## C8.7. PACKAGING

## C8.7.1. Requirements. The DoD Components shall:

- C8.7.1.1. Preserve, package, and mark materiel for storage and movement in a way that provides adequate and quality protection, at the most economic cost, until ultimate consumption by the user.
- C8.7.1.2. Use commercial packaging when it is cost effective and will withstand anticipated logistics conditions.
- C8.7.1.3. Specify packaging requirements to prevent needless repackaging and/or upgrading of packaging.
- C8.7.1.4. Base packaging upon the nature of the item, known or anticipated logistics requirements, and economic or normal consumer order quantities.
- C8.7.1.5. Continuously improve DoD packaging specifications based on reviews of materiel order and issue quantities, cost of the item itself versus the cost to package, hazardous materiel packaging requirements, preservation and marking, storing and transporting the item, and its criticality to the end-user's weapons system or mission.
- C8.7.1.6. Incorporate environmental pollution prevention measures into packaging standards, specifications, and other instructions and processes. The design and selection of packaging materials shall include consideration of disposability, reuse, biodegradability (when it meets logistics needs), recycling, and conservation.
- C8.7.1.7. Develop where required, apply, issue, and document in accessible databases packaging requirements, in their assigned areas, for DoD-wide retrieval and application. Packaging requirements for items could be commercial standards or, if those are inadequate, military standards. Packaging requirements for reparable items shall provide protection against damage and deterioration in retrograde operations and should be easily retrieved for guidance in item repacking upon repair or upgrading.
- C8.7.1.8. Develop and apply uniform in-the-clear and machine-readable marking requirements per the latest version of MIL-STD-129, <sup>11</sup> to facilitate safe handling and efficient receipt, storage, and shipment of materiel.
- C8.7.1.9. Package and mark hazardous materials according to applicable Federal and international regulations.
- C8.7.1.10. Ensure that reusable containers are effectively used in applications where materiel is routinely returned for rebuilding or servicing.

- C8.7.2.1. The DoD Components shall package materiel to provide adequate and quality protection at a fair and reasonable cost and to ensure efficient and cost-effective handling. The DoD Components shall use packaging designed to accommodate unitized or containerized loading and handling when it results in overall economy. The DoD Components also shall encourage commercial suppliers to apply similarly stringent packaging by using contract terms or other appropriate means.
- C8.7.2.2. In developing the packaging and marking requirements for an item throughout its life cycle, the nature of the materiel, its reparability, the anticipated logistics environment (e.g., shipping, handling, transportation, length, and type of storage) it will encounter, and consideration of the consequences of the receipt of damaged materiel shall determine the type and extent of preservation, packaging and marking required.
- C8.7.2.3. The DoD Components shall use common definitions for the levels of protection used for materiel. Those levels are explained in Appendix 14.
- C8.7.2.4. The DoD Components shall accept commercial packaging when such packaging is cost-effective and the technical details of the package construction and test performance criteria, as noted in ASTM 3951, <sup>12</sup> show that the package will withstand the logistics conditions.

- C8.7.2.5. In the absence of specific contract requirements, commercial packaging shall provide protection and preservation for the safe delivery of the item to the shipping destination and for storage at destination in enclosed facilities. Extraordinary preservation requirements shall be contractually specified, in advance of each contract award. Safe delivery shall be deemed to mean no damage to the contents of the package. Damage to the packaging is permissible if the integrity of the package remains sufficient to permit reasonable handling and storage at destination.
- C8.7.2.6. MIL-STD-2073-1 (latest version<sup>13</sup>) is to be required only when adequate, cost-effective commercial packaging for procured items is not available.
- C8.7.2.7. In lieu of commercial packaging, a contractor may provide military levels of protection given in MIL-STD-2073-1 at the contractor's option, but at no additional cost to the Government.
- C8.7.2.8. Commercial items procured according to Part 12 of the FAR (reference (be)) and as defined by 44 U.S.C. 403 (reference (bf)) shall be purchased utilizing commercial and performance-based packaging methods commonly used by commercial activities. Military packaging requirements shall only be specified for those items when available commercial methods cannot satisfy the known environment and logistical conditions the item will encounter during its life cycle.
  - C8.7.2.9. Packaging specifications, standards, and operations shall comply with all safety

See URL http://www.dscc.dla.mil/offices/packaging/specstdslist.html.

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requirements specified in DoD Instruction 6055.1 (reference (bg)) and 49 CFR 173 (reference (bh)).

- C8.7.2.10. The DoD Components shall incorporate environmental pollution prevention measures, consistent with DoD Directive 4715.1, DoD Instruction 4715.6, and Sections 1901 through 1915 of U.S.C. 33 (references (bi) through (bk)), into packaging standards, specifications, and other instructions and processes. The selection of packaging materials shall include consideration of disposability, reuse, degradability (when it meets logistics needs), recycling, and conservation.
  - $^{13} See\ URL\ http://www.dscc.dla.mil/offices/packaging/specstdslist.html.$
- C8.7.2.11. The DoD Components shall reuse packaging, materials, and containers to the maximum extent practical. DoD activities shall ensure reuse by establishing DoD Component procedures for container and material reclamation. The DoD Components shall also consider reduced packaging and the use of non-plastic packaging.
- C8.7.2.12. The DoD Components shall, by means of the Defense Packaging Policy Group (see Appendix 15), coordinate and establish major efforts to improve packaging policies, procedures, engineering, and training to facilitate standardization and prevent duplication.
- C8.7.2.13. When procuring items, the DoD Components shall specify items' packaging and marking requirements in acquisition documents to prevent needless repackaging and upgrading of packaging at the receiving activity. The DoD procuring activities shall ensure that the specified packaging and marking requirements are cost effective and adequately protect the item according to subparagraph C8.7.2.2., above.
- C8.7.2.14. Upon completion of the repair at a DoD maintenance facility, repaired items shall be packaged and marked according to paragraph C8.7.2.2., above. To facilitate proper packaging and marking at commercial repair activities, the DoD Components shall specify item packaging and marking requirements in repair contracts.
- C8.7.2.15. The DoD Components shall determine the quantity for each unit package for all materiel based upon the nature of the item, known logistics requirements, and normal usage factors. Commercial distribution or over-the-counter retail package quantities shall only be used when they are cost-effective and satisfy military distribution requirements.
- C8.7.2.16. The DoD Components shall use electronic communication to transmit and make their packaging data requirements readily available to authorized users.

C8.7.2.17. To promote packaging and marking uniformity between the Department of Defense and industry, the DoD Components shall circulate proposed packaging and marking specifications and standards for comment to a representative cross-section of the affected segments of industry. Those include industrial associations -- National standardization organizations -- and producer, manufacturer, and user societies. The DoD Components shall consider recommendations

Joint issuance AR 735-11-2/SECNAVINST 4355.18A/AFJMAN 23-215/DLAI 4140.55, "Reporting of Supply Discrepancies," August 6, 2001, can be found at website http://www.dlaps.hq.dla.mil/dlai/i4140.55.htm.

for using readily available materials and processes when they satisfy the needs of the Department of Defense.

- C8.7.2.18. The DoD Components shall record and report shipments received with packaging inadequacies and discrepancies, according to the provisions outlined in AR 735-11-2/SECNAVINST 4355.18A/AFJMAN 23-215/DLAI 4140.55.
- C8.7.2.19. The DoD Components shall develop and maintain packaging standards, specifications, and similar documents, according to DoD 4120.24-M (reference (j)). Reference (j) establishes a 5-year review and validation period for military standardization documents. Under that program, packaging specification reviews shall concentrate on validating materiel cost-effectiveness, identifying and eliminating redundancies in packaging specifications, and incorporating changes that have occurred in the state-of-the-art of packaging.
- C8.7.2.20. Each DoD Component shall develop procedures to measure and document packaging savings and cost-avoidance actions.
- C8.7.2.21. The Defense Packaging Policy Group (see Charter at Appendix 15) is responsible for recommending revisions to the packaging guidance in this Regulation to the DUSD(L&MR).
- C8.7.2.22. The Heads of the DoD Components shall comply with that guidance. The DoD Components may supplement the packaging guidance in this Regulation to address unique situations, but shall not issue separate guidance on the subject. The DoD Components shall request clarification and/or changes through the DUSD(L&MR).