PURCHASE ORDER PROVISIONS

General Quality Provisions: Applicable to all Purchase Orders

- A. Provide only the exact item(s) specified in the Purchase Order (PO). All items are subject to receiving inspection and test; items not meeting all the requirements shall be rejected and reflected negatively in your quality performance rating. Use of superseded material, as defined by its controlling specification, is allowable permitted the material can be traced to or from the original drawing requirements. Do not fabricate parts from substitute material without written authorization from the EBAD Buyer. Previous acceptance by EBAD of product, which was not to the requirements, does not relieve the seller from the responsibility of delivering subsequent shipments, which fully conform to the requirements.
- B. When applicable, the EBAD PO shall state the revision of the drawing or specification that applies to the order. If the revision is not stated, it is assumed that the current revision of the drawing or specification applies.
- C. Your quality control or inspection system and manufacturing process are subject to review, verification, and analysis by authorized EBAD representatives, our customers, and regulatory authorities, when applicable. Customer inspection or release of product prior to shipment is not required unless you are otherwise notified. A copy of the PO must be furnished by you to EBAD or the customer representative, upon request. A copy of this paragraph shall be passed down to your sub-tier suppliers and all their sub-tier suppliers on all Purchase Orders issued as a result of this PO.
- D. Unless otherwise specified, there is no Material Review Board (MRB) authority granted to you or any of your suppliers or sub tier suppliers providing materials, parts, or services as a result of this PO. Seller shall have documented internal systems or processes that include provisions to identify, segregate, and control non-conforming material to ensure the Seller does not ship non-conforming material to EBAD. Seller shall notify EBAD of discovery or suspicion of nonconformance(s) that may materially affect the goods delivered (or to be delivered) under this Purchase Order.
- E. A packing slip is required with each delivery. The packing slip will include, *as a minimum*, Sellers Name & Address, Purchase Order Number, Item Name, Description or Part Number, Quantity, and Number of Packages.
- F. When previously rejected items are returned to EBAD, reworked and/or replacement items shall be kept separate and clearly identified. On the packing slip, the quantity of each component shall be itemized and the EBAD NCR Number shall be listed. All of the certification requirements originally identified on the PO are applicable to reworked and/or replacement parts.1
- G. The seller shall maintain a quality system satisfactory to EBAD for control of the items being procured and shall be subject to audit by EBAD representatives. The seller shall notify EBAD of any changes to their Quality Management System that may affect the conformity of their goods or services or when their Quality Management Representative changes. Sellers must retain all quotations, quality/certification documents, contractual documents, and technical documents pertaining to a PO for a minimum period of 10 years, unless otherwise specified. Prior to disposition of the records, notify EBAD Buyer.
- H. FOR HAZARDOUS MATERIAL SHIPMENTS ONLY: Seller shall provide a current Safety Data Sheet (SDS) at the time of first delivery and at the time of first delivery subsequent to a revision of the SDS, Fax (860-843-2939), Email, or mail SDS to the attention of: Manager, Safety and Regulatory Compliance, Ensign-Bickford Aerospace & Defense Company, PO Box 429, Simsbury, CT 06070-0429.
- I. When any documentation required by the PO requires correction, either prior to or after submittal to EBAD, the correction shall be made by drawing a single line through the incorrect information, and then entering the correct information above or below the line out. No whiteout or obliterations or erasures shall be used for corrections. The correction shall be initialed and dated by the person making the change.
- J. Each page of the seller's certification package must be traceable to the EBAD PO. The seller shall maintain a method of commodity and item level traceability that ensures tracking of the supply chain back to the manufacturer of all material being delivered per this order. This traceability method shall clearly identify the name and location of all of the supply chain intermediaries from the manufacturer to the direct source of the material for the seller and shall include the manufacturer's commodity or item level identification for the item(s) such as date codes, lot codes, heat codes, serializations, unique item identifiers, or batch identifications.
- K. The requirements of this PO shall be flowed down to your sub-tier suppliers. When there are conflicting requirements, they shall be resolved by following the requirements of the document with the highest precedence. The order of precedence, in descending order, is, (1) The Document Text of the PO, (2) EBAD Special Quality Clauses listed on the PO, (3) ADPUR-04 General Quality Provisions, (4) The requirements on the Applicable Documents (Drawing) or listed Specification defining the item to be delivered.
- L. New equipment/gaging shall be provided with an appropriate certification from the manufacturer. Items delivered are subject to calibration by EBAD upon receipt and shall be rejected if not in conformance.

- M. Each item shipped to EBAD must fairly represent both the buyer's and seller's commitment to quality. If the PO, drawing, or specification does not define workmanship, then the following criteria apply: Each item must be free of foreign materials, such as grease, machining fluids, chips, or loose dirt. Surface treatments must be consistent within each lot. For example, each lot should not exhibit extreme color variations or excessive buildup of residual coating material, unless these variations are permitted by the controlling specification. Dents, scratches, gouges, and other types of surface defects must not exceed the drawing requirements for dimensions, surface finish, and/or broken edges.
- N. There shall be no parts used that are known to be obsolete by the original manufacturer. Seller shall notify EBAD of any impending parts obsolescence for evaluation.
- O. The Seller or the seller's sub-tier suppliers shall respond to EBAD requests for corrective action within the timeframe specified and take timely and effective action to eliminate and prevent the root cause underlying deficiencies.
- P. Seller shall not implement any changes in design, materials, processes, or controls without prior written approval from EBAD before supplying services and/or materials. Such changes or events may negate all previous EBAD supplier qualifications, certifications, and approval status, and may require re-qualification or resubmittal of a First Article. Seller shall notify EBAD of any proposed changes to the established baseline of materials, processes, sub-tier suppliers, inspection testing methods, techniques, ownership, or facility changes. EBAD approval is required prior to the implementation of any proposed changes. The seller is also responsible for compliance by subcontractors. Seller shall submit proposed changes for approval via a Supplier Information Request Form ADPUR-07, which can be found on our website http://www.ebad.com/suppliers/
- Q. All parts and materials intended for EBAD shall be protected against the potential damage from shipping, ESD (Electrostatic Discharge), corrosion, moisture, contamination, deterioration, or damage by processing, handling, storage at the Seller, or in transit to EBAD or from any sub-tier supplier

R. Counterfeit Material Avoidance

The Seller shall maintain a Counterfeit Item risk mitigation process internally and with its suppliers for all parts using SAE AS6174 as a guide. Seller shall ensure traceability of components/products from the original manufacturer to product acceptance by Buyer. Traceability methods shall clearly identify the name and location of all of the supply chain intermediaries from the original manufacturer, including build identification such as date codes, lot codes, melt and heat treatment lot, serialization, or other batch identification. When suspect or confirmed counterfeit item(s) associated with this purchase order are discovered, the seller shall notify EBAD so EBAD can issue a Government Industry Data Exchange Program (GIDEP) report and shall ensure that suspect counterfeit items are not delivered to EBAD. The seller shall immediately notify EBAD with the pertinent facts if the seller becomes aware or suspects that items delivered in accordance with the EBAD purchase order are or contain suspect or confirmed counterfeit items.

When requested by EBAD, seller shall provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM. Seller shall provide evidence of the Seller's risk mitigation process to EBAD upon request. The Seller shall ensure that only new and authentic materials are used in the material delivered to EBAD. The Seller shall purchase material directly from OEMs or OCMs or from Authorized Distributors of OEMs or OCMs and shall obtain approval from EBAD Buyer if items required to satisfy this order cannot be procured from these sources. Seller shall present complete and compelling support for any request to procure from sources other than OEMs or OCMs or their Authorized Distributors and include in the request all actions completed to ensure the parts thus procured are not Counterfeit Items. The Seller's supporting documentation shall also include: 1) Results of authentication test and analysis conducted (Using AS6174 as a guide). 2) Traceability with identification of all supply chain intermediaries wherever such traceability exists. 3) Identification of and traceability to the source for any remarked or resurfaced material. Seller is not authorized to deliver any item procured from sources other than OEMs or OCMs, or their Authorized Distributors without prior written authorization from the EBAD Buyer. The Seller shall segregate and provide traceability identifiers (i.e., Date Code/Lot code, Serial number) for all items delivered to EBAD which contain an item procured from sources other than OEMs or OCMs or their Authorized Distributors.

Product Impoundment and Financial Responsibility

If suspect/counterfeit item is furnished under this purchase order, such items shall be impounded. The seller shall promptly replace such items with items acceptable to EBAD and the seller may be liable for all costs relating to impoundment, removal, and replacement. EBAD may turn such items over to Authority Having Jurisdiction for investigation and reserves the right to withhold payment for the suspect items pending the results of the investigation. Any known instances of fraud or attempted fraud shall be documented in writing to EBAD.

Penalties Associated with Fraud

This purchase order and activities hereunder may be within the jurisdiction of the Government. Any knowing and willful act to falsify, conceal or alter a material fact, or any false, fraudulent or fictitious statement or representation in connection with the performance of work under this purchase order may be punishable in accordance with applicable legal statutes. Sellers employees engaged in the performance of work under this purchase order this purchase order shall be informed in writing prior to performance of work that there is a risk of criminal penalties associated with any falsification, concealment, or misrepresentation in connection with work performed under this purchase order.

Definitions:

"**Counterfeit Item**" is defined to include, but not limited to, (i) an item that is an illegal or unauthorized copy or substitute of an Original Equipment Manufacturer ("OEM") or Original Component Manufacturer ("OCM") item; (ii) an item that does not contain the proper external or internal materials or components required by the OEM or OCM or that is not constructed in accordance with OEM or OCM design, but is represented as such; (iii) an item or component thereof that is used, refurbished or reclaimed but the Supplier represents as being a new item; (iv) an item that has not successfully passed all OEM or OCM required testing, verification, screening and quality control but that Seller represents as having met or passed such requirements; or (v) an item with a label or other marking intended, or reasonably likely, to mislead a reasonable person into believing a non-OEM or OCM item is a genuine OEM or OCM item when it is not.

"Authorized Distributor" is defined as a distributor with which the OM has a contractual agreement to stock, repackage, sell and distribute its product lines. Authorized Distributors normally offer the product for sale with full manufacturer flow-through warranty.

S. The Seller shall establish and maintain an effective FOD Prevention Program. The Seller's program shall utilize effective FOD prevention practices. The written procedures or policies developed by the Seller shall be subject to review and audit by the Buyer and/or government representative, and disapproval when the Seller's procedures or policies do not accomplish their objectives.

EBAD Special Quality Clauses

Clause Description No.

1 **Source Inspection** – Items on this PO are subject to EBAD Source Inspection in your facility. A certification data package fulfilling all PO requirements shall be presented to Source Inspector. Notify the Buyer identified on the PO to schedule Source Inspection. A minimum 7 working day notice is required. Evidence of source inspection completion must accompany shipment. EBAD reserves the right to waive Source Inspection. The EBAD Buyer shall provide written authorization to process a shipment without Source Inspection. A copy of the authorization must accompany the shipment. The seller is responsible for providing adequate facilities to the EBAD Source Inspector so that an accurate inspection of the parts can be accomplished.

- 1A <u>In-Process Source Inspection</u> In-Process Source Inspection is REQUIRED during the processing of these parts. The seller SHALL NOT proceed further in the processing of parts until EBAD signs off these parts were sourced at the proper stage. Prior to starting the build, contact the Buyer identified on the PO to get specifics on what processes / inspection points are required. A minimum 5 working day notice is required. Evidence of In-Process source inspection completion must accompany shipment. EBAD reserves the right to waive In-Process Source Inspection. The EBAD Buyer shall provide written authorization to proceed without In-Process Source Inspection. A copy of the authorization must accompany the shipment. The seller is responsible for providing adequate facilities to the EBAD Source Inspector so that an accurate inspection of the parts can be accomplished.
- 2 **GSI** Government Source Inspection (GSI) is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government Representative who normally services your facility so that appropriate planning for GSI can be accomplished. If no Government Representative services your plant, notify the EBAD Buyer immediately. GSI approval shall be indicated on shipping documentation.

<u>GSS</u> - Government Source Surveillance is applicable. During performance of Purchase Order requirements, your Quality Program/Inspection System and Manufacturing Processes are subject to review, analysis and verification by authorized Government personnel or other EBAD Customers when approved by EBAD.
Government mandatory product inspections, process buyoffs, release of product prior to shipment or final inspections are not required, but may be imposed temporarily, when deemed necessary by the Government Representative or when directed by the delegating authority.
Immediately upon receipt of this Purchase Order, contact the Government Representative who normally services your plant. Government surveillance does not constitute product acceptance or certification of systems or processes by either Buyer or Government, and does not relieve the Seller of any of the requirements of the Purchase Order.

- 3 <u>Contract Manufacturer Inspection</u> Component parts will be drop-shipped to your facility by an EBAD third party supplier. You shall perform, as a minimum, packing slip verification at your receiving inspection to ensure that the product received matches EBAD parts list specified in the PO. You shall perform any additional inspections that are required by the PO and provide data sheets with your shipment. Notification of a nonconformance shall be communicated within one business day to EBAD in the form of an email to the Buyer.
- 4 <u>**Calibration**</u> Provide certification and data showing before (if applicable) and after results of calibrations performed including any adjustments made. List Manufacturer's specification acceptance limits or, if provided, EBAD's acceptance limits. If an out-of-tolerance condition is found, notify EBAD within 24 hours via a notice of escape. Measurement standards used to calibrate gages must have documented traceability to at least one of the following:
 - 1. U.S. national standards maintained by the National Institute of Standards and Technology (NIST)
 - 2. International or national measurement standards

- 3. Accepted values of fundamental physical constants
- 5A Please see 5B. 5A has been replaced with 5B.
- 5B <u>**PO Certification**</u> The seller shall approve, retain and provide copies of Certificate of Conformance. Provide a certification stating that the parts or material provided are in full compliance with the EBAD PO. The minimum information required on this certification is:
 - 1. Manufacturer Name,
 - 2. Manufacturer Address or Location, and/or Cage Code
 - 3. EBAD PO No,
 - 4. Part No, Drawing and revision, (drawing revision are not required for a distributor),
 - Item level identification, All information applicable to the product shall be included in this certification (i.e., date code(s), lot code(s), heat code(s), serialization(s), unique item identifier(s), batch identification(s) or other identification information),
 - 6. **Authorized signature with title** (signature is not required for a distributor; an electronic authorized signature is acceptable),
 - 7. Date.
- 6 **<u>Raw Material Certification</u>** Provide a certification of compliance for raw material as supplied by the mill/plant/sub-tier supplier. This certification shall be traceable to the EBAD PO and shall state the proper specification or standard as it is called out on the drawing or specification including type, class, grade, temper, etc. (see General Quality Provision A.).
- 7 **Special Process Certification** Provide a certification that the special processes required to fulfill this order were performed in accordance with the requirements as it is called out on the drawing or specification including type, class, grade, etc. Such processes may be welding, heat treating, magnetic particle inspection, radiography, anodizing, passivation, or others as specified in the PO. This certification shall be traceable to the EBAD PO.
- 8A Please see 8B. 8A has been replaced with 8B.
- 8B **Product Acceptance Inspection Data** Provide a product acceptance inspection data with each delivered lot. This may be in the form of a Certificate of Analysis, datasheet, test report or other document applicable to the product. It shall provide objective evidence of product conformance including actual dimensional results. Unless otherwise specified, inspections shall be performed for 100% of drawing dimensions on a sample of the lot. Sample size to be IAW ANSI / ASQ Z1.4, General Inspection Level I, AQL 1.0, Single sample plan for normal inspection. All acceptance is to be based on "0" defects,

regardless of sample plan. The seller shall provide the following data: EBAD and seller part number, lot number, characteristics inspected, tolerance, sample size, Inspection results for each characteristic inspected and an authorized signature or stamp. (an electronic authorized signature is acceptable). Each page shall be traceable to the EBAD PO.

When 100% inspection is specified on the drawing, provide actual dimensional results for each characteristic on 100% of the lot.

If an Inspection Plan (IP) is provided by EBAD, the supplier must complete the inspection plan and submit the completed IP. Unless otherwise specified, sample size to be IAW ANSI / ASQ Z1.4, General Inspection Level I, AQL 1.0, Single sample plan for normal inspection. All acceptance is to be based on "0" defects. A completed IP meets the requirements of Clause 8B. Each page of the IP shall be traceable to the EBAD PO.

- 9 Shelf Life Limited Material Certification Provide a certification with each shipment of shelf life limited material including the lot or batch number; date of manufacture; the EBAD PO; and the expiration date. Identify each container with the lot or batch number and special handling, safety, or storage requirements. Shelf life limited material must have at least 50% of the shelf life remaining unless otherwise specified upon receipt by EBAD.
- 10 Removed.
- 11 <u>First Article Inspection</u> A First Article Inspection Report in accordance with AS9102, latest revision is required. AS9102 First Article Report forms and instructions for completing the report can be obtained at <u>IAQG Forms Management – IAQG</u>

If the product you provide is an assembly, a First Article Report in AS9102 format is required for all items listed on the Bill of Material for the assembly. A "bubbled" drawing is to be included with the report where the Char. No. assigned (FAI report Form 3, block 5) is circled ("bubbled") next to that note or feature on the product drawing. There are no "optional" fields.

Upon acceptance of the report, EBAD will return to you Form 1 with Blocks 22 and 24 filled in. For all future orders with this PO Clause imposed for which a new FAI Report is not required, per AS9102, a copy of the signed and dated Form 1 is to be

included in your documentation package. Providing a copy of the approved Form 1 is evidence that the requirements of this clause are fully met without having to complete an entire new First Article Inspection Report. When authorized changes occur to the design, or the processing of the item, a partial First Article (also called a Delta First Article) Report is required per AS9102.

Contact the Buyer listed on your Purchase Order if you are unable to retrieve the AS9102 forms or if you have any questions. If you do not know if what you deliver is considered an assembly, or you are unclear about how to complete any portion of the report or you are not sure if a full or delta FAI is needed, please contact Buyer listed on the Purchase Order. Bag & Tag part used for the First Article Inspection Report separate from the rest of the lot, as practicable for the part delivered.

- 11A *<u>First Article Inspection 1 Year</u> A First Article Inspection Report is required in accordance with AS9102 except the lapse in production (as stated in AS9102 Para 5.3.) shall not exceed ONE year.*
- 11B *<u>First Article Inspection Report</u> A First Article Inspection Report is required. Contractor format allowed. Format shall be approved by EBAD prior to beginning FAI activities.*
- 13 Additional contract flow down requirements are attached.
- 14 <u>Manned Space Flight</u> Articles ordered in this PO are for use in Manned Space Flight. Materials, manufacturing, and workmanship of the highest quality standards are essential to astronaut safety. If you are able to supply the desired items with a quality which is higher than that of the items specified or proposed, you are requested to bring this fact to the immediate attention of the EBAD Buyer. Insert this clause in all subcontracts and purchase orders for such items down to the lowest tier.
- 15 **Domestic Specialty Metals** Any specialty metals incorporated in articles produced and delivered under this contract shall be melted in the United States or qualified country in accordance with ADPUR-03.
- 16 <u>Circuit Board Assembly Class 3</u> The circuit board assembly shall meet the requirements of J-STD-001 Class 3 and inspection IAW IPC-A-610 Class 3. Solder wire shall be leaded type and meet or exceed the requirements of J-STD-006. Solder paste shall be leaded type and meet or exceed the requirements of J-STD-005. Flux shall meet or exceed the requirements of J-STD-004 Printed Circuit Boards (PCBs) procured for this assembly shall be manufactured in the United States. Deviations or variations to the requirements as outlined must be approved by EBAD Quality.
- 16A <u>**Circuit Board Assembly Class 2**</u> The circuit board assembly shall meet the requirements of J-STD-001 Class 2 and inspection IAW IPC-A-610 Class 2. Solder wire shall be leaded type and meet or exceed the requirements of J-STD-006. Solder paste shall be leaded type and meet or exceed the requirements of J-STD-005. Flux shall meet or exceed the requirements of J-STD-004. Printed Circuit Boards (PCBs) procured for this assembly shall be manufactured in the United States. . Deviations or variations to the requirements as outlined must be approved by EBAD Quality.
- 16B <u>Circuit Board Assembly Class 3 Space Addendum</u> The circuit board assembly shall meet the requirements of J-STD-001 Class 3 Space Addendum and inspection IAW IPC-A-610 Class 3. Solder wire shall be leaded type and meet or exceed the requirements of J-STD-006. Solder paste shall be leaded type and meet or exceed the requirements of J-STD-005. Flux shall meet or exceed the Space Addendum requirements of J-STD-004. Printed Circuit Boards (PCBs) procured for this assembly shall be manufactured in the United States. . Deviations or variations to the requirements as outlined must be approved by EBAD Quality.
- 17 Removed
- 17A Removed
- 18 **Supplier Procurement Baseline Document** Provide a Supplier Procurement Baseline Document for approval to the EBAD Buyer. The supplier procurement document baseline is the approved technical documentation which describes the configuration of the delivered product and components during the manufacturing and procurement cycle. The supplier procurement baseline document prescribes all necessary physical or form, fit, and function characteristics, selected functional characteristics designated for production acceptance testing, and the production acceptance test requirements. The Supplier Procurement Baseline Document will be submitted on EBAD Form ADPUR-SM-01. Seller need only provide and obtain approval of the baseline document once during the performance of the PO, unless changes are made to the baseline. Changes will require approval of EBAD prior to implementation.
- 19 Explosive Materials Each lot of explosives shall be tested/analyzed for conformance to the applicable specification listed in the Purchase Order. The Certificate of Analysis shall include the lot acceptance test/analysis results and the date the testing was performed. The difference between the test date and ship date shall not be more than 12 months.
- 20 **PCB Coupons and Test Data** Each shipment shall be accompanied by one representative test coupon for each lot or batch along with a legible copy of all applicable test data from the tests conducted on printed wiring boards or subassemblies submitted to EBAD.

- 21 <u>**PCB DPA Requirements**</u> The seller shall provide one representative printed wiring board destructive physical analysis (DPA) cross-section sample and DPA report for each panel unless otherwise specified. Along with a legible copy of the report, the seller is to provide a certification with a signature of the agency representative that performed the DPA attesting to conformance to specification requirements (Electronic signature or signed validation is acceptable unless otherwise specified by contract).
- 22 <u>**PCB Design Services**</u> Artwork shall be supplied to Buyer for approval in electronic format that is readable with free viewers. Fabrication of the PCB shall not proceed prior to artwork approval by the Buyer. If no changes are made to the design, the final artwork shall be supplied to Buyer for documentation purposes.
- 23 <u>PCB Testing w/ Coupons</u> PCBs on this order shall be tested to the requirements of IPC-6012, IPC-6013, or MIL-P-50884, Group A and B prior to delivery. Copies of Group A test data shall accompany each shipment of PCBs. Group B test data shall be retained on file.

<u>Coupons and Micro sections</u>: The PCB supplier shall incorporate coupons on the fabrication panel that are representative of all the technology in the PCB including the worst-case condition of such features (e.g., annular rings). Micro-sections shall be performed on a read and record basis with data included in the PCB certification. One additional set of coupons shall be provided to Buyer with each lot of PCBs

23A **PCB Testing** – All PCBs on this order shall be tested to the requirements of IPC-6012, IPC-6013, or MIL-P-50884, Group A and B prior to delivery. Copies of the report shall accompany each delivery.

<u>Coupons and Micro sections</u>: The PCB supplier shall incorporate coupons on the fabrication panel that are representative of all the technology in the PCB including the worst-case condition of such features (e.g., annular rings). Micro-sections shall be performed on a read and record basis with data included in the PCB certification. All sets of coupons shall be retained by the supplier for 10 years.

24 <u>Boeing Approved Processors</u> – The Seller and any sub-tier contractor engaged in special processes (i.e., including, but not limited to soldering, X-Ray, welding, magnetic particle and penetrant inspection, heat treating, plating, passivation, anodizing, coating) shall be approved by Boeing. Approval of special process sub-tier contractors does not relieve the Seller of the responsibility for exercising control measures necessary to ensure that work performed by sub-tier contractors is in accordance with specification requirements. The Boeing approved process sources in accordance with DI-4426, which, along with information on Boeing approved processors and the User Instructions for the document, can be obtained from the Boeing website http://active.boeing.com/doingbiz/d14426/GetAllProcessors.cfm

The seller shall identify any sub-tier contractor(s) that performed special processes, by process specification, and shall supply copies of the approved processor certification to Buyer with each shipment.

If specific special processes have not been identified, please request identification from Buyer.

25 Lockheed Approved Processors – The Seller and any sub-tier contractor engaged in special processes (i.e., including, but not limited to soldering, X-Ray, welding, magnetic particle and penetrant inspection, heat treating, plating, passivation, anodizing, coating) shall be approved by Lockheed Martin. Approval of special process sub-tier contractors does not relieve the Seller of the responsibility for exercising control measures necessary to ensure that work performed by sub-tier contractors is in accordance with specification requirements. The Seller shall have records of Lockheed Martin approval on file available for review. A list of first tier Lockheed Martin approved special processors can be found in Exostar Lockheed Martin Procure to Pay Portal under Current Approvals tab. Contact your EBAD Buyer for a list of current approved processors.

The seller shall identify any sub-tier contractor(s) that performed special processes, by process specification, and shall supply copies of the approved processor certification to Buyer with each shipment.

If specific special processes have not been identified, please request identification from Buyer.

- 26 Please see General Quality Provision R. Clause 26 has been moved to the General Quality Provision R.
- 27 <u>United Launch Alliance (ULA) Approved Processors</u> The Seller and any sub-tier contractor engaged in special processes (i.e., including, but not limited to soldering, cleaning, X-Ray, welding, magnetic particle and penetrant inspection, heat treating, plating, etc.) shall have special process approval by ULA to control his sub-tier's special processes shall have been approved by ULA. Approval of special process sub-tier contractors does not relieve the Seller of the responsibility for exercising control measures necessary to ensure that work performed by sub-tier contractors is in accordance with specification requirements. The Seller shall have records of ULA approval on file available for review.

The seller shall identify any sub-tier contractor(s) that performed special processes, by process specification, and shall supply copies of the approved processor certification to Buyer with each shipment.

A current list of ULA approved processors can be obtained from the SDT System, under ULA Approves Processors.

In lieu of using a ULA Approved Processor, the Seller may request approval of a NADCAP certified Special Processor certified in the process to be performed via ADPUR-07 Supplier Information Request (SIR). Once approved, the Seller must provide a valid copy of the NADCAP certification with each shipment.

If specific special processes have not been identified, please request identification from the Buyer.

28 <u>Certificate of Conformance to Tin Lead Plating Requirement</u> -

Tin Lead Plating- per AMS-P-81728. Seller to perform section 4.4 quality conformance inspections to include:

- 1. Non-Destructive visual examination and thickness of plating (nondestructive test) per specified sampling plan (visual examination and nondestructive tests)
- 2. Destructive tests for the following: composition, thickness of plating, adhesion bend test; destructive sample size shall be as specified (4 parts for each destructive test for each plating lot).

Certification of conformance to include:

- 1. Title, number, and date of specification.
- 2. Composition and thickness of tin-lead plating.
- 3. Type and thickness of under plating.
- 4. Test results from both non-destructive and destructive testing.

Failure of one or more of the test pieces shall constitute failure of the lot.

- 29 <u>Single Lot Requirement</u> All material and/or parts supplied under this Purchase Order line, inclusive of all Releases (Rel), shall be from a single lot. Unless otherwise specified on the drawing, a single lot is defined as: one homogeneous and identical lot; that is, there shall be no change in the material constituents (i.e., Raw Material Heat Lot) manufacturing location, process, or design during manufacture of the lot by the seller.
- 29A <u>Single Manufacturing Lot Requirement</u> In addition to the requirements of Clause 29, the following shall apply: The parts shall be produced in a single lot, without change to process or location. Once set up is verified, tooling shall not be reset or altered until production of the lot is complete (Replacement of normal wear tooling, such as drill bits, is permitted). These same requirements also apply to Special Processes, whether they are performed in-house or by a sub-tier supplier.
- 30 **Prohibited Material (Pure Cadmium, Pure Zinc, Pure Tin, Pure Silver)** All constructions and finishes containing pure cadmium or pure zinc are prohibited. In addition, constructions and finishes containing pure tin or pure silver are prohibited unless they contain a minimum of 3 weight percent lead. The use of lead-free solder alloys is not acceptable unless approved by the buyer (Note-Sn96/Ag4, Sn95/Sb5, and Au80/Sn20 are acceptable when indicated in buyer specifications or buyer approved Process Identification Documents).
- 31. <u>Seals and other Molded products</u> Seals and other molded products are to be manufactured according to the provided drawing. 10x magnification is the standard for inspection (Confirmation data can be collected at any magnification). No embedded FOD visible at 10x magnification shall be allowed. Any markings must stay intact after EBAD's cleaning processes, using Cotton Fiber and 100% Isopropyl Alcohol.
- 32. Removed
- 33. <u>Statistical Process Control (SPC)</u> The seller must develop, document and implement a process control and improvement plan for all material supplied on this purchase order. Applicable processes must be evaluated using statistical process control techniques (capability studies) to ensure that problems are detected early and that the quality and reliability of physical and functional attributes at all levels of assembly are maintained. The process control and improvement plan must include justification when capability studies indicate that the application of statistical techniques would be a non-value added task.

EBAD may conduct reviews at the seller's facility to verify the demonstration of effective implementation of the seller's process control and improvement plan. At the seller's request, EBAD will provide assistance to bring the seller into minimum compliance.

- 34. <u>Raw Material Certification</u> Provide a certification of compliance for raw material as supplied by the mill/plant/sub-tier supplier. This certification shall be traceable to the EBAD PO and shall state the proper specification or standard as it is called out on the drawing or specification (see General Quality Provision A). In addition, a sample of raw material shall be retested at an independent lab to validate mill/plant/sub-tier supplier data. This certification shall be traceable to the EBAD PO and shall state the proper specification or standard as it is called out in the drawing or specification (see General Quality Clause Provision A).
- 35. **NADCAP Special Process Approval** One or more special processes required to fulfill this order must be performed by a NADCAP approved supplier. A Certificate of Conformance and/or equivalent Process Certificate, signed by an authorized agent of the Processor, shall be included with shipping documentation (packing slip/invoice). The certificate shall include

purchase contract number, part number(s), Process Specification number (with revision), processing date(s) and name and address of the Processor(s) performing each of the NADCAP Processes. NADCAP approval must be stated on the special process cert. This certification shall also be traceable to the EBAD PO.

If specific NADCAP special processes have not been identified, please request identification from the Buyer.

36 MRB Authority

The seller is authorized to make the following dispositions

- a) Rework to industry-accepted procedures to bring the product into conformance
- b) Scrap

c) Return to Vendor

Seller is not authorized to make the following dispositions unless authorized by EBAD approval of ADPUR-07. a) Use as is (UAI)

b) Repair

37 PCB Delivery Quality Requirements

The following requirements apply to all Printed Circuit Board (PCB) deliveries:

PCB Serialization – PCBs that are serialized shall include a complete serial number list with each shipment. The list shall document all alphanumeric characters exactly as marked on each PCB.

Inspection Reporting – Final Visual and Mechanical Inspection Reports shall be included with each delivery. At a minimum, these reports shall include:

- Inspection sample plan
- Actual mechanical dimensions, including X and Y hole-to-edge and overall board profile
- Actual overall board thickness
- Actual finished hole sizes
- Bow and twist (pass/fail acceptable)
- Actual measurements for Minimum Annular Ring (MAR), Line width, and spacing
- Visual inspection confirmation per applicable IPC standard

PCB Electrical Testing - All PCBs shall be electrically tested to the requirements of IPC-6012 and IPC-6013 as applicable. Certificate of Conformance for electrical testing shall be delivered for each lot.

38A Red Plague

Silver-coated copper (SCC) and silver-coated alloy (SCA) wire and cable shall be protected to reduce and control exposure to environmental conditions and contamination that promote the development of cuprous / cupric oxide corrosion (Red Plague). Completed hardware shall be stored in water-vapor-proof packaging OR in an environmentally controlled and monitored area where dew point is not attained, and the relative humidity is less than 70%RH. They shall be shipped and stored with capped ends conforming to SAE-AMS-DTL-23053/4 or dipped in insulating electrical varnish for a length of ~2.5 cm, in sealed water-vapor-proof packaging (i.e.- Moisture Barrier Bag, dry pack, etc.), activated desiccant, and an irreversible humidity indicator card (1-HIC). Wire and cable shall not be stored in paper wrapping materials or cardboard boxes.

38B Wire manufacturers shall ensure that the Silver Coated Copper (SCC) and Silver Coated Copper Alloy (SCA) strands silver plating shall conform to ASTM AS29606.

39 Northrop Grumman Approved Processors

The Seller and any sub-tier contractor engaged in special processes (i.e., including, but not limited to soldering, X-Ray, welding, magnetic particle and penetrant inspection, heat treating, plating, passivation, anodizing, coating) shall be approved by Northrop Grumman. Approval of special process sub-tier contractors does not relieve the Seller of the responsibility for exercising control measures necessary to ensure that work performed by sub-tier contractors is in accordance with specification requirements. The Northrop Grumman approved process sources can be obtained from the Northrop Grumman website Tools | Northrop Grumman.

The seller shall identify any sub-tier contractor(s) that performed special processes, by process specification, and shall supply copies of the approved processor certification to Buyer with each shipment.

If specific special processes have not been identified, please request identification from Buyer.

- 121 The seller's quality system shall be certified to AS9100 or AS9120.
- 122 The seller's quality system shall be certified to ISO 9001 or equivalent as a minimum.
- 129 No additional quality system requirement beyond ADPUR-04 General Quality Provision G.