

**FORM F-332**  
**QUALITY TERMS FOR PURCHASE ORDERS**

The following terms apply as indicated by the Quality Term Number on the face of the Purchase Order. In the event any term cannot be met, notify Teledyne Brown Engineering's Buyer immediately.

**1. General:** Teledyne Brown Engineering, the Government, Customer, Prime or any appropriate regulatory authority has the right of access to the supplier's plant and applicable records as may be necessary to determine compliance to contract requirements on all supplies or services included in this contract.

The supplier is to flow down to sub-tier suppliers the applicable requirements in this purchase order, including key characteristics where required.

The supplier is to notify and obtain TBE approval of changes in product and/or processes and changes of manufacturing facility location.

**Counterfeit Parts Control:** The supplier must implement and maintain a documented counterfeit parts control program appropriate to the organization and products provided to TBE, and flow down a requirement for all of your suppliers to implement and maintain a documented counterfeit parts control program.

Notwithstanding any other provisions of this agreement, the supplier warrants that all items provided to TBE shall be genuine, new and unused unless otherwise specified in writing by TBE. The supplier further warrants that all items used by the supplier during the performance of work at a TBE facility, include all genuine, original, and new components, or are otherwise suitable for the intended purpose. Furthermore, the supplier shall indemnify TBE, its agents, and third parties for any financial loss, injury, or property damage resulting directly or indirectly from material, components, or parts that are not genuine, original, and unused, or not otherwise suitable for the intended purpose. This includes, but is not limited to, materials that are defective, suspect, or counterfeit; materials that have been provided under false pretenses; and materials or items that are materially altered, damaged, deteriorated, degraded, or result in product failure.

The supplier's warranty also extends to labels and/or trademarks or logos affixed, or designed to be affixed, to items supplied or delivered to TBE. In addition, because falsification of information or documentation may constitute criminal conduct, TBE may reject and retain such information or items, at no cost, and identify, segregate, and report such information or activities to cognizant Government officials.

**Supplier Evaluation:** All TBE suppliers will be graded based on on-time delivery and the quality of products, services, and required documentation. A weighted score is calculated for each supplier used during each calendar quarter. 50% of your score is

based on on-time delivery and 50% is based on the quality of products, services, and required documentation. If you have any questions regarding your score, please contact your TBE buyer.

It is the supplier's responsibility to ensure that all supplier personnel are made aware of their contribution to service and/or product conformity, product safety, and the importance of ethical behavior.

- 2. Government Source Inspection:** All work on this contract is subject to inspection and test by the Government at any time and place. The Government quality representative who has delegated quality assurance functions on this contract shall be notified immediately upon receipt of this order.
- 3. DOD Government Source Inspection:** NOTICE – Government inspection is required prior to shipment from your plant. Upon receipt of this contract, promptly notify the Government Representative who normally services your plant so that appropriate planning for Government inspection can be accomplished.
- 4. DOD Source Inspection:** COPY – Upon receipt of this contract, promptly furnish a copy to the Government Representative who normally services your plant, or if none, to the nearest Army, Navy, Air Force, or Defense Logistics Agency inspection office. In the event the representative or office cannot be located, our purchasing agent should be notified immediately.
- 5. Customer Right of Inspection:** Teledyne Brown Engineering's (TBE's) customer has the right to inspect any or all work included in this contract at the Supplier's facility.
- 6. Customer Mandatory Source Inspection:** Source Inspection by TBE's customer is required on this contract.
- 7. TBE's In-Process Source Inspection:** All work performed under this contract requires in-process TBE Source Inspection. Notify the TBE Buyer as work planning is defined and seventy-two (72) hours prior to product work initiated and seventy-two (72) hours prior to final inspection being performed for possible in-process and final source inspection requirements. Evaluation of personnel, equipment, methods, and items may be conducted to determine compliance to contract requirements.
- 8. TBE Final Source Inspection:** All work performed under this contract requires TBE inspection and test verification at the Supplier's facility. Notify the TBE Buyer at least seventy-two (72) hours in advance of the item being ready for final source inspection.
- 9. General Compliance:** The Supplier shall provide a signed Certificate of Conformance to the effect that article(s) provided are in accordance with all Purchase Order requirements. **Country of Origin must be supplied for the article(s) being supplied.**
- 10. Specific Compliance:** The Supplier shall provide a signed Certificate of Conformance to the effect that article(s) provided meet all Purchase Order, Drawing and/or Specification with revision requirements when called out on the Purchase Order. If the C of C states that product meets all PO requirements, the supplier is certifying that all PO, Drawing, and Specification requirement, including revision have been met. **Country of Origin must be supplied for the article(s) being supplied.**

**11. Specific Compliance with traceability Information:** The Supplier shall provide a signed Certificate of Conformance to the effect that article(s) provided are in accordance with all Purchase Order, Drawing and/or Specification with revision requirements when called out on the Purchase Order. If the C of C states that product meets all PO requirements, the supplier is certifying that all PO, Drawing, and Specification requirements, including revision meet all TBE PO requirements. The C of C or other documentation provided with the product shall also include lot information (serial number, lot number, date of manufacture, etc.) which provides traceability to all like items produced from the same batch or lot. Inspection and test data and location of inspections and tests must be maintained on file for a minimum of 7 years at your facility or your supplier's facility, and provided to TBE upon request. **Country of Origin must be supplied for the article(s) being supplied.**

**12. U.S. GOVERNMENT Qualified Product/Qualified Manufacturer Lists (QPL/QML):** When items listed on our PO are listed on a QPL/QML, the items you provide must be manufactured by a manufacturer listed on the QPL/QML. When the manufacturer is not listed on the currently published QPL/QML, the seller shall include with each shipment, a signed statement, that the items being procured on this purchase order were produced by a currently approved QPL/QML manufacturer, using processes which produced the product submitted for qualification. The name and QPL/QML number of the manufacturer shall appear on the statement. Qualification data shall be made available to TBE upon request.

**13. Inspection and Test Reports (Actual):** The Supplier shall submit signed inspection reports and actual results proving conformance to the applicable drawings and specifications for items shipped under this contract.

**14. Material Test Reports (Actual):** The Supplier shall submit a signed chemical and physical test report per the applicable specification for the material shipped under this contract with actual test results from samples of this specific material.

**15. Physical Test Reports (Actual):** The Supplier shall submit a signed physical test report per the applicable specification for the materials shipped under this contract with actual test results from samples of this specific material.

**16. Chemical Test Reports (Actual):** The Supplier shall submit a signed chemical test report per the applicable specification for the materials shipped under this contract with actual test results from samples of this specific material.

**17. Material Test Reports (Typical):** The Supplier shall submit a signed chemical and physical test report for all material shipped under this contract. The report may include typical results from samples representative of this material.

**18. Shelf Life Data:** For items or materials which are susceptible to quality degradation with age, the Supplier shall provide a statement with the starting date, and expiration date of the item and special storage requirements, if any. If shelf life is not applicable for this item, the supplier will provide a signed statement stating that shelf life does not apply to the item. All shelf life limited items shall have 75% or more of their shelf life remaining at the time of delivery to TBE. If the item has

unlimited shelf life, the signed statement shall specify (unlimited).

**19. Inspection and Test Plan:** An Inspection and Test Plan for control of articles furnished in accordance with the Purchase Order shall be prepared specifically written to outline the product flow from receipt of materials through fabrication, assembly, and test operations. The Plan shall define the inspection points throughout the manufacturing sequence and describe the inspections. A general description of procedures and records used will be adequate. Two (2) copies of the Plan shall be forwarded to the Buyer before the work described begins unless otherwise specified.

**20. Quality Manual:** A copy of the Supplier's Quality Manual or equivalent shall be submitted for review before the work on this contract begins.

**21. Supplier Inspection Requirements:** The Supplier is responsible for performing or having performed all inspections and tests necessary to substantiate that the items furnished under this contract conform to contract requirements, including any applicable technical, drawing, or specification requirements for specified manufacturer's parts.

**22. Supplier Inspection of Supplies:** The Supplier shall provide and maintain an inspection system covering items under this contract and shall tender to TBE for acceptance only items that have been inspected in accordance with the inspection system and have been found by the Supplier to be in conformity with contract requirements. As part of this system, the Supplier shall prepare records evidencing all inspections made under the system and the outcome. These records shall be kept complete and made available to TBE during performance and for as long afterwards as required by contract. TBE may perform reviews and evaluations as reasonably necessary to ascertain compliance. These reviews and evaluations shall be conducted in a manner that will not unduly delay the work under this contract.

**23. Quality Program (ISO 9001):** The Supplier's Quality program shall be in accordance with Specification ANSI/ASQ Q9001; latest revision unless otherwise specified.

**24. Welding Materials Identification:** Welding materials shall be clearly identified by legible marking on the package or container to ensure positive identification of the material. The marking shall include the heat or lot number as applicable, a control marking code which identifies the material with the Test Report and other information such as specification, grade and classification number, Material Organization's name, and trade designation. Low Hydrogen Electrodes must be hermetically sealed in containers. There shall be positive material traceability for straight length filler metal, each piece of straight length material must be positively identified per the ASME/AWS specification.

**25. Quality Program (AS9100):** The Supplier's Quality Program shall be in accordance with Specification SAE AS9100; latest revision unless otherwise specified.

**26. Calibration Services:** The Supplier's calibration program shall be in accordance with systems ANSI/ISO/IEC 17025, ISO 10012 or ANSI-Z540 of the latest revision unless otherwise specified. Items submitted to the Supplier for calibration on this contract

shall be evaluated for acceptance before any repair or adjustments are made. Records of the as-received findings and the as-returned findings (post-adjustment or post-repair, if applicable) shall be clearly stated on the signed calibration report along with indication as to whether the individual findings were acceptable or unsatisfactory. The report shall attest to the fact that measurement standard(s) used in the performance of this calibration are traceable to the National Standard, International Standard, or Intrinsic Standard.

**27 Calibration Certification:** A signed calibration certification is required with each item certifying it has been calibrated and that the Supplier's calibration program is in accordance with one of the following systems; ANS/ISO/IEC 17025, ISO 10012 or ANSI-Z540. The latest revision applies unless otherwise specified. The certification shall attest to the fact that the measurement standard(s) used in the performance of this calibration are traceable to a National Standard, International Standard, or Intrinsic Standard.

**28 Traceability Certification:** If the items are not marked with manufacturer's name or identification, lot code, date code, or serial number, or labels are not provided with this information, a signed certification shall be submitted with each shipment identifying the manufacturer, his location and necessary traceability data to provide traceability to these and like items' manufacturing records.

**29 Traceability:** All items furnished on this contract shall have documentation on file at your facility to permit traceability from the delivered item back through all suppliers back to its manufacture and inspection to the procurement records on its constituent parts and materials. These records shall be sufficient to prove conformance to all applicable specifications and drawings and shall provide means for identifying all like items. Records shall be retained for a period of time specified in applicable items specifications or seven (7) years if not otherwise specified in this contract.

**30 Record Retention:** Retain all records pertaining to materials or services provided under this contract in a legible, traceable and retrievable fashion for a period of five (5) years, but in no case will records be destroyed without notice to customer 30 days prior.

**31 Record Retention:** Retain all item records pertaining to materials or services provided under this contract in a legible, traceable and retrievable fashion for a period of ten (10) years, but in no case will records be destroyed without notice to customer 30 days prior.

**32 Radiographic Testing:** All microcircuits and semiconductor cavity devices shall undergo Radiographic Inspection in accordance with Method 2012 of MIL-STD-883 (microcircuits) or Method 2076 of MIL-STD-750 (semiconductors). All acceptable parts shall be marked with a blue dot of ink conforming to MIL-I-43553 or A-A-56032.

**33 Particle Impact Noise Detection (PIND) Testing:** All microcircuits and semiconductor cavity devices shall undergo Radiographic Inspection in accordance with Method 2020 of MIL-STD-883 (microcircuits) or Method 2052 of MIL-STD-750 (semiconductors). All acceptable parts shall be marked with a blue dot of ink conforming to MIL-I-43553 or A-A-56032.

**34 Record Retention:** Retain all item records pertaining to materials or services provided under this contract in a legible, traceable and retrievable fashion for a period of twenty (20) years, but in no case will records be destroyed without notice to customer 30 days prior.

**35 ESD-Sensitive Devices:** All electrical / electronic parts, assemblies or equipment provided under this requirement shall be treated in a manner that provides continuous protection from electrostatic damage. Suppliers shall identify items as ESD-Sensitive with proper markings on packaging and/or containers. (Ref. DOD-HDBK-263, MIL-STD-1686 and ANSI/ESD S20.20).

**36 Hazardous Material Data:** A Safety Data Sheet (SDS) meeting OSHA regulations shall be provided with hazardous material when delivered to TBE. If material is not hazardous, you may provide a signed statement to that effect with the item.

**The hazardous material shall be labeled with:**

- a. Chemical name, common name, or trade name;
- b. Appropriate hazard warnings including exposure health hazards and first aid and emergency procedures; and
- c. Name, address, and phone number of the manufacturer or other responsible party.

**37 Certificate of Transportability:** The subject hazardous material shall be certified to be air transportable as delivered to TBE or shall state what additional actions are required to make it air transportable. The Department of Transportation classification number (UN xxx, NA xxx, etc.) shall be provided on the item's container or in supplied data that accompanies the item.

**38 Part Identification, Packaging, and Shipping:** All items and subpackages including raw material (plate, bar, extrusions, sheet, etc.) supplied under this contract shall be identified with complete nomenclature and part number as specified by the applicable drawing, specification, catalog, purchase order, etc. Materials shall be packaged, handled and transported adequately to maintain the reliability and achieve their damage-free delivery to TBE or other designated location.

**39 Workmanship:** All items must conform to workmanship requirements as specified on applicable Purchase Orders, Drawings and Specifications. If no revision is specified, the most current revision is applicable. If no workmanship is specified, the items shall be fabricated and finished to normal industry acceptance standards.

Supplier must ensure the product is shipped free of Foreign Object Debris (FOD), general cleanliness practice is acceptable.

**40 Product Nonconformances:** Items that do not conform to the requirements of this contract shall not be shipped to TBE without prior written approval of TBE Quality Assurance. Request approval for shipment through the TBE Buyer. Failure to comply may result in return of the shipment at the Supplier's expense. Any material supplied under this Purchase Order or Subcontract which is returned by Teledyne Brown because of a nonconformance and is subsequently resubmitted by the Supplier to TBE shall be accompanied by a written description of the rework accomplished to correct the nonconformance and corrective action taken to prevent recurrence.

- 41 Process Control:** The supplier shall obtain TBE approval of all special processes to be used in the performance of this contract. Special Processes include plating, welding, nondestructive examinations, finishes, soldering, chemical processes, etc. The Supplier shall maintain objective evidence of process qualification and control in accordance with applicable specifications. The procedure(s) and qualification/certification data shall be submitted to TBE for approval prior to the work being processed by the vendor. If any changes in the certifications, qualifications, and/or processes are made, resubmittal and reapproval is mandatory. A TBE survey of operations may be required before approval is given.
- Note:** If a subcontractor, in turn, uses a TBE approved supplier, qualification data does not have to be provided to TBE prior to starting work. Using a TBE approved supplier in no way guarantees satisfactory performance by the special process supplier nor does it relieve (you) the TBE subcontractor from your obligation to deliver conforming parts in accordance with contractual requirements of the TBE purchase order or subcontract.
- 42 Configuration Control:** The Supplier agrees not to make any changes in items delivered under this contract at anytime in the future which would affect physical or functional interchangeability, reliability, or repair and maintenance operations unless the part identification is changed.
- 43 First Item Inspection:** The supplier must provide a sample first item to TBE for dimensional and functional approval prior to making production item(s). The Supplier is required to perform 100% inspection on that item upon approval by TBE. Supplier will provide 100% inspection on the remainder of items supplied.
- 44 Calibration:** Test and Measuring equipment which is used for process control or inspection must be appropriately calibrated with traceability to the National Institute of Standards and Technology or Natural Standards. The Supplier may use a calibration system complying with MIL-STD-45662, ISO 10012, or ANSI-Z540 for compliance to this requirement.
- 45 Raw Metals:** Raw metals (plate, bar extrusions, sheet, etc.) must be identified by the producing mill identifying alloy, condition (if applicable), and specification. If not mill marked, actual physical and chemical test data is required except for aluminum. On Aluminum, actual physical and typical chemical data is acceptable.
- 46 Government Industry Data Exchange Program (GIDEP):** On subcontracts requiring GIDEP participation, the subcontractor shall participate in the appropriate interchange of GIDEP. This program is an invaluable tool in the government's war against inefficiency and is limited to participating activities. Data entered is retained by the program and provided on a privileged basis. Compliance with this clause shall not relieve the subcontractor from complying with any other provisions of this contract.
- 47 Defense Contract Management Agency (DCMA) inspection** is not required at your facility. DCMA inspection will be performed at TBE Receiving Inspection.
- 48 Part Segregation:** If items furnished on this order are not from a single homogeneous lot, they shall be segregated by homogeneous lots. A homogeneous lot is defined as all items having the same part number, date or lot code, and manufacturer.
- 49 Mercury Free Contamination Certification:** Certification shall include the following statement: "Item(s) furnished under this PO have not been fabricated, nor have they come in contact with mercury, mercury vapor or mercury compounds, including test equipment, inspection equipment, handling, packaging material and/or any other associated material that may come in contact with the furnished item(s), materials or assemblies."
- 50 Quality Program Provision (MSFC Test Area Contractors):** The Supplier's quality program shall be in accordance with applicable portions of the MSFC Quality Publication (MSFC-HDBK-1630, "Quality Program Provisions for MSFC Test Area Contractors". The latest revision applies unless otherwise specified.
- 51 Manufacturer's Certification of Compliance:** The manufacturer of the item being supplied shall certify in a signed certificate of compliance that all parts, materials, processes and finished items supplied under this contract were inspected, tested and found to comply with requirements of this order. Inspection and test data shall be maintained and are subject to TBE's examination. All applicable drawings and/or specifications and their revisions shall be referenced.
- 52 Quality Requirements (International Space Station):** The Supplier's inspection program shall be in accordance with specification SSP 41173. "Space Station Quality Assurance Requirements". The latest revision applies unless otherwise specified.
- 53 Calibration and/or Repair Services:** Items submitted to the Supplier for calibration/repair on this contract shall be evaluated for acceptance before any repair or adjustments are made. For calibration service, a signed calibration certificate or report of calibration is required with each item certifying it has been calibrated to the appropriate manufacturer's specification utilizing measurements which are traceable to the National Institute of Standard and Technology (NIST), by comparison to natural physical constraints, or that self-calibration ration type measurements were utilized. Records of the as-received finding and the as-returned findings (post-adjustment or post-repair, as applicable), shall be clearly stated on the signed calibration certificate or report of calibration along with indication as to whether the individual findings were acceptable or unsatisfactory. Any limitation shall be noted on the calibration certificate or report of calibration.
- 54 Calibration System:** The Supplier's calibration program shall be in accordance with ISO 10012. Acceptable alternatives are ISO 9001 paragraph 4.11, ANSI-Z540, or ANSI/ISO/IEC 17025. Supplier may propose alternates for TBE's evaluation and acceptance.
- 55 Calibration Services ANSI-Z540:** The Supplier's calibration program shall be in accordance with ANSI-Z540, latest revision, unless otherwise specified. Items submitted to the supplier for calibration on this contract shall be evaluated for acceptance before any repair or adjustments are made. Records of the as-received findings and the as-returned findings (post adjustment or post-repair, if applicable) shall be clearly stated on the signed calibration report along with indication as to whether the

individual findings were acceptable or unsatisfactory. All test reports shall have a TAR of 4 to 1 (minimum) or shall state the uncertainties or achieved TAR. The reports shall attest to the fact that measurement standard(s) used in the performance of this calibration are traceable to a National Standard, International Standard, or Intrinsic Standard.

indication as to whether the individual findings were acceptable or unsatisfactory. All test reports shall have a TAR of 4 to 1 (minimum) or shall state the uncertainties or achieved TAR. Any limitation shall be noted on the calibration certificate or report of calibration. The NIST standard shall be listed along with that standard's calibration date and due date.

**56 Calibration Services 17025:** The Supplier's calibration program shall be certified to ISO/IEC 17025, latest revision and accredited by the International Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), unless otherwise specified. Items submitted to the supplier for calibration on this contract shall be evaluated for acceptance before any repair or adjustments are made. Records of the as-received findings and the as-returned findings (post adjustment or post-repair, if applicable) shall be clearly stated on the signed calibration certificate along with indication as to whether the individual findings were acceptable or unsatisfactory. All test reports shall have a TAR of 4 to 1 (minimum) or shall state the uncertainties or achieved TAR. The reports shall attest to the fact that measurement standard(s) used in the performance of this calibration are traceable to a National Standard, International Standard, or Intrinsic Standard.

**60 Supply Chain Traceability (Assemblies and Subassemblies):** The seller shall maintain a method of item traceability that ensures tracking of the supply chain back to the manufacturer of all Electrical, Electronic, and Electromechanical (EEE) parts included in assemblies and subassemblies being delivered per this order. This traceability shall be provided for each item supplied under this PO term. 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 product for the seller and shall include the manufacturer's batch identification for the item(s) such as date codes, lot codes, serializations or other batch identifications.

**57 Calibration Services ISO 10012:** The Supplier's calibration program shall be in accordance with ISO 10012 in conjunction with ISO 9000, both latest revisions, unless otherwise specified. Items submitted to the supplier for calibration on this contract shall be evaluated for acceptance before any repair or adjustments are made. Records of the as-received findings and the as-returned findings (post adjustment or post-repair, if applicable) shall be clearly stated on the signed calibration report along with indication as to whether the individual findings were acceptable or unsatisfactory. All test reports shall have a TAR of 4 to 1 (minimum) or shall state the uncertainties or achieved TAR. The reports shall attest to the fact that measurement standard(s) used in the performance of this calibration are traceable to a National Standard, International Standard, or Intrinsic Standard.

**61 Supply Chain Traceability (Parts):** The seller shall maintain a method of item traceability that ensures tracking of the supply chain back to the manufacturer of all Electrical, Electronic, and Electromechanical (EEE) parts being delivered per this order. This traceability shall be provided for each item supplied under this PO term. 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 product for the seller and shall include the manufacturer's batch identification for the item(s) such as date codes, lot codes, serializations or other batch identifications.

**58 Calibration Services to an ASTM Calibration Standard:** The Supplier's calibration program shall be in accordance with applicable ASTM Calibration Standard, latest revision, unless otherwise specified. Items submitted to the supplier for calibration on this contract shall be evaluated for acceptance before any repair or adjustments are made. Records of the as-received findings and the as-returned findings (post adjustment or post-repair, if applicable) shall be clearly stated on the signed calibration report along with indication as to whether the individual findings were acceptable or unsatisfactory. All test reports shall have a TAR of 4 to 1 (minimum) or shall state the uncertainties or achieved TAR. The reports shall attest to the fact that measurement standard(s) used in the performance of this calibration are traceable to a National Standard, International Standard, or Intrinsic Standard.

**62 Guarantee of Product Source (s):** The seller shall ensure that only new and authentic materials are used in products delivered to TBE. The Seller may only purchase parts directly from Original Component Manufacturers (OCMs), OCM franchised distributors, or authorized aftermarket manufacturers. Use of product that was not provided by these sources is not authorized unless first approved in writing by TBE. The seller must present compelling support for its request (e.g., OCM documentation that authenticates traceability of the parts to the OCM), and include in its request all actions to ensure the parts thus procured are authentic/conforming parts.

**59 Calibration NIST Traceable:** Items submitted to the Supplier for calibration/repair on this contract shall be evaluated for acceptance before any repair or adjustments are made. A signed calibration certificate or report of calibration is required with each item certifying it has been calibrated to the appropriate manufacturer's specifications utilizing measurements which are traceable to the national Institute of Standard and Technology (NIST). Records of the as-received findings and the as-returned findings (post adjustment or post-repair, if applicable) shall be clearly stated on the signed calibration report along with

**63 Certificate of Conformance and Traceability:** Applicable to all contracts for QPL or QML integrated circuits or hybrid semiconductor devices procured in accordance with MIL-PRF-38534 or MIL-PRF-38535 and semiconductor devices procured in accordance with MIL-PRF-19500. The parts supplied must be in strict conformance to the requirements set forth and/or referenced in the item description including applicable revisions and slash sheets. To ensure this conformance, the seller must provide a Certificate of Conformance and Traceability (CoC/T) with the information and documentation required by the applicable military specification. This documentation must reference the contract number and include a certification signed by the approved QPL/QML manufacturer. In addition, if the material is not procured directly from the approved manufacturer, all additional documentation required by the specification must be provided to establish traceability from the QPL/QML manufacturer through delivery to TBE. This will be an unbroken chain of documentation (certifications, packing slips, etc.) tracing the movement of the parts back to the OCM and the certification that the parts have not been salvaged, reclaimed, otherwise used

or previously rejected for any reason. The CoC/T is required to determine acceptability of the EEE parts. If the CoC/T is not provided, is incomplete or otherwise unacceptable, the supplies will be determined not to meet contract requirements and will be rejected.

**64 10CFR Part 21** applies to work covered by this Purchase Order. Required postings, notifications, flow downs, and record keeping must be made.

**65 Deleted**

**66 First Article Report:** The Supplier is required to perform a First Article Inspection (FAI) on hardware identified in this purchase order. The First Article Inspection shall conform to the requirements of AS9102, and to record the actual data for the first item, and identify each characteristic, the allowable tolerance limits, and the actual value measured. The First Article Inspection Report must accompany the first part shipped. The revision of AS9102 at the time of the purchase order applies.

**67 Calibration Service Requirement (NDT Equipment):** Calibration must be performed on a minimum of three (3) points spanning the full range of use of the equipment being calibrated unless otherwise specified in this PO or associated reference documents. Light meters shall have an accuracy of  $\pm 5\%$  of the standard reading.

**500 Government Property:** This line item will be treated as government property when received. Please notify the TBE Government Property Administrator upon receipt.

**503 Buy American:** COUNTRY OF ORIGIN MUST BE SUPPLIED WITH ALL DELIVERED MATERIAL IN ACCORDANCE WITH DFAR-Clauses 252.225.7001, 252.225.7002, 252.225.7008 and 252.225.7009. COUNTRY OF ORIGIN MUST\* BE ONE OF THE FOLLOWING: USA, Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Israel, Italy, Japan, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland.  
\* If material from one of the above countries cannot be supplied. Notify the TBE Buyer. The TBE Buyer may be able to waive this requirement.

**506 Flight Hardware Quality Requirements For This Procurement**

1. A Certificate of Compliance, (C of C) must be signed (stamped or printed signatures not acceptable). Must have signers title stated. Shall state all materials, processes and/or finished components supplied under this purchase order meet the applicable specifications. The C of C shall contain all applicable part/ specification numbers, lot/batch and serial numbers.
2. Data Package shall (as a minimum) contain:
  - a. Certificate of Compliance
  - b. Raw Material Manufacturers Test report
  - c. Reports of all outside services referencing
    - 1) Fastener Manufacturer's lot number
    - 2) Quantity of parts processed
    - 3) Name of process performed including process specification

- d. Fastener Manufacturer's test report shall contain the following:
    - 1) All applicable specification numbers and revisions
    - 2) Name of company that performed the tests
    - 3) Manufacturer's lot number for the fastener tested
    - 4) Sample size and method(s) employed for sample size selection for each test.
    - 5) Clear identification of test results for acceptable lots
  - e. Special traceability for externally threaded fasteners
    - 1) The original manufacturer will have lot traceability back through the manufacturing process to the raw material test certifications
    - 2) Any subsequent modifying supplier shall have lot traceability back to the original manufacturer
    - 3) Any subsequent supplier shall have lot traceability back to the original manufacturer
3. ALL FASTENERS SHALL COME FROM THE SAME LOT.

**513 Raytheon TPY-2 Q-Notes**

As applicable to the scope of this PO, the following Raytheon Q-Notes are imposed on this PO. PIV6012\_12, BA-1, DL-5, HK-12, WE-4, WF-9, CT-6, EB-7, LZ-5, D4-6, UK-7, DD-10, EC-6, MS-6, NF-3, G3-3, DE-3, SA-2, WH-4, UD-3, JY-15, SJ-3, TC-9, D11-0. Note that the revision listed above applies. Contents of Raytheon Q-Notes can be found at <https://qnotes.raytheon.com/>

**514 Special Processes - Northrop Grumman:**

- \* On Purchase Orders for special processes, Northrop Grumman Aerospace Systems is our customer and latest process specification revisions apply.
- \* The special processor must be Northrop Grumman approved if the specification working to is listed in the Northrop Grumman Approved Special Processors List (ASPL) located on the Online Automated Supplier Information System (OASIS) which can be accessed at: <https://oasis.northgrum.com>.
- \* Special processors are required to be accredited by NADCAP for the following process categories listed on the OASIS web site:
  - Nondestructive Testing
  - Heat Treating
  - Material Testing Laboratories
  - Chemical Processes
  - Non-Conventional Machining & Surface Enhancements
  - Welding
  - Composites

**515 Mercury Exclusion:**

1. Mercury or mercury containing compounds shall not be intentionally added or come in direct contact with hardware or supplies furnished under this Purchase Order.
2. POLYCHLORINATED BIPHENYLS PROHIBITION. Seller shall not employ equipment or use material that is known or suspected of containing polychlorinated biphenyls.
3. PROHIBITION OF YELLOW WRAPPINGS OR PROTECTION DEVICES. SELLER SHALL NOT USE YELLOW WRAPPING MATERIAL OR ATTACHED YELLOW PROTECTION DIVICES SUCH AS CAPS OR PLUGS.
4. BRASS AND COPPER BLACK OXIDE COATED THREADED FASTENER PROHIBITION. Seller shall not



use brass or copper black oxide coated threaded fasteners when installing or replacing threaded fasteners in the accomplishment of any work required by this Purchase Order.

**517. Factory Acceptance Test Data:** Actual factory acceptance test data required. The following information, as a minimum, shall be recorded:

- a. Platform and System Tested
- b. Date Test Conducted
- c. Test Boundary
- d. Calibration Dates and Serial Numbers of Test Equipment
- e. Pressure Gauge Range
- f. Test Fittings, Blanks, and Jumpers (if applicable)
- g. Required Test Pressure
- h. Actual Test Pressure
- i. Required and Actual Test Fluid
- j. Required and Actual Duration
- k. Allowable Leakage
- l. Measured Leakage
- m. Results of Inspections/Out-of-Roundness Measurements
- n. Temperature and Pressure Data Supporting Drop Tests
- o. Valve Line-up for Test, or Detailed Diagram of the Test Area with Secondary Party validation.

**Note:** Valve line-ups or Detailed Diagram of the Test Area for pressure testing shall provide the following information:

- Valve designator and/or valve nomenclature
- Required valve positions
- Initials and date of the Valve Positioner verifying by observation the actual valve positions
- Test entry point when an external pressure source is used for an internal pressure test.

- p. Test Acceptance Signature

**Note:** The Test Accepted Signature shall be annotated as attesting that the person who actually performed or witnessed the test is verifying that all associated test parameters were met.

**518. Specific Certificate of Compliance (COC):** The Supplier shall specifically sign and certify that the components comply with the requirements of the procurement document, invoked specifications and drawings, that the product material composition and condition are correct, and that inspections and tests required by contract specification have been accomplished. The COC shall contain as a minimum:

1. The Vendor's name, address, phone number and date
2. The TBE Purchase Order number
3. Item nomenclature of the purchased item
4. Vendor's authorized personnel's signature.

**NOTE:** This statement clarifies and takes precedence over any other C of C requirement on this Purchase Order.

**519 Specific Certificate of Test:** All Certificates of Test (COTs) must contain the following information:

- \* The Contractors (or subcontractors) name, address, and phone number
- \* The TBE Purchase Order number

- \* Item nomenclature of the purchased item (Part Name/Number)
- \* Unique traceability information (Serial Number, Lot Number, Heat Code, etc.)
- \* Authorized personnel's signature (e.g., QA Manager) and date.
- \* Actual Test Data
- \* Conclusion on Conformance/Non-conformance to applicable specification

The Contractor is required to pass these COT requirements to its subcontractors for all items/services for which a COT is required.

**520 Supplier to Sub-tier Supplier:** If the supplier's Quality System is not compliant to ISO9001, AS9100, AS9120 or AS9003:

1. Teledyne Brown Engineering (TBE) shall provide all raw material or supplier shall provide the raw material certification for material used as part of their certificate of certification provided to TBE.
2. TBE shall perform all inspections of supplier's hardware.
3. TBE shall be responsible for all special processing of supplier's hardware.
4. Supplier shall not off-load to another sub-tier without documented approval from TBE.

**521 Special Process - Raytheon:**

- \* On this Purchase Order for Special Processes, Raytheon is our customer and the latest process specification revision applies.
- \* The purpose of the note is to ensure Raytheon processors meet minimum Raytheon Quality Standards, has processes in place, and is capable of producing hardware compliant to the applicable technical drawing package.
- \* Special processors performing plating, surface finish or conditioning shall comply with one of the following conditions unless otherwise approved by our customer Raytheon.
- \* CONDITION I – Processor shall be a current approved NADCAP processor for the applicable plating, surface finish or conditioning process and listed on the NADCAP approval list at [www.eauditnet.com](http://www.eauditnet.com).
- \* CONDITION II – Processor shall be a Raytheon approved when a specific Raytheon controlled process is required. The list of Raytheon approved processors is located on Raytheon Quality Notes website (<http://qnotes.raytheon.com>) adjacent to the applicable Quality Note.
- \* Raytheon Quality Notes are:
  - JY, Plating, Surface Finish and Conditioning,
  - SJ, Heat Treating,
  - TC, Non-Destructive Testing,
  - CT, Painting
  - HK, Welding

**522 Special Process - NADCAP:** Special Processors are required to be accredited by NADCAP for the following process categories:

- Nondestructive Testing
- Heat Treating
- Material Testing Laboratories
- Chemical Processes
- Non-Conventional Machining & Surface Enhancements
- Welding
- Composites

**528 Special Process - Boeing:**

- \* On Purchase Orders for special Processes, Boeing is our customer and latest process specification revisions apply.
- \* The special processor must be Boeing approved if the specification working to is listed in the Boeing Approved Special Processor List located on the online which can be accessed at <http://www.boeingsuppliers.com/d14426/index.html>.

**529 Material Substitution - Boeing:** Unauthorized material substitutions are not permitted. Includes any deviation of form, size, shape, chemistry, melt method, origin, temper/condition, product testing, or surface finish. Unless authorized by the engineering, conversion of the raw material (i.e. heat treat to change the temper or condition) constitutes material substitution. Raw material must not be re-certified with respect to thickness, diameter, width or cross sectional area or product form. Machining or cutting of thicker product or other product form shall not be supplied. Certifications for materials shall reflect the form and size as originally manufactured.

**531 Special OEM Requirements – Raytheon:** On this Purchase Order if the supplier is not the OEM, then supplier must provide the name and address of the OEM (including country of origin).

**532 Special Process – Lockheed C-130:** Processing to be accomplished in performance of this purchase order is directly related to a Lockheed Martin Aeronautics Company purchase order and must be accomplished in accordance with process specification(s) on this purchase order and Lockheed Martin Aeronautics Company Appendix QJ.

**533 Prohibition of Pure Tin:** The uses of Pure Tin Plated finishes are strictly PROHIBITED. Any Tin Plating or Tin Solder processes shall contain NO LESS than 3 percent LEAD composition, unless specifically authorized in writing.

**534 Special Process – Lockheed JASSM Metals:** Manufacturer is to notify the Lockheed Martin buyer if any special process subprocessors are utilized. Notification shall include name and location of subprocessor. All special processes must be performed by a Lockheed Martin approved processor. A list of Lockheed Martin approved special processors can be found on the current approvals tab on the Lockheed Martin Procure-to-Pay internet portal. A search by approval code description or by specification number may be performed by using the approval code details provided on the title of this text note.

**535 Counterfeit Parts Control for DOE Contracts:**

The seller shall maintain a method of item traceability that ensures tracking of the supply chain back to the original manufacturer of parts, parts included in assemblies, and subassemblies 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 product for the seller and shall include the manufacturer's batch identification for the item(s) such as date codes, lot codes, serializations or other batch identifications.