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REVISION HISTORY

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0.1	INITIAL RELEASE	See PDM
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ALL SHEETS ARE THE SAME REVISION STATUS

SEE PDM FOR ELECTRONIC APPROVALS

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1.0 PURPOSE

1.1 This specification informs suppliers of Raytheon's minimum packaging requirements for inbound purchased items, parts and assemblies listed on a Purchase Order.

2.0 SCOPE

2.1 The supplier shall meet all requirements established by drawings, specifications, requirements, technical data package and/or notes found in the procurement data package in addition to the minimum packaging requirements identified within this document. Unique requirements identified on the technical data package or purchase order take precedence over this document.

2.2 Failure to comply with the requirements specified herein may result in rejection and return of consignment(s) to the supplier at their expense.

2.3 For questions related to the application of this specification, please contact Raytheon Supply Chain Management.

2.4 Raytheon Supplier Quality representative will authorize exceptions to this document as needed.

3.0 DEFINITIONS

3.1 **Unit Container/Unit Pack.** The first tie, wrap, bag, divided cell or container applied to a single item or to a group of items of a single part number, which constitutes a complete or identifiable package.

3.2 **Intermediate Container.** A wrap, box, bundle, or assembly which contains two or more unit containers of identical items.

3.3 **Exterior or Shipping Container.** A container, bundle or assembly which is sufficient by reason or material, design and construction to protect hardware during shipment and storage. This can be the unit pack or a container with any combination of unit or intermediate containers.

3.4 **Lead Container.** The first container identified of a multi-container shipment (i.e. Box 1 of 5).

4.0 RESPONSIBILITIES

4.1 SUPPLIER

4.1.1 The supplier shall provide adequate packaging to insure safe arrival of the purchased hardware. The supplier must ensure the packages, packaging and palletizing, comply with all applicable domestic and international laws and regulations.

4.1.2 The supplier shall supply appropriate packaging for the type of distribution channel used, air, sea, truck and rail.

4.1.3 The supplier shall follow the instructions in section 5.0 and apply only those that are applicable to the deliverable hardware.

4.1.4 Suppliers are responsible for developing and submitting packaging plans for each item supplied to Raytheon as indicated by request and/or Raytheon specification. The plan shall include factors such as dimensions, material type, content quantity, internal dunnage descriptions, and material descriptions.

4.1.5 Include packaging as appropriate in the supplier's Failure Modes and Effects Analysis (FMEA), Quality Plan, Source Release Plan, PPAP when used.

4.1.6 Suppliers shall perform packaged performance testing per International Safe Transit Association (ISTA.org) or ASTM D 4169 Standard Practice for Performance Testing of Shipping Containers and Systems when required by Raytheon Supply Chain Management. Typically, this requirement is for those items that are of high value, and/or high volume, and are critical in nature. Prior to any testing, submit the test plan to Raytheon for approval.

4.1.7 Suppliers shall communicate any changes or modification of existing packaging to Raytheon Supply Chain Management.

4.1.8 The supplier shall ensure that any packaging inbound to destinations governed by the European Union (EU), complies with the metal limits and essential requirements per the EU Packaging Directive. When requested by Raytheon Supply Chain Management, the supplier will provide documentation or declarations that show compliance to these requirements.

4.1.9 The supplier shall design packaging solutions that minimize negative environmental and social impacts while meeting the requirements described below.

4.1.9.1 Minimize the material required to comply with requirements.

4.1.9.2 Reuse the packaging thru tiers of the supply chain when practicable. Reuse of packaging materials must be a planned function and approved by Raytheon Supply Chain Management.

4.1.9.3 Comprised of materials that are readily recyclable and fabricated from renewable resources when practicable.

4.2 RAYTHEON SUPPLY CHAIN MANAGEMENT AND RAYTHEON SUPPLIER QUALITY

4.2.1 Raytheon Supply Chain Management will provide this specification to the supplier and, if required, cite the sections of this specification that apply in addition to meeting best commercial standards.

4.2.2 Raytheon Supplier Quality shall act as the first line to respond to supplier questions concerning questions regarding this specification. Raytheon Supplier Quality shall consult with Packaging Engineering as needed.

4.3 RAYTHEON PACKAGING ENGINEERING

4.3.1 Packaging Engineering shall maintain this specification and act as an information source to resolve packaging related questions.

4.3.2 Packaging Engineering shall review and provide feedback concerning packaging plans submitted.

4.3.3 Packaging Engineering shall provide technical assistance to Raytheon Supplier Quality staff as requested.

5.0 PACKAGING REQUIREMENTS

5.1 PREPARATION FOR DELIVERY: Preservation, Packaging, and Packing

5.1.1 The packaging shall allow for safe delivery of the shipment to its destination with no damage to contents. Hardware shall not sustain

corrosion, deterioration, or physical damage during storage, transportation or handling.

5.1.2 Package hardware to assure carrier acceptance, safe delivery and adequate storage. Containers shall be in accordance with all rules or regulations applicable to the mode of transportation.

5.1.3 Drop Shipments to the Department of Defense (D.O.D.) shall be per MIL-STD-2073, Level A for both foreign and domestic shipments unless otherwise specified by Raytheon Supply Chain Management.

5.1.4 The Supplier shall comply with the requirements of ASTM-D3951 (Standard Practice for Commercial Packaging) when packaging items and shall follow supplemental instructions provided in Section 6.0, as applicable. These requirements apply to all unit, intermediate, and shipping containers.

5.1.4.1 Items excluded from ASTM-D3951:

5.1.4.1.1 Ammunition, explosives and hazardous materials

5.1.4.1.2 Tape and reel components

5.1.4.1.3 Plastic Encapsulated Microcircuits (PEMs)

5.1.5 The unit container shall be of a size to provide a snug fit for the item(s). Pack hardware requiring separation from each other in compartmentalized packaging to prevent shifting or moving during transport or storage. Containers with multiple unit quantities shall allow easy access to individual parts without disturbing the remaining hardware.

5.1.6 Secure loose hardware, such as cables with floating hardware, to prevent separation during transportation.

5.1.7 The packaging plan shall maximize density per load, provide ease of access, facilitate removal of a single item without disturbing the remainder, account for human factors and address proper disposal.

5.1.8 Evaluate the use of returnable/reusable packaging.

5.1.9 The packaging plan shall address the mode of transportation – air, truck, sea, and/or rail, and the distribution environment. Select appropriate materials and protection methods to adequately protect the parts from any known environmental conditions, such as temperature and humidity that may be detrimental to the hardware.

5.1.10 Packaging materials shall leave no residue on the hardware.

5.1.11 Foreign Object Debris (FOD). The FOD level shall be appropriate to the hardware.

5.1.11.1 Do not use staples for the closure of packs.

5.1.11.2 Do not use loose fill material. Examples of loose fill are, but not limited to, foam packing peanuts, small pieces of shredded paper, plastic, and broken pieces of polystyrene foam.

5.1.11.3 Packaging methodology should minimize FOD.

5.1.12 Solid Wood Packaging Materials (SWPM)

5.1.12.1 Any packaging using solid wood materials shall be appropriately heat treated and marked to certify compliance with European Union ISPM 15, and the United States regulations governing the imports of SWPM. Materials typically regulated are wood pallets, crates and interior dunnage. Additional information is available at the USDA web site:

http://www.aphis.usda.gov/ppq/swp/

5.1.13 Unit Pack Quantity (UPQ) shall be one (1) if hardware weight is greater than 5 lbs. Supplier can request an exception to UPQ quantity for items weighing greater than 5 lbs.

5.1.13.1 Bulk Unit Pack quantity for small mechanical hardware items (gaskets, screws, nuts, bolts, etc.) is allowed but cannot exceed a single person lift of 28 lbs.

6.0 HARDWARE TYPE SUPPLEMENTAL REQUIREMENTS

NOTE: Apply shipping requirements listed below, as needed, based on hardware being shipped.

6.1 ELECTROSTATIC DISCHARGE SENSITIVE (ESDS) ITEMS

NOTE: Items that are sensitive to voltages above 16,000 volts HBM (Human Body Model) are not considered ESDS.

6.1.1 Shipper shall protect all ESDS items from static discharge.

6.1.1.1 Static shielding materials shall be used to protect ESDS items.

6.1.1.2 Static shielding materials include (but are not limited to):

6.1.1.2.1 Static shielding bags

6.1.1.2.2 Conductive boxes, containers and tubes

6.1.1.2.3 Other conductive materials that create a Farraday cage.

6.1.2 Anti-static and static dissipative materials used by themselves **do not** provide static shielding protection.

6.1.2.1 Anti-static and static dissipative materials include (but are not limited to):

6.1.2.1.1 Static dissipative boxes, containers, and tubes

6.1.2.1.2 Anti-static bags, foam, cushioning, and bubble wrap

6.1.3 Anti-static packaging materials shall be amine-free.

6.1.4 Packaging materials selected to protect ESDS items shall meet the requirements of ANSI/ESD S20.20 For the Development of an Electrostatic Discharge Control Program and ANSI/ESD S541, For the Protections of Electrostatic Discharge Susceptible Items – Packaging Materials.

6.1.5 Mark shielding bags, shielding containers, and unit packs using ESD protective symbols as described in ANSI/ESD S8.1, For the Protection of Electrostatic Discharge Susceptible Items - Symbols.

6.2 METALS

6.2.1 Silver or copper plated parts and assemblies

6.2.1.1 Use WATER VAPORPROOF bags conforming to MIL-DTL-117, Class F for ESD Sensitive items or MIL-DTL-117, Class E or F for Non-ESD Sensitive items.

6.2.2 Painted or plated parts and assemblies

6.2.2.1 Use WATER VAPORPROOF bags conforming to MIL-DTL-117, Class F for ESD Sensitive items or MIL-DTL-117, Class E or F for Non-ESD Sensitive items.

6.2.3 Parts and assemblies vulnerable to corrosion packed in wood containers

Wood can contain moisture and outgas acetic acid advancing the corrosion process for items vulnerable to corrosion.

6.2.3.1 Use WATER VAPORPROOF barrier bags conforming to MIL-DTL-117(heat sealable bag), Class E (water vapor-proof, grease-proof or F (water vaporproof, electrostatic protective, electrostatic and electromagnetic shielding).

6.2.4 Mechanical Hardware (screws, nuts, bolts, washers, etc.)

6.2.4.1 Use WATERPROOF Low Density Polyethylene (LDPE) re-closable bag, **or** bag conforming to MIL-DTL-117, Class B, C, E, F or H.

6.3 OPTICS AND POLYCARBONATES

6.3.1 Package optical components in a manner that preserves their cleanliness. Packaging materials shall not cause immediate or latent damage to the hardware, nor shall it introduce particulate that may affect the performance characteristics of the component.

6.3.2 Packaging materials shall not leave a foreign residue on the optical hardware (i.e. out gassing, particulate). Any material used shall be amine free.

6.3.3 Packaging materials in contact with an optical surface shall not cause damage or contaminate the surface during transportation, handling and storage. Complete abrasion testing as needed. Wrap packaging material around the hardware in a manner that prevents a sealed edge from contacting the optical surface directly.

6.3.4 Bagging materials shall not contain lubricants or anti-slip agents. Anti-static treatments shall be amine free. Do not use topical anti-static treatments.

6.3.5 Moisture sensitive optical hardware

6.3.5.1 Use WATER VAPORPROOF bags conforming to MIL-DTL-117, Class F for ESD Sensitive items or MIL-DTL-117, Class E or F for Non-ESD Sensitive items.

6.4 CABLES, CABLE CONNECTORS AND HARNESSES

6.4.1 Packaging must protect the connectors from physical damage and FOD.

6.4.2 Cap, bag or wrap connectors on cables.

6.4.3 Cap, bag or wrap all connectors on ESDS hardware with ESDS packaging materials.

6.4.4 Preferred method for protection of connectors on cables are appropriately sized conductive protective caps.

6.4.5 Permissible to use non-conductive caps if the hardware is not ESDS.

6.4.6 Installation of pin protectors on all male connectors is the preferred method of packaging.

6.4.7 Handle and package hardware in a manner that does not strain or distort preformed shape and bends.

6.4.8 Coil as hardware allows to reduce container cube and distribute weight evenly.

6.4.9 To protect connectors, it is permissible to individually bag small cables with light connectors.

6.4.10 Package cables to prevent connector to connector contact.

6.4.11 For coiled cables, coil in a manner that does not allow the connectors to touch.

6.4.12 Individually cap large, heavy connectors with appropriately sized protective caps or individually protected with bags, wraps and/or cushions.

6.4.13 It is permissible to package large cables and harnesses directly into clean shipping containers or tubes in good condition in lieu of bags.

6.5 SEMI RIGID CABLES

6.5.1 Secure semi rigid cables individually to a backing that provides support without damaging the cable. Use removable and reusable fasteners, such as twist ties to secure the cable. The cable shall not extend beyond the backing.

6.5.1.1 Bag the secured cable into appropriately sized bag and close.

6.5.1.2 Separate and cushion cables when packing multiple cables into a unit container. Access to a single cable must not jeopardize the security and part integrity of the remaining units.

6.6 CIRCUIT CARD ASSEMBLIES (CCA)/PRINITED WIRING BOARD (PWB)

6.6.1 Storage and shipping containers for CCA/PWB shall not emit chemicals that could be detrimental to solderability.

6.6.2 Storage and shipping containers for CCA/PWB shall not be made of or processed with silicones or sulfur compounds.

6.6.3 Containers and/or bags shall be clean, static free, free from ionic contaminants, and shall not emit contaminants due to heat sealing.

6.6.4 Packaging shall prevent physical contact of boards and prevent damage.

6.6.5 Single unit containers are preferred.

6.6.6 Take special precaution to prevent damage to pins and/or connectors.

6.7 CADMIUM

6.7.1 Hardware containing cadmium

6.7.1.1 Use WATER VAPORPROOF barrier bags conforming to MIL-DTL-117(heat sealable bag), Class E (water vapor-proof, grease-proof or F (water vaporproof, electrostatic protective, electrostatic and electromagnetic shielding) and H (water vaporproof, electrostatic protective, electrostatic shielding).

6.7.1.2 Remove excess air and heat seal closed.

6.8 REGULATED HAZARDOUS MATERIALS

6.8.1 Pack hazardous materials in accordance with Title 49 of the United States Code of Federal Regulations (49 CFR) for over-the-road transport in the United States and/or applicable governing body for mode of transport selected:

6.8.1.1 International Civil Aviation Organization (ICAO)

6.8.1.2 International Air Transport Association (IATA)(Section 10)

6.8.1.3 International Maritime Organization (IMO)(Volume 1, Annex 1, Section 8)

6.9 ITEMS WITH PRESERVATIVE COATINGS, OPEN PORTS OR CONTAINING LIQUIDS

6.9.1 Preservative Coatings

6.9.1.1 Use preservative coatings only when required/necessary.

6.9.1.2 Select preservative coatings based on requirements and ease of cleaning, when required.

6.9.1.3 Wrap or bag hardware coated in oil or greased-based preservative to prevent leaking using one of the following materials:

6.9.1.3.1.1 Water vaporproof, greaseproof bag: MIL-DTL-117, Class E

6.9.1.3.1.2 Waterproof, greaseproof bag: MIL-DTL-117, Class C

6.9.1.3.1.3 Water vaporproof, greaseproof barrier: MIL-PRF-131

6.9.1.3.1.4 Waterproof, greaseproof barrier: MIL-PRF-121

6.9.1.4 Cap, plug or cover all open ports to prevent leakage or contamination.

6.9.2 Items Containing Liquids

6.9.2.1 Package in a manner to prevent leakage inside the unit container.

6.9.2.2 Mark the exterior unit container with orientation labels.

6.10 PLASTIC ENCAPSULATED MICROCIRCUITS (PEMS) /MOISTURE SENSITIVE DEVICES (MSDs) OR PROCESS SENSITIVE COMPONENTS

6.10.1 Any devices/components classified as moisture sensitive per J-STD-020 or process sensitive per J-STD-075. Major categories are (but not limited to): J-leaded and gull-wing leaded devices such as Plastic Leaded Chip Carriers (PLCCs), Small Outline Integrated Circuits (SOICs), Plastic Quad Flat Packs (PQFPs), Ball Grid Arrays (BGAs), Bottom Termination Components (BTCs), QFNs (Quad Flat No-Leads), and Thin Small Outline Packages (TSOPs).

6.10.2 Packaging, handling and identification of the PEMs/MSDs and process sensitive components shall be in accordance with JOINT INDUSTRY STANDARD, IPC/JEDEC J-STD-033.

6.10.2.1 When tray packaging in lieu of Tape and Reel, cover each populated JEDEC tray with an empty JEDEC tray as a cover, allowing each populated JEDEC tray the ability to be separated and shipped individually with its own cover.

6.10.2.2 When tray packaging, secure trays using non-stretching bands, straps or JEDEC tray clips.

7.0 SHIPPING CONTAINER REQUIREMENTS

7.1 Shipping containers shall be in accordance with carrier rules and regulations, applicable to the mode of transportation.

7.2 Use the minimum sized shipping container to provide a snug fit for the hardware.

7.3 The shipping container shall be capable of enduring multiple handling cycles and storage periods of at least one year in an enclosed facility without damage to the hardware.

7.4 Assemble wood packaging material using materials certified compliant with the American Lumber Standards Committee (ALSC) Non-Manufactured Wood Packing (NMWP) regulations and International Plant Protection Convention (IPPC) standard requirements.

7.4.1 Fabricate shipping containers from damage free materials.

7.5 FIBERBOARD CONTAINERS

7.5.1 Fiberboard containers must meet National Motor Freight Traffic Association's National Motor Freight Classification (NMFC) Item 222 and the National Railroad Freight Committee's Uniform Freight classification (UFC) Rule 41 regarding weight and size limitations, at a minimum.

7.5.1.1 Fiberboard Shipping Boxes: ASTM D5118

7.5.1.2 Triple-Wall Corrugated Fiberboard Containers: ASTM D5168

7.5.2 Do not use staples for container closure.

7.6 WOOD CRATES

7.6.1 Meet wood crate requirements in the following specifications as applicable:

7.6.1.1 Wood-Cleated Panelboard Shipping Boxes: ASTM D6251 (Preferred design is ASTM D6251, Type III, Class 2, Style A or B)

7.6.1.2 Wood Boxes: ASTM D6880

7.6.1.3 Wood-Cleated with Skidded, Load-Bearing Bases: ASTM D6256

7.6.1.4 Wire bound Pallet Type Wood Boxes: ASTM D6254

7.6.1.5 Steel or Aluminum Slotted Angle Crates: ASTM D6255

7.6.1.6 Open and Covered Wood Crates: ASTM D6039

7.6.1.7 Heavy Duty Sheathed Wood Crates: ASTM D7478

7.6.1.8 Open Wood Crates; 12,000- and 16,000-Pound Capacity: MIL-C-3774

7.6.2 Weight and size limitations: See ASTM D3951, Table I or container specification

7.6.3 All wood crates shall include skid runners to facilitate lifting by pallet jack and forklift, unless being palletized.

8.0 UNIT LOAD AND PALLETIZATION REQUIREMENTS

8.1 Unit load requirements:

8.1.1 Assemble and/or restrain unit loads in a manner to eliminate the possibility of any free movement during handling and transport.

8.1.2 Secured unit loads shall be capable of being handled as one entity throughout the distribution cycle.

8.1.3 Unit loads of Class 1 explosives shall be limited to one part number.

8.2 Palletizing load requirements:

8.2.1 Use wooden, metal or plastic pallets for palletized loads. Pallets constructed from fiber products are permitted if they have been adequately tested and rated for the load and distribution system.

8.2.2 Pallets shall be in good working condition and show no signs of structural damage that could compromise the safety of the load or personnel.

8.2.3 A palletized unit load shall not exceed 60 inches total height or as negotiated between supplier and Raytheon.

8.2.3.1 The height requirement does not apply to items shipped as a single unit or in single bulk packaging.

8.2.4 Configure pallet loads with the heaviest items located on the bottom. Stack materials in a method that creates a centered, balanced, and square load. Minimize overhanging of containers.

8.2.5 Large, heavy or bulky boxes shall be palletized.

8.2.6 Pallets shall be sturdy, in good condition and provide for multiple uses/trips.

8.2.7 Use of slip sheets for palletized loads is encouraged to facilitate load distribution unless accounted for in the pallet design.

8.2.8 Do not exceed the following pallet maximums. If there is a compelling reason to exceed load and size maximums contact Raytheon Supplier Quality for review and approval of oversized pallets.

8.2.8.1 USA DESTINATIONS

8.2.8.1.1 Maximum pallet size: 48 inches x 48 inches (approximately 1200 mm x 1200 mm)

8.2.8.1.2 Maximum load: 1000 pounds gross palletized load

8.2.8.1.3 Maximum load height: 60 inches including pallet

8.2.8.2 EUROPEAN DESTINATIONS

8.2.8.2.1 Maximum Euro pallet size: 1000 mm x 1200 mm (approximately 40 inches x 48 inches)

8.2.8.2.2 Maximum load: 455 kilograms gross palletized load

8.2.8.2.3 Maximum load height: 1530 mm including pallet

8.2.9 Leaning and/or bulging loads are not acceptable. Secure pallet loads to the pallet using either half slotted container (HSC) shroud, stretch wrapping or strapping with corner boards (preferred).

8.2.10 All shipments shall be palletized, strapped and/or stretch wrapped except for those shipments received via small parcel carriers (i.e. UPS, RPS, etc.).

9.0 MARKING REQUIREMENTS

9.1 General Marking Requirements

9.1.1 Mark packaging materials with applicable compliance markings required for ease of recycling and disposal. Marking of packaging

materials must comply with appropriate country regulations governing the business practice (i.e. China-RoHS, EU REACH, etc.).

9.1.2 The supplier shall ensure marking compliance with all domestic and international laws and regulations.

9.1.3 Required markings shall be clear and visible. Ensure the marking will not be destroyed when the pack or container is opened for inspection or until its contents have been used.

9.1.4 Markings shall be in accordance with carrier rules and regulations.

9.1.5 See ASTM D 5445 Standard Practice for Pictorial Markings for Handling of Goods as reference for marking handling icons.

9.1.6 When over-packing hardware from various purchase orders into one container, mark the container with all purchase order numbers.

9.1.7 Mark hazardous or restricted items in accordance with applicable regulation:

9.1.7.1 Title 49 of the United States Code of Federal Regulations (49 CFR)

9.1.7.2 International Air Transport Association (IATA)ICAO

9.1.7.3 International Maritime Organization Dangerous Goods (IMDG)

9.1.7.4 International Civil Aviation Organization (ICAO)

9.1.8 All drop shipments to the **Department of Defense** shall be in accordance with **MIL-STD-129**.

9.1.9 Shipments within the Continental United States (CONUS) to Raytheon facilities shall be in accordance with ASTM D3951 except for Classified Items. Nomenclature shall not appear on the exterior container for Classified Items unless otherwise specified per MIL STD 129.

9.2 Labels

9.2.1 Pressure sensitive labels shall be durable and weather resistant. The label finish shall be suitable for printing and writing upon with

permanent ink without feathering or spreading and be capable of withstanding normal handling and storage conditions.

9.2.2 Labels that are not weather-resistant (i.e. paper), shall have clear, waterproof, pressure-sensitive tape placed over the entire outer surface of the label.

9.2.3 Apply labels to wooden containers using adhesive and staples.

9.3 Minimum Container Markings

9.3.1 Minimum container markings apply to the unit, intermediate and the exterior shipping container. See Table 1 for minimum marking requirements.

TABLE 1: MINIMUM CONTAINER MARKING REQUIREMENTS

Marking Element	Unit	Intermediate	Exterior
National Stock Number (omit this line if not applicable)	X	X	X
Part Number	X	X	X
Nomenclature (as applicable)	X	X	X
Quantity (QTY)	X	X	X
Serial Number (as applicable)	X	X	X
Manufacturer's CAGE code (as applicable)	X	X	X
Manufacture date month/year (as applicable)	X	X	X
Shelf-life marking (as applicable)	X	X	X
Dimensions			X
Weight (WT)			X
Cube			X
Supplier's company addresses			X
RTX company receiving addresses			X
RTX Purchse Order number(s)			X
Storage legends (as applicable)	X	X	X
Lot, batch, or identification control numbers (as applicable)	X	X	X
Precautionary handling (as applicable)			X
Container count (ie. box 1 of 3)			X
Shelf Life (as applicable)	X	X	X

9.3.2 Minimum container markings shall be IN ADDITION TO other required markings such as hazardous material markings.

9.3.3 Layout may vary, provided that all required information is on the label.

9.3.4 Weight (WT), and serial number(s) (S/N) may be handwritten in permanent ink or marker.

9.3.5 Temperature Sensitive Materials (as required)

9.3.5.1 Required when the hardware is susceptible to damage from temperature extremes due to the shipping or storage environment or when specified in the contract, purchase order or TDP.

9.3.5.2 Affix storage temperature warning labels to outside of exterior container adjacent to product nomenclature.

9.3.6 Place warning labels (i.e. “Do not Stack”, “Fragile”, “Heavy Lift”, etc.) on all exterior shipping containers as required.

9.3.7 Shelf-Life Marking (when required)

9.3.7.1 Required when specified in the contract, purchase order, TDP or Quality Note.

9.3.7.2 Apply shelf life marking as part of the item identification data to unit packs, intermediate containers, exterior containers and unpacked items.

9.3.7.3 Do not mix different shelf-life dates in the same unit container.

9.3.7.4 When consolidating two or more-unit packs of the same hardware within any intermediate or exterior containers that have different shelf life dates, mark the earliest date on the container.

10.0 PACKAGING DOCUMENTATION REQUIREMENTS

10.1 Include at least one packing list for each shipment. Apply the packing list to the outside of the lead container identified as “Packing List Enclosed”.

10.2 All packing lists must contain the information listed in Table 2

TABLE 2: REQUIRED PACKING LIST INFORMATION	
Packing List Artifact	**Notes**
Supplier Name	
Supplier Address	
Raytheon Part Number	Human readable and barcode preferred
Purchase Order Number	Human readable and barcode preferred
Quantity	
Serial Numbers for each serialized item	Human readable and barcode preferred. See Section 10.3
Name and address of receiving location	
Number of pieces shipped	
Description of material	As needed (see 9.1.9)
Shipping date	
Box number	I.E. Box 1 of 10

10.3 Bar-coded serial numbers may be printed on or affixed to the packing list or may be printed on a separate 'scan sheet' accompanying the box or packing list.

10.4 When using multiple scan sheets, identify as 'BOX x of x' or other appropriate distinction.

10.5 Hazardous Materials Documentation

10.5.1 Suppliers of hardware containing hazardous materials must provide classification documents. These may include, but not limited to, the following documents:

10.5.1.1 Competent Approval Authority

10.5.1.2 Department of Transportation Competent Authority Approval

10.5.1.3 Competent Approval Authority/Classification of Explosives

10.5.1.4 Classification of Explosives, EX-Letter/Final Hazard Classification (FHC)

10.5.1.5 Department of Defense issued Interim Hazard Classification (IHC) letter

10.5.1.6 Net Explosive Weight (NEW)

10.5.1.7 Department of Transportation Special Permit

10.5.1.8 Chemical Composition/Technical Name (only required for items with a Proper Shipping name containing “n.o.s.”)

10.5.1.9 MSDA as applicable

10.5.2 Provide Raytheon Packaging Engineering Department a copy of the United Nations Performance Oriented Packaging (POP) test report for supplier built/supplied containers required to ship a regulated hazardous material, when requested.

11.0 ACCOUNTABILITY

11.1 Failure to comply with the requirements specified herein may result in rejection and return of consignment(s) to the supplier at supplier’s expense.

11.2 When requesting exceptions to this document, specifically identify the paragraph number, a detailed explanation of the exception reason, and a description of the new proposed packaging scheme.

11.3 Raytheon Supplier Quality representative has sole authority to approve exceptions to this document.