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|  | FORM | FRM 7.4 002 |
| | Purchasing Order Terms & Quality Clause Conditions | Rev: 1 |
| Department / s: Procurement / Quality | ISO 9001:2008 QMS AS9100 C | Clause: 7.4 Effective Date: 01/16/2016 |


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| <u>Item-01: TERMS</u> | <p>A: Seller shall keep confidential all technical and proprietary information furnished to Seller by Buyer in connection with this order, including blueprints, data, designs, drawings, engineering data for production, product know how, and any other information furnished to Seller by Buyer in connection with this contract. Seller shall not use such items or information in the design, manufacture, or production of any goods, or for any other purchase or for the manufacture of production of larger quantities than those specified, except with the express consent in writing from the Buyer. Seller, including its agents, employees, and representatives will exercise extreme caution to prevent disclosure of such information to third parties. The obligations of this provision shall survive the completion of performance and expiration or termination of this contract.</p> <p>B: Buyer and authorized representatives of Buyer's Customers and / or Regulatory Authorities shall have direct access to all applicable areas of all Seller's and Seller's Subcontractor's Plants (at any level of the supply chain) where work under this Purchase Order is being performed, to review progress, records and witness testing of the items related to this Purchase Order Seller shall include this clause in all of Seller's subcontracted Purchase Orders.</p> <p>C: Prior to shipment, Supplier shall notify Buyer if a non-conformance condition exists with the product and obtain approval for nonconforming product disposition.</p> <p>D: Supplier shall notify of changes in product and/or process changes of suppliers, changes of manufacturing facility location and, where required, obtain organization approval.</p> <p>E: Supplier shall flow down to the supply chain the applicable requirements including customer requirements.</p> <p>F: Gauges, tooling & manufacturing Aids (Manufacturing Equipment's) supplied by Buyer shall be returned with the last shipment on this order. Manufacturing Equipment's shall be returned in the same condition as received. Supplier will be responsible for any Manufacturing Equipment's repair costs if necessary. Gauges must have a current certified calibration sticker when returned to Buyer.</p> <p>G: Quantity variances and / or partial shipments are not permitted unless prior written authorization is received from the Buyer.</p> <p>H: All goods supplied shall be suitably packaged to protect, marked, and shipped in accordance with Buyer instructions. In the absence of instruction, Supplier shall contact the Buyer. All supplied goods will be returned to the Buyer for inspection if parts are received damaged.</p> <p>I: Accelerated delivery is not permitted. Any modification to the delivery schedule requires written authorization from the Buyer.</p> |
| <u>Item 02: SCHEDULE</u> | For delivery will be the responsibility of the Supplier. The Supplier shall not be held liable for damages in respect to delivery delay due to clause beyond supplier's reasonable control. However, if the supplier does not meet the delivery date as depicted on the face of the order, The Buyer may approve a revised delivery date schedule, or terminate the order without liability for such termination. |
| <u>Item 03: QUALITY MANAGEMENT SYSTEM</u> | The supplier shall have a Quality Management System that meet the requirement of AS9100. As a minimum, the following must be meet: |

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| | <ul style="list-style-type: none"> • Contract / Purchased Order Review • Data Document Control • Procurement Control • Calibration Control • Stamp Control • Corrective/Preventative Action Control • Record Retention • Production Control • Non-Conforming Product Control |
| <u>Item-04: SUPPLIER SURVEY</u> | The Supplier's QMS is subject to initial survey and approval by Buyer. Surveys or audit Including Sub-tier suppliers and processors may be conducted before or after issuance of a Purchase Order. The Supplier shall be notified of deficiencies and shall follow up and ensure that deficiencies are promptly corrected. Corrective Action shall be subject to review and approval by. |
| <u>Item-05: SUPPLIER PROCESS APPROVAL</u> | Manufacturing and Inspection special process used in the performance of this Purchase Order must be approved by Buyer. |
| <u>Item-06: Manufacturing Process Approval:</u> | Manufacturing routing document must be submitted to Buyer for approval prior to start of work. Subsequent change to approved routing documented must be submitted to Crenshaw for approval prior to implementation of change. A Change is defined as any change including sequence, equipment, material, tooling, certified personnel, etc. |
| <u>Item-07: CERTIFICATE OF CONFORMANCE:</u> | Supplier Certification of Conformance is required with this Purchase Order. A legible and reproducible Certificate of Conformance or Seller's statement of quality will accompany each shipment. Certifications must show the part number, quantity, specification, and revision number, and have a legible printed and signed signature and title of responsible person signing the certification. This certifies the material / services provided by the seller meet all drawing and / or specifications requirements. Records supporting this certification shall be on file and shall be provided to Buyer upon request at no cost to Buyer. |
| <u>Item-08: MATERIAL AND SPECIAL PROCESSING CERTIFICATIONS</u> | Actual Material Certifications are required for all Seller provided material. All Certifications must be traceable to the original Mill Lot and Heat Number. Processing Certifications are required for all Sellers providing processing. All certifications must indicate that the process has been performed to drawing requirements. Parts are subject to rejection without correct documentation. All certifications must show the part number, quantity, process being performed, specification, revision number, and have a legible printed and signed signature and title of responsible person signing the certification. Supplier shall notify the undersigned prior to shipment if specification has been replaced / superseded / updated. List specification as show on drawing, and then list the replacement specification with current revision. |
| <u>Item -09: FIRST ARTICLE INSPECTION</u> | First Article Inspection shall be performed per AS9102 on the first part Produced for new parts, or change the tools, NC tapes, configuration or processes. |

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| <u>Item -10: RUN MATERIAL</u> | The run material shall meet the requirements of industry Specification AMSQQ-A-250A (workmanship) and the requirement of the specific alloy specification(s) detailed on the Purchase Order. If at risk of corrosion or damage, material shall be oiled/preserved and full surface area interleaved after manufacture and whilst in storage/transportation, packaged/protected. All material furnished against the above Purchase Order were produced in conformance with all applicable specification and drawings as referenced therein. |
| <u>Item -11: NON-CONFORMING PRODUCT OR PROCESS:</u> | Any deviation to requirements set forth in this Purchase Order shall be documented and submitted to Buyer for disposition prior to shipment from Supplier's facility. In the event that product or material is received for processing in a nonconforming condition (i.e. damaged, paperwork/traceability issues, etc.), Supplier shall notify Seller Quality Assurance PRIOR to performing work. Note: When a nonconformance is discovered that may affect already delivered goods Seller shall notify Buyer promptly by a Seller generated Notification of Escapement (NOE) letter sent to the Buyer's authorized procurement Representative with a copy to the assigned Buyer's Supplier Quality Source Representative. Additionally, an electronic NOE shall be submitted via the Corrective Action Request System (CARS), |
| <u>Item -12: CORRECTIVE AND PREVENTATIVE ACTION</u> | Supplier shall establish and maintain documented procedures for Corrective and Preventive Action, which shall include: effective handling of customer complaints and reports, investigation of cause of non-conformance, determination of corrective action needed to eliminate cause, application of controls to ensure Corrective Action Effectiveness. |
| <u>Item -13: MONITORING AND MEASURING DEVICES</u> | All monitoring and measuring devices used in the performance of this Purchase Order shall be certified against a standard having greater accuracy. Random and systematic error in any article or material measurement process shall not exceed 10% of the tolerance of the parameter being measured. Random and systematic errors in any calibration measurement process shall not exceed 25% of the tolerance of the parameter being measured |
| <u>Item -14: RECORD RETENTION:</u> | Quality Records shall be retained for a minimum of Seven (7) years after completion of Purchase Order, or as directed by Crenshaw Customer's Quality Requirements. Records shall be identified and stored in a manner that allows them to be easily retrievable and adequately protected. |
| <u>Item -15: TOOLING UTILIZATION AND MAINTENANCE:</u> | Supplier shall maintain and administer, in accordance with sound industrial practice, a program for the maintenance, calibration, repair, protection and preservation of Customer Owned Property to assure that it is used only in the performance of the purchase order. The Supplier is responsible for any loss, damage or destruction of customer owned property upon delivery to the Supplier. Supplier is required to document and report all lost/damaged customer property to Buyer. Tooling used as a media of inspection must be part of supplier calibration system and within 2/3 engineering tolerance. |
| <u>Item -16: PRESERVATION:</u> | In order to prevent corrosion, Supplier shall store all raw materials and work-in-process in a covered structure, except forgings, castings and extrusions from which subsequent machining requirements will remove 100% of the as forged, cast or extruded surface. |

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| | Any corroded condition of such material after acceptance by the Supplier shall be the supplier's responsibility. <u>PACKAGING AND PROTECTION</u> Of the product shipped shall be in accordance with the Buyer. Purchase Order or best commercial practice to protect product from damage and /or deterioration. Supplier must take in to consideration <u>THE PREVENTION OF FOD FOR ANY PRODUCT SHIPPED TO CRENSHAW.</u> |
| <u>Item -17: MATERIAL ACCOUNTABILITY:</u> | Supplier is to return all unused/scrap material to buyer for accountability. If Material is supplied by Buyer. |
| <u>Item -18: 100% TRACEABILITY</u> | Traceability to raw material must be maintained throughout the manufacturing process. Supplier is to maintain heat lot, work order and/or serial number traceability at all times. |
| <u>Item -19: TEMPORARY PART MARKING:</u> | If id required each individual article on this Purchase Order shall have temporary identification applied/maintained prior to shipment to buyer. Any one of the following methods of identification may be used: 1-Vibro-etching of part/serial number on tool tab, or in excess areas if no tool tab is present. 2-Tag tied to part indicating part/serial number. 3-Attach label to the outside of each individually wrapped, boxed or bagged part. 4-Lot tag indicating part number and quantity. |
| <u>Item -20: TRAINING /CERTIFICATION:</u> | Supplier shall conduct training, personnel certification and recertification as necessary to assure effective accomplishment of special processes and inspection operations. |
| <u>PG-21: SAFETY:</u> | Supplier shall maintain in Industrial Safety Program applicable to their operations, facilities and equipment. Industrial Safety includes identification, elimination and/or control of hazards in employee accident prevention and fire prevention/protection in accordance with Federal, State and local standards and regulation. |
| <u>Item -22 CERTIFIED TEST REPORT/RAW MATERIAL CERTIFICATION:</u> | Product or Material shall be supplied with Certified Test Report and Raw Material Traceability/Certification at all times unless noted by Buyer Purchase Order. <u>TEST SPECIMENTS</u> Shall be required when there is a design approval from Buyer, Inspection, Investigation or Audit. <u>MATERIAL SUBSTITUTION PROHIBITION</u> <u>A. Unauthorized Material Substitution (General)</u> Unauthorized material substitutions are not permitted on Buyer's Goods. Unauthorized material substitution includes any deviation from the engineering definition of a raw material. |
| <u>Item -23 FOREIGN OBJECT DEBRIS (FOD)</u> | Supplier shall have a written system for the prevention of FOD. This system must show evidence of a written practice, effective employee training and a corrective action system when FOD is detected. This system must demonstrate employee awareness and be audited on an on-going basis. Supplier shall certify in their Certificate of Conformance (C of C) that parts are free from FOD. |
| <u>Item -24 PROHIBITED MATERIALS</u> | The use of pure Tin, Zinc and Cadmium shall be prohibited as a surface finish for Space hardware, and as follows, except when approved in advance in writing. A) TIN: the prohibition of pure unalloyed Tin shall include the surface finish on components or part used inside hermetic cavity or encapsulated within an assembly (i.e. terminations on chip capacitors in hybrids, the potted portions of leads on devices |

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| | <p>that are encapsulated). Solder-dipped Tin alloy finishes shall contain at least 3% Lead or at least 3 ½% silver. All other Tin and Tin alloy finishes shall contain at least 3% Lead.</p> <p>B) ZINC: un-plated Brass (an alloy containing Copper and zinc as the main constituents) containing greater than 21% Zinc shall be prohibited. Brass with greater than 21% Zinc shall be acceptable if the Brass is over-plated with a minimum of 50 micro-inches of Nickel or 100 micro-inches of either Copper or Gold. Zinc or alloys containing Zinc that are sealed within a hermetic cavity shall be acceptable.</p> <p>C) CADMIUM: Un-plated alloys containing greater than 5% Cadmium shall be prohibited. Alloys containing greater than 5% Cadmium shall be acceptable if they are over-plated with a minimum of 50 micro-inches of Nickel or 100 micro-inches of either Copper or Gold. Cadmium or alloys containing Cadmium that are sealed within a hermetic cavity shall be acceptable.</p> <p>D) HAZARDOUS MATERIAL: Suppliers agree to furnish the applicable Material Safety Data Sheet (MSDS) with each shipment, for products designed by industry, State, or Federal Agencies as Hazardous Material.</p> |
| <u>Item -25 RAW MATERIAL ALUMINIUM</u> | <p>Supplied aluminum raw material shall meet the requirements of Industry Specification AMS QQ-A-250A (workmanship) and the requirements of the specific alloy specification(s) detailed in the Purchase Order. Material shall be oiled/preserved and full surface area interleaved after manufacture and whilst in the storage/transportation, and package/protected per ASTM B660 (including “overseas” packaging where applicable). All material furnished against the above purchase order were produced in conformance with all applicable specifications and drawing as referenced therein. Additionally, we certify the material and/or parts supplied are free from mercury contents and all production has been conducted in a mercury free environment.</p> |
| <u>Item -26 INTERCHANGEABILITY & REPLACABILITY</u> | <p>Interchangeability demonstrations are required on products identified as Interchangeable and Replaceable (I and R) on the drawing. When the requirement is identified, the design of the demonstration shall be coordinated with Crenshaw Supplier Quality.</p> |
| <u>Item -27 ITAR REGISTRATION REQUIREMENTS</u> | <p>Seller shall comply with International Traffic in Arms Regulations 122.2 if needed, Registration Requirements.</p> |
| <u>Item -28 EXPORT LICENSING INFORMATION OFFSHORE PROCUREMENT</u> | <p>A) This contract, including any attachments or exhibits hereto, many contain information which is subjected to the International traffic in Arms Regulations (ITAR) or Export Administration Regulation (EAR) which may not be released to foreign concerns or foreign persons either inside or outside the United States without first obtaining the proper export authority. Seller shall obtain an export license pursuant to the requirements set forth herein for any items that Seller either manufactures or subcontracts outside the U.S. or before allowing access to any technical data by a foreign person in the United States. If Seller is a “Foreign Person” (as defined by the International Traffics in Arms Regulations (ITAR) reference 22 CFR Sub-chapter M) the Seller shall , upon request of Buyer’s Procurement Agent and without additional cost, provided such information as may be necessary to support Buyer’s application for export license(s) covering any items ordered from Seller hereunder.</p> <p>B) This contract may contain defense related technical data. Buyer has obtained, or will obtain, the approval of the U.S. Government to furnish to Seller the data and any other items hereunder requiring such approval, which are necessary for Seller to perform this Contract U.S. Government approval is based upon the following ITAR requirements with which Seller agrees to comply:</p> |

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| | <p>(1) Seller shall use the technical data furnished by Buyer only in the manufacture of defense article in accordance with this contract.</p> <p>(2) Seller shall not disclosure or provided technical data furnished by Buyer or any person except authorized U.S. citizen, protected person, permanent resident alien (immigration alien). If Seller is "Foreign Person", it may also disclose or provided technical data furnished by Buyer or to its employees who are citizen of the same country and qualified subcontractors in the same country, which require the data in performance of the subcontractors.</p> <p>(3) Seller shall not disclose or provide technical data furnished by Buyer to any foreign person either in the U.S. or abroad unless obtaining prior authorization directly from the U.S. Department of State Office of Defense Trade Controls (ODTC). ITAR defines "foreign person" as any person who is not U.S. citizen, permanent resident alien, or a protected individual as defined by 8 USC 1324B(a)(3). Foreign person also means a foreign corporation (corporation not incorporated in the U.S), foreign government, and any agency or subdivision of foreign governments (i.e. diplomatic mission).</p> <p>(4) Seller shall not acquire any rights in the data furnished by Buyer except to use it in the performance of this contract. Seller also shall not convey to its qualified subcontractor any greater rights in the data than Seller has Seller's qualified subcontractors shall only have the right to use the data as required in performance of their subcontractors.</p> <p>(5) Seller shall deliver the defense articles manufactured in accordance with this Contract only to Buyer or to the U.S Government.</p> <p>(6) Upon completion or termination of this Contract, Seller shall destroy or return to Buyer all proprietary information, technical data furnished to Seller by Buyer pursuant to this Contract. At Buyer, election, Buyer may direct Seller to return or destroy the data and may require Seller to certify in writing that Seller has complied.</p> <p>(7) Seller shall impose these requirements, (1) through (7), suitably revised to identify the parties' property, and on all of its subcontractors to which Seller intends to furnish technical data provided by Buyer for use by the subcontractors in performance of the subcontractors.</p> <p>(8) PROPRIETARY INFORMATION subcontractors upon receipt of proprietary information shall at no time allows Buyers documents outside of their facility or released without approval from buyer. Subcontractors shall comply with customer requirements at all times and shall have documented procedures and training records. Completion or termination of this Contract, Seller shall destroy or return to Buyer all proprietary information, technical data furnished to Seller by Buyer pursuant to this Contract. At Buyer's election, Buyer may direct Seller to return or destroy the data and may require Seller to certify in writing that Seller has complied.</p> |
| <u>Item -29 FLOWDOWN OF REQUIREMENTS (DFARS 252.225.7009 AND PURCHASE ORDER)</u> | When required by contract of PO, Raw Material or Items, which contains "Specialty Metals" (Defined as certain Steel and other alloys, Titanium and Zirconium) Shall be acquired from Domestic or Qualifying Country Resources. Additional flows downs as related to the purchase order requirements, including but not limited to purchasing documents and key characteristics. |
| <u>Item – 30 CUSTOMER FURNISHED MATERIAL</u> | Material furnished by the customer shall be inspected upon receipt for obvious damage, corrosion, inadequate preservation or other conditions which would adversely affect the usability of the material or its suitability for storage. Material received in an unsatisfactory condition shall be reported immediately to Crenshaw Quality, and shall be protected against further damage or deterioration pending disposal instructions from the customer. |
| <u>Item – 31 PART MARKING –</u> | All parts (excluding standards hardware) shall be identified with part number and revision level, cage code, production order number and inspection acceptance stamp. |

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| <u>PRODUCTION LOT TRACEABILITY</u> | |
| <u>Item – 32 PART MARKING SERIALIZED TRACEABILITY</u> | All parts (excluding standards hardware) shall be identified with part number and revision level, cage code, production order number, unique serial number, special processing transfer stamp(s), and inspection acceptance stamp. |
| <u>Item – 33 STATISTICAL PROCESS CONTROL</u> | Management of Process Variation is required per AS9103 where Key Characteristics are identified via purchase order or supplied engineering data set (models, blueprints, process specifications, etc.). When required by Crenshaw, supplier shall provide SPC data for review or with product shipments. |
| <u>Item – 34 SUB-TIER SUPPLIERS</u> | Material, supplies and services contracted to a sub-tier supplier must be obtained from Crenshaw approved sources. Crenshaw shall flow down all requirements in the Crenshaw PO to the sub-tier supplier. |
| <u>Item – 35 SUPPLIER PROCEDURE APPROVAL</u> | Manufacturing and Inspection special process procedures used in the performance of this purchase order must be approved by Crenshaw and/or its customer. Procedures are to be submitted to Crenshaw and approved prior to start of work to this purchase order. |
| <u>Item – 36 OPTIONAL CRENSHAW SOURCE INSPECTION</u> | Crenshaw Customer and/or Government Source Inspections (GSI) reserves the right to inspect any and/or all work on this purchase order at supplier's facility. The Supplier will be notified in advance of shipping date if Crenshaw source is required. Supplier shall provide evidence of Crenshaw. |
| <u>Item – 37 RIGHT OF ENTRY</u> | Crenshaw customer (including government representative) reserve the Right-of-Entry into Crenshaw supplier facility to determine and verify the quality of work and material at all productions stages. Visitation by Crenshaw customer shall be conducted with prior knowledge of, and jointly with, Crenshaw and its supplier. |
| <u>Item – 38 CHANGE NOTIFICATION</u> | Where appropriate, supplier shall notified Crenshaw of changes in testing, product, and/or process definition where acceptance, fit form or function may be affected. CANCELLATION Shall remain the right of the buyer and may be initiated at any time. |