Include the following in solicitations and contracts whenever specified on the AMSTA-AR Form 377, Preservation, Packaging and Packing Instructions.

52.211-4000 COMMERCIAL PACKAGING REQUIREMENTS OCT/2010

1. Packaging - Preservation, packaging, packing, unitization and marking furnished by the supplier shall provide protection for a minimum of one year, provide for multiple handling, redistribution and shipment by any mode and meet or exceed the following requirements.

1.1 Cleanliness - Items shall be free of dirt and other contaminants which would contribute to the deterioration of the item or which would require cleaning by the customer prior to use. Coatings and preservatives applied to the item for protection are not considered contaminants.

1.2 Preservation - Items susceptible to corrosion or deterioration shall be provided protection such as preservative coatings, volatile corrosion inhibitors, desiccants, water-proof and/or water-vapor-proof barriers.

1.3 Cushioning - Items requiring protection from physical and mechanical damage (e.g. fragile, sensitive, critical material) or which could cause physical damage to other items, shall be protected by wrapping, cushioning, pack compartmentalization, or other means to mitigate shock and vibration and prevent damage during handling and shipment.

2. Unit package

2.1 Unit Package - A unit package shall be so designed and constructed that it will contain the contents with no damage to the item(s), and with minimal damage to the unit pack during shipment and storage in the shipping container, and will allow subsequent handling. The outermost component of the unit package shall be a container such as a sealed bag, carton or box.

2.2 Unit Package Quantity - Unless otherwise specified, the unit package quantity shall be one each part, set, assembly, kit, etc.

3. Intermediate Package

3.1 Intermediate Packaging - The use of intermediate packaging is required whenever one or more of the following conditions exist:

a. The quantity is over one (1) gross of the same national stock number.

- b. Use enhances handling and inventorying.
- c. The exterior surface of the unit pack is a barrier bag.
- d. The unit pack is less than 64 cubic inches.
- e. The weight of the unit pack is less than five (5) pounds and no dimension is over twelve (12) inches.

Intermediate container shall be limited to a maximum of 100 unit packs, a net load of 40 pounds, or a maximum volume of 1.5 cubic feet, whichever occurs first.

4. Packing

4.1 Unit packages and intermediate packages not meeting the requirements for a shipping container shall be packed in shipping containers. All shipping containers shall be the most cost effective and shall be of the minimum cube to contain and protect the items.

4.2 Shipping Containers - The shipping container (including any necessary blocking, bracing, cushioning, or waterproofing) shall comply with the regulations of the carrier used and shall provide safe delivery to the destination at the lowest tariff cost. The shipping container shall be capable of multiple handling, stacking at least ten feet high, and storage under favorable conditions (such as enclosed facilities) for a minimum of one year.

5. Unitization: Shipments of identical items going to the same destination shall be palletized if they have a total cubic displacement of 50 cubic feet or more unless skids or other forklift handling features are included on the containers. Pallet loads must be stable, and to the greatest extent possible, provide a level top for ease of stacking. A palletized load shall be of a size to allow for placement of two loads high and wide in a conveyance. The weight capacity of the pallet must be adequate for the load. The preferred commercial expendable pallet is a 40 x 48 inch, 4-way entry pallet although variations may be permitted as dictated by the characteristics of the items being unitized. The load shall be contained in a manner that will permit safe handling during shipment and storage.

6. Marking

All unit packages, intermediate packs, exterior shipping containers, and, as applicable, unitized loads shall be marked in accordance with MIL-STD-129, Revision P, Change Notice 4, Date 19 September 2007 including bar coding. The contractor is responsible for application of special markings as discussed in the Military Standard regardless of whether specified in the contract or not. Special markings include, but are not limited to, shelf-life markings, structural markings, and transportation special handling markings. The marking of pilferable and sensitive materiel will not identify the nature of the materiel. NOTE: Passive RFID tagging is required in all contracts that contain DFARS clause 252.211-7006. Contractors must check the solicitation and/or contract for this clause. For details and most recent information, see http://www.acq.osd.mil/log/rfid/index.htm for the current DoD Suppliers' Passive RFID Information Guide and Supplier Implementation Plan. If the item has Unique Item Identifier (UII) markings then the UII needs to be 2D bar coded and applied on the unit package, intermediate and exterior containers, and the unit load.

7. Hazardous Materials

7.1 A hazardous material is defined as a substance which has been determined by the Department of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated. (This includes all items listed as hazardous in Title 49 CFR and other applicable modal regulations effective at the time of shipment.) Ammunition and explosives (Hazard Class 1) are special cases and must be properly hazard classified and registered with the competent authority of the United States (Department of Transportation).

7.2 Packaging and marking for hazardous material shall comply with the requirements for the mode of transport and the applicable performance packaging contained in the following documents:

a. International Air Transport: International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air

b. International Vessel Transport: International Maritime Dangerous Goods Code (IMDG)

c. Domestic Transport: Code of Federal Regulations (CFR) Title 49

d. Military Air Transport: Joint Service Regulation AFMAN24-204/TM38-250/NAVSUP PUB 505/MCO P4030.19/DLAM 4145.3.

7.3 If the shipment originates from outside the continental United States, the shipment shall be prepared in

accordance with the regulations of the Competent Authority of the nation of origin and in accordance with regulations of all applicable carriers.

7.4 A Product Material Safety Data Sheets (MSDS) is required to be included with every unit pack and intermediate container and shall be included with the packing list inside a waterproof sealed pouch attached to the outside of the package.

8. Wood Packaging Materials - Heat Treatment and Marking of Wood Packaging Materials: In accordance with the requirements of International Standards for Phytosanitary Measures (ISPM) 15, the following commercial heat treatment process has been approved by the American Lumber Standards Committee (ALSC) and is required for all Wood Packaging Material (WPM). WPM is defined as wood pallets, skids, load boards, pallet collars, wooden boxes, reels, dunnage, crates, frames, and cleats. Packaging materials exempt from the requirements are materials that have undergone a manufacturing process such as corrugated fiberboard, plywood, particleboard, veneer and oriented strand board. All WPM shall be constructed from Heat Treated (HT to 56 degrees Centigrade for 30 minutes) lumber and certified by an accredited agency recognized by the ALSC in accordance with Wood Packaging Material Policy and Wood Packaging Material Enforcement Regulations (see URL: http://www.alsc.org). All materials must include certification markings in accordance with ALSC standards and be placed in an unobstructed area that will be readily visible to inspectors. Pallet markings shall be applied to the stringer or block on diagonally opposite sides and ends of the pallet and be contrasting and clearly visible. All dunnage used in configuring and/or securing the load shall also comply with ISPM 15 and be marked with an ALSC approved DUNNAGE stamp. Failure to comply with the requirements of this restriction may result in refusal, destruction, or treatment of materials at the point of entry.

9. Quality Assurance -The contractor is responsible for establishing a quality system. Full consideration to examinations, inspections, and tests will be given to ensure the acceptability of the commercial package.