ULTRA MARITIME

OP 1006-7
COUNTERFEIT PARTS PREVENTION PLAN
Rev: G

1.0 Purpose

1.1 The purpose of this document is to describe the process and due diligence performed at EMS to prevent the purchase and/or use of counterfeit parts, and meet, as necessary, the requirements of the AS5553C Standard for Counterfeit Electronic Parts Avoidance, Detection, Mitigation and Disposition.

2.0 Responsibilities

2.1 Purchasing is responsible to procure the correct electronic part using the applicable drawing, specification, description, or any other information to meet the intended use. Purchasing is responsible for referencing and implementing this procedure.

2.2 Engineering is responsible to ensure the drawing, specification, process, or other description identifies the applicable type, class, style, part number, manufacturer, or other related information so the correct part or product is identified.

2.3 Receiving Inspection is responsible to examine, inspect the parts to identify and mitigate the receipt and/or use of counterfeit parts.

3.0 Definitions

3.1 **Suspect Part**: a part in which there is an indication by visual inspection, testing, or other information indicating the item may have been misrepresented by the supplier or manufacturer may meet the definition of a counterfeit part.

3.2 **Counterfeit Part**: a suspect part identified as a copy or substitute without the legal right or authority to do so or a part whose material, performance, or characteristics are knowingly misrepresented by a supplier in the supply chain. The counterfeit parts include but are not limited to:

- Parts not containing the proper internal construction (die, manufacturer, wire bonding, etc) consistent with the ordered part.
- Used, refurbished, or reclaimed parts represented as a new product.
- Parts with a different package style, type, or surface plating/finish than required.
- Parts not successfully completing the full production and/or test flow of the Original Component Manufacturer (OCM) that are represented as completed product.
- Parts sold or delivered as upscreened product that have not successfully completed the upscreening process.
- Parts sold or delivered with modified labeling or marking intended to misrepresent the form, fit, function, or grade of the intended product.
- Note: a part is not considered counterfeit if it has been refinished, upscreened, or updated parts have been identified accordingly.

3.3 **Aftermarket Manufacturer**: a manufacturer meeting one or more to these criteria:

- A manufacturer authorized by the OCM to produce or provide replacement parts. The parts supplied originate from the OCM to the aftermarket manufacturer or an aftermarket manufacturer using the OCM tooling, or intellectual property to produce the parts.
- The manufacturer produces parts using tooling or equipment manufactured by and traceable to an OCM that was properly stored until use. The parts are subsequently assembled, tested, and qualified using processes meeting the technical specifications without violating the intellectual property rights, patents, or copyrights of the OCM.
- The manufacturer produces parts by emulation, reverse engineering, or redesign using processes matching the OCM specification. The parts must meet the Customer requirements without violating the OCM intellectual property rights, patents, or copyrights.
- NOTE: the aftermarket manufacturer must mark and identify the part to ensure the product shipped is not mistaken for the product manufactured by the OCM.

3.4 **Approved Supplier**: suppliers who are formally assessed and determined to have a low risk of providing counterfeit product.

3.5 **Authorized Supplier**: Aftermarket manufacturers (reference section 3.3) and the OCM-authorized source of supply for a specific part.

3.6 **Broker**: in the independent distribution market, brokers are referred to (professionally) as “Independent Distributors”.

3.7 **Franchised Distributor**: A distributor with which the OCM has a contractual agreement to buy, stock, repackage, sell, and distribute its product lines. When a distributor does not provide products, for the purpose of AS5553, the distributor is considered an independent distributor for those products. Franchised distributors normally offer the product for sale with full manufacturer warranty. Franchised contracts may include clauses that provide for the OCM’s marketing and technical support inclusive of, but not limited to, failure analysis and corrective actions, exclusivity of inventory, and competitive limiters. Franchised Distributors must provide a C of C from the part OCM’s.

3.8 **Independent Distributors**: A distributor that purchases new parts with the intention to sell and redistribute them back into the market. Purchased parts may be obtained from the original equipment manufacturers (OEM’s) or contract manufacturers (typical from excess inventories), or from other independent distributors. Resale of the purchased parts (redistribution) may be to OEM’s, contract manufacturers, or other independent distributors. Independent distributors do not have contractual agreements or obligations with OCMs. Any parts procured from a broker must be inspected in accordance with Appendix A of this document. In addition, customer approval must be received by EMS to authorize from a broker. Independent Distributors must provide a C of C from the part OEM’s.

3.9 **Certificate of Conformance (C of C):** a document provided by the supplier formally declaring the purchase order requirements are met. The document may include information relative to the manufacturer, distributor, quantity, date code, inspection date that is signed by a responsible associate for the supplier.

3.10 **Certificate of Conformance and Traceability (C of CT):** A certificate of conformance applicable to some military specifications requiring documented traceability of the product from the Qualified Parts List / Qualified Materials manufacturer through the product delivery to the Government.

3.11 **ERAI:** a privately held global trade associate who monitors, investigates, reports, and mediates issues affecting global supply chain of electronics including the supply of counterfeit and substandard parts.

3.12 **Packaging**: component packaging refers to the manner the electronic parts are packaged in preparation for use. There are four basic types of packaging: (A) bulk, (B) tray, (C) tube, and (D) reel.

3.13 **Refinishing**: Using a plating process method after manufacture to alter the original plating composition on a parts lead or lead wire.

3.14 **Refurbished**: Subjecting parts to a process to brighten, polish, or renovate the item to restore the item to a “like new” condition. Refurbished parts may have the leads realigned and re-tinned.

3.15 **Upscreened:** Additional part testing performed to produce parts verified beyond the specification parameters of the manufacturer.

3.16 **Used**: Electrically charged parts removed from a prior application. Parts should be examined for nonstandard packaging, mixed lots, dates, parts from various sites, scratches, bends, test dots, faded marking, chemical residue, or other signs of use. Used parts may be sold with a limited warranty. Programmable product still contains partial or complete programming capability that may affect part functionality. Used parts marketed as such should be identified accordingly.

Note: Other definitions are available for review in Section 3.3 of the AS5553, Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition Standard.

4.0 Equipment/Software

None

5.0 Procedures

5.1 Training for this procedure shall occur within 30 days of the employee start date. It shall be performed by the representative of the Quality department.

5.2 Part Availability: the process shall maximize availability of authentic, originally designed and/or qualified parts throughout the product’s life cycle, including management of parts obsolescence.

Purchasing must examine a potential source of supply to assess the risk of receiving counterfeit parts. Assessment may be a survey, audit, product alert review, or a review of the supplier quality data to determine performance.

5.3 GIDEP reports and other creditable reports shall be continuously reviewed for parts which are viewed as counterfeit. This process is continuous and on-going.

5.4 Purchasing maintains a List of Approved Suppliers (ASL) to minimize the risk associated with the supply and/or receipt of counterfeit parts.

5.5 Purchasing shall focus buying efforts to obtain parts directly form an OCM, approved distributor, authorized resale organization, or franchised aftermarket supplier if available.

5.6 Assure that the approved/ongoing sources of supply are maintaining effective process for mitigating the risks of supplying counterfeit parts. Assurance actions may include surveys, audits, signed agreements (see Appendix B), review of product alerts, and review of supplier quality data to determine part performance.

The OCM distributor or the aftermarket manufacturer shall be required to provide certificates of conformance and acquisition traceability. These certification requirements must be clearly identified on the purchase document as deliverable data.

Product with electronic components destined for Government or military may require an original manufacturer certification. Product with electronic components destined for commercial use may not require the certification or traceability documents.

The electronic component requirements for the product may be identified from a review of the customer purchase order, specification, or flowdown requirements. It is always practical for purchasing to request certification and traceability data as a deliverable item.

5.7 Purchasing must use the flow-down requirements from the DFARS 252.246-7007 and DFARS 252.246-7008 requirements to be compliant by the customer. Purchasing shall perform some level of risk assessment if the supplier or subcontractor does not maintain a documented counterfeit part control plan compliant to the AS5553 Standard, and the Navy/EB/NNS of compliance with the DFARS mention above.

5.8 The purchase document must specify the applicable requirements of the Counterfeit Part procedure to the supplier to minimize the risk of receiving counterfeit parts. To minimize the risk of procuring counterfeit parts, the purchasing document should include requirements to ensure conforming, original, and authentic parts are provided. The purchasing document may list certification or traceability requirements, test, and/or inspection results and Quality System requirements for the supplier.

The program site ERAI will be used to monitor for new trends in counterfeit part information by continually monitoring this information provided. This will be completed on a regular basis.

5.9 Persons inspecting, or processing 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. Record suspect or counterfeit parts on a Discrepant Material Review Form so the items may be identified and dispositioned.

If a part is found to be counterfeit after the final product was delivery to the customer, the customer shall be informed of the incident. An RMA number shall be issued and sent to have the product returned. The incident shall be investigated, and a report generated for the customer. The product shall be repaired or replaced, whichever is more economical.

5.10 This procedure shall assure that all occurrences of counterfeit parts are reported, as appropriate, to internal organizations, customers, government reporting organizations (GIDEP), industry supported reporting programs (ERAI), and criminal investigative authorities.

5.11 VERIFICATION: EMS considers the due diligence applied to the material purchase successful when this procedure is followed and when finished product meets the test or inspection requirements identified for the product or the standard work established for the product. A failed assembly does not mean the instance was caused by a counterfeit part. EMS must verify the cause of the nonconformance and disposition the defect. This procedure will apply if the deficiency is suspected or attributed to a counterfeit part.

5.12 The Quality Engineer is responsible for this procedure. When this procedure is revised, all personnel shall be retrained to the new revision. The old procedure shall be placed in the obsolete file and the new procedure shall replace the old procedure.

5.13 When a part in an EMS product becomes unavailable and is obsolete, procedure OP-1004-7 shall be used to locate a suitable replacement.

6.0 Forms and Records

6.1 None

7.0 Attachments

7.1	Appendix A	Counterfeit Part Risk Mitigation Inspection Guidelines
7.2	Appendix B	Counterfeit Letter to Suppliers

8.0 Related Documents

8.1	OP 1006	Purchasing Procedure
8.2	OP 1013	Control of Nonconforming Material
8.3	OP 1004-7	Obsolescence Mitigation Plan

9.0 References

9.1	AS5553	Counterfeit Electronic Pats: Avoidance, Detection, Mitigation, & Disposition
9.2	ISO 9001	Quality Management System Requirements

APPENDIX A

COUNTERFEIT PART RISK MITIGATION INSPECTION GUIDELINES

The following is a checklist to be used in cases where procurements are made from sources other than OCMs or authorized (franchised) suppliers, or there is a reason to doubt a parts' authenticity, tests and inspections shall be performed to detect fraudulent / counterfeit parts. The following methods shall be performed as a minimum.

A. Documentation and Packaging Inspection

- Lot and/or date codes on the package do not match the lot and/or date codes on the parts, or are inconsistent with OCM Product Discontinuation Notices (PDN)
- Manufacturer's logo or label is absent or does not match that shown on their website or on previous shipments.
- Poor use of English, misspelled words, alterations, or changes to the document.
- Barcode symbols do not match human-readable printed part data.
- Package material is inconsistent with the description on the datasheet or otherwise indicates that the parts may not be new and authentic. Wrong military packaging/labeling

B. Physical Part Inspection

- Different marking styles for parts with the same date/lot code
- Different country of origin for parts with the same date/lot code
- Previous marking partially visible on the surface
- Excessive glue or mismatched components
- Manufacturer's name or cage code missing on military part.
- Signs of poor workmanship, wrong, or mismatched hardware
- Surface of parts appear to have been sanded.
- Deep holes in laser etching (lettering on part)
- Bluish-green discoloration present between lead(s) and body of component.
- Signs of re-tinning of leads
- If practical, perform electrical testing on a sample of the parts received.
- Certify the following is correct against the military specification or manufacturer's datasheet: number of pins/contacts per part, packaging type, part dimensions, verify connector rotation/polarization.

Note: if there is any suspicion that a part might be counterfeit, notify your supervisor/manager, and segregate the part (bag, tag, etc. to prevent the parts from being placed in stock.

APENDIX B

Ultra Maritime
EMS
95 Horseblock Road, Unit 2
Yaphank
New York 11980
USA
Tel: +1 631 3456200
Fax: +1 631 3456216
www.umaritime.com

To all EMS suppliers:

As part of the EMS Counterfeit Parts Prevention Program, you are hereby notified that the delivery of suspect/counterfeit parts is prohibited to EMS. If suspect/counterfeit parts are provided against any order or are found in any of the goods delivered hereunder, such items will be impounded by EMS. You, the supplier, shall promptly replace such suspect/counterfeit parts with parts acceptable to EMS and you shall be liable for all costs relating to the removal and replacement of said parts. EMS reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts. To further mitigate the possibility of the inadvertent use of counterfeit parts, you shall only purchase components and parts procured directly from the Original Component Manufacturer (OCM) / Original Equipment Manufacturer (OEM), or through the OCM authorized distributor chain. Procurement through an Independent Distributor or purchase through Brokers is not authorized, unless first approved in writing by EMS. Upon request, you must provide OCM/OEM documentation that authenticates traceability of the components to the applicable OCM/OEM.

Your signature below indicates your agreement to all the terms and conditions.

_____
Company Name

_____
Printed Name

_____
Electronic Signature

_____
Title

_____
Date

Date	Rev:	Changes	Auth:
5-4-21	A		T. Vintimilla
5-10-21	B		C.Metaxas
5-17-21	C	Updated CCI Monitoring	C.Metaxas
6-1-21	D	Remove ref. to Appendices	C.Metaxas
6-3-21	E	Update to include DFARS	C.Metaxas
1-11-24	F	Added OEM/OCM C of C statement to 3.7 and 3.8. Grammar and spelling fixes	A. Adhyatman
5-28-24	G	Updated logo, Added Appendix B	L. Pena