in the procurement document.

7. Change of Management/Owner: Seller **shall** notify Buyer when a significant change in management or ownership has occurred.

B. RESPONSIBILITY FOR CONFORMANCE

1. Neither surveillance, inspection, and/or test made by Buyer or its representatives or U.S. Government representatives at either Seller's or Buyer's facility, or Seller's compliance with all applicable supplier quality requirements, **shall** relieve Seller of the responsibility to furnish an item that conforms to the requirements of the procurement document.

2. Seller **shall** control sub-tier supplier procurements to the extent necessary to ensure quality requirements specified in the procurement document are satisfied.

3. Quality requirements **shall** include, but are not limited to, the following:

   a. Ensuring adequate review of procurement documentation prior to procurements

   b. Inspection of procured items to documented procedures

   c. Control of non-conforming material, including corrective action

C. BUYER SURVEY, SURVEILLANCE, AUDITS AND INSPECTION

1. Buyer **shall** have the right to conduct surveys, audits, and surveillance of Seller facilities, and those of Seller's sub-tier suppliers with prior coordination with Seller, to determine capability to comply, and to verify continuing compliance, with the requirements of the procurement document.

2. Buyer **shall** have the right to perform an inspection at Seller's facilities and those of Seller's sub-tier supplier with prior coordination with Seller, during the period of manufacturing and inspection prior to shipment.

3. Final inspection and acceptance **shall** be performed at Buyer's facility, when specified in the procurement document.

D. CORRECTIVE ACTION REQUEST

1. When a quality problem exists with Seller's items, Buyer **may** require Seller to complete a Corrective Action Request.

2. Responses to Corrective Action Requests **shall** be timely and **shall** include the following information:

   a. Root cause of the deficiency

   b. Action taken to correct the specific deficiency

   c. Action taken to prevent recurrence of the deficiency

   d. Action taken to determine if other products are affected

   e. Effectivity date for implementation of identified corrective and preventive actions

   f. Verification that the corrective and preventive actions are effective

E. U.S. GOVERNMENT SOURCE INSPECTION

For procurements made under U.S. Government contracts, the U.S. Government **shall** have the right to inspect any and all of the work included in the procurement document, at Seller's facilities or at sub-tier supplier's facilities. Seller quality control or inspection system and manufacturing processes are subject to review, verification, and analysis by authorized U.S. Government representatives.

F. MEASURING AND TEST EQUIPMENT

1. Seller **shall** be responsible for validating the accuracy and stability of tools, gages, and test equipment used to demonstrate that any item conforms to the requirements specified in the procurement document. Objective evidence of calibrations **shall** be recorded and made available for Buyer's review upon request.

G. NONCONFORMING MATERIALS

1. Seller **shall** provide and maintain a corrective action and disposition program for non-conforming materials.

2. Seller **shall** provide for control, segregation, and identification of non-conforming materials detected at Seller's facilities.

3. Seller **shall** not have MRB disposition authority without Buyer's written authorization.

4. No repair **shall** be allowed outside of the specific specification limits unless prior written approval is obtained by Seller from Buyer.

H. DOCUMENTED INFORMATION

1. Seller **shall** maintain and retain, for a minimum of 8 years, records of all documented information on any item delivered to Buyer.

2. Records **shall** identify any non-conformance and **shall** be made available for Buyer's review.

3. Seller **shall** ensure records are available for review by Customers and Regulatory Authorities in accordance with contract or regulatory requirements.

I. IDENTIFICATION

1. All materials **shall** be identified by a part number and revision, permanently and legibly affixed directly to the surface of each article,

2. In the event this is not possible due to physical size or nature of material, an identification tag **shall** be securely affixed to each article, or

3. If articles are supplied in individual or multi-unit containers the container **shall** reveal the appropriate identification and quantity

J. PACKAGING, PRESERVATION, AND STORAGE

1. Seller **shall** incorporate good commercial practices for preservation and packaging of all articles that apply to this Purchase Order / Subcontract, unless otherwise stated within the Purchase Order / Subcontract or attached documentation.

2. Seller **shall** identify each package permanently and legibly with Purchase Order / Subcontract number, manufacturer's name, date shipped, and packing sheet number.

3. Packaging **shall** be selected, to the extent necessary, to provide protection from physical and environmental damage during shipping and handling.

   a. Cushioning materials **shall** be applied, as required, to protect and to restrict movement of items.

4. All materials which are volatile, toxic, or emit fumes, which are harmful to human health, **shall** be properly contained in accordance with applicable health and safety requirements. Seller **shall** take appropriate measures to prevent handling damage, from preparation for shipment through receipt (i.e., palletizing, shrink wrapping, or otherwise securing materials for shipment to prevent degradation during transit).

   a. Containers **shall** be plainly marked as to its contents with appropriate warnings, precautions, instructions, and storage conditions.

   b. Material Safety Data Sheet (MSDS) **shall** be included with each shipment.

K. STORAGE AND SHELF LIFE

1. Seller **shall** identify materials and articles having definite characteristics of quality degradation or drift with age and/or the environment. Where shelf life is either a specified requirement or is needed to ensure end-of-life performance, the seller **shall** affix appropriate label identifying the shelf life expiration date to supplied materials.

2. Identification **shall** indicate the date and/or cycle that the critical life was initiated and the date and/or cycle at which the useful life will be expended.

3. If environment is a factor in determining useful life, identification **shall** also include the storage temperature, humidity, etc., required to achieve the stated useful life.

4. In no case **shall** materials or articles be supplied to Buyer with less than 75% of its useful life or cycles remaining; however, Seller **shall** verify that sufficient operating life and environmental margin remains to meet the specified requirements of the procurement document.

L. CERTIFICATE OF GOVERNMENT APPROVED QUALIFIED PARTS LIST (QPL) ITEMS

When the items supplied are required to be Qualified Parts List (QPL)/Qualified Manufacturers Line (QML) parts the following **shall** apply:

1. Seller **shall** submit a certification identifying that the manufacturer of the material described herein has been granted qualification by the Defense Supply Agency (DSA) in accordance with the applicable military specification.

2. The inclusion of products from the QPL **shall** not relieve the manufacturer of their responsibility for providing items, which meet all specification requirements, or for performing the qualification, inspections, and tests specified for such items.

M. CONTROL OF PROCESSES

1. Seller **shall** monitor processes to ensure services and/or products meet contractual requirements and take corrective action when process measures indicate that products or services could potentially falls outside of acceptable, contractual limits.

Q-2 Raw Material Documentation Requirements

A. Shipment of materials, whether raw, semi-finished, or finished, **shall** be accompanied by a Certificate of Conformance/ from Seller, stating at a minimum:

1. Material identification by specification number and material conditions, where applicable.

2. The raw material manufacturer's or mill's lot or batch number.

3. A statement of raw material conformance to applicable requirements.

4. The name and location of the raw material manufacturer or mill.

B. All items defined in Q2-A with the addition of actual chemical/physical test results that substantiate compliance with the applicable raw material and/or specification requirements **shall** be provided.

C. Seller **shall** provide a Certificate of Traceability showing unbroken Chain of Custody from the lowest level component to configured end item(s).

Q-3 Control of Special Processes

A. Special Process Certifications must accompany all material delivered under this Purchase Order. All certificates and data must indicate Macrolink' Purchase Order number, End user or Macrolink' Part Number, Serial number (if applicable) or Date codes (if applicable), the special process used, and applicable

specifications including end user specifications (i.e. Boeing See para B below & BACXXXX's .Siikorsky SSXXXX).
When special processes are subcontracted, subtier external providers must use end user approved sources per drawings provided, (i.e. Boeing, NGC, Sikorsky, etc.). If drawings provided are Macrolink drawings, as a minimum NADCAP certified external providers must be utilized.

The seller/subcontractor's Quality Assurance Department must sign and/or stamp the Certificate of Special Processes. Examples of Special Processes are, but not limited to; welding, destructive physical analysis, brazing, dye penetrate inspection, radiographic inspection, plating, heat treating of metals, casting, chemical surface treatments, forging, contamination control, bonding, magnetic particle inspections.

A Certificate must accompany all Dip Brazed assemblies delivered under this Purchase Order. The Certificate must indicate Macrolink P.O. number, Macrolink Part Number, Serial Number (if applicable) or date codes (if applicable), and that the part or assemblies meet the following cleanliness requirement:

- *Each assembly shall exhibit cleanliness to the extent that flux residue (chloride, fluoride, etc.) will not exceed five (5) PPM when measured over the entire brazed assembly, or in any specific area.*
- The seller's Quality Assurance Department must sign and/or stamp this document.
- Actual numeric data must accompany all material; data will be reviewed and approved by Macrolink Quality Assurance.

B. For Boeing orders the following **shall** be required to be flowed down to External Providers and their sub-tier processors:

BOEING Clause Number: Q020
D1-4426 APPROVED PROCESS SOURCE
Seller and/or Seller's subcontract process sources shall be an approved processor or shall use approved processors as required by D1-4426, "Approved Process Sources". A list of the approved processors and associated processes are available from Buyer's Procurement Agent or at:
http://active.boeing.com/doingbiz/d14426/index.cfm
This clause shall be included in Seller's subcontracts for work performed under this purchase contract that involves D1-4426 processes. The Seller's purchasing information shall conform to the purchasing data requirements of D1-4426 Appendix D. These purchasing data requirements can be found at:
http://active.boeing.com/doingbiz/d14426/Appendix-D.pdf
A Certificate of Conformance and/or equivalent Process Certificate, signed by an authorized agent of the Processor/Seller shall be maintained by the Seller. The certificate shall include purchase contract number, part number(s), Trace Number (as applicable), Process Specification number (with revision), processing date(s) and name and address of the Processor(s) performing each of the D1-4426 Processes.

C. Buyer approval of any processor shall not relieve Seller of Seller's requirement to comply with the terms of this purchase contract.

D. Buyer approval of special processes **shall** not relieve Seller of responsibility for exercising the control measures necessary to ensure delivered items conform to the requirements of the Purchase Order / Subcontract.

E. Sub-contract and Contract manufacturer's **shall** have the responsibility of approving, auditing and maintaining their sub-tier suppliers for special processes. Macrolink reserves the right to review any records pertaining to special processes and will be made available for review upon request.

Q-4 Inspection / Test Data

A. When Buyer's specifications or procurement document require test data to be recorded during the performance of acceptance testing, a paper or preferably electronic copy of the recorded data, showing evidence of Seller's inspection and verification of performance, **shall** accompany each shipment.

B. Data **shall** meet the requirements of Buyer's specifications or procurement document and, at a minimum, be identified with:

1. Buyer's Purchase Order / Subcontract number and change notice number
2. Part number
3. Lot numbers, serial numbers, or date codes of items tested
4. Drawing/specification and revision used
5. Type of test performed
6. Identification number of test equipment used
7. Total quantity of items tested, quantity of items accepted, and quantity of items rejected
8. Any codes, keys, or other information necessary to interpret Seller data

Q-5 Requirements for Distributors

A. The Distributor (a Seller other than the Manufacturer) **shall** certify that the articles delivered under this Purchase Order / Subcontract conform to the applicable requirements of Buyer's or Manufacturer's specifications for the article ordered.

B. The Distributor Certification of Conformance **shall** include the following information:

1. The origin of manufacture
2. Part number
3. Applicable traceability information (date lot code, etc.)
4. Results of testing or special inspection, as required
5. Dated signature of authorized Seller Representative
6. Items identified by Buyer number **shall** have complete information as to the original manufacturer and original manufacturer's part number

C. The Distributer Certificate of Traceability **shall** provide documented traceability and unbroken Chain of Custody from the OCM/OEM to the Seller.

Q-6 Seller Inspection Reporting Requirements

A. Seller **shall** submit, with each shipment of items, one copy of an inspection report reflecting 100 percent inspection verification of all drawing characteristics, including notes, for all products.

B. The report **shall** delineate each drawing characteristic and specify the corresponding actual measurement results.

C. Inspection record traceability **shall** be maintained by either serializing each item, if allowed, or tag identification. The item identification is then matched with the corresponding inspection report.

Q-7 Calibration System Requirements

A. Seller **shall** be responsible for the calibration, accuracy, validation, and maintenance of any equipment, tooling, or gauges utilized by Seller to produce, inspect, or test articles to be delivered under this Purchase Order / Subcontract.

B. Seller's equipment calibration system **shall** be traceable to NIST standards

Q-8 Electrostatic Discharge Control

A. Seller **shall** provide and maintain a program for Electrostatic Discharge (ESD) control for hardware items to be furnished for this procurement in accordance with one or more of the following standards:

1. MIL-STD-1686 Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment (excluding Electrically Initiated Explosive Devices)

2. ANSI-S20.20 Parts, Electrical and Electronic, Assemblies and Equipment, Protection of (excluding Electrically Initiated Explosive Devices), for the Development of an Electrostatic Discharge Control Program

B. Items **shall** be packaged with ESD protective material.

1. ESD protective caps **shall** be used on equipment external connectors or contacts that connect to ESD parts and assemblies within the equipment.

2. All packages **shall** be identified with a suitable precautionary label.

3. The label **shall** not be utilized as a sealing device.

C. Any ESD components or assemblies received by Buyer that are not in an ESD protective material **shall** be subject to return to Seller. **NOTE:** ESD requirements are defined as applicable to any active or passive components.

Q-9 Prohibited Material (Electrical, Electronic & Electromechanical Parts)

A. All constructions and finishes containing pure cadmium or pure zinc **shall** be prohibited.

B. Constructions and finishes containing pure tin **shall** be prohibited unless they contain a minimum of 3 weight percent alloying element(s), i.e., lead, silver, etc.

C. Seller **shall** submit a certificate with each shipment stating that no prohibited materials are present in their deliverable product.

D. Suppliers and their sub-tier suppliers must comply with Materials of Concern (MOC), requirements. MOC list located is located at: https://utcaerospacesystems.com/green-products/

Q-10 Quality Management System

A. Seller **shall** provide and maintain a Quality System that is compliant to ISO 9001 or AS9100

Q-11 First Article Inspection

A. Inspection and acceptance by Buyer of the first article manufactured against this Purchase Order / Subcontract **shall** be required in accordance with AS9102.

1. The report **shall** reflect 100 percent inspection verification of all drawing characteristics.

2. The report **shall** delineate each drawing characteristic and specify the corresponding actual measurement results.

3. The report **shall** include a ballooned drawing for Items 1 & 2 above.

4. External Provider **shall** ensure only approved Sources are used for Special Processes, these requirements must be flowed down to sub-tier external providers if utilized.

3. The report **shall** provide evidence of acceptance by the Seller's authorized Quality Assurance representative.

B. **ASQR-01 Requirement for UTC & Sikorsky designated orders**-

1. In addition to the AS9102B requirement, the ASQR-01 specification requires the following statement to be on all sub-contractors C of C's:

a. UTC - "All items on this Purchase Order are for UTC members end use".

b. Sikorsky – "All items on this Purchase Order are for Sikorsky end use".

2. This statement must also be on any special process certs included from the sub-contractors. Special process certs must be originals. A picture of part marking must be included with FAI Report. Per ASQR-01, only approved special processors can be used. A copy of ASQR-01 can be provided by upon request.

C. Required documentation **shall** be supplied with first delivery of parts and subject to approval by Macrolink Quality Assurance. Verification update of 1st article inspection is required following implementation of engineering and manufacturing method changes or delivery inactivity of over two years.

Q-12 Contamination / Foreign Object Debris (FOD) Control

A. Seller **shall** maintain a FOD prevention program.

B. Articles ordered under this Purchase Order / Subcontract **shall** be protected by Seller from contamination or damage from foreign objects during processing, testing, inspection, handling, and packaging prior to delivery to Seller.

Q-13 Solder Workmanship Standard

A. Soldering and processing of electronic assemblies **shall** be in accordance or equivalent with IPC-A-610 "Acceptability of Electronic Assemblies" and J-STD-001 "Requirements for Soldered Electrical and Electronic Assemblies".

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Q-15 Material Outgoing to Seller (Customer Furnished Property)

A. Materials furnished to Seller, by Buyer, **shall** require accountability by Seller.

B. Materials **shall** be stored and handled in such a manner to ensure the integrity of the material is maintained.

C. Seller **shall** obtain direction from Buyer's Procurement concerning the disposition of rejected and/or unused quantities, or usable trimming remaining at the end of the procurement activity.

D. Seller **shall** be responsible for maintaining records of identity and the assurance of continued suitability of the tooling, test equipment, etc., while such materials are in their possession.

1. Return of the equipment **shall** be arranged through Buyer's Procurement.

Q-16 Cable Workmanship Standard

A. Workmanship **shall** be in accordance with IPC/WHMA-A-620 "Requirements and Acceptance for Cable and Wire Harness Assemblies".

Q-17 Printed Wiring Board

A. Printed Wiring Boards fabricated under this Purchase Order / Subcontract **shall** comply with the requirements of IPC-A-600 "Acceptability of Printed Boards", IPC-6011 "Generic Performance of Printed Boards", and IPC-6012 "Qualification and Performance Specification for Rigid Printed Boards".

B. Test coupons and a solder sample **shall** be provided per the specification for each shipment.

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Q-20 Seller's Basic Certificate of Conformance

A. A Certification of Conformance **shall** be provided with each shipment with the following information at a minimum:

1. Purchase Order / Subcontract and Line Item Number

2. Identifying nomenclature as identified by the purchase order (i.e., Item Name, Part Number, Revision, Serial Numbers).

3. Quantity shipped

4. The Certification of Conformance **shall** be signed by Seller's duly authorized representative (including electronic signatures)

B. .The seller **shall** provide a Certificate of Traceability showing unbroken Chain of Custody from the lowest level component to configured end item(s).

Q-21 Material Authenticity/Counterfeit Part Prevention Requirements for Electronic Component Suppliers and Distributors

Instructions for Suppliers

*The supplier **shall** be required to apply one of clauses Q-21.A or B to all electronic parts procured under contract to Macrolink. The supplier **shall** use the clause based on their status as an Original Component Manufacturer (OCM) or their relationship to the OCM.*

Supplier Status	Q-21.A	Q-21.B
Original Component Manufacturer (OCM), OCM-Franchised Distributor or OCM-Authorized Aftermarket Supplier	**X**	
All other Suppliers of Electronic Components		**X**

Q-21.A – For Parts/Components procured from an Original Component Manufacturer (OCM), OCM- Franchised Distributor or OCM-Authorized Aftermarket Supplier

A. The Supplier **shall** not misrepresent used or reclaimed parts as new.

B. Supplier **shall** comply with original manufacturer's handling, storage and shipping procedures.

C. Supplier **shall** maintain and provide to the Buyer when requested all necessary certificates of conformance and acquisition traceability to the OCM.

D. Supplier **shall** maintain objective evidence that the chain of custody has been maintained from original manufacturing of the part to the delivery of part to Buyers' receiving dock.

Q-21.B – For Parts/Components procured from a supplier that is not an Original Component Manufacturer (OCM), Franchised Distributor or Authorized Aftermarket Supplier for that specific Part/Component.

Purpose:

To define and implement the requirements necessary for a distributor to be approved to supply electronic components to Macrolink Systems Corporation (Buyer)

Supplier Quality Management System / Approved Supplier Requirements:

A. All material delivered under the Buyer's Authorized Purchase Order or Agreement shall be authentic and traceable to the OCM. If documented acquisition traceability is not available, Supplier shall not accept the Buyer's Purchase Order or Agreement unless Supplier requests and receives Buyer authorization to validate the authenticity of material according to Buyer-specified requirements:

1. If Buyer authorizes the supplier to provide material without traceability supplier shall comply with the Material Authenticity Validation Requirements.

2. Supplier shall have and implement effective counterfeit parts/material prevention processes that align with AS5553 requirements:

a. Supplier Quality System and Counterfeit Prevention Plan/Processes are subject to on-site assessment by Buyer.

b. The supplier shall have and implement an effective Counterfeit Prevention Plan that documents: (a) its processes used for assuring that only authentic and conforming parts/materiel are procured and (b) its processes to be used for risk mitigation, disposition, and reporting in the event any counterfeit parts/materiel are encountered in its supply chain. The Counterfeit Prevention Plan is subject to Buyer approval, and may be disapproved at any time during the life of this Purchase Order/Subcontract if Supplier does not provide for an appropriate level of assurance for procuring authentic and conforming materiel to Buyer's satisfaction.

c. The Supplier shall impose appropriate requirements on all tiers of its supply chain to ensure the substance of these requirements and the Buyer's Authorized Purchase Order/Subcontract are met.

d. If the Supplier provides parts/material it obtains from sources other than the manufacturer or manufacturer-authorized distributors, the Supplier shall be a member of GIDEP and review and take appropriate corrective and preventive actions on all relevant Suspect Counterfeit GIDEP alerts.

e. Supplier shall ensure all occurrences where it has acquired and/or provided suspect counterfeit parts/material are reported as appropriate to customers and GIDEP

f. Supplier shall maintain controls for electrostatic discharge (ESD) and moisture sensitive devices which comply with ANSI-ESD S20.20 and JEDEC-STD-033, respectively.

Buyer Audit and Surveillance Program Requirements:

A. Buyer reserves the right to conduct periodic audits of Supplier's Counterfeit Prevention Plan/processes and associated records. Supplier shall make available to Buyer pertinent records as necessary for Buyer to conduct audit(s). Record retention will be the responsibility of the Supplier

B. The Supplier shall ensure that Buyer and Buyer's Customers have access to the Supplier facilities and the facilities of its supply chain at all tiers, in order to verify compliance to Buyer's requirements

C. Prior to being approved, Supplier shall have an onsite audit performed by Buyer to verify counterfeit detection processes are in alignment with AS5553 and compliance to this requirements document.

Material Authenticity Validation Requirements:

A. After acceptance of the PO if the Supplier discovers they are unable to comply with the supply chain traceability requirements set forth herein Supplier must contact the Buyer for further direction.

B. If Buyer authorizes the Supplier to provide electronic components/material without traceability, the Supplier shall demonstrate to the Buyer their capability to perform all necessary material authenticity validation tests and inspections. In proposing their approach to the Buyer, the Supplier should consider using industry standard practices (SAE AS5553, IDEA-STD-1010 as a guide) or utilize the services of an industry-recognized 3rd party Material Authenticity Verification Test Facility. All Material Authenticity Validation tests must be approved in advance by the Buyer.

Q-22 Material Authenticity/Counterfeit Parts Requirements for Suppliers and Subcontractors of Electronic Assemblies, Subsystems and Systems

A. The Supplier/Subcontractor (hereinafter referred to as the Supplier) **shall** maintain a Material Authenticity / Counterfeit Parts Prevention (MA/CPP) program for the avoidance, detection, mitigation and disposition of counterfeit parts. The Supplier's MA/CPP program **shall** be aligned with and meet the intent of AS5553.

B. The Supplier **shall** flow these requirements to all levels of its Supply Chain for the procurement of items that contain electronic parts.

C. The Supplier **shall** procure electronic parts from the Original Component Manufacturer (OCM), OCM-Franchised Distributers or OCM-Authorized Aftermarket Manufacturers. If the Supplier is unable to procure electronic parts from the aforementioned sources, the Supplier may establish one or more "Trusted Suppliers" who have been audited by the Supplier to AS5553 and been confirmed to have a MA/CPP program that is aligned with AS5553.

D. The Supplier **shall** ensure that all electronic parts used in their deliverable products have full traceability to the OCM and positive control of Chain of Custody from the OCM to the Supplier's deliverable end item to Macrolink.

E. If any electronic parts, including those of sub-tier suppliers used in the Supplier's deliverable products do not meet the requirements of (D), the Supplier **shall** notify the Buyer before using these parts. The Supplier may propose to the Buyer their recommendation for resolving the lack of traceability and/or lack of positive chain of custody. The Buyer **shall** be afforded the opportunity to approve any electronic parts usage that does not meet the requirements of (D).The Supplier should consider the following methods for resolution:

1. Inspection in accordance with IDEA-STD-1010
2. Testing in accordance with AS5553
3. Selection of an alternate supplier with full Certificate of Conformance (CoC) and Certificate of Traceability (CoT) to the OCM
4. Selection of an alternate part with full CoC/CoT to the OCM

F. The Supplier **shall** not misrepresent used or reclaimed parts as new.

G. Supplier **shall** comply with original manufacturer's handling, storage and shipping procedures.

H. Supplier **shall** provide to the Buyer, upon request, all electronic parts certificates of conformance and acquisition traceability (CoC/CoT) to the OEM/OCM.

I. The Supplier **shall** be a member of GIDEP if eligible and **shall**:

1. Notify the Buyer of any instances where GIDEP Suspect Counterfeit Alerts could affect the Supplier's products that are deliverable to Macrolink

2. Report any instances involving Suspect Counterfeit Parts discovered during the performance of their contract with Macrolink to GIDEP and the Buyer

J. The Buyer reserves the right to audit the Supplier's MA/CPP program at the Supplier's facility and at the Supplier's suppliers' facilities when accompanied by the Supplier.

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Q-25 Calibration Services Requirements for Supplier Providing Calibration

A. Seller **shall** be responsible for the calibration and applicable maintenance of any equipment, tooling, or gauges provided from the Buyer to the Seller under this procurement agreement.

B. Seller's equipment calibration system **shall** be in accordance with one of the four requirements listed below:

1. MIL-STD-45662A

2. ANSI/NCSL Z540

3. ISO 10012-1

4. ISO 17025

C. Seller **shall** provide a data package for each service that meets the requirements of the above standards including as found and final results, acceptance criteria, and traceability to applicable national standards.

Q-26 ITAR

International Traffic in Arms Regulations (ITAR) controlled commodities, technology and/or software export compliance statement: The information contained in this Purchase Order (PO) is sensitive to U.S. export laws and regulations. Acceptance of this purchase order binds your company to the following:

a. The goods being procured will not be used or transferred for the purposes associated with chemical, biological, or nuclear weapons or missiles. Nor will they be resold if it is known that they are intended or likely to be used to such a purpose.
b. The understanding that AATC goods and technology (i.e. drawings, parts) are controlled by the U.S. Department of State, International Traffic in Arms Regulations and/or Department of commerce, Export Administration Regulations.
c. Upon acceptance of this PO your company assumes all responsibilities for export compliance and to ensure the goods and/or technology will not be exported, re-exported, released or disclosed to foreign nationals inside or outside the U.S. without prior U.S. Government export authorization.
d. Agree that export control requirements stated above shall survive the completion, early termination, cancellation or expiration of the applicable purchase order, agreement, or contract.

Q-27 EEO

If this order is for a contract or subcontract with the U.S. Government, then the following applies:

The Equal Employment Opportunity clauses in Section 202 of Executive Order 11246, Section 503 of the Rehabilitation Act of 1973, and Section 4212 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended, 29 CFR Part 471, Appendix A to Subpart A (EO13496), and the implementing rules and regulations of the Office of Federal Contract Compliance Programs (41 CFR, Chapter 60) are incorporated herein.

This contractor and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a). These regulations prohibit discrimination against qualified individuals on the basis of protected veteran status or disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities, and to treat qualified individuals without discrimination on the basis of their physical or mental disability.

Q-28 External Provider Awareness

External provider must ensure that their employees are aware of:

– their contribution to product or service conformity;

– their contribution to product safety;

– the importance of ethical behavior.