

UNITED TITANIUM, INC

COUNTERFEIT PARTS / MATERIEL PROCEDURES

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Approved By:



Vice President / General Manager

United Titanium, Inc. Counterfeit Parts / Materiel Procedures

1.0 Purpose

The purpose of this document is to describe the process and due diligence performed to prevent the purchase and / or use of Counterfeit Parts / Materiel and meet the requirements of the following documents:

- a. AS5553: Standard for Counterfeit Electronic Parts Avoidance, Detection, Mitigation and Disposition.
- b. DFAR 252.246-7007 - Contractor Counterfeit Electronic Part Detection and Avoidance System
- c. AS6174: Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel.

The overall intent of this document is to achieve the following:

- a. Maximize availability of authentic materiel or parts.
- b. Purchase raw materials and manufactured parts from reliable sources.
- c. Assure authenticity and conformance of procured materiel and purchased parts.
- d. Control materiel and parts identified as fraudulent / counterfeit, and
- e. Report suspect or confirmed fraudulent/counterfeit materiel or parts to other potential users and Authority Having Jurisdiction.

2.0 Scope

This document applies to the procurement activities at United Titanium, Inc. to the extent specified herein.

3.0 Application

Standards AS5533 and DFAR 252.246-7007 apply to companies that manufacture, integrate, or procure electrical, electronic, and electromechanical (EEE) parts or assemblies; while standard AS6174 is more within the scope of our manufacturing processes. Our involvement with AS5553 and DFAR 252.246-7007 is solely based on customer requirements to implement a counterfeit parts prevention program.

AS6174 will be used as a guide in our efforts to focus on the following:

- Parts sent out to vendors for additional processing (testing, anodizing, machining, etc.)
- Parts manufactured by a vendor for United Titanium, Inc. (Does not include parts for the Service Center).
- Parts returned due to failures, does not include parts returned due to administrative issues (wrong part, incorrect quantities, etc.)

4.0 Key Terms and Definitions

MATERIEL: In AS6174 materiel refers to material, parts, assemblies, and other procured items (except for electronic parts, which are covered by AS5553).

MANUFACTURER: Manufacturer in this standard refers to the point of origin of any materiel covered by the standard, including factories, mills, foundries, mines, chemical plants, laboratories, etc.

SUSPECT MATERIEL: Materiel, items, or products in which there is an indication by visual inspection, testing, or other information that it may meet the definition of fraudulent materiel or counterfeit materiel provided below.

FRAUDULENT MATERIEL: Suspect materiel misrepresented to the customer as meeting the customer's requirements.

COUNTERFEIT MATERIEL: Fraudulent materiel that has been confirmed to be a copy, imitation or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with intent to mislead, deceive or defraud. NOTE: The following diagram depicts the above relationships between Suspect, Fraudulent and Counterfeit Materiel. Suspect Materiel can become Fraudulent or Counterfeit Materiel through further evaluation and testing. All counterfeit materiel is fraudulent, but not all fraudulent materiel is counterfeit. There are legal distinctions between counterfeit and fraudulent materiel. Legal counsel and/or the OCM should be consulted to determine the nature and extent of these distinctions.

IDENTITY: Information such as the current design authority, original manufacturer, trademark or other intellectual property, performance, unique item identifier, part number, date code, lot number, testing methods and results, inspection, documentation, warranty, origin, ownership history, packaging, storage, handling, physical condition, previous use, etc.

AUTHENTIC: Produced with legal right or authority granted by the legally authorized source.

Related Definitions are listed in Appendix B

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5.0 Responsibility

Purchasing, engineering, sales, and other associates as appropriate or required are responsible to comply with the requirements and processes identified in this document.

5.1 Purchasing is responsible for the following:

- Procuring correct raw materials or contract parts using the applicable drawing, specification, description, or other information to meet the intended use.
- Ensuring requirements are thoroughly and correctly identified on parts sent out for additional processing.
- The flow down of customer requirements to the vendor.

5.3 Engineering is responsible for the following:

- Ensuring the drawing, specification, process, or other description identifies the applicable type, class, style, part number, manufacturer, or other related information so the correct part is identified.
- When requested, provide Certificates of Conformance to assure authenticity and conformance of purchased parts.
- Initial investigation of suspect parts identified by Shipping or Quality Assurance.
- Initial investigation of parts returned for failures.

5.4 Sales is responsible for the following:

- Identifying customer flow down requirements (Contract Review) and ensuring these requirements are made known to Purchasing and Engineering/Manufacturing.
- Encouraging customer to purchase parts directly from United Titanium, Inc. (decreases the probability of them receiving counterfeit parts).

5.5 Receiving Inspection is responsible for the following:

- Conduct raw material verification activities in accordance with established work instructions.
- As required, analyze suspect counterfeit parts to determine / verify material composition.

5.6 Inspections and release of product for the following will be in accordance with the job card. Inspector shall report any out of the ordinary or suspicious parts to Engineering

- Incoming parts (sent out for additional processing)
- Incoming parts (manufactured by a vendor for United Titanium, Inc.)

5.7 Compliance Manager is responsible for the following:

- Maintaining the company's GIDEP membership.
- Monitoring the GIDEP website, in particular the weekly Suspect Counterfeit part information.
- As required, provide GIDEP information to appropriate departments for consideration / action.
- Initiating any counterfeit parts reporting in accordance with Appendix G, Reporting of AS6174.

6.0 Procedure

6.1 Due to our low risk as shown in Figure A3 of AS6174 (RISK STACK CHART) many of our existing ISO 9001 procedures and work instructions may be used to achieve the requirements of these standards and those of our customers.

6.2 Part Availability: Our processes shall maximize availability of authentic, originally manufactured parts throughout the product's life cycle, including management of parts obsolescence. Parts availability shall be in accordance with customer contract requirements. Management of obsolete parts shall be in accordance with work instruction WI 75-08, "Identification and Disposition of Obsolete parts."

6.3 Purchasing must assess potential sources to determine the risk of receiving counterfeit materiel and/or counterfeit parts. Areas of concern regarding counterfeit parts are as shown below:

- Parts sent out to suppliers or subcontractors for additional processing (testing, anodizing, machining, etc.)
- Parts manufactured by a supplier or subcontractor for United Titanium, Inc.

Existing purchasing procedures and work instructions are sufficient to meet this assessment requirement.

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6.0 Procedure (Continued)

6.4 Purchasing must maintain a list of suppliers to minimize the risk associated with the supply and / or receipt of counterfeit parts / materiel. Existing procedures and Approved Vendor List are sufficient in meeting this requirement. In no case will parts or materiel be purchased from unapproved / authorized sources.

6.5 Assure that approved/ongoing sources of supply and services are maintaining effective processes for mitigating the risks of supplying counterfeit parts or materiel. Assurance actions may include surveys, audits, review of product alerts, and review of supplier quality data to determine past performance. Existing purchasing procedures and work instructions for the evaluation of approved vendors are sufficient to meet this requirement.

6.6 When required by the contract, Purchasing must specify the customer flow-down requirements applicable to the supplier or subcontractor. Existing Purchasing Clauses should be sufficient in meeting flow-down requirements of AS6174. As required, the purchasing document may also list certification or traceability requirements, test and / or inspection results and Quality System requirement for the supplier.

6.7 Personnel receiving, or inspecting, parts must examine the product to ensure the drawing, specification, type, class, style, part number, manufacturer, Certificate of conformance or other related information is present to detect or identify suspect or counterfeit parts. Suspect or counterfeit parts shall be documented on a Non-conforming Material Report (NMR) and the parts placed in a quarantine area. The NMR shall be processed in accordance with established procedures and work instructions.

6.8 Parts returned due to failures. Engineering shall conduct the initial investigation to determine the cause of the failure.

6.9 This procedure shall ensure that all occurrences of counterfeit parts are reported, as appropriate, to internal organizations, customers, government reporting organizations (e.g., GIDEP), industry supported reporting programs (e.g., ERAI), and criminal investigative authorities. Information and guidelines for reporting counterfeit parts are provided in Appendix G, "Reporting" of AS6174. Reporting shall be completed by the Compliance Manager in coordination with the Engineering Manager and Vice President / General Manager.

7.0 Verification

United Titanium, Inc. considers the due diligence applied to the material purchased, successful when this procedure is followed and when the finished parts meet the identified test or inspection requirements. A failed fastener / part reported by the customer does not mean the part was counterfeit. United Titanium, Inc. must verify the cause of the non-conformance and disposition of the defect per QM 8.3 "Control of Nonconforming Product". This procedure will apply if the deficiency is suspected or attributed to a counterfeit part.

Appendix A - Applicable Documents

Customer Documents

- Lockheed Martin: Appendix QX Supplier Quality Requirements (Paragraph 1.3 1.4)
- Northrop Grumman Aerospace Systems: SQAR (Paragraph 3.11)
- Newport News Shipbuilding: Appendix A-DOD CONTRACTS (Paragraph 17)
- Harris Procurement Quality Clauses: H-1999Q, (Paragraph 5.0 QC-1 Counterfeit Parts Prevention)
- Teledyne ODI: General Terms and Conditions Of Purchase, (Paragraph 14)
- L3Harris QA-560-01 Supplier Quality Assurance Provisions (Component Part Authenticity)
- Collins Aerospace: RC-9000 - Supplier Quality System Requirements (Paragraph 2.7 Counterfeit Risk Mitigation)
- Raytheon TC-001 General Terms And Conditions Of Purchase (Paragraph 19(e)B23)
- General Dynamics Land Systems: P. O. Terms & Conditions (84-005-0807) (Paragraph- 41(b))

Related Documents

- AS5553D, Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition
- AS6174A: Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
- DFAR 252.246-7007 - Contractor Counterfeit Electronic Part Detection and Avoidance System
- ISO9001: 2015, Quality Management System Requirements
- United Titanium, Inc. procedure QM 7.4, Purchasing
- United Titanium, Inc. procedure QM 8.2, Monitoring and Measurement
- United Titanium, Inc. procedure QM 8.3, Control of Non-Conforming Product

Appendix B – Related Definitions

AFTERMARKET MANUFACTURER: A manufacturer that meets one or both of the following criteria:

- a. The manufacturer is authorized by the original manufacturer to produce and sell replacement materiel, usually due to an original manufacturer decision to discontinue production of materiel. Materiel supplied is produced from dies, molds, or other manufacturing equipment that has been
 1. transferred from the original manufacturer to the aftermarket manufacturer,
 2. produced by the aftermarket manufacturer using original manufacturer tooling and intellectual property (IP), or
 3. produced by the aftermarket manufacturer through redesign to match the original manufacturer's specifications without violating the original manufacturer's intellectual property rights (IPR), patents, or copyrights.
- b. The manufacturer produces materiel by emulating or reverse-engineering obsolete materiel to satisfy continuing customer needs without violating the original manufacturer's intellectual property rights, patents, or copyrights.

APPROVED SUPPLIER: Suppliers that are formally assessed by the current design activity or the original manufacturer, determined to be a trusted source that will reliably provide authentic and conforming materiel, and entered on a register of approved suppliers.

AUTHORITY HAVING JURISDICTION: A statutory authority can differ between countries, the term is used to refer to the governmental organization at the federal, national, state, or local entity having statutory authority to respond to, enforce, or prosecute anti-counterfeiting laws. Examples are Customs and Judicial bodies.

AUTHORIZED RESELLER: An entity who has a legally binding relationship with the legally authorized source, but does not provide direct product support to the customer.

AUTHORIZED SUPPLIER: Aftermarket manufacturers as defined above, and suppliers authorized by the current design activity or the original manufacturer to produce and/or sell materiel (i.e., franchised distributors).

BROKER: In the independent distribution market, brokers are professionally referred to as independent distributors. See definitions for "broker distributor" and "independent distributor".

BROKER DISTRIBUTOR: A type of independent distributor that works in a "Just in Time" (JIT) environment. Customers contact the broker distributor with requirements identifying information such as the part number, quantity, target price, and date required. The broker distributor searches the industry and locates parts or other materiel that meet the target price and other customer requirements.

CERTIFICATE OF AUTHENTICITY (C of A): A statement to the effect that all materiel items listed above furnished on this contract are genuine, new and unused unless otherwise specified in writing herein; are suitable for the intended purpose; are not defective, suspect, or counterfeit; have not been provided under false pretenses; and have not been materially altered, damaged, deteriorated, or degraded.

CERTIFICATE OF CONFORMANCE (C of C, CoC): A document provided by a supplier formally declaring that all buyer purchase order requirements have been met. The document may include information such as manufacturer, distributor, quantity, lot and/or date code, inspection date, etc., and is signed by a responsible party for the supplier.

CERTIFICATE OF CONFORMANCE AND TRACEABILITY (CoCT): A certificate of conformance required by certain U.S. military specifications which requires documented traceability from the QPL/QML manufacturer through delivery to the U.S. Government if the material is not procured directly from the approved manufacturer.

COMMODITY LEVEL TRACEABILITY: The requirement to trace lifecycle management to a commodity for specified events related to acquisition, validation of authenticity, property accountability, storage, operation, maintenance, safety, physical security, retirement, and disposal by each commodity, e.g., a stock numbered product and/or a lot or batch of a product.

CURRENT DESIGN ACTIVITY: The organizational entity currently responsible for the design of materiel. This may be the original design activity or a design activity to which the design responsibility has been transferred.

DESTRUCTIVE TESTING: A systematic, logical, detailed examination of materiel during various stages of physical disassembly, conducted on a sample of completed materiel from a given lot, wherein materiel is examined for a wide variety of design, workmanship, and/or processing problems. Information derived from destructive testing may be used to:

- a. preclude installation of inauthentic materiel or materiel having obvious or latent defects
- b. aid in disposition of materiel that exhibits anomalies
- c. aid in defining improvement changes in design, materials, or processes
- d. evaluate supplier production trends

Appendix B – Related Definitions (Continued)

DISPOSITION: Decisions made by authorized representatives within an organization concerning future treatment of nonconforming materiel. Examples of dispositions are to scrap, mutilation, use-as-is (normally accompanied by an approved variance/waiver), retest, rework, repair, or return-to-supplier.

FRANCHISED DISTRIBUTOR: A distributor with which the original manufacturer has a contractual agreement to buy, stock, re-package, sell and distribute its product lines. Franchised distributors normally offer the product for sale with full manufacturer flow-through warranty. Franchising contracts may include clauses that provide for the original manufacturer's marketing and technical support inclusive of, but not limited to, failure analysis and corrective action, exclusivity of inventory, and competitive limiters.

GIDEP (GOVERNMENT-INDUSTRY DATA EXCHANGE PROGRAM): A cooperative activity between U.S. and Canadian government and industry participants seeking to reduce or eliminate expenditures of resources by sharing technical information essential during research, design, development, production and operational phases of the life cycle of systems, facilities, and equipment.

INDEPENDENT DISTRIBUTOR: A distributor that purchases new materiel with the intention to sell and redistribute it back into the market. Purchased materiel may be obtained from original manufacturers or contract manufacturers (typically from excess inventories), or from other independent distributors. Resale of the purchased materiel (re-distribution) may be to original manufacturers, contract manufacturers, or other independent distributors. Independent distributors do not have legally binding relationships with current design activities or original manufacturers.

ITEM LEVEL TRACEABILITY: The requirement to trace lifecycle management to an individual item for specified events related to acquisition, validation of authenticity, property accountability, storage, operation, maintenance, safety, physical security, retirement, and disposal by a single instance of an item.

ITEM UNIQUE IDENTIFICATION (IUID): IUID is a materiel identification system instituted by the United States Department of Defense (DoD) in accordance with International Organization for Standards (ISO) standards including ISO 15459 to uniquely identify a discrete tangible item and distinguish it from other like and/or unlike tangible items. Tangible items are distinguished from one another by the assignment of a unique item identifier (UII) in the form of a unique data string and encoded in a Data Matrix bar code symbol which is placed on the item. The same approach has been adopted by the North Atlantic Treaty Organization, the Air Transport Association, American National Standards Institute, individual companies, etc. A UII is only assigned to a single instance of an item and is never reused. Once assigned to an item, the UII is never changed, even if the item is modified or re-engineered.

LEGALLY AUTHORIZED SOURCE: The current design activity or a supplier authorized by the current design activity or the original manufacturer to produce an item.

NONDESTRUCTIVE TESTING (NDT): Can also be described as Nondestructive Inspection (NDI) or Nondestructive Evaluation (NDE). NDT encompasses a wide variety of analytical techniques used in science and industry to evaluate the properties of materials, components, subcomponents, or systems without damaging or permanently altering them.

OPEN MARKET: The trading market that buys or consigns primarily original manufacturers' and contract manufacturers' excess inventories of new materiel and subsequently utilizes these inventories to fulfill supply needs of other original manufacturers and contract manufacturers, often due to urgent or obsolete materiel demands.

ORGANIZATION: In the context of this document, it refers to procurement and design activity entities (government and contractor), and sub-tier materiel suppliers and producers.

ORIGINAL MANUFACTURER: An organization that designs and/or engineers and produces materiel and is pursuing or has obtained the intellectual property rights to that materiel. Notes:

- a. The materiel and/or its packaging are typically identified with the original manufacturer's trademark.
- b. Original manufacturers may contract out manufacturing and/or distribution of its product.
- c. Different original manufacturers may supply product for the same application or to a common specification.

PACKAGING: Packaging refers to the manner in which materiel is packaged in preparation for use. The determination of packaging types is determined by product sensitivities such as moisture, physical characteristics, etc., as well as the method (manually, or by use of automated equipment) to be used to place the materiel into its application.

REFURBISHED: Materiel that has been cleaned, freshened, painted, polished or renovated in an effort to restore it to a "like new" condition.

Appendix B – Related Definitions (Continued)

RESELLER: An entity providing materiel who may or may not have a legally binding relationship with the legally authorized source and is serving only as an agent of the transaction.

SLASH SHEET: For the purposes of this standard, an addendum and/or appendix like supplement to the basic standard that specifies requirements for a specifically defined commodity and its supply chain. Each slash sheet is balloted and released separately from the basic standard..

STOCKING DISTRIBUTOR: A type of independent distributor that stocks large inventories typically purchased from original manufacturers and contract manufacturers. The handling, chain of custody, and environmental conditions for materiel procured from stocking distributors is generally better known than for product bought and supplied by broker distributors.

SUPPLIER: Within the context of this document, a blanket description of all sources of supply for a materiel (e.g., original manufacturer, franchised distributor, independent distributor, broker distributor, stocking distributor, aftermarket manufacturer) who may or may not have a legally binding relationship with the legally authorized source. This relationship generally includes direct product support, training and marketing support from the legally authorized source and provides direct product support to the customer.

SUPPLY CHAIN TRACEABILITY: Documented evidence of materiel's supply chain history. This refers to documentation of all supply chain intermediaries and significant handling transactions, such as from original manufacturer to distributor, or from excess inventory to broker to distributor.

UNIQUE ITEM IDENTIFIER (UII): A globally unique and unambiguous identifier that distinguishes an item from all other like and unlike items. The UII is a concatenated value that is derived from a UII data set of one or more data elements encoded in an IUID compliant Data Matrix bar code symbol. The UII is intended to be a permanent mark placed on a single instance of an item of materiel and cannot be changed over the life of that item.

UNUSED (NEW SURPLUS): Materiel that has not been previously used. A shipment of unused materiel can contain mixed date codes, lot codes, or countries of origin, and should be received in unused factory or third party packaging. The materiel may have minor scratches or other physical defects as a result of handling, but should be in good condition and should not be refurbished. The materiel should be guaranteed to meet the manufacturer's full specifications.

UPRATED: Assessment which results in the extension of materiel ratings to meet the performance requirements of an application in which the materiel is used outside the manufacturer's specification range.

UPSCREENED: Additional materiel testing performed to produce materiel verified to specifications beyond the standard materiel's rated parameters.

USED (REFURBISHED OR PULLED): Materiel that has been installed and used, but subsequently removed from its application. Used materiel may be received in non-standard packaging (i.e., bulk), and may contain mixed lots, date codes, be from different facilities, etc. Materiel may have physical defects such as scratches, faded markings, chemical residue or other signs of use, but should be intact. Used materiel may be sold with a limited warranty. Used materiel marketed as refurbished should meet the industry definition of refurbished, or should be sold as used or pulled product.