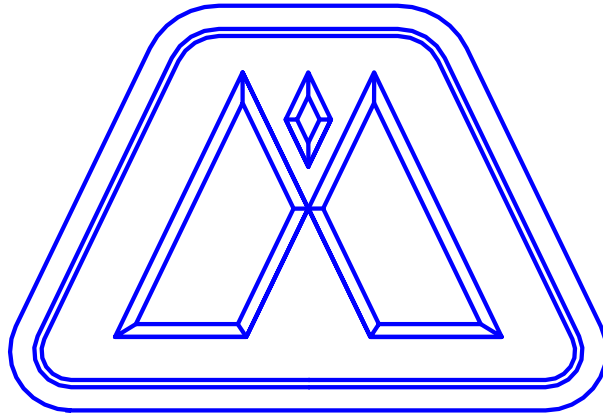


MODERN INDUSTRIES, INC.

Quality Clauses



MODERN INDUSTRIES, INC.

MII-SC-00261

4755 E. Beautiful Lane
Phoenix Arizona 85044

1. PURPOSE

- 1.1. This document clearly defines for each purchase of products or services all of the applicable quality requirements the Supplier shall comply with to meet the requirements of Modern Industries, its customers and/or regulatory authorities. For the purpose of this document, the term “Modern Industries” means the Modern Industries division which has entered into a Contract with the Supplier.

2. APPLICATION

- 2.1. Unless expressly excluded by the Contract, the Supplier Handbook (MII-CRP-0094) contains the general quality requirements that apply to all Contracts. The "Q" clauses listed in Section 4 apply only when the specific clause number is included on the Contract. NOTE: “Q” clauses may be flowed down to the Supplier electronically, in attachments that are part of the Contract or a document referenced in the contract.

3. SUPPLIER RESPONSIBILITIES

- 3.1. The supplier shall review the Contract, Supplier Handbook, specific “Q” clauses and general quality requirements as identified by Modern Industries prior to starting work.
- 3.2. If errors, conflicts, or inconsistencies are noted with the contract or any other document referenced by the contract, the supplier must immediately notify the buyer. The Supplier is required to resolve the error or inconsistency in written form from the buyer. If the supplier proceeds without resolution it does so at its own risk.
- 3.3. Compliance by the Supplier to all Contract requirements is subject to on-site verification by Modern Industries, representatives of Modern Industries, its customers and/or regulatory authorities.

4. QUALITY ASSURANCE PURCHASE ORDER CLAUSES

Q10 Quality Management System

Q10.1 Quality Management System per SAE AS9100 – The Supplier shall establish and maintain a Quality Management System that is in compliance with the current revision of the requirements of SAE AS9100 “Quality Management Systems - Requirements for Aviation, Space and Defense Organizations”. Supplier’s AS9100 Quality Management System shall be certified and accredited in accordance with SAE AS9104 and listed on the SAE OASIS data base. The Supplier’s Quality Management System is subject to audit, verification and approval and/or disapproval by Modern Industries designated representative(s).

Q10.2 Quality Management System per SAE AS9110 – The Supplier shall establish and maintain a Quality Management System that is in compliance with the current revision of the requirements of SAE AS9110 “Quality Maintenance Systems - Aerospace - Requirements for Maintenance Organizations”. Supplier’s AS9110 Quality Management System shall be certified and accredited in accordance with SAE AS9104 and listed on the SAE OASIS data base. The Supplier’s Quality Management System is subject to audit, verification and approval and/or disapproval by Modern

Industries designated representative(s).

Alcohol and Drug Prevention Program - All Employees performing maintenance or inspection of products scheduled for delivery to Modern Industries shall be included and part of a Federal Aviation Administration (FAA) approved Anti-drug and Alcohol Misuse Prevention Program. This requirement applies both to pre-employment and random testing of current employees in accordance with the requirements of US 14 CFR Part 121, Appendix "I" and Appendix "J". Evidence of compliance with this requirement shall be made available to Modern Industries for review upon request

Q10.3 Quality Management System per SAE AS9120 – The Supplier shall establish and maintain a Quality Management System that is in compliance with the current revision of the requirements of SAE AS9120 "Quality Management Systems - Aerospace Requirements for Stockist Distributors". Supplier's AS9120 Quality Management System shall be certified and accredited in accordance with SAE AS9104 and listed on the SAE OASIS data base. The Supplier's Quality Management System is subject to audit, verification and approval and/or disapproval by Modern Industries designated representative(s).

Q10.4 The Supplier shall establish and maintain a Quality Management System in compliance with the current requirements of ISO 9001 "Quality Management Systems – Requirements".

Q10.5 The Supplier shall establish and maintain a Quality Management System in compliance with the current requirements of ISO 14001 "Environmental Management Systems –Requirements".

Q10.6 The Supplier shall establish and maintain a Quality Management System in compliance with the current requirements of ISO 17025 "General Requirements for the Competence of Testing and Calibration Laboratories".

Q20 Inspection System

Q20.1 Variation Management Program per SAE AS9103 – The Supplier shall establish and maintain a Variation Management Program in compliance with the current requirements of SAE AS9103 - "Variation Management of Key Characteristics." AS9103 requires the use of statistical methods to control manufacturing and processing operations. Supplier's variation management program is subject to audit, verification and approval and/or disapproval by Modern Industries designated representative(s).

Q20.2 Statistical Product Acceptance Requirements per SAE ARP9013 - When the Supplier elects to use statistical methods for product acceptance, unless otherwise specified by the Contract, the Supplier's statistical acceptance method(s) shall be in compliance with the requirements established by ARP9013, ARP9013/1, ARP9013/2, ARP9013/3 or ARP9013/4. When this clause is included on the Contract, Supplier shall submit Supplier's proposed statistical product acceptance method to Modern Industries for review and concurrence.

Q20.3 Source Inspection - Products to be delivered on this Contract require source inspection, tests or both by a Modern Industries Quality Assurance representative and/or customer, prior to delivery to Modern Industries. The Supplier shall notify Modern Industries at least forty-eight (48) hours in advance of the time the products will be ready for source inspection. Upon request, the Supplier shall make available to the Modern Industries representative any measuring and test equipment, facilities, records and personnel to facilitate the source inspection.

Q20.4 Delegated Source Inspection - Products or services to be delivered on this Contract require inspection, tests or both, by a representative(s) in your quality organization delegated and authorized by Modern Industries to perform inspection and/or tests on behalf of Modern Industries. Such inspection and/or tests shall be accomplished prior to delivery of products to Modern Industries, and may be accomplished at your facilities and/or the facilities of your sub-tier sources. The delegated representative(s) is responsible for assuring that products delivered to Modern Industries conform to all Contract requirements. Upon receipt of this Contract, notify the Modern Industries delegated representative(s) so that appropriate planning and scheduling can be accomplished to conduct the required inspection and/or testing to meet the Contract required delivery schedules. The Supplier shall make available to the delegated Modern Industries representative any measuring and test equipment, facilities, records and personnel to facilitate the delegated source inspection.

Q20.5 Supplier Self Release Authority - Under the Modern Industries Supplier Self-Release Program, the Supplier has been delegated authority to perform final inspection on behalf of Modern Industries and release product(s) for delivery to Modern Industries. Modern Industries Quality Assurance reserves the right to conduct product integrity audits, quality system assessments, verify Supplier's conformance to the Modern Industries self-release program requirements and to revoke delegation authorization. Inability to maintain an acceptable level of quality performance by the Supplier may result in cancellation of self-release authority by exclusion of specific part number(s) or the authority in its entirety.

Q20.6 Government Source Inspection (GSI) - US Government Source Inspection (GSI) is required prior to delivery to Modern Industries. Upon receipt of this Contract, the Supplier shall promptly notify the US Government representative who normally services the Supplier's plant, in order that the US Government representative can accomplish appropriate planning for conducting source inspection at the Supplier's facilities. If the Supplier cannot locate the US Government representative to arrange for the required source inspection, the Supplier shall notify the Modern Industries Buyer immediately. Upon request, the Supplier shall make available to the US Government representative any measuring and test equipment, facilities, records and personnel to facilitate the Government source inspection.

Q20.7 Government Surveillance - During performance on this Contract, the Supplier's Inspection/Quality System, manufacturing operations and processes, including when applicable those at the Supplier's sub-tier sources, are subject to review, verification and analysis by authorized representatives of applicable US Government agencies and personnel. Government source inspection (GSI) is not required unless Clause Q200 is also included in the Contract.

Q20.8 Raw Material Verification Program – The Supplier shall develop, document and implement a raw material (sheet, plate, bar, rod, etc.) verification program that will ensure that material received from the Supplier's sub-tier sources meets all applicable technical and quality requirements. The Supplier's verification program shall include provisions for monitoring and periodic testing of raw material upon receipt to ensure that such material meets all applicable requirements, and implement appropriate storage and controls to preclude commingling of different heat/lots or batches of material. Raw material testing shall be in accordance with specification requirements and shall be performed by a customer approved testing laboratory. Supplier's verification program shall document the frequency of such tests and the test results. Records showing the results of the Supplier's material verification program and its effectiveness shall be available to Modern Industries for review upon request.

Q20.9 Test Samples - With each delivery of products on the Contract, the Supplier shall furnish

for verification testing by Modern Industries one (1) additional product or suitable test sample produced from the same material lot and processed simultaneously with the lot of products delivered. When more than one lot of material was used, a sample is required for each lot of material. The sample shall be marked or tagged to identify the process that it represents (i.e. material, heat treat, nitriding, plating, etc.), and noted on the packing list/shipper.

Q20.10 Nondestructive Test (NDT) Reports – Unless otherwise specified by the contract, drawing or specification, NDT shall be performed on 100% of the lot of products. With each delivery of products on the Contract, the Supplier shall furnish a certified test report that shows that the required NDT (i.e. penetrant, magnetic particle, radiographic, ultrasonic, etc.) test was performed on all delivered products. The test report shall be issued by the organization that actually performed the NDT and include: (a) a complete description of the test, test name, specification, revision, type, method, etc. (b) the acceptance criteria document number and revision, that applies to the NDT operation (c) the number and revision level of the NDT procedure used, and (d) when applicable, identity of the qualified/certified personnel who performed the NDT. All products subjected to NDT and found to be acceptable shall be identified as required by the applicable NDT specification. When products are serialized the serial numbers shall be referenced on the NDT reports and certifications.

Q20.11 Radiographic (x-ray) Inspection - With each delivery of products on the Contract, the Supplier shall furnish a certified test report of radiographic (x-ray) inspection performed on the products. The document package supporting the radiographic inspection shall be issued by the organization that actually performed the radiographic inspection and include: (a) test report showing the accept/reject quantities, and (b) copy of the approved shooting sketch; the shooting sketch or test report shall include the number and revision of the approved radiographic technique. Unless Clause Q20.12 is included on the Contract, the Supplier is not required to furnish the exposed x-ray film with delivery of the products; however, Supplier shall maintain the film in accordance with the record retention requirements of the Supplier's Quality Management System.

Q20.12 Radiographic (x-ray) Film - In addition to the test reports and shooting sketches required by Q20.11, the Supplier shall furnish the exposed x-ray film with each delivery of products.

Q20.13 Modern Industries Approval of NDT Techniques - Prior to conducting any nondestructive testing (NDT) required by drawing or specification on products scheduled for delivery on this Contract, the Supplier shall prepare and submit to Modern Industries for review and approval a detailed procedure describing the NDT to be performed. The Supplier's procedure shall include all necessary information including pictures or sketches, materials, tooling and/or equipment to be used, safety precautions and any other pertinent information required to successfully conduct the NDT operation. The procedure shall be: (a) identified with a control number; (b) reference the applicable NDT specification and revision with which it complies, and (c) include the name, signature and date of the qualified and certified technician who prepared and/or approved the NDT technique. Changes to Modern Industries approved NDT techniques shall be submitted to Modern Industries for approval prior to their use in production.

Q20.14 1st Article Inspection at Source - Inspection and/or testing and acceptance of 1st Article product by Modern Industries is required prior to delivery of any products on this Contract. The 1st Article product shall be complete, documented per SAE AS9102 and ready for delivery to Modern Industries. The Supplier shall notify Modern Industries at least forty-eight (48) hours in advance so that the inspection and/or testing of the 1st Article product as well as review of supporting documentation can be scheduled and completed prior to the required product delivery date. Upon request, the Supplier shall make available to Modern Industries representatives any

measuring and test equipment, facilities and/or personnel to facilitate the 1st Article inspection.

Q20.15 1st Article Inspection at Modern Industries – The Supplier shall submit a 1st Article product and supporting documentation, as required by current revision of SAE AS9102, for inspection and/or testing and acceptance by Modern Industries prior to delivery of products on this Contract. The 1st article shall be completely processed in accordance with Contract requirements. When authorized by the Contract, the 1st Article product may be included as part of the initial quantity delivered on the Contract and included as part of the total Contract order quantity. In such cases, failure of the 1st Article product to meet Contract specified requirements may result in rejection and return of the delivered production quantity to the Supplier at the Supplier's expense.

Q20.16 Aerospace 1ST Article Inspection Requirements (FAIR) – The Supplier shall perform a First Article Inspection (FAI) in accordance with the requirements of the current revision of SAE AS9102. The FAIR data package shall include a ballooned drawing and completed AS9102 forms as follows: (a) Form 1 - a list of the applicable detail drawings; (b) Form 2 - a list of the standard parts, material or processes; and (c) Form 3 - the actual results for each drawing dimension and notes. 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 on the Contract. A First Article resubmittal shall be performed as required on the Supplier Handbook.

Q20.17 Non- Aerospace 1ST Article Inspection Requirements (FAIR) – The Supplier shall perform a First Article Inspection Report (FAIR). The FAIR data package shall include a ballooned drawing, corresponding dimensional results, list of the standard parts, materials, special processes and drawing notes. 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 on the Contract. A First Article resubmittal shall be performed as required on the Supplier Handbook. Contact Modern Industries for questions on FAIR requirements.

Q20.18 100% Inspection Report – The Supplier shall perform 100% inspection of all characteristics on all products delivered on this Contract. The Supplier's 100% inspection data shall show the part number and drawing revision and the actual values obtained during inspection versus the requirements of the drawing (including block data and notes) or specification. When applicable, copies of material and/or process certifications shall be attached to the inspection report. Each part shall be serialized with a paper tag or traceable to the inspection data results upon delivery to Modern Industries.

Q20.19 Dimensional Inspection Plan (DIP) - When this clause is included in the Contract, Modern Industries will define the specific product inspection to be accomplished by the Supplier on this Contract. The Supplier shall perform the required inspections and record the actual results on a DIP form(s). The DIP shall include the name and signature of the Supplier's authorized representative responsible for quality and be included with each delivery of products on this Contract.

Q20.20 Supplier Inspection Report of Classified Characteristics (<M>, <C> Keys) - Classification of characteristics on the drawing is a means by which Modern Industries Engineering conveys the potential seriousness of non-conformance of certain product characteristics. Classification of characteristics is not intended to indicate that other drawing requirements are not important or need not be met. The purpose is to establish a common basis for placing emphasis on the more important characteristics during all phases of tooling, production, inspection, and testing.

Any characteristic found to be nonconforming during inspection is cause for rejection regardless of classification.

On all products delivered on this Contract, the Supplier shall furnish an Inspection Report showing the actual results of inspection of all classified characteristics in accordance with the inspection requirements for each classified characteristic defined below. The Supplier's inspection report shall show the part number, drawing revision and the actual values obtained during inspection versus the requirements of the drawing (including block data and notes) or specification. When applicable, copies of material and/or process certifications shall be attached to the inspection report. Each part shall be serialized with a paper tag or traceable to the inspection data results upon delivery to Modern Industries.

Q20.21 Functional Test Data Sheets - With each delivery of products on this Contract, the Supplier shall furnish to Modern Industries a functional test data sheet, which shows the actual results (values) obtained during the functional tests performed on each unit of product versus the requirements specified in the Modern Industries approved Acceptance Test Procedure (ATP) or specification. The test data sheets shall identify the part number and drawing revision, test requirement, individual products by serial number, actual test results, pass/fail results and shall include the name and signature of the Supplier's authorized representative responsible for quality and be included with each delivery of products on this Contract.

Q20.22 Manufacturers Catalogs, Drawings, etc. - With the initial delivery of products on this Contract, the Supplier shall furnish to Modern Industries one (1) copy of the current manufacturers catalog, drawing, blueprint, or specification which fully and clearly describes the products delivered, and can be used by Modern Industries to verify product conformance to requirements.

Q20.23 Product/Process FMEA Requirements – The Supplier shall implement Failure Mode & Effects Analysis or a similar tool to use for identifying variation in product/process characteristics, their effects and causes, and to develop solutions that will minimize/eliminate the effects of variation in products/process delivered on this Contract. The Supplier's product/process FMEA program shall be submitted to Modern Industries for review and approval prior to start of work on the Contract.

Q30 Material

Q30.1 Modern Industries Furnished Material – Modern Industries may furnish raw material (bar stock, castings, forgings, etc.) and/or components (fittings, connectors, etc.) to the Supplier for use in or on products to be delivered on this Contract. In such cases the Supplier shall establish and maintain strict accountability for all Modern Industries furnished material to ensure that it is properly used and accounted for. When raw material is furnished, the Supplier shall establish required controls to ensure traceability of the raw material to the finished product and furnish material traceability records with the delivery of products to Modern Industries. For components, unless individual component traceability is required by Contract, the Supplier shall ensure that such components are used only on products to be delivered to Modern Industries on the Contract. Unless otherwise specified by the Contract, the Supplier shall return any unused Modern Industries furnished material to Modern Industries with the last delivery of products on the Contract.

Q30.2 Supplier Furnished Raw Material - With each lot of raw material delivered or used to fabricate products on this Contract, the Supplier shall furnish a "Certification/Material Test Report." When more than one heat/lot of raw material is delivered at the same time, each heat/lot

of material shall be identified and provide traceability to its Certification/Material Test Report. In the event that more than one heat/lot of raw material was used to fabricate products, the products produced from each heat/lot shall be identified and/or packaged separately to maintain integrity and to provide traceability to the applicable material Certification/Material Test Report.

Raw Material from Foreign Sources - Prior to delivery or use of any raw material produced outside the United States, the Supplier shall submit a request to the Modern Industries Buyer for approval to use the raw material for each Part Number being supplied. Modern Industries approval may be contingent on on-site evaluation of the source of the material as well as additional and independent material testing and analysis to determine that the material meets all applicable requirements. Modern Industries reserves the right to reject and return to the Supplier at Supplier's expense any raw material, or products made from raw material, when the source that produced the raw material is outside the United States. The supplier shall submit a copy of the Modern Industries "approved" request to use raw material from foreign sources with each delivery of products where the raw material from the foreign source was used.

Q30.3 Foundry Control (Castings, Forgings, Extrusions) - Prior to making the first production run on any new parts for which new tooling (i.e. patterns or molds) have been made; or, when a change is made in gates, risers, chills, or as cast shape; or, when a pattern or mold is modified or transferred to a different facility, the Supplier shall establish a foundry control process and submit to Modern Industries for approval prior to production, the process shall address the following:

A. SAMPLE PARTS - Sample foundry control parts from the first production run representative of the controls, practices and processes to be used on the production parts. The quantity of foundry control parts shall be in compliance with the requirements of the applicable part specification and/or as specified in the Contract.

B. 1ST ARTICLE INSPECTION REPORT (FAIR) – FAIR per Q20.16 or Q20.17 as applicable. When the tooling contains multiple cavities an individual FAIR is required for each cavity.

C. MECHANICAL PROPERTIES - The laboratory test report of the test bar mechanical properties from the foundry control 1st Article parts. The test bars shall be from the same melt and heat treat lot traceable to the foundry control 1st Article parts.

D. CHEMICAL COMPOSITION - The laboratory test report containing the chemical analysis of the material (melt) used in the foundry control 1st Article parts. The test report shall contain the actual percentage of each element required by the material specification and traceable to the 1st article parts.

E. RADIOGRAPHIC (x-ray) FILM - The shooting sketch, radiographic technique used and the exposed film of the foundry Control 1st Article parts in accordance with Q20.10 and Q20.11.

Q30.4 Production (Castings, Forgings, Extrusions) – The Supplier shall produce production parts using the same foundry control practices established and approved by Modern Industries as a result of foundry control defined in clause Q30.3. With each delivery of production parts on this Contract, the Supplier shall furnish for each separate heat/melt of parts in the lot, all certifications and test reports required by the following 'Q' Clauses: Q30.2 - The Supplier Furnished Raw Material Q70.1 - Qualified Process Sources & Certifications Q70.2 - Heat Treat Certifications Q20.10- Nondestructive Test (NDT) Reports

Q30.5 Limited Shelf Life Materials – For each delivery of materials on this Contract containing

a limited or specified shelf life the Supplier shall furnish the following data: (a) cure or manufacture date; (b) expiration date or shelf life; (c) lot or batch number, and (d) when applicable, any special storage requirements/handling procedures to be followed. The above information shall be marked on each container or certification and shall be in addition to normal identification requirements. For each delivery of limited shelf life materials on the Contract the time lapse between the cure or manufacturing date of such materials, and the date of scheduled receipt by Modern Industries, shall not exceed one fourth (1/4) of the total shelf life of the material without prior written waiver from the Modern Industries Buyer.

Q30.6 Dock to Stock (DTS) – The products on this Contract have been approved and designated for DTS processing. The Supplier shall be monitored against the requirements in the supplier handbook to maintain the DTS status.

Q30.7 Customer Furnished Material – Modern Industries’ customers may furnish raw material (bar stock, castings, forgings, etc.) and/or components (fittings, connectors, etc.) to Modern Industries for use in or on products to be delivered to the customer. Customer furnished materials shall be processed in accordance with QCI 1001 “Inspection Procedures.”

Q30.8 DROP SHIPMENTS - This purchase order requires drop shipment of Modern Industries owned material. The supplier shall check quantity and condition of the material and perform inspection and/or test to verify compliance to requirements. For packaging and documentation requirements the supplier shall contact the Modern Industries buyer. The supplier shall provide a copy of all documents included in the drop shipment. If the supplier cannot deliver the quantity specified in the contract the supplier shall notify the Modern Industries buyer immediately. Supplier shall maintain all traceability and provide shipment tracking information for each shipment.

Q40 Calibration

Q40.1 Requirements for Calibration Laboratories – The supplier shall have a Quality System compliant to any of the following specifications; ISO 10012, ANSI Z540.3, ISO/IEC 17025, unless the calibration or manufacturing of the device is performed by an original equipment manufacturer. The supplier shall furnish Calibration Certifications compliant to ISO 10012. Supplier shall notify Modern Industries Purchasing Department with an estimated cost prior to performing work. If the Actual Price is different than the quoted price, supplier shall submit a new itemized quote to the Buyer as soon the actual cost is known. When a supplier is unable to comply with the Contract and Quality Requirements, the supplier shall notify Modern Industries Purchasing Department prior to performing work.

Original Equipment Manufacturers (OEM) will be required to deliver a Certificate of Conformance of product acceptance, and if dimensional verification occurs it must be traceable to National Institute of Standards and Technology (NIST).

When specialized containers are used, return gages in the same containers as received unless otherwise directed in writing from Modern Industries.

Q50 Frozen Process

Q50.1 Frozen Planning – The products on this Contract are considered critical for Modern

Industries applications and require strict control of manufacturing and processing operations. The Supplier shall furnish copies of Supplier's manufacturing and processing routing sheets to be used during production. Upon Modern Industries review and approval of the first article and planning documentation, the Supplier's manufacturing and process planning shall be considered as 'frozen'. Any changes proposed by the Supplier to the approved frozen planning shall be submitted to Modern Industries for review and approval prior to implementation. The Supplier shall furnish a revised FAIR, reflecting the changes in product as a result of changes in planning approved by Modern Industries, with the next delivery of products on the Contract. Documentation shall be identified as "FROZEN PLANNING" and include a revision list containing the details of all changes.

Q60 Certificates

Q60.1 Certificate of Conformance (C of C) – With each lot of product on this Contract, the Supplier shall include on the packing list/shipper or on a separate attached document, a written statement attesting compliance to all Contract requirements signed by an authorized supplier representative. The certification shall be traceable to the Contract, material, components, special processing, product and supplier.

Q60.2 Fasteners – Manufacturer & Lot Identification – All fasteners delivered on this Contract shall be manufactured, tested and controlled in compliance with the requirements of PUBLIC LAW 15 CFR 280 – generally known as the "Fastener Quality Act". The Supplier shall provide on the packing list/shipper or on separate attached document information that identifies the fastener manufacturer and the manufacturer's production lot or batch number. In addition, the Supplier shall verify and certify that the manufacturer (or other source) of the fasteners is not currently listed as a "debarred, suspended, or ineligible Contractor" on the current issue of the "lists of parties" published by the US Government, General Services Administration (GSA). For additional information and resolution of eligibility questions, contact the Modern Industries Buyer. With each delivery of fasteners on this Contract, the Supplier shall furnish copies of the original certifications and test reports.

Q70 Special Process

Q70.1 NADCAP Accreditation - Special processes shall only be performed by sources that are accredited and approved by the National Aerospace and Defense Contractors Accreditation Program (NADCAP). This requirement applies whether the process is performed by the Supplier or by the Supplier's sub-tier sources. Use of sources not accredited by NADCAP shall result in return of products to the Supplier at the Supplier's expense. For a list of NADCAP accredited sources contact the Modern Industries Buyer.

Q70.2 Qualified Process Sources – All special processes shall be performed by sources approved by Modern Industries. Use of processes and/or process sources that have not been approved by Modern Industries may result in return of all products to the Supplier at the Supplier's expense. Unless otherwise directed by the Contract or the procuring Modern Industries division, the Supplier shall request process sources by contacting the Modern Industries Buyer.

Q70.3 Heat Treat Certifications - With each lot of product on this Contract, the Supplier shall furnish a time/temperature certification that includes the following data: (a) part number and revision; (b) quantity heat treated; and (c) for each heat treatment cycle – the actual temperature

range & duration (hrs.) of each heat treat cycle.

Q70.4 Heat Treat Furnace Charts - With each lot of product on this Contract, the Supplier shall furnish the original, or a legible copy, of the furnace temperature chart, which shows the part number, the date and the actual time the part was moved in/out of the furnace.

Q70.5 Modern Industries Braze or Weld Schedule Approval - Prior to performing any brazing or welding on products scheduled for delivery on this Contract, the Supplier shall prepare and submit to Modern Industries for review and approval a detailed written braze or weld schedule and a braze or weld sample or an actual part that was produced using the submitted braze or weld schedule. The braze or weld schedule shall identify: (a) Part Number and revision; (b) applicable braze or weld specification and revision, and (c) name & signature of the qualified/certified individual that approved the braze or weld schedule

Q90 Traceability

Q90.1 Product Serialization Requirements - Serial numbers for all products on this Contract have been assigned by Modern Industries and are defined in the Contract or reference documents. The Supplier shall apply the specified serial numbers on all products and record the serial numbers on all applicable documentation. The assigned serial numbers may not be altered or replaced without written authorization from Modern Industries.

Q90.2 Product Serialization by the Supplier - Products ordered on this Contract shall be serialized by the Supplier using serialization scheme selected by the Supplier. Unless otherwise specified on the Contract. The Supplier's serialization scheme shall include provisions to ensure that serial numbers are not duplicated on products with the same part number. The process may be audited by Modern Industries for compliance.

Q90.3 Traceability of Products to Raw Material - For each lot of products delivered to Modern Industries, the Supplier shall provide traceability of each individual product to the material certification/test report that represents the raw material from which each of the products was manufactured. Traceability shall be provided by identifying the raw material heat, lot, batch or melt number from the certification/test report on tags attached to each product and/or on packaging (when used). Heat/lot identification required by applicable specifications, such as for castings and forgings is acceptable for traceability purposes provided it is clearly marked and not obliterated by subsequent operations.

Q90.4 Component Traceability Requirements – The Supplier shall establish and maintain traceability of all detail components used in the manufacture or assembly of products delivered on this Contract. Data (such as parts inventory or bill of material lists, that include lot numbers, job numbers or work orders., etc.) which provides traceability of each detail component, including sub-assemblies, to the raw material from which it was made, including all processing, testing and inspection operations performed during manufacturing operations shall be furnished with the delivery of products to Modern Industries on this Contract.

Q90.5 Certificate of Traceability (C of T) – With each lot of product on this Contract, the Supplier shall certify the products contain a documented unbroken chain of traceability through the manufacturing, processing and/or distribution of the product. The Certificate of Traceability shall be signed by an authorized supplier representative.

Q100 Statutory and Regulatory

Q100.1 ITAR - Suppliers and Processors shall ensure compliance to ITAR “International Traffic in Arms Regulations” requirements when handling parts and documentation. The supplier and processor shall flow down this requirement to all of their sub-tier suppliers.

Q100.2 EAR - Suppliers and Processors shall ensure compliance to E.A.R. “Export Administration Regulations” requirements when handling parts and documentation. The supplier and processor shall flow down this requirement to all of their sub-tier suppliers.

Q100.3 DFARS 252.225-7014 Preference for Domestic Metals - Purchase orders with this clause require certification that metals used to manufacture the items provided comply with DOD requirements for country of origin as listed in DFARS 225.872-1

Q500 Customer Specific

Q500.1 Applied Materials

Q500.1A General - Clauses Q60.1, Q70.1, and Q20.21 applies by default with this clause. First article Clause Q20.17 and corresponding procedure 2-60.1 is applicable to all part numbers beginning with 0500 and below. Workmanship standards, Cosmetic Inspection standards & PQP requirements are applicable per drawing. Workmanship Standard 0250-09954 applies to this contract.

Q500.1B Copy Exact - Supplier shall not change any process and/or material that will effect fit, form or function without prior approval from the buyer. Product, which has been subjected to customer and/or regulatory specified qualification procedure to qualify the product or to permit the supplier to become a qualified source for the product shall not change any process or material used to qualify without the prior notification and approval by the buyer, customer and/or regulatory agency as appropriate. Suppliers shall provide evidence of CE training of their personnel on request.

Q500.1C UHV/HV Component Fabrication - The requirements of Applied Materials specification 0250-20001 apply to this contract. This specification defines the minimum requirements for the fabrication of Ultra-high Vacuum (UHV) components as well as High Vacuum (HV) components used in semiconductor manufacturing equipment.

Q500.2 Bell Helicopter Textron

Q500.2A BHT QPS 100 “Bell Designed Product Quality Requirements”– The requirements of QPS 100 Apply to this contract. This document establishes the requirements for sub-tier supplier Quality Assurance requirements for products purchased by Bell Helicopter Textron.

Q500.2B BHT QPS 200 “Bell Helicopter Supplier Quality Management System

Requirements”– The requirements of QPS 200 Apply to this contract. This document establishes the requirements for sub-tier supplier Quality Management Systems for products purchased by Bell Helicopter Textron. The requirements of Q500.2A also apply.

Q500.2C BHT QPS 300 “Bell Controlled Item Program”– The requirements of QPS 300 apply to this contract. This document establishes the Bell Helicopter Textron requirements for sub-tier supplier control, management, planning and traceability of controlled items designated as Primary Part, Critical Part, Flight Safety Part and/or Fatigue Controlled Part. The requirements of Q500.2A and Q500.2B also apply.

Q500.3 UTC

Q500.3A ASQR 01 “UTC Supplier Quality System Requirements” - The requirements of ASQR 01 apply to this contract. Suppliers and all members of their supply chain that provide Member product shall be compliant to all applicable Quality Management System and ASQR 01 requirements.

Q500.3B ASQR 09.1 “UTC Flight Safety Part Program” - The requirements of ASQR 09.1 apply to this contract. This document defines unique requirements for suppliers and their sub-tiers for the control of Flight Safety Parts (FSP). It supplements but does not replace other UTC Business Entity requirements.

Q500.3C SQOP 01-01 “P&WC - Supplementary Supplier Requirements” - This document defines the unique supplementary P&WC Supplier/Integrator requirements. This document applies to Suppliers and all members of their supply chain who furnish product, material or services to P&WC. The requirements of Q500.3A also apply.

Q500.4 Rockwell Collins

Q500.4A RC9000 “Supplier Quality System Requirements” - The requirements of RC9000 apply to this contract. This document defines quality systems that are required for those suppliers, vendors, and subcontractors providing materials/products/services to Rockwell Collins.

Q500.5 AeroControlex

Q500.5A QAP043 “Subcontractor Inspection Requirements” - This procedure shall be adhered to by all subcontractors, with the exception of distributors of hardware, standard catalog items, and special processors other than heat treating. Monitoring will be done by AeroControlex Quality Assurance.

Q500.6 Goodrich Corporation

Q500.6A DOC 300 “Supplier Product and Quality Requirements” - The requirements of DOC 300 apply to this contract. Doc 300 defines, illustrates, and explains quality requirements for tier 1, sub-tier suppliers, and processors on product purchased.

Q500.7 Jabil

Q500.7A 43-PR30-PURH-007 “General Requirements for Suppliers” - The requirements of 43-PR30-PURH-007 apply to this contract. The purpose of this document is to define the general quality requirements for suppliers of Jabil.

Q500.8 Space Exploration Technologies

Q500.8A SPX-00000874 “SpaceX Quality Clause Attachment for Purchase Orders” - This document establishes requirements applicable to items ordered under the Purchase Order, of which this is a part, to assure contract flow down, quality, and reliability. The General Requirements for product assurance, including continuous improvement, are applicable unless expressly excluded in the Purchase Order. SpaceX Federal Acquisition Regulations (FAR) Clauses also apply to this contract.

Q500.9 Honeywell Aerospace

Q500.9A SPX-00000874 “Quality Supplemental Purchase Order Conditions” – Supplier shall ensure they are working to the current revision of the Honeywell Aerospace Quality Supplemental Purchase Order Conditions (SPOC) manual. Supplier Shall adhere to the direction provided in the executive order (EO) 13224, Executive Order On Terrorist Financing – Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, Or Support Terrorism, Effective 09/24/2001 and any subsequent changes made to it. Supplier further agrees to include this requirement in lower-tier purchase orders or subcontracts hereunder. To view the contents of the EO, please access the following website:
<http://www.treas.gov/offices/enforcement/ofac/legal/eo/13224.pdf>.

Q500.10 Raytheon Company

Q500.10A Raytheon Quality Note BF “Universal Quality Note” – All sections of Quality Note BF are a requirement of this contract.

Q500.10B Raytheon Quality Note DD “First Article Inspection” – All sections of Quality Note DD are a requirement of this contract.

Q500.10C Raytheon Quality Note QL “Certificate of Conformance” – All sections of Quality Note QL are a requirement of this contract.

