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PKL SERVICES NOTICE TO SUPPLIERS PROCEDURE

Chief Operating Officer: _____ Date: _____ Date: _____

Control Number: PKL-P-NTS Procedure-1 Revision: (Original) 9/10/2021 Process Owner: Purchasing Coordinator

When notice to suppliers is referenced on the face of the Purchase Order, is an integral part of the Order. Failure by the supplier to conform toall of the notice requirements listed on the Purchase Order shall be cause for rejection and return of articles at the Supplier's risk and expense.

Certification submitted by the Supplier must be in duplicate, bear the signature of the authorized agent, and be legible and reproducible (preferably black and white).

NO QUALITY REQUIREMENTS SPECIFIED

There are no quality requirements specified by PKL Services, Inc. Material and/or services provided, shall meet the supplier's standard level of quality. If any, substitution claims made by the supplier in the published product descriptions or applicable quotation to PKL Services, Inc., those changes must be approved by the customer.

QUALITY SYSTEMS

The supplier shall provide, document and maintain a Quality Assurance Program that complies with the requirements of the following codes, Standards or Specifications, selected for this subcontract or purchase order, and shall be subject to review, conditional approval and audit by PKL Services, Inc. supply chain management.

- (A) ISO 9001:9015 (D) Other (Specify)
- (B) AS9100
- (C) AS9110
- 1 The Supplier shall maintain an Inspection System in compliance with or meeting the intent of the following publications, standards and specifications selected for this subcontract or purchase order. This system shall provide for early detection, documentation, and timely correction of any conditions considered adverse to Product Quality.
 - (A) ISO 9003 or Q9003-
 - (B) NAS NHB5300.4 (2D)
 - (C) Other (Specify)
- 2 The material supplier shall maintain an Identification and Verification Program to provide traceability of material while under its control.
 - (A) Each lot shall be separated and identified prior to delivery to PKL Services, Inc. for traceability purposes.

APPROVED SOURCES

- 3 All material furnished or processing performed by a sub-tier supplier under this order must be by a source approved by PKL SERVICES, INC... Contact PKL SERVICES, INC.. prior to placing sub-tier order.
- 4 Supplier shall pass on to its sub-tier supplier(s) the applicable requirements of this Purchase Order.

APPROVED MATERIALS

- 5 All material supplied under this purchase order shall be in accordance with the latest military specification revision.
- 6 Certificates received by PKL Services, Inc. must be in English and of microfilm or photographically reproducible quality. <u>Supplier must keep all records applicable to this order. Retention time is per end use customer requirements. If there are no</u> <u>retention requirements specified by the end use customer, records shall be retained for a minimum of 10 years. Supplier</u> <u>must obtain PKL Services, Inc. approval prior to destruction of records. If end use customer has not been specified on this</u> <u>order, contact PKL Services, Inc.</u>
- 7 Supplier shall submit the original Certified Material Test Report ("CMTR") from the test lab. The CMTR shall provide mill identity and mill tests and analyses of material as required.

- 8 Supplier shall provide the original Certified Chemical and / or Physical Test Report(s) from the test lab, per applicable specifications. The report shall reflect the mill source of material.
 - Chemical (A)
 - (B) Physical
 - (C) Inactive
 - Material must be fabricated by an approved source and must be tested by an approved testing house. (D)
 - (E) Material not fabricated by a customer approved source must be subjected to testing by a customer approved testing house.
- Supplier shall submit a certification that includes cure or manufacturing date for material whose acceptability is limited by age. 9 Both the cure date and the shelf life shall be listed on the container and on the document certifying the material. PKL Services, Inc. will not accept material that has less than 75% of its shelf life remaining upon receipt.
- 10 Supplier shall provide certifications as to the country of origin of the materials provided. (A)
 - The supplier shall submit with each shipment a certification that any bearing, bearing assembly or any component part (B) thereof, except the raw material (such as bar or rod stock and lubricants) or bearing contained in any item of this order, has been manufactured in the United States or Canada or by an "other authorized manufacturer" as defined in DOD FAR Supplement 52.208-7006.
- Supplier shall certify that all articles furnished against this order do not contain, nor have they been contaminated with metallic 11 mercury or mercury compounds; nor do they include any mercury-containing devices employing only a single boundary of containment.
- 12 (A) Supplier shall submit a list of all actual dimensions as machined or manufactured as required by the P.O., O.I.S. or drawing; the list shall reference the drawing by number and revision.
 - (B) Statistical Control Plan to provide:
 - (a) Process variance reduction
 - Process limits (statistical control limits) (b)
 - (c) Special and common cause identification
 - When Feature is designated with CCF or KCP or KCP1 or KCP2 on the drawing and/or Purchase Order, then process (C) capability studies are required per Feature.
 - Gage R&R on the measuring instrument that is used to inspect CCF or KPC or KPC1 or KPC2 Characteristics % of Gage R&R = 10% then process is acceptable <u>a)</u>
 - 10% < % of Gage R&R = 20% process is barely acceptable b)
 - % of Gage R&R > 20% Process is not acceptable. Corrective Action is required to improve the process. <u>c)</u>
 - Control plan is required ii)
 - iii) PFMEA (Process Failure Mode Analysis) is required.
 - Flow chart of the process is required iv)
 - 100% inspection report is required by each serial number as manufactured during operation for CCF or KCP or V) KPC1 or KPC2 to perform Process Capability.

MATERIAL IDENTIFICATION

i)

- 13 All materials supplied under this purchase order must be identified with:
 - (A) Heat / Lot / Batch information for material and any subsequent Manufacturing Lot Number, e.g. if any additional processing has been performed modifying the original physical properties as defined on the mill certification.
 - (B) Specification
 - (C)Grade
 - (D) Slab Number
 - **Billet Number** (E)
 - (F) Alloy and Temper
 - (G) Mill Marking including Material Type
- 14 Each individual length of weld rod must be "Flag-Tagged" on both ends with material type.
- 15 Each part shall be marked with a serial number; certifications accompanying parts shall reflect the applicable (same) serial numbers. Marking method shall be as follows: (F)
 - (A) Rubber stamp / ink

- Steel tag with wire attachment Paper tag or "bag and tag"
- (B) Inactive (G) (C) Electrochemical etch
 - (H) Supplier's standard method

PKL-P-NTS Procedure-1

(D) Steel stamp(E) Inactive

- (I) Vibropeen per drawing requirements
- 16 Parts may be identified on package or container
- 17 The manufacturer of all printed wiring boards supplied to PKL Services, Inc. shall mark the board(s) in a permanent manner with the Manufacturer's name and 4-digit date code. The date code shall provide the date of manufacture, with the first two digits representing the week of the calendar year, and the last two digits representing the year. Marking shall be applied so as tominimize contact with printed wiring. (Electronics)
- 18 PKL Services, Inc. reserves the right to inspect any or all of the materials included in this order at the supplier's plant. The same right is extended to its customer and the applicable regulatory agency representatives.
- 19 This order is subject to PKL Services, Inc. source inspection. PKL Services, Inc. must be notified forty-eight (48) hours in advance of the time thearticles or processes are ready for inspection or test.
- 20 The Government and the Customer reserves the right to inspect any or all the materials included in this order at the supplier's plant. See General Terms and Conditions.
- 21 Government inspection is required prior to shipment from your plant. Upon receipt of this order promptly notify and furnish a copy to the Government representative normally servicing your plant so that Government inspection can be appropriately planned. If a government representative does not service your plant, contact the appropriate Government Inspection office in your area. If you cannot locate the Government Inspection office, our purchasing agent should be notified immediately.

TOOLING / FIRST ARTICLE INSPECTION

22 Acceptance of production tooling on this purchase order shall be contingent upon inspection and acceptance by PKL SERVICES, INC... Thetooling and dimensional samples produced by this tooling must conform to the tolerance limits of engineering drawings and specifications stated on this purchase order, must be AS9100 or AS9103.

PREPRODUCTION FIRST ARTICLE INSPECTION

23 First Article(s) must be inspected and accepted by PKL Services, Inc. prior to a production shipment unless specifically authorized by the buyer. First article(s) should be tagged or otherwise identified to show the tool used.

DEVIATIONS / NONCONFORMANCE

24 Nonconforming product shall not be shipped to PKL Services, Inc... Any departure from drawings, specifications, nonconformance or failure to meet other purchase order requirements, must be recorded on PKL Services, Inc. Supplier Discrepancy Report (SAK-0087).Disposition of these departures must be documented and approved by PKL Services, Inc. prior to shipment.

Note: If any nonconformance is found after shipment of the product, the supplier shall notify PKL Services, Inc. within 24 hours.

SPECIAL PROCESSES

- 25 Supplier shall submit a written description of all Special Process performed. Approval by Purchaser is required prior to use.
- 26 Supplier shall submit a Certification of Heat Treatment, including items below, as / if specified.
 - (A) Time/temperature chart for material (entire cycle)
 - (B) Time/temperature chart for furnace
 - (C) Sketch of thermocouple placement(s) with key to multi-point recording, if utilized.
 - (D) A load thermocouple shall be used for all heat treatments. A minimum of one part per furnace load shall have the load thermocouple attached to the thickest portion. The time at temperature shall be based upon this thermocouple.
- 27 Supplier shall submit Welding Certification(s) per applicable specification(s) including items below, as / if specified:
 - (A) Procedure Qualification records
 - (B) Performance Qualification records
 - (C) Determination of ferrite content in deposited weld (Magna-Gage)
- 28 Supplier shall submit Nondestructive Testing (NDT) items as specified below:
 - (A) Radiographic Certification (F) Leak Test Certification
 - (B) Magnetic Particle Certification (G) NDT Personnel Qualifications

PKL-P-NTS Procedure-1

- (C) Penetrant Inspection Certification
- (H) X-Ray Film
- (I) X-Ray Technique Sheets
- (D) Ultrasonic Inspection Certification(E) Pressure Test Certification
- 29 Supplier shall submit a certification of Forming Process to applicable specification requirements.
- 30 Welding on material to facilitate a forming process is expressly prohibited without prior approval by PKL Services, Inc.
- 31 Supplier shall submit a Certification of Plating per applicable specification.
- 32 Supplier shall submit a Certification of Peening process per applicable specification(s).
- 33 Supplier shall submit a certification of the Special Process(es) as indicated below, per applicable specification(s):
 - (A) Surface finish (roughness) (D) Adhesive Bonding
 - (B) Coatings (E) Plastic/composite fabrication
 - (C) Treatments
- 34 Supplier shall submit Certified Electrical Test Data with shipment.
- 35 Supplier is required to package item utilizing standard Anti-Static packaging methods.

SUPPLEMENTAL TESTING

- 36 Supplier shall submit, along with shipment and certifications, test samples, as specified, representative of the processed part.
- 37 Supplier shall subject representative sample(s) of material to impact testing. Specimens tested must be of the same heat or lot of material, and in the same condition as production item(s). Tests and reporting shall be in accordance with the requirements on the face of the Purchase Order. Supplier shall submit Certified Impact test results along with shipment and other certifications as / if applicable.

CERTIFICATION OF CONFORMANCE

38 Supplier shall submit, with each shipment of items covered by the order, a Certificate of Conformance ("C of C")

This certificate must list all of the drawings and/or specifications that formed the Purchase Order, as well as the amendment revision level of each document named.

This "C of C" must be dated, signed by authorized quality personnel, include the following statement (or an equivalent statement):

(Note: Supplier's pre-printed "C of C" may be acceptable if it includes all of the requirements of this clause.)

(FOR SUPPLIERS OF MATERIALS, ONLY)

(A) Materials supplied conform in all respects to the requirements of the Purchase Order.

(FOR SUPPLIERS PERFORMING A PROCESS, ONLY)

(B) Processes utilized in the performance of this order were performed in accordance with, and the results conform to, all the requirements of the Purchase Order.

Supplier shall include a written statement on the C of C as follows: "Only materials furnished by PKL Services, Inc. were used in the fabrication of items supplied on this order."

(FOR SUPPLIER OF MATERIALS, WHICH ORDER INCLUDES PROCESSING THERETO)

- (C) Materials supplied, and processes performed, conform in all respects to the requirements of the Purchase Order.
- (D) Certificate of Conformance must identify manufacturing source and the date of manufacture.
- (E) "C of C" must report the current Rolls Royce First Article Inspection Report (FAIR) approval date.
- (F) "C of C" must report the current Fixed Process Approval (FPA) number and approval date.
- (G) "C of C" must report the current approved Method of Manufacture, "MoM", number used and its revision level and date.
- (H) "C of C" must report part classification.
- (J) "C of C" must report the current data card number used and its revision.
- (K) Material supplied shall be guaranteed to meet NDT requirements as defined by the end use customer drawing.

(FOR FASTENERS)

(L) For fasteners (i.e., nuts, bolts, and washers) the supplier shall include the original certification of conformance suppliedby the fastener OEM (Original Equipment Manufacturer) as part of their Certification package.

MANUFACTURING, INSPECTION AND TEST CONTROL

- 39 (A) The Supplier shall submit to PKL Services, Inc. a product flowchart, which defines the operational sequence, initial acceptance and testing points, and process control points, with sufficient description to identify the system. The factory inspectionand test plan must be submitted prior to fabrication on this order, and is subject to approval by PKL Services, Inc.
 - (B) The Supplier shall submit a Quality Inspection Plan which provides a complete list of drawing features and characteristics, as well as a description of how those items are to be verified, e.g., Caliper, O. D. Micrometer, Visual Reference Std., Coordinate Measuring machine, etc. (Characteristic Accountability).
 - (C) Characteristic Accountability: The Quality Inspection plan must be approved prior to shipment of items by the Supplier. Accordingly, it should be submitted within thirty (30) days after receipt of order or two (2) weeks prior to completion of items, whichever is earlier.
 - (D) Supplier shall submit to PKL Services, Inc. process instructions and any subsequent changes that provide a detailed step-by-stepdescription of how to do each process performed by the supplier or its sub-tier suppliers. Each process instruction shallbe assigned a unique control number and shall contain the following subsections: Scope, Materials, Equipment, Safety,Instructions, Certification and/or Qualification of Personnel (if applicable) and Quality Assurance.
 - (E) Supplier process instructions and any changes shall be validated. PKL Services, Inc. shall determine if validation will be by documentation review or by demonstration. Validation by demonstration consists of reviewing the implementing instruction against the Process Specification and witnessing the actual processing of a production-like piece of hardware to the applicable implementing instruction. Process validation shall be performed by a PKL Services, Inc. Quality Assurance representative and, when applicable, <u>the End Use Customer</u> Quality Assurance representative. The supplier shall notify PKL Services, Inc. of the time and place for validation. Advance notification shall be in sufficient time to allow for planning.
- 40 Supplier shall inform the Purchaser of all manufacturing processes and procedures used to produce parts. Once these practices are established and approved, they shall not be changed without PKL Services, Inc. Processing Engineer and Quality Department approval.
 - (A) Upon notification by PKL Services, Inc. buyer that approval of supplier's processing documentation is granted, supplier shall consider all documents frozen. Any change to supplier processing and/or documentation must be submitted to PKL Services, Inc.and approved prior to incorporation. A change is defined as "any change, up to and / or including personnel, equipment, material, tooling, etc., subsequent to start of production." See specific customer requirements for further definition.
 - (B) Processes and Procedures considered frozen must be controlled by a Process or Procedure number, Revision and Date. The Process or Procedure must be listed on C of C submitted with each shipment.
 - (C) Must immediately notify the PKL Services, Inc. in writing, of any change to the manufacturing facilities that may affect theinspection, conformity, or airworthiness of its product or article.
- 41 Process and Procedure Sheets are required for source substantiation per General Electric specification P1TF17. Supplier shall submit Process and Procedure Sheets for each individual item under this Order. In the event that the processes are complex and/or questions arise as to adequate description of those activities, the Supplier is encouraged to contact PKL Services, Inc. Quality Assurance, through the Buyer, for assistance
- 42 Other requirements: As noted in narrative form on the face of the Purchase Order.
- 43 Supplier must maintain a calibration system for measuring and test equipment that complies or meets the intent of the requirements of ANS/NCSLI 540-3 and / or ISO-10012-1. In addition, ISO/IEC 17025 must be applied when equipment for Material Testing is calibrated. Calibration sources shall be accredited by a member of the International Laboratory

PKL-P-NTS Procedure-1

Accreditation Cooperation (ILAC) Mutual Recognition Agreement(MRA) or a national metrology institute of calibration service provider verified as competent by the AB or ILAC.

Calibration certificates must clearly state that the service, if applicable, was performed per ISO 10012, ANSI/NCSL Z540-3 and ISO/IEC 17025 (when applicable) using equipment traceable to N.I.S.T. and must list the actual temperature and humidity conditions under which calibration was performed. All accuracy requirements must meet the manufacturer's recommended standards.

44 Supplier of calibration services or supplies shall perform calibration of M&TE in accordance with ANSI/NCSL Z540-3, ISO 10012-1 and ISO/IEC 17025 as applicable.

Calibration certificates must clearly state that the service, if applicable, was performed per ISO 10012, ANSI/NCSL Z540-3 and ISO/IEC 17025 (when applicable) using equipment traceable to N.I.S.T. and must list the actual temperature and humidity conditions under which calibration was performed. All accuracy requirements must meet the manufacturer's recommended standards.

PACKAGING/PROTECTION

- 45 Sheet stock shall be protected by appropriate material interleaved between individual sheets and on top and bottom surfaces of material.
- 46 Supplier shall individually wrap or box items to prevent damage in transit.
- 47 Supplier shall package items for shipment so as to prevent metal- to-metal contact of machined surfaces. No staples shall be used in packaging or sealing of bags.
- 48 Protective devices accompany materials or items when shipped to supplier; Supplier shall maintain protection during processing and return all such items with return shipment.

49 Inactive

CHARACTERISTIC ACCOUNTABILITY

- 50 All supporting documentation must be furnished with shipment unless written permission is obtained from Buyer.
 - (A) Completed copy of First Article router/process sheet. All operations and sub tier supplier processes sheets must be included. The first article shall conform to AS9102.
 - Data must include method of appraisal for all features.
 - (B) Completed characteristic accountability sheets as provided by Supplier or PKL Services, Inc. Supplier Characteristic sheets(alternate format) are acceptable provided all characteristic are clearly identified and have been accounted for on asimilar format.
 - (C) Any Supplier Discrepancy Report (SDR's) referenced for nonconforming characteristics.
 - (D) Exhibits referenced on completed characteristics accountability sheets, e.g., raw material certifications, test reports, penetrant certifications, heat treat certifications, GT193 / Nadcap approvals, etc.
 - (E) 100% inspection required. Sampling plan (copy of suppler controlled/numbered document(s) that justify less than 100% inspection, i.e., sampling plan, periodic evaluation, SPC) used must be approved by Senior Aerospace PKL Services, Inc.
 - (F) Planning/operation sheets for part marking operation.
- 51 No production sample inspection allowed. 100% inspection required unless given written approval to perform sampling inspection.

MATERIAL OVERCHECK

- 52 Material furnished under this order must have a material test report as required in Quality Code 14. Material furnished must conform to all specified requirements. Material furnished must conform to overcheck requirements contained in AS9100 Verification of Purchased Product Section. Seller must have evidence of verification plan on file and available upon request.
 - (A) Material test report under this order must be generated from a certified GE S400 lab.
 - (B) Material furnished under this order must have an independent lab overcheck by a NADCAP certified lab.
 - (C) Material furnished under this order must have an independent overcheck by an approved Customer lab.
- 53 Material furnished is subject to braze-ability test requirements, per PKL Services, Inc. procedures. PKL Services, Inc. Receiving Department shall contact the M&P Lab to determine if the lot number has a braze-ability test on file.

PKL-P-NTS Procedure-1

- 54 NOTE: If the lot number has not been tested, contact the Planner to issue a braze-ability test router.
- 55 Supplier or its sub-tier suppliers must be approved by Nadcap for special process being performed.