



**DOC 253-01**  
**UNITED LAUNCH ALLIANCE'S QUALITY CLAUSES**

Notwithstanding any other provisions, all Work furnished hereunder are subject to the General Provisions of this Contract and the following Special Provisions Quality Assurance Clause(s) when indicated by Quality Clause Code(s).

Work defined in this Contract will not be accepted by ULA if the CONTRACTOR fails to submit certification, documentation, test data, and reports specified herein.

**Quality Clause Cross Reference Instructions:**

Purchase orders generated from the SAP system list the applicable Quality Codes, the Quality Clause Title and Text are not listed. Go to "Edit" and "Find". Type the Quality Code and select "Find Next"

If you have any questions regarding the use of this list, please contact the Procurement Representative as identified on this Contract.

The following Quality Codes have been retired - QC006, QC007, QC09, QC011, QC017, QC018, QC019, QC020, QC023, QC024, QC025, QC026, QC032, QC036, QC037, QC039, QC040, QC044, QC049, QC052, QC053, QC054, QC055, QC056, QC057, QC063, QC067, QC069, QC072, QC073, QC075, QC078, QC080, QC082, QC086, QC091, QC095.

**Definitions:**

"CONTRACTOR" means the party identified on the face of this Contract with whom ULA is contracting. CONTRACTOR shall mean the same as supplier, seller, vendor or other such type designation.

"Procurement Representative" means the person authorized by ULA's cognizant procurement organization to administer and/or execute this Contract.

"Subcontractor" means CONTRACTOR's subcontractor at any tier.

"ULA" hereinafter will mean United Launch Alliance, LLC.

"Work" means all required labor, articles, materials, supplies, goods, services and deliverable information and materials constituting the subject matter of this Contract.

"Quality Clause Data Item" refers to a document or data set called for by one of the following Quality Clauses (clauses also demarcated by the **highlighting** of the clause code in the body of this document) and should be submitted into SDT:

QC004, QC005A, QC008, QC010, QC012A, QC012B, QC013, QC014, QC015, QC016, QC033, QC034, QC035, QC041, QC042, QC047, QC051, QC077, QC079, QC081, QC083, QC084, QC085, QC087, QC088, QC089, QC090, QC092, QC093, QC098, QC100, QC101.

**Reference Documents:**

ISO 9001 Quality Systems-Model for Quality Assurance in Design, Development, Production, Installation, and Servicing

SAE AS9100 Model for Quality Assurance in Design/Development, Production, Installation, and Servicing

SAE AS9003 Inspection and Test Quality System

SAE AS9102 Aerospace First Article Inspection Requirement

ISO 17025 General Requirements for the Competence of Testing and Calibration Laboratories

NCSL/ANSI Z540.3 Requirements for the Calibration of Measuring and Test Equipment

MIL-STD-1686 Electronic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies, and Equipment

SAE AS9102 Aerospace First Article Inspection Requirement

MIL-STD-453 Inspection, Radiographic

ASTM-E1742 Standard Practice for Radiographic Examination

Quality Clause Code	Clause Name	Clause Text
QC001	ACCEPTANCE AT DESTINATION	Work ordered under this Contract is subject to final acceptance at ULA's facility as set forth on the face of the Contract.
QC002	ULA'S SOURCE ACCEPTANCE	<p>Source acceptance of all Contract and product requirements is subject to review by ULA's Procurement Quality Assurance Representative (PQAR) at the CONTRACTOR's facility prior to shipment of the Work.</p> <p>Upon receipt of Contract or additional line items added to the contract, CONTRACTOR shall notify the PQAR that an 'Initial Visit' is required through ULA's Automated Source Activity Planning (ASAP) system. This visit will identify and coordinate mandatory surveillance points.</p> <p>CONTRACTOR will notify the PQAR, through ASAP, 3 business days in advance of the time that the Work is available for review. CONTRACTOR will provide reasonable facilities and assistance, including all quality records and related data for contracted Work, upon request as required to satisfactorily perform the inspections and tests. The approval of the PQAR will be indicated on CONTRACTOR's shipping document as evidence of approval to ship. CONTRACTOR will ensure that the mandatory in-process inspection points are not by-passed. Immediately contact the Procurement Representative if CONTRACTOR cannot access the ASAP system.</p> <p>Work ordered under this Contract is subject to final acceptance at ULA's facility as set forth on the face of the Contract.</p>
QC003	ULA TOOLING DESIGN SOURCE ACCEPTANCE	<p>Prior to shipment of any tooling, promptly notify designated ULA Tooling Quality Assurance Representative (TQAR) per the PO text attached to the agreement.</p> <p>Contracted Tool Design activity is to be approved by ULA Tool Engineering and a final Tooling Quality Assurance approval must be provided prior to supplier proceeding with tooling fabrication.</p> <p>Supplier shall notify the TQAR at least 3 days in advance of the time that the tooling is available for final inspection review. Supplier shall provide reasonable facilities and assistance, including all quality records and related data for contracted tooling, as required or upon request by ULA to perform the tooling inspection.</p> <p>The approval of the TQAR shall be indicated on the supplier's shipping document as evidence of final approval to ship. This final inspection approval will be performed onsite or via email based upon ULA Tooling Quality discretion. CONTRACTOR is responsible to ensure that both the tool design inspection point and the final post-fabrication tooling inspection point are not by-passed.</p> <p>Work ordered under this contract is subject to final acceptance at ULA's facility as set forth on the face of the contract.</p>

Quality Clause Code	Clause Name	Clause Text
QC004	CERTIFICATE OF CONFORMANCE	<p>CONTRACTOR will submit a Certificate of Conformance to attest that the Work conforms to the Contract requirements. The Certificate of Conformance will be signed, with title, and dated by an authorized CONTRACTOR representative.</p> <p>The Certificate of Conformance will include the following information:</p> <ol style="list-style-type: none"> <li>1) Name and Address of Manufacturer</li> <li>2) Contract number</li> <li>3) Part number including revision level</li> <li>4) Quantity</li> <li>5) Manufacturer's lot, heat, batch, date code, and/or serial number (if applicable)</li> <li>6) Indicate if work is ULA furnished, reference QC005</li> </ol> <p>Applicable material test results, process certifications and inspection records will be presented upon ULA's request.</p> <p>For Subcontractor manufactured parts:  CONTRACTOR will submit CONTRACTOR's Certificate of Conformance, as above, and the Subcontractor manufacturer's Certificate of Conformance.</p>
QC005A	CERTIFICATE OF CONFORMANCE - ULA FURNISHED MATERIAL	<p>This Contract contains ULA furnished material. CONTRACTOR will submit a Certificate of Conformance stating that the Work furnished is in conformance with Contract requirements, and that ULA furnished material was used in the manufacture of the hardware. The Certificate of Conformance will be signed, with title, and dated by an authorized CONTRACTOR representative.</p> <p>If ULA furnished material is found to be nonconforming, CONTRACTOR will control the material to preclude its use and must request and receive through the Procurement Representative disposition instructions and approval to proceed</p> <p>Applicable material test results, process certifications and inspection records will be presented upon ULA's request.</p> <p>An example of an acceptable statement of Certificate of Conformance is as follows: "This is to certify that all items noted are in conformance with the Contract, drawings, specifications, and other applicable documentation. Material was furnished by ULA and no substitutions and/or deviations have been made without ULA's authorization." When substitutions and/or deviations have been authorized, the certification will be modified to indicate the source, nature, and date of the authorization.</p>
QC005B	OUTSIDE MANUFACTURING	<p>If ULA furnished material is found to be nonconforming, CONTRACTOR will control the material to preclude its use and must request and receive through the Procurement Representative disposition instructions and approval to proceed .</p>

Quality Clause Code	Clause Name	Clause Text
QC008	CERTIFICATE OF CONFORMANCE - HIGH STRENGTH FASTENERS	<p>This Contract contains high-strength fasteners with specified ultimate tensile strengths equal to or greater than 160 ksi, or shear strengths equal to or greater than 95 ksi, and nominal diameters equal to or greater than 3/16 inch. Fasteners shall be procured from manufacturers and distributors approved for Class 3 fasteners by the Defense Logistics Agency and listed on the DLA Qualified Suppliers List for Manufacturers and the DLA Qualified Suppliers List for Distributors. Alternate manufacturers and distributors shall require prior approval by ULA PQE and PMP Engineering. All testing will be performed at an accredited laboratory in compliance with the Fastener Quality Act. Complete traceability is required for every fastener lot. The DLA Qualified Supplier/Manufacturer list may be accessed at: <a href="http://www.dla.mil/TroopSupport/IndustrialHardware/Engineering-and-Technical-services/Qualified-Suppliers-List/">http://www.dla.mil/TroopSupport/IndustrialHardware/Engineering-and-Technical-services/Qualified-Suppliers-List/</a></p> <p>A Certificate of Conformance and Manufacturer's Test Reports will be submitted to ULA, OR, if CONTRACTOR meets the following criteria, they may maintain said documents within CONTRACTOR's electronic data repository:</p> <ol style="list-style-type: none"> <li>1) CONTRACTOR is listed as approved for "DIG_COFC" on ULA Approved Supplier Website: <a href="http://suppweb.ulalaunch.com/AppProcWeb/Default.aspx">http://suppweb.ulalaunch.com/AppProcWeb/Default.aspx</a></li> <li>2) CONTRACTOR assures ULA access to CONTRACTOR's electronic data repository</li> </ol> <p>The Certificate of Conformance shall attest that the fasteners and all associated processes conform to the specification requirements, will be signed, with title, and dated by an authorized CONTRACTOR representative. The following information will be included, at a minimum:</p> <ol style="list-style-type: none"> <li>1) Name and address of the manufacturer</li> <li>2) CONTRACTOR's name, if CONTRACTOR is not manufacturer</li> <li>3) ULA Contract Number</li> <li>4) Part number including revision level</li> <li>5) Manufacturer's production order/lot number</li> <li>6) Manufacturer's Test Report: <ol style="list-style-type: none"> <li>a) Raw material specification, including class, type, or grade as applicable</li> <li>b) Raw material heat, lot, or melt number</li> <li>c) Name of raw material producer</li> <li>d) Name of test laboratory, if not manufacturer</li> <li>e) Chemical analysis report as defined by the applicable specification</li> <li>f) Mechanical test report as defined by the applicable specification (i.e. tensile and/or single/double shear strength)</li> <li>g) Metallurgical examination report as defined by the applicable specification (i.e. microstructure and/or macrostructure)</li> <li>h) Non-destructive test results when required by applicable specification (i.e. dye penetrant, magnetic particle, etc.)</li> </ol> </li> </ol> <p>CONTRACTOR's Quality Organization will be responsible for ensuring that items of this order are packaged in such a manner that the dimensional integrity is preserved, contamination and corrosion are prevented, and no physical damage occurs to the threads during shipment. The preferred method, when size permits, will be to individually sleeve the threaded portion of the fastener. Bulk packaging of unprotected threads is prohibited.</p>

Quality Clause Code	Clause Name	Clause Text
QC010	CERTIFICATE OF CONFORMANCE - COMMERCIAL ITEM, MATERIAL, OR PROCESS	<p>CONTRACTOR will submit a Certificate of Conformance to attest that the Work conforms to the Contract requirements. Applicable material test results, process certifications and inspection records will be presented upon ULA's request. Certification will include name of the CONTRACTOR, quantity shipped, and Contract Number. The Certificate of Conformance will be signed, with title, and dated by an authorized CONTRACTOR representative.</p> <p>An example of an acceptable Certificate of Conformance is as follows: "This is to certify that all items noted are in conformance with the Contract, drawings, specification and other applicable documentation. All applicable process certifications, chemical and physical test reports are on file at this facility and are available for review by ULA."</p>
QC012A	CERTIFICATE OF CONFORMANCE - RAW MATERIAL	<p>CONTRACTOR will submit a certificate that states that the raw materials shipped, or used in the manufacture of the Work, were tested, inspected, and found to be in compliance with the applicable parts and material specifications. The certificate will be signed, with title, and dated by an authorized CONTRACTOR representative and include, at a minimum, the following information:</p> <ol style="list-style-type: none"> <li>1) Name and address of ULA CONTRACTOR</li> <li>2) ULA Contract number</li> <li>3) ULA Part number, including revision level</li> <li>4) Manufacturer's lot identification number of the Work</li> <li>5) Name of raw material manufacturer</li> <li>6) Raw material specification, including revision</li> <li>7) Raw material heat/lot/batch number and</li> <li>8) Raw material total lot weight as applicable</li> </ol> <p>If CONTRACTOR supplies converted material produced by a raw material manufacturer, CONTRACTOR is responsible for ensuring performance of all physical tests where the manufacturing process has altered the properties from what had been certified by the raw material manufacturer. The data submitted must also reflect the altered condition of the material.</p> <p>Upon ULA's request, CONTRACTOR will provide any applicable material test results, process certifications, and inspection records pertaining to Work submitted.</p>

Quality Clause Code	Clause Name	Clause Text
<p><b>QC012B</b></p>	<p>MILL REPORT AND CERTIFICATE OF CONFORMANCE - RAW MATERIAL</p>	<p>CONTRACTOR will submit a certificate that states that the raw materials shipped, or used in the manufacture of the Work, were tested, inspected, and found to be in compliance with the applicable parts and material specifications. The certificate will be signed, with title, and dated by an authorized CONTRACTOR representative and include, at a minimum, the following information:</p> <ol style="list-style-type: none"> <li>1) Name and address of ULA CONTRACTOR</li> <li>2) ULA Contract number</li> <li>3) ULA Part number, including revision level</li> <li>4) Manufacturer's lot identification number of the Work</li> <li>5) Name of raw material manufacturer</li> <li>6) Raw material specification, including revision</li> <li>7) Raw material heat/lot/batch number</li> <li>8) Raw Material total lot weight as applicable</li> </ol> <p>Additionally, CONTRACTOR will include the raw material manufacturer's test report (i.e. mill test report) which has:</p> <ol style="list-style-type: none"> <li>a) The specification(s), including revision numbers or letters, to which the material has been tested and/or inspected, and the identification of the material lot to which it applies.</li> <li>b) The quantitative limits for chemical, mechanical, and/or physical properties allowable by specification, and the actual test/inspection values obtained.</li> </ol> <p>If CONTRACTOR supplies converted material produced by a raw material manufacturer, CONTRACTOR is responsible for ensuring performance of all physical tests where the manufacturing process has altered the properties from what had been certified by the raw material manufacturer. The data submitted must also reflect the altered condition of the material.</p>
<p><b>QC013</b></p>	<p>CERTIFICATE OF CONFORMANCE - NDT TEST REPORT</p>	<p>This Contract contains requirements to perform Nondestructive Testing (NDT) which will evaluate the properties of material or parts without causing damage. CONTRACTOR will include or submit a certificate that lists the NDT specification tested to, including revision numbers or letters, and must include the inspector's signature or stamp. The Certificate of Conformance will be signed, and dated by an authorized CONTRACTOR representative.</p>

Quality Clause Code	Clause Name	Clause Text
QC014	CERTIFICATE OF CONFORMANCE - SPECIAL PROCESS APPROVAL	<p>This Contract requires Special Processing. The CONTRACTOR and/or CONTRACTOR's subcontract source <b>must</b> be approved by ULA at the time of process performance OR be listed as approved for: "Q4M - SUPPLIER APPROVE OWN SPECIAL PROCESSORS"</p> <p>A list of ULA approved suppliers/processors and their associated processes is available at <a href="http://suppweb.ulalaunch.com/AppProcWeb/Default.aspx">http://suppweb.ulalaunch.com/AppProcWeb/Default.aspx</a></p> <p>The CONTRACTOR shall include this clause, including this paragraph, in all Subcontracts.</p> <p>A Certificate of Conformance and/or equivalent Process Certificate, from CONTRACTOR and all Subcontractors performing Special Processing Work under this Contract, will be submitted to ULA. The certificate shall be traceable to a ULA Contract number and include:</p> <ol style="list-style-type: none"> <li>1) Part number including revision level</li> <li>2) Serial and/or lot number(s) (as applicable)</li> <li>3) Process specification number and revision level</li> <li>4) Processing date</li> <li>5) Name and address of the processor(s) performing each process</li> <li>6) A certification statement that the special process was performed per the applicable drawing/specification requirements</li> <li>7) Signature with date and title by an authorized representative of the CONTRACTOR and/or CONTRACTOR's subcontract source</li> </ol> <p>ULA's approval of any processor does not relieve CONTRACTOR of CONTRACTOR's requirement to comply with the terms of this Contract.</p>
QC015	100% INSPECTION	<p>The CONTRACTOR will submit all inspection documentation, stamped by the responsible quality inspector, showing 100% inspection for all attributes noted on the drawings, for all parts submitted. Inspection documentation will include serial numbers and/or lot codes, if applicable.</p>
QC016	100% INSPECTION - CRITICAL CHARACTERISTICS	<p>The CONTRACTOR will perform 100% inspection of critical characteristics identified in the drawing or specification. The CONTRACTOR will submit a Certificate of Conformance attesting that all critical characteristics have been verified to meet the requirements of the engineering document(s). The certification will contain as a minimum:</p> <ol style="list-style-type: none"> <li>1) Name and address of CONTRACTOR</li> <li>2) Contract number</li> <li>3) Part number including revision level</li> <li>4) Serial number(s) (as applicable)</li> <li>5) Quantity</li> <li>6) Listing of critical characteristics verified</li> </ol> <p>The Certificate of Conformance will be signed, with title, and dated by an authorized CONTRACTOR representative.</p>

Quality Clause Code	Clause Name	Clause Text
QC021	CAGE CODE	<p>Unless otherwise specified on this Contract, CONTRACTOR shall include their Commercial and Government Entity (CAGE) code number as part of assigned serial number(s) described by Cage Code-Serial Number or serial number-cage code, separated by dash with no spaces (e.g., 12345-001 or 001-12345). The total serial number length shall not exceed sixteen characters.</p> <p>Registration instructions to obtain CAGE code number are available on: <a href="https://cage.dla.mil/">https://cage.dla.mil/</a></p>
QC022	CALIBRATION SYSTEM APPROVAL	<p>If CONTRACTOR is an original equipment manufacturer (OEM) or OEM authorized for the equipment being calibrated, CONTRACTOR will be registered or certified to ISO 9001, AS9100, or equivalent.</p> <p>If CONTRACTOR is not an original equipment manufacturer (OEM) for the equipment being calibrated, CONTRACTOR will have a documented calibration system that meets the requirements of current revisions of ISO 17025, ANSI Z540.3, or equivalent. Third party accreditation (e.g. A2LA, NVLAP, etc.) will be accepted. CONTRACTOR declaring calibration system compliance with no formal accreditation will be reviewed. The CONTRACTOR's system will be subject to review and approval at all times by ULA.</p> <p>If ULA has accepted CONTRACTOR's third party quality registration and CONTRACTOR subsequently changes registrars, loses its registration status, or is put on notice of losing its registration status, CONTRACTOR will notify ULA within three days of receiving such notice from its registrar.</p> <p>CONTRACTOR must notify ULA if unable to perform Work and will only send Work to a ULA approved Subcontractor.</p>

Quality Clause Code	Clause Name	Clause Text
QC027	MODEL BASED DEFINITION (MBD)	<p>This Contract requires Special Capabilities . The CONTRACTOR and/or CONTRACTOR’s subcontract source <b>must</b> be approved by ULA at the time of process performance OR be listed as approved for: “MBD – SUPPLIER MODEL BASED DEFINITION APPROVAL”</p> <p>To become MBD approved the Contractor must complete a QS-702.3 questionnaire. The completed questionnaire along with the supplier’s supporting procedures should be submitted to ULA electronically via SDT. Upon ULA SDT review and approval, it will be determined if an onsite ULA verification audit will be required prior to MBD special capability approval is granted.</p> <p>The CONTRACTOR shall include this clause, including this paragraph, in all Subcontracts.</p> <p>Contractor shall conform to ULA’s document QS-702.03 "Quality Assurance Standard for Model Based Definition at ULA Suppliers" and obtain ULA approval as MBD Capable if Contractor receives, downloads, and/or uses Contractor’s MBD geometry in any format.</p> <ul style="list-style-type: none"> <li>• If Contractor receives ULA’s MBD geometry, Contractor is required to obtain ULA’s approval as MBD-capable.</li> <li>• If Contractor provides ULA’s MBD geometry to Contractor’s subcontractors in any format, Contractor shall impose ULA’s document QS-702.03 as a requirement and is responsible for its subcontractor’s conformance. <ul style="list-style-type: none"> <li>- Subcontractors will provide C of C of completed work and will be part of the Contractors data package.</li> </ul> </li> </ul> <p>A copy of ULA’s document QS-702.03 and a list of ULA approved suppliers/processors and their associated processes can be obtained at the following URL or are available through the Procurement Representative.</p> <p><a href="http://suppweb.ulalaunch.com/AppProcWeb/">http://suppweb.ulalaunch.com/AppProcWeb/</a></p>
QC028	DROP SHIPMENT DOCUMENTATION ACCEPTANCE	<p>Work ordered under this Contract is to be drop shipped to a destination other than a ULA facility. Final acceptance is contingent upon submittal and approval of quality data to ULA.</p>
QC029	ELECTROSTATIC DISCHARGE PROTECTION (ESD)	<p>Work ordered under this Contract requires Electrostatic Discharge (ESD) protection and must be properly packaged and identified. The CONTRACTOR will ensure that ESD protection is compliant with applicable ULA standards and specifications. All Work must be shipped with their leads electrically shorted together in noncorrosive, conductive foam or other suitable method of packaging. All Work will be placed in conductive or static dissipative packages, tubes, carriers, bags, etc. for shipment. The packaging will be clearly labeled to indicate that it contains electrostatic sensitive items.</p> <p>NOTE: Lead shorting is not required for items such as Dual Inline Packages (DIP's) shipped in conductive rails or tubes.</p>

Quality Clause Code	Clause Name	Clause Text
QC030	ELECTROSTATIC DISCHARGE PROTECTION (ESD) PROGRAM REQUIREMENT	Work ordered under this Contract requires the CONTRACTOR to maintain a documented Electrostatic Discharge (ESD) protection program. The CONTRACTOR will ensure that ESD protection program is compliant with applicable ULA standards and specifications. If ULA's specification referenced in the Contract does not specify ESD program requirements, the CONTRACTOR will maintain a documented ESD protection program which meets the elements 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, and 5.9 requirements of MIL-STD-1686C, and includes documented employee training.
QC031	ELECTROSTATIC DISCHARGE PROTECTION (NON-ESD)	<p>Work ordered under this Contract is not considered Electrostatic Discharge (ESD) sensitive. However, Work will be associated with ESD sensitive hardware in the stocking and manufacturing processes where static generating packaging materials are forbidden.</p> <p>CONTRACTOR will make every effort to package and ship Work in noncorrosive, conductive foam or other suitable method of packaging. CONTRACTOR will make every effort to package Work in conductive or static-dissipative packages, tubes, carriers, bags, etc. for shipment.</p>
QC033	FOREIGN OBJECT DAMAGE (FOD) AWARENESS	<p>CONTRACTOR will maintain a Foreign Object Elimination (FOE) Program assuring work is accomplished in a manner preventing foreign objects or materials from entering and remaining in deliverable items. CONTRACTOR will provide FOE Program training to employees performing operations on Foreign Object Damage (FOD) Sensitive products. Maintenance of the work area and control of tools, parts and material will mitigate the risk of FOD incidents. Tooling, jigs, fixtures, and test or handling equipment will be maintained in a state of cleanliness and repair to prevent FOD.</p> <p>CONTRACTOR will provide a statement of certification that deliverable products are free of any foreign materials that could result in FOD to the installed product or companion components/systems.</p>

Quality Clause Code	Clause Name	Clause Text
QC034	FOREIGN OBJECT DAMAGE (FOD) CONTROL	<p>CONTRACTOR will maintain a Foreign Object Elimination (FOE) Program with a documented and current plan assuring work is accomplished in a manner preventing foreign objects or materials from entering and remaining in deliverable items.</p> <p>The CONTRACTOR will identify a FOE person responsible for implementing the FOE Program. CONTRACTOR will provide FOE Program training to employees performing operations on Foreign Object Damage (FOD) Sensitive products.</p> <p>Maintenance of the work area and control of tools, parts and material will preclude the risk of FOD incidents. Tooling, jigs, fixtures, and test or handling equipment will be maintained in a state of cleanliness and repair to prevent FOD.</p> <p>Prior to closing inaccessible or obscured areas and compartments during assembly, the CONTRACTOR will inspect for foreign objects/materials.</p> <p>The CONTRACTOR will document and investigate all FOD incidents assuring elimination of the root cause.</p> <p>ULA will have the right to perform inspections, verification and FOE Program audits at CONTRACTOR's facility to assure program documentation and effectiveness.</p> <p>CONTRACTOR will flow down requirements as required to their Subcontractors to ensure compliance with this requirement.</p> <p>CONTRACTOR will provide a statement of certification that deliverable products are free of any foreign materials that could result in FOD to the installed product or companion components/systems.</p>

Quality Clause Code	Clause Name	Clause Text
QC035	FOREIGN OBJECT DAMAGE (FOD) CRITICAL REQUIREMENTS	<p>CONTRACTOR will maintain a Foreign Object Elimination (FOE) Program with a documented and current plan assuring work is accomplished in a manner preventing foreign objects or materials from entering and remaining in deliverable items. The CONTRACTOR's FOE Program processes will be provided to ULA for review and approval.</p> <p>The CONTRACTOR will identify a FOE person responsible for implementing the FOE Program. CONTRACTOR will provide FOE Program training to employees performing operations on Foreign Object Damage (FOD) Sensitive products.</p> <p>Maintenance of the work area and control of tools, parts and material will preclude the risk of FOD incidents. Prior to closing inaccessible or obscured areas and compartments during assembly, the CONTRACTOR will inspect for foreign objects/materials. Tooling, jigs, fixtures, and test or handling equipment will be maintained in a state of cleanliness and repair to prevent FOD.</p> <p>The CONTRACTOR will document and investigate all FOD incidents assuring elimination of the root cause.</p> <p>ULA will have the right to perform inspections, verification and FOE Program audits at CONTRACTOR's facility to assure program documentation and effectiveness.</p> <p>CONTRACTOR will flow down requirements as required to their Subcontractors to ensure compliance to this requirement.</p> <p>The CONTRACTOR will report, in writing, to the Contract designated technical interface, any FOD to FOD Sensitive products within three days of discovery and provide written cause and corrective action to the problem within 15 days of discovery.</p> <p>CONTRACTOR will provide a statement of certification that deliverable products are free of any foreign materials that could result in foreign object damage to the installed product or companion components/systems.</p>
QC038	IDENTIFICATION – TIME AND TEMPERATURE SENSITIVE	<p>Time and temperature storage conditions must be attached to the packing sheet and accompany each shipment. The outer most shipping box must be marked to indicate "Time and Temperature Sensitive Material", including the temperature storage range in degrees.</p>

Quality Clause Code	Clause Name	Clause Text
QC041	LIMITED LIFE AND AGE CONTROL ITEMS	<p>Work on this Contract requires submittal of a Certificate which includes the following information, as a minimum:</p> <ol style="list-style-type: none"> <li>1) Name and address of CONTRACTOR</li> <li>2) Contract Number</li> <li>3) Part Number including revision level</li> <li>4) Manufacturer's Name (if not CONTRACTOR)</li> <li>5) Lot, Heat, Batch, Date Code, and/or Serial Number (as applicable)</li> <li>6) Date of Manufacture</li> <li>7) Date of Shipment from Manufacturer</li> <li>8) Remaining minimum shelf life at time of certification</li> </ol> <p>The Certificate of Conformance will be signed, with title, and dated by an authorized CONTRACTOR representative.</p> <p>Upon shipment, remaining shelf life of the Work will meet the minimum shelf life specified on the Contract. If no minimum shelf life is specified, 75 percent of the shelf life will be remaining on the Work unless approved by PMP.</p> <p>Work will be individually packaged (i.e. bagged). When the size of the item or the applicable specification does not permit marking of individual items, CONTRACTOR will label each package or box furnished. All elastomeric parts will be identified on the part itself or on interior and exterior packaging in compliance with the specification.</p>
QC042	LIMITED OPERATING LIFE ITEMS	<p>CONTRACTOR will collect and maintain records of operating time or cycles for all items designated as Limited Operating Life Items (LOLI) by ULA's drawings or specifications. The following records will be submitted to ULA for each contracted item:</p> <ol style="list-style-type: none"> <li>1) Total elapsed time or cycles for each operation</li> <li>2) Cumulative time or cycles starting with the first functional test</li> <li>3) Remaining time or cycles</li> </ol> <p>The records will be signed and/or stamped, and dated by an authorized CONTRACTOR representative.</p>
QC043	MATERIAL REVIEW AUTHORITY (MRA)	<p>Nonconformances to CONTRACTOR controlled features, characteristics, and parameters that do not result in failures to completely meet ULA specification requirements may be dispositioned in accordance with CONTRACTOR's system for the control of non-conforming goods. ULA does not delegate Material Review Board (MRB) authority to CONTRACTOR or its suppliers relative to permanent nonconformances of features, characteristics, or parameters that are controlled by ULA's specifications.</p> <p>This delegation is subject to review at any time by ULA. Material Review records, reports, documentation and qualification of personnel will be made available to ULA upon request, or as required by the terms of the contract. This delegation of MRA can be rescinded at any time by written notification from ULA.</p>

Quality Clause Code	Clause Name	Clause Text
QC045	NONDELIVERABLE SOFTWARE REQUIREMENTS	<p>The CONTRACTOR will plan, develop, and implement those practices and procedures that are necessary to assure compliance with the following requirements for hardware designed, tested, supported, or operated by software.</p> <p>CONTRACTOR will provide controls to ensure that different software program versions are accurately identified and documented, that no unauthorized modifications are made, that all approved modifications are properly incorporated, and that software used for testing is the proper version.</p> <p>CONTRACTOR will ensure that support software and computer hardware to be used to develop and test software or hardware under the Contract is acceptable to ULA.</p> <p>CONTRACTOR will establish a baseline of procured or developed software by performing validation tests that include demonstration of pass/fail criteria. ULA reserves the right to observe all validation tests and will be notified at least three (3) days in advance of the start of testing.</p>
QC046	NOTIFICATION OF CHANGES (NON-ENGINEERING)	<p>The CONTRACTOR will provide, in writing to the Procurement Representative, advance notification of any change(s) to tooling, facilities, materials or processes at the CONTRACTOR or the CONTRACTOR's sub-tier that will likely affect the form, fit, or function of ULA's contracted product. This includes, but is not limited to, changes in fabrication, assembly, handling, testing, facility location, or introduction of a new Subcontractor.</p>

Quality Clause Code	Clause Name	Clause Text
QC047	CHANGE DEVIATION REQUEST	<p>The Change Deviation Request (CDR) shall be submitted for a supplier change request to the ULA Purchase Order baselines.</p> <p>The CDR shall be prepared and submitted for each applicable part number and effectivity specified on the Purchase Order. If the change or deviation affects the total Items ordered by ULA's Purchase Agreement, it shall be indicated. Utilize ULA form Z-EN-010, or supplier equivalent, in the supplier portal on iDM, to document and submit CDR.</p> <p>Refer to requirements from the AS9100 Configuration Management section for guidance in the consideration of proposed changes to ULA-controlled configuration baselines.</p> <p>The following information below is a summary of the minimum requirements:</p> <ol style="list-style-type: none"> <li>1) ULA part number (or ULA specification number and description of item being procured).</li> <li>2) CONTRACTOR part number specified for delivery in ULA's purchase order, if applicable.</li> <li>3) Classify the change or deviation as Class I or Class II using the definitions in the ULA form.</li> <li>4) Effectivity of the requested change or deviation and, if the item is traceable, include the serial number(s) affected by the requested change.</li> <li>5) Impact or savings on cost or delivery to implement the change or deviation and any impacts if not approved, if applicable.</li> <li>6) Describe the reason, and provide a clear description of proposed changes or deviations with supporting rationale in sufficient detail for ready identification and evaluation. The description shall be phrased in definitive language so that, if repeated by ULA in its contractual documents, ULA can provide the contract authorization desired. Changes to models, specifications, documents, drawings, and parts lists shall be provided in From/To or Was/Is format so that the proposed change is clearly defined in the submittal of the CDR. If applicable, prepare sketches and or red-lines adequate to define the proposed change.</li> <li>7) Utilize the ULA Form or CONTRACTOR's format is acceptable, provided the content meets the requirements of the ULA Form.</li> </ol> <p>ULA Form: <a href="http://www.ulalaunch.com/docs/default-source/special-provisions---functional-documents/cdr-form-z-en-010.pdf?sfvrsn=334a48fe_4">http://www.ulalaunch.com/docs/default-source/special-provisions---functional-documents/cdr-form-z-en-010.pdf?sfvrsn=334a48fe_4</a></p>

Quality Clause Code	Clause Name	Clause Text
QC048	ORDNANCE REQUIREMENTS	<p>The following requirements apply to each item/lot shipped under this Contract and will take precedence over data-submittal requirements of any other quality clauses incorporated in this Contract. A Statement of Work may include additional mandatory requirements.</p> <ol style="list-style-type: none"> <li>1) Requirements for Lot Acceptance Test (LAT) Firing: <ol style="list-style-type: none"> <li>a) CONTRACTOR will prepare an advance data package consisting of production acceptance test report (PATR) (i.e. nondestructive test reports, applicable X-ray/N-ray C of C or films, and environmental test reports), build paper, rejection reports, certifications, and any additional pertinent data relative to the lot to be tested. The data package will be made available to ULA's Ordnance Engineer at the test site or electronically no later than one day prior to the scheduled test firing. Functional testing shall not proceed until supplier receives approval from ULA Engineering.</li> <li>b) ULA's Engineering and Quality Assurance Representatives (Quality Engineer or Procurement Quality Assurance Representative) will conduct a review of the data package. When the data package is acceptable, and after completion of successful LAT firing, ULA's Engineering and Quality Assurance Representatives will sign the Ordnance Device Certification, which CONTRACTOR will include with each shipment.</li> <li>c) If ULA review of the data is not complete prior to item shipment, ULA will generate a Recap PIRs, and send it to CONTRACTOR to be shipped with hardware.</li> </ol> </li> <li>2) Documentation to be shipped with Ordnance. CONTRACTOR will include the following documentation with each ordnance shipment: <ol style="list-style-type: none"> <li>a) CONTRACTOR's shipping report stamped by ULA's Quality Assurance and Government Source Inspection (if required).</li> <li>b) ULA's Ordnance Device Certification or Recap PIRs</li> <li>c) Material Safety Data Sheet (MSDS).</li> <li>d) Bureau of Explosive documentation and Competent Authority Letter with material classification, material description, and explosive classification</li> <li>e) Shipping information necessary to properly package, mark, and label, in accordance with Department of Transportation Hazardous Materials Regulations, will be included.</li> </ol> </li> <li>3) Ordnance Data Review Requirements after Shipment of Hardware: <ol style="list-style-type: none"> <li>a) The Procurement Representative will notify CONTRACTOR that the data package is acceptable or that additional data is needed.</li> </ol> </li> </ol>
QC050	PRELIMINARY MATERIAL REVIEW (PMR) AUTHORITY	<p>The CONTRACTOR is delegated Preliminary Material Review authority (PMR) for hardware nonconformances. This authority is limited to dispositions of Rework to engineering requirements, return to previous operation for reprocessing, Scrap (unless material was supplied by ULA), Repair to a ULA approved Standard Repair Instruction (SRI), and Return to Subcontractor. This authority does not extend to the use of Material Review Board (MRB).</p>

Quality Clause Code	Clause Name	Clause Text
QC051	PREPRODUCTION AND FIRST ARTICLE APPROVAL FOR CASTINGS, FORGINGS, & FORMED PRODUCTS	<p>Prior to production, the CONTRACTOR shall submit for approval the pre-production manufacturing, inspection, and test plans in accordance with applicable casting, forging, or formed product requirements. After manufacturing the first article, and prior to shipping, the CONTRACTOR shall submit for approval a First Article / Qualification Test Report. The report shall include applicable qualification test data, and the finalized manufacturing, inspection and test plans. These plans shall then be fixed processes for subsequent production lots. Refer to the engineering drawing or specification for the applicable Pre-Production /First Article specification for specific requirements (e.g. ULA 1P00086, STP0578, 1P00011 Class A, AMS 4241, AMS 2375 etc.). ULA approval is required, but not limited to the following:</p> <ol style="list-style-type: none"> <li>1) This is the first time the part number has been produced by the Contractor.</li> <li>2) A significant change was made to the design drawing, in-process control factors, controlled operations, or fixed process plans which could affect the performance of the part.</li> <li>3) A change is made in casting/forging/formed product Subcontractor, or Subcontractor has changed location.</li> <li>4) Seven years time has elapsed since last production lot.</li> <li>5) Requested by ULA.</li> </ol> <p>Laboratories selected for testing must be a ULA approved process source.</p> <p>If, under a previous Contract, ULA provided qualification approval for the casting/forging/formed product ordered as part of this Contract, then submittal and re-approval of fixed process plans is not required under this Contract unless, subsequent to the previous approval, changes as defined in the applicable preproduction specification have been made.</p>
QC058	QUALITY SYSTEM ISO 17025	<p>CONTRACTOR will have a Quality System conforming to the requirements of the elements described in ISO 17025, General Requirements for the Competence of Testing and Calibration Laboratories. Third party registration by an accredited registrar will be accepted. CONTRACTOR declaring system compliance to ISO 17025 with no formal accredited registrar will be reviewed. The CONTRACTOR's system will be subject to review and approval at all times by ULA.</p>
QC059	MATERIALS AND PROCESSES ENGINEERING APPROVAL	<p>This Contract contains requirements for parts or materials that are controlled by ULA Parts, Materials, and Processes (PMP) Engineering. The source(s) of these parts and materials must be approved by ULA PMP. If you are unsure about who is approved by ULA PMP, contact the Procurement Representative.</p>
QC060	QUALITY SYSTEM ISO 9001	<p>CONTRACTOR will have, at a minimum, a Quality System conforming to the requirements of the elements described in ISO 9001. If CONTRACTOR is registered / certified to AS9100 requirements of this clause will be exceeded. Third party registration by an accredited registrar will be accepted. CONTRACTOR declaring system compliance to ISO 9001 or AS9100 with no formal accredited registrar will be reviewed. The CONTRACTOR's system will be subject to review and approval at all times by ULA.</p> <p>If ULA has accepted CONTRACTOR's third party quality registration and CONTRACTOR subsequently changes registrars, loses its registration status, or is put on notice of losing its registration status, it will notify ULA within three days of receiving such notice from its registrar.</p>

Quality Clause Code	Clause Name	Clause Text
QC061	QUALITY SYSTEM ISO 9001 WITH EXCLUSIONS	<p>CONTRACTOR will have, at a minimum, a Quality System conforming to the requirements of the elements described in ISO 9001, with exclusions to Section 8. If CONTRACTOR does not have ISO 9001 approval, AS9100, with or without Section 8 exclusions, will exceed the requirements of this clause. Third party registration by an accredited registrar will be accepted. CONTRACTOR declaring system compliance to ISO 9001 or AS9100 with no formal accredited registrar will be reviewed. The CONTRACTOR's system will be subject to review and approval at all times by ULA.</p> <p>If ULA has accepted CONTRACTOR's third party quality registration and CONTRACTOR subsequently changes registrars, loses its registration status, or is put on notice of losing its registration status, it will notify ULA within three days of receiving such notice from its registrar.</p>
QC062	QUALITY SYSTEM SAE AS9003	<p>CONTRACTOR will have, at a minimum, a Quality System conforming to the requirements of the elements described in SAE AS9003. Third party certification to ISO 9001 or AS 9100 by an aerospace recognized accredited registrar will be accepted as meeting this Quality System requirement. CONTRACTOR declaring system compliance to AS9003, ISO 9001, or AS9100 without an aerospace recognized certification will be reviewed. Regardless of certification, the CONTRACTOR's system will be subject to review and approval at all times by ULA.</p> <p>If ULA has accepted CONTRACTOR's third party quality certification and CONTRACTOR subsequently changes registrars, loses its certification, or is put on notice of losing its certification, it will notify ULA within three days of receiving such notice from its registrar.</p> <p>For processes where the resulting output cannot be verified by subsequent monitoring or measurement (e.g., "special processes"), the CONTRACTOR shall establish arrangements for these processes including, as applicable:</p> <ol style="list-style-type: none"> <li>a. definition of criteria for the review and approval of the processes;</li> <li>b. determination of conditions to maintain the approval;</li> <li>c. approval of facilities and equipment;</li> <li>d. qualification of persons;</li> <li>e. use of specific methods and procedures for implementation and monitoring the processes;</li> <li>f. requirements for documented information to be retained.</li> </ol>
QC064	QUALITY SYSTEM SAE AS9100	<p>CONTRACTOR will have, at a minimum, a Quality System conforming to the requirements of the elements described in SAE AS9100. Third party registration by an accredited registrar will be accepted. CONTRACTOR declaring system compliance to AS9100 with no formal accredited registrar will be reviewed. The CONTRACTOR's system will be subject to review and approval at all times by ULA.</p> <p>If ULA has accepted CONTRACTOR's third party quality registration and CONTRACTOR subsequently changes registrars, loses its registration status, or is put on notice of losing its registration status, it will notify ULA within three days of receiving such notice from its registrar.</p>

Quality Clause Code	Clause Name	Clause Text
QC065	QUALITY SYSTEM SAE AS9100 WITH EXCLUSIONS	<p>CONTRACTOR will have, at a minimum, a Quality System conforming to the requirements of the elements described in SAE AS9100, with exclusions to Section 8. Third party registration by an accredited registrar will be accepted. CONTRACTOR declaring system compliance to AS9100 with no formal accredited registrar will be reviewed. The CONTRACTOR's system will be subject to review and approval at all times by ULA.</p> <p>If ULA has accepted CONTRACTOR's third party quality registration and CONTRACTOR subsequently changes registrars, loses its registration status, or is put on notice of losing its registration status, it will notify ULA within three days of receiving such notice from its registrar.</p>
QC066	RIGHT OF ACCESS	<p>Work under this Contract is subject to ULA surveillance/inspection at CONTRACTOR's plant or Subcontractor's facility. The CONTRACTOR will be notified by the Procurement Representative if a surveillance/inspection is to be conducted.</p>
QC068	SERIALIZATION	<p>Serialization requirements are imposed on this Contract. All work, including spares, test units, etc. will be assigned a serial number in accordance with requirements within this clause unless otherwise specified on this Contract (e.g. Statements of Work, Engineering Documentation, etc).</p> <p>Serial number(s) shall be assigned sequentially and:</p> <ol style="list-style-type: none"> <li>1) Shall not exceed sixteen characters</li> <li>2) Shall not be duplicated in a part family when items are derivatives of one another, and can be reworked to comply with a different dash number (i.e. 1G12345-1 &amp; 1G12345-501 parts may only have the same serial number if the -1 cannot be reworked into a -501 and/or vice versa)</li> <li>3) Will not be changed once assigned</li> <li>4) Be retained on work for repair, rework, or rework to a new configuration with the same base drawing number</li> <li>5) Include the CONTRACTOR's CAGE Code when clause QC021 is invoked on the contract</li> </ol> <p>A record of the serial numbers will be maintained and CONTRACTOR will indicate serial numbers on all shipping reports. Listing serial numbers by ranges is acceptable provided that any breaks in the range are so noted (e.g. S/N 1- 10, 12-20, 25-30 for a total of 25 parts). If Work is delivered in multiple shipments, only the serial numbers of the Work in a given shipment will be listed in the shipping report for that shipment. Leading zeros in serial number are not allowed.</p> <p>CONTRACTOR will maintain traceability for the items in the Contract. Traceability will be shown by maintaining documentation of materials, parts and assemblies from acquisition through fabrication, assembly, test and delivery. This documentation will include applicable traceability to part serial numbers, lot or batch number, raw materials, subassemblies, and, as applicable, any test reports, shipping reports, or certifications. Reference ISO 9001 or SAE AS9100 section 7 for clarification of requirements.</p>
QC070	SINGLE LOT OR DATE CODE	<p>All parts provided under this Contract will come from the same single lot or date code.</p> <p>The CONTRACTOR will have written approval from ULA if multiple codes are used within this order and will provide a copy of this approval with the shipping documentation. When mixed lot or date codes are authorized, the shipper will list individual lot or date codes and quantity. Multiple lot or date codes will not be co-mingled. In addition, the individual part containers will be marked with the quantity and lot or date code.</p>

Quality Clause Code	Clause Name	Clause Text
QC071	SPECIAL LABELING	<p>CONTRACTOR is hereby notified of special labeling requirements in the applicable drawing and/or specification.</p> <p>As required, the applicable label or decal will be applied near the nameplate of each part defined in this Contract. Label/decal will be positioned so that it does not obscure any information. If there is a possibility that the label/decal would contaminate the item, or if the item is too small, the label/decal will not be used.</p>
QC074	STATEMENT OF WORK	<p>Work defined in this Contract is subject to additional requirements per a Statement of Work (SOW), which must be met to achieve compliance to contract requirements. Work will not be accepted by ULA if CONTRACTOR fails to comply with all requirements of the SOW. (Reference Contract Purchase Order for applicable SOW)</p>
QC076	TRACEABILITY	<p>The CONTRACTOR will maintain traceability for the items in the Contract, which will be shown with the provided documentation of materials, parts and assemblies from acquisition through fabrication, assembly, test and delivery. This documentation will include applicable traceability to part serial numbers, lot or batch number, raw materials, subassemblies, and, as applicable, any test reports, shipping reports, or certifications. Reference ISO 9001 or SAE AS9100 for clarification of requirements.</p>
QC077	SUBMITTAL – ACCEPTANCE TEST PROCEDURE	<p>The CONTRACTOR will prepare separate detailed test procedures, encompassing tests required for acceptance. Each item of hardware, or part thereof, which requires acceptance testing, will be covered by an Acceptance Test Procedure. Acceptance Test Procedures require ULA's approval prior to testing of the first unit of hardware through SDT. Subsequent changes are subject to ULA's approval prior to incorporation. Where these tests are performed utilizing equipment controlled by computer software or firmware, the software or firmware associated with, or affecting, those tests require ULA's approval at the same time(s) as the remainder of the Acceptance Test Procedure.</p>
QC079	SUBMITTAL – FAILURE ANALYSIS REPORT	<p>The CONTRACTOR will perform a failure analysis on item(s) returned under this Contract and will provide to ULA, as a minimum if not defined by the SOW, the following information:</p> <ol style="list-style-type: none"> <li>1) Date of report</li> <li>2) Contract number</li> <li>3) CONTRACTOR's Name and Address</li> <li>4) Part Name, Number, Revision level, and Serial Number</li> <li>5) Nonconformance Document number (if specified by Contract)</li> <li>6) Specific and contributory causes of failure</li> <li>7) List of parts required to rework/repair item(s)</li> <li>8) Corrective action taken to preclude recurrence and effectivity by date or serial number of corrective action</li> <li>9) Signature and title of CONTRACTOR's Quality Representative approving the failure analysis report</li> </ol>

Quality Clause Code	Clause Name	Clause Text
QC081	SUBMITTAL – ACCEPTANCE TEST REPORT	<p>CONTRACTOR will submit the results of the lot or individual acceptance tests required by the Contract. The report will include the specification, including revision numbers or letters, which govern the production of the item. Where quantitative limits are established by the specification, the report will indicate the actual values obtained during testing. Test reports will include the control identity (i.e. lot, heat lot, batch, serial number) of the Work tested. If CONTRACTOR is not the manufacturer, CONTRACTOR will furnish the manufacturer's test report as described above.</p>
QC083	SUBMITTAL – FIRST ARTICLE INSPECTION (FAI)	<p>CONTRACTOR is required to perform a First Article Inspection (FAI). The inspection records and data will be per AS9102 or equivalent reproduction. If the deliverable is an assembly, this inspection will also include all of the piece parts that make up the assembly. When testing is required, the parameters and results of the test will be recorded in the same manner.</p> <p>CONTRACTOR will submit a copy of the initial FAI report through SDT. Additionally when a partial or re-accomplished FAI is performed, as required by AS9102, CONTRACTOR will submit said report to ULA through SDT. These reports must show evidence of acceptance by the Procurement Quality Assurance Representative when quality clause QC002 ULA's Source Acceptance, either by application of Source Stamp and/or Approval in SDT system. Note: "Acknowledgement" in SDT is not considered acceptance</p> <p>If an FAI has already been performed for this part number, subsequent shipments of item will not require a new full or partial FAI be performed if all of the following are true:</p> <ol style="list-style-type: none"> <li>1) No change in Subcontractor(s), or CONTRACTOR location</li> <li>2) No change in processes, tooling, or materials that can affect fit, form or function</li> <li>3) No natural or man-made occurrence which has affected manufacturing</li> <li>4) No lapse in production for two years, or as otherwise specified by ULA.</li> </ol>
QC084	SUBMITTAL – RESISTIVITY AND/OR CONDUCTIVITY TEST	<p>The Work covered by this Contract requires an electrical resistivity and/or conductivity test. CONTRACTOR will perform, and certify to the completion of, the tests per the Contract. Results will include, as a minimum:</p> <ol style="list-style-type: none"> <li>1) Part number including revision level</li> <li>2) Serial number(s) or lot code(s), as applicable</li> <li>3) Acceptance criteria</li> <li>4) Actual minimum and maximum values obtained</li> </ol> <p>CONTRACTOR will submit test results to ULA and be signed and/or stamped with title, and dated by an authorized CONTRACTOR representative.</p>

Quality Clause Code	Clause Name	Clause Text
QC085	SUBMITTAL – HARDNESS TEST	<p>The Work covered by this contract requires a hardness test. CONTRACTOR will perform, and certify to the completion of, the tests per the Contract. Results will include, as a minimum:</p> <ol style="list-style-type: none"> <li>1) Part number including revision level</li> <li>2) Serial number(s) or lot code(s), as applicable</li> <li>3) Acceptance criteria</li> <li>4) Actual minimum and maximum values obtained</li> </ol> <p>CONTRACTOR will submit test results to ULA and be signed and/or stamped with title, and dated by an authorized CONTRACTOR representative.</p>
QC087	SUBMITTAL – MANUFACTURING AND INSPECTION CONTROL PLAN	<p>CONTRACTOR will submit a manufacturing and inspection control plan for ULA approval. As a minimum, the plan will delineate the sequence of manufacturing operations to be performed, the points within the manufacturing sequence where inspection is to be performed, the type of each inspection specified, and, if applicable, the specifications that define each inspection requirement. This plan will be submitted through SDT. Approval by ULA engineering is required prior to production of the Work.</p> <p>Approval of this plan does not relieve CONTRACTOR of the responsibility to perform all inspections required by the applicable specifications. Any changes to the approved plan will be submitted to ULA for approval.</p>
QC088	SUBMITTAL - OBJECTIVE EVIDENCE OF DIMENSIONAL INSPECTION	<p>CONTRACTOR shall provide objective evidence that all Work furnished under this Contract were dimensionally inspected for conformance with drawing and other Contract requirements. Objective evidence shall consist of records of actual readings taken during the inspection of each part, with the dimension and its tolerance noted.</p> <p>Each inspection data sheet shall include:</p> <ol style="list-style-type: none"> <li>1) Contract Number</li> <li>2) Part Number and Revision</li> <li>3) Serial Number (if applicable)</li> </ol> <p>Each inspection data sheet will be signed, with title, and dated by an authorized CONTRACTOR representative.</p>
QC089	SUBMITTAL – PRESSURE VESSEL	<p>CONTRACTOR will provide American Society of Mechanical Engineering (ASME) Code Reports showing conformance of the units to the requirements of the Pressure Vessel Code. When required, the hardware markings must be in accordance with the applicable drawing/specification. The pressures tested/certified to and the method used will be indicated on the report.</p>

Quality Clause Code	Clause Name	Clause Text
QC090	SUBMITTAL - RADIOGRAPHIC	<p>CONTRACTOR will submit Radiographic inspection results (associated films, test reports, actual values) of each item defined in the Contract to ULA with the Work. CONTRACTOR will submit the radiographic control document identifying the areas inspected, image views, and orientation to allow precise film interpretation with appropriate traceability to the items.</p> <p>When welding is a requirement, a document to identify each weld by number, direction, and the number of views is required per weld. Welding operations will not be conducted by the CONTRACTOR until ULA's approval of this document is obtained.</p> <p>ULA's review and acceptance of radiographic inspection results is required prior to shipment of the contracted work unless otherwise authorized by the Procurement Representative</p> <p>If review and acceptance will be at CONTRACTOR's facility, CONTRACTOR will provide for reasonable facilities and assistance, including a suitable film review area (ref. MIL-STD-453 / ASTM E 1742). Evidence of ULA's acceptance must be indicated on the applicable radiographic report or certification provided by the source performing the radiographic service.</p> <p>Work defined in this Contract is subject to ULA's inspection at destination and will not be accepted if the CONTRACTOR fails to ship x-rays with the Work.</p>
QC092	SUBMITTAL – FUNCTIONAL/PROOF TEST REPORT	<p>This Contract requires functional and/or proof testing. Actual test report(s) will submitted to ULA and include, as a minimum:</p> <ol style="list-style-type: none"> <li>1) CONTRACTOR name and address and/or Independent Laboratory name and address</li> <li>2) Contract number</li> <li>3) Part number including revision level</li> <li>4) Serial number (if applicable)</li> <li>5) Testing date</li> <li>6) Test parameters and results</li> </ol> <p>The report(s) will be signed and/or stamped, with title, and dated by an authorized CONTRACTOR representative.</p>

Quality Clause Code	Clause Name	Clause Text
QC093	SUBMITTAL – CALIBRATION	<p>The CONTRACTOR will submit for each item calibrated, a Certificate of Calibration that which includes at a minimum:</p> <ol style="list-style-type: none"> <li>1) Name and address of the calibration lab performing the calibration.</li> <li>2) Model Number or Part number of the Item being calibrated including revision level if applicable.</li> <li>3) Unique calibration control number and/or Item Serial number if applicable</li> <li>4) Identification of Calibration procedure used, including sampling procedure and any deviations to the procedure, if applicable.</li> <li>5) Calibration tolerance range</li> <li>6) Identification of all measurements taken, including standard values applied, resulting values obtained and degree of deviation or error.</li> <li>7) Environmental Conditions for each parameter calibrated, if applicable</li> <li>8) Operating error per specification (measurement uncertainty)</li> <li>9) Degree of correction of out-of tolerance condition and remaining uncorrected out of tolerance condition if applicable. (As-Found and As-Left condition)</li> <li>10) Identification of standards used with traceability to National Institute of Standards and Technology (NIST).</li> <li>11) Statement of calibration compliance to ISO/IEC 17025 and ANSI/NCS Z540.1.</li> <li>12) Signature and title or stamp and date of the person responsible for the content of the report or certificate.</li> <li>13) Calibration date</li> </ol>
QC094	SUBMITTAL – WORK DESCRIPTION	<p>CONTRACTOR will include with each shipment a copy of the catalog sheet, drawing, specification, test report, or other technically descriptive documentation that best and most thoroughly describes the Work procured.</p> <p>If information is available through CONTRACTOR’s website, no physical documentation submittal is required, but a statement must be made on the Certificate of Conformance or shipper that drawing or specification may be obtained through website. Include base URL and navigation instructions, if necessary. If documentation is removed from website, or not retrievable, CONTRACTOR is responsible for providing documentation upon ULA request.</p>
QC096	SUBMITTAL – MATERIAL SAFETY DATA SHEET	<p>CONTRACTOR will submit a Material Safety Data Sheet with the shipment.</p> <p>CONTRACTOR will submit the proper shipping classification, flash point, and information necessary to properly ship the Work in compliance with CFR Title 49.</p>

Quality Clause Code	Clause Name	Clause Text
QC097	DELEGATED SUPPLIER PARTNER (DSP) PROGRAM	<p>If CONTRACTOR does not have approval in ULA’s DSP program, CONTRACTOR will adhere to the requirements of clause QC002, ULA’s Source Acceptance</p> <p>Work on Contract is approved for delegated acceptance in ULA's Delegated Supplier Partner (DSP) program. CONTRACTOR will follow the DSP program rules, and will adhere to the Program Requirements listed below. Approval in ULA's DSP program delegates authority to CONTRACTOR to accept Work on behalf of ULA. Work thus accepted by CONTRACTOR will not require ULA source inspection per clause QC002, except for periodic surveillance.</p> <p>Program Requirements:</p> <ol style="list-style-type: none"> <li>1) CONTRACTOR must be listed as DSP approved within ULA Approved Supplier Database: <a href="http://suppweb.ulalaunch.com/AppProcWeb/GeoAPL_Results.aspx?action=exact&amp;cd=DSP">http://suppweb.ulalaunch.com/AppProcWeb/GeoAPL_Results.aspx?action=exact&amp;cd=DSP</a> CONTRACTOR will maintain access to, and log all inspections in, the ULA Automated Source Activity Planning (ASAP) tool no less than 72 hours prior to scheduled performance of that inspection.</li> <li>2) CONTRACTOR is required to maintain Quality Management System approval by an accredited Certification Body, or through a ULA 2<sup>nd</sup> party audit.</li> <li>3) FAI verification will be requested through the ASAP tool and performed by a ULA Procurement Quality Assurance Representative (PQAR) at the CONTRACTOR’s facility prior to shipment of Work if BOTH: <ol style="list-style-type: none"> <li>a) QC083, First Article Inspection (FAI), has been applied to this contracted item, AND</li> <li>b) No valid FAI report is on file within the ULA database (ref QC083 for validity criteria)</li> </ol> </li> <li>4) Work accepted by CONTRACTOR will be verified only by a Delegated Supplier Representative (DSR) in accordance with contractual (drawing, specification, etc.) requirements. DSR will show evidence of compliance and certify acceptance of all product tests/inspections by a ULA provided stamp imprint and date on the shipping document. Stamp impressions will be legible and will not obscure pertinent information on the shipping document.</li> <li>5) Notwithstanding a supplier’s status as an approved DSP, delegation does not apply to the following circumstances: <ol style="list-style-type: none"> <li>a) For hardware returned to supplier for rework and the ULA nonconformance document disposition action remains open, the hardware must be accepted by the ULA PQAR prior to shipment back to ULA.</li> <li>b) For hardware returned to the supplier for repair, the hardware must be accepted by ULA PQAR prior to shipment back to ULA.</li> </ol> </li> <li>6) CONTRACTOR will notify ULA of any changes to list of DSRs by use of Form QS-808.01.A, Designated Supplier Representative List, which can be obtained through the Procurement Representative.</li> </ol> <p>CONTRACTOR's failure to comply with any of the above-stated requirements at any time may result in the probation or revocation of DSP authority. Probation or Revocation requires CONTRACTOR to immediately comply at no cost increase to ULA with the requirements of clause QC002, ULA’s Source Acceptance, in lieu of the obligations listed in this clause. ULA will notify CONTRACTOR of any changes to approval status.</p>

Quality Clause Code	Clause Name	Clause Text
QC098	AIRBORNE TUBING FABRICATION VERIFICATION	<p>The following requirements apply to each contracted item or to each item contained in a contracted kit. The content of this clause, in its entirety, will be included in the CONTRACTOR's subcontracts for work under this Contract. CONTRACTOR will prepare a document containing, as a minimum, the following information and will include the document(s) with the shipment of the contracted item(s):</p> <ol style="list-style-type: none"> <li>1) ULA's PO number, drawing number with revision level, test date(s), CONTRACTOR's name, address, and cage code identification number. Name, address, and cage code of subcontracted test and clean facilities will also be included if applicable.</li> <li>2) Certificate of conformance to verify the following requirements: <ol style="list-style-type: none"> <li>a) Condition of test fixture and fittings (flare savers or ring seal fittings are not permitted)</li> <li>b) Lubrication per ULA document 69-85049 paragraph 3.2.1.4, table 17, and figure 30</li> <li>c) Tube flare conformance (reference 69-85049 table 1)</li> <li>d) No damage to the tubing, sleeves, B-nuts, and sealing surfaces</li> <li>e) B-Nuts and sleeves are free to rotate (reference 69-85049 paragraph 3.2.1.7.3)</li> <li>f) No leakage or permanent deformation</li> <li>g) Cleanliness levels required by engineering drawing have been met</li> </ol> </li> <li>3) Actual and required values will be recorded and documented for: <ol style="list-style-type: none"> <li>a) Pressure test values (reference 69-85049 table 27)</li> <li>b) Torque values applied during proof testing (reference 69-85049 table 16)</li> </ol> </li> </ol>
QC099	SUPPLIER DATA TRANSMITTAL (SDT)	<p>Unless otherwise allotted/directed by ULA, CONTRACTOR shall submit Quality Clause Data Item(s) to ULA electronically via SDT. For contracts subject to QC002 or QC097, this submission will be completed prior to logging of ASAP Call; for all other contracts, submission will be completed prior to shipment of Work.</p> <p>Each document submitted must be compatible with Microsoft Office products or Adobe Acrobat and shall be entered into SDT as a separate line with a separate file identified with the following information:</p> <ol style="list-style-type: none"> <li>1) Procured Part Number (ULA part number or supplier part number from PO), including applicable Serial Number and Lot Number (Serial numbers must be coordinated with Procurement Representative for submission into SDT)</li> <li>2) Purchase order number</li> <li>3) Document number with revision level</li> <li>4) Title of document with reference to applicable ULA quality clause</li> </ol> <p>ULA's system will issue a SDT number; CONTRACTOR shall record this number within the body of the shipping document.</p> <p>If CONTRACTOR does not have access to ULA's internal network and/or SDT, they shall contact their Procurement Representative for the completion/submission of an IT Access Request Form.</p>

Quality Clause Code	Clause Name	Clause Text
QC100	SUBMITTAL – PRECISION CLEAN PROCEDURE	<p>Work ordered under this contract shall be cleaned by the CONTRACTOR as required by ULA’s engineering drawings and applicable specifications. Prior to performing cleaning defined within work, CONTRACTOR shall submit a detailed Precision Cleaning Procedure to ULA PMP Engineering for approval. As a minimum, the procedure will include:</p> <ol style="list-style-type: none"> <li>1) <i>Scope</i> – Define as generic cleaning or list specific part numbers, drawing numbers, and any other unique hardware identification/configuration</li> <li>2) <i>Applicable Documents</i> – List any relevant standards/documents (ULA’s, common industry, and/or CONTRACTOR’s)</li> <li>3) <i>Materials, Equipment, Chemicals</i> –List materials used (liquids, gases, tapes, films/bags, etc) and any special equipment or tooling not normally referenced in common industry standards</li> <li>4) <i>Pre-Cleaning Steps</i> – Detailed description including: <ol style="list-style-type: none"> <li>a) Materials/fluids used and their quantities</li> <li>b) Times and temperatures when cleaning in any liquid/ultrasonic bath or purge gases</li> <li>c) Filter type(s)</li> <li>d) Any in-process drying and/or inspection</li> </ol> </li> <li>5) <i>Precision Cleaning &amp; Verification &amp; Drying</i> – Detailed description including: <ol style="list-style-type: none"> <li>a) Verification requirements, clearly referenced or listed in a table</li> <li>b) All inspection methods used (UV inspection, etc)</li> <li>c) Steps for obtaining verification sample</li> <li>d) Method for performing particle counting and/or residue analysis</li> </ol> </li> <li>6) <i>Final Inspection &amp; Packaging</i> – Details on bagging, sealing openings, and decal usage</li> </ol> <p>Precision Cleaning and/or testing of the articles shall be performed in controlled environments meeting Class 7 (or cleaner) requirements per ISO 14644-1 and 14644-2 unless otherwise approved by ULA PMP Engineering. CONTRACTOR shall submit a contamination control plan meeting the requirements of ASTM E 1548 for ULA PMP Engineering approval before the start of cleaning operations</p> <p>Procedure submittal(s) must be completed within ULA’s SDT system and be compatible with Microsoft Office products or Adobe Acrobat. The file name shall reference the ULA cleaning specification number and CONTRACTOR’s procedure revision level (if applicable).</p> <p>If CONTRACTOR’s cleaning procedure has already been approved by ULA, resubmissions are required only if procedure has undergone a technical change.</p>

Quality Clause Code	Clause Name	Clause Text
QC101	BARCODING	<p>Barcoding requirements are imposed on this Contract. All work, including spares, test units, etc. will be assigned a barcode in accordance with requirements within this clause unless otherwise specified on this Contract (e.g. Statements of Work, Engineering Documentation, etc).</p> <p>Barcode(s) shall include:</p> <ol style="list-style-type: none"> <li>1) PO Serial Number – No leading zeros or spaces and do not include the letters “PO”</li> <li>2) Supplier’s Packing Slip Number – No spaces</li> <li>3) Serial Numbers – Only if S/N’s are available otherwise leave blank and No spaces</li> </ol> <p>Note(s) – Place readable text above or below barcoded text  - Use Barcode Font – Code128</p>