

Department of the Army  
Pamphlet 700-32

Logistics

# Packaging of Army Materiel

Headquarters  
Department of the Army  
Washington, DC  
15 January 2008

**UNCLASSIFIED**

# ***SUMMARY of CHANGE***

DA PAM 700-32

Packaging of Army Materiel

This major revision, dated 15 January 2008--

- o Deletes the excessive packaging section (paras 2-12, 2-13, 2-14, and 2-15).
- o Deletes local packaging training reference (para 4-2).
- o Adds levels of protection (para 5-2).
- o Adds documentation and marking requirements (para 5-3).
- o Adds single stock fund (para 5-11).
- o Deletes information on commercial small-parcel carriers (para 7-6).
- o Deletes information on small-parcel shrink film system (para 7-8)
- o Deletes information on guided missile and large rocket systems (paras 8-5, 8-7, 8-8, 8-9, 8-10, 8-11, and 8-12).
- o Deletes section on conventional, chemical, and nuclear ammunition and explosives (paras 8-12, 8-13, 8-14, 8-15, 8-16, and 8-17).
- o Revises requirements for preparing vehicles and aircraft for shipment and storage (chap 9).

## Logistics

### Packaging of Army Materiel

---

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.  
*General, United States Army*  
*Chief of Staff*

Official:

  
JOYCE E. MORROW  
*Administrative Assistant to the*  
*Secretary of the Army*

**History.** This publication is a major revision.

**Summary.** This publication defines the procedures and requirements of Army unique packaging. It implements AR 700–15/NAVSUPINST 4030.28E/AFJMAN 24–206/MCO 4030.33E/DLAR 4145.7, and DODD 4140.1.

**Applicability.** This pamphlet applies to

the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated. It also applies to all personnel who perform packaging operations for the Army.

**Proponent and exception authority.**

The proponent of this pamphlet is the Deputy Chief of Staff, G–4. The proponent has the authority to approve exceptions or waivers to this pamphlet that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this pamphlet by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters

to the policy proponent. Refer to AR 25–30 for specific guidance.

**Suggested improvements.** Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff, G–4, ATTN: DALO–SUS, 500 Army Pentagon, Washington, DC 20310–1546.

**Distribution.** Distribution of this publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

---

**Contents** (Listed by paragraph and page number)

**Chapter 1**

**General, page 1**

Purpose • 1–1, page 1

References • 1–2, page 1

Explanation of abbreviations and terms • 1–3, page 1

Functions • 1–4, page 1

**Chapter 2**

**Preparation, Application, Control, and Evaluation of Packaging Requirements, page 3**

*Section 1*

*Preparation, page 3*

Developing requirements • 2–1, page 3

Prescribing requirements • 2–2, page 3

Coordinating requirements • 2–3, page 4

Determining availability of packaging documentation • 2–4, page 4

---

\*This pamphlet supersedes DA Pamphlet 700–32, dated 6 May 2003.

## **Contents—Continued**

### *Section II*

*Control and Evaluation, page 4*

Control of repackaging • 2-5, *page 4*

Control of packaging requirements in shipment and storage applications • 2-6, *page 4*

Analysis of packaging requirements and applications • 2-7, *page 5*

Evaluation of suggestions • 2-8, *page 5*

### *Section III*

*Packaging Data Files, page 6*

Packaging data files • 2-9, *page 6*

Development of packaging data by Army installations and activities other than Army Materiel Command, major subordinate commands, and life-cycle management commands • 2-10, *page 6*

## **Chapter 3**

**Design and Performance Criteria for Preservation and Packing Levels, Prescription, and Application,**  
*page 6*

Criteria for developing preservation and packing requirements • 3-1, *page 6*

Commercial packaging • 3-2, *page 7*

## **Chapter 4**

**Training,** *page 7*

General • 4-1, *page 7*

The School of Military Packaging Technology • 4-2, *page 7*

## **Chapter 5**

**Application of Packaging Requirements for Shipment and Storage,** *page 8*

General • 5-1, *page 8*

Levels of protection • 5-2, *page 8*

Documentation and marking requirements • 5-3, *page 8*

Distinctive markings • 5-4, *page 8*

Unitization • 5-5, *page 8*

Palletization • 5-6, *page 9*

Consolidation • 5-7, *page 10*

Preparing Army prepositioned stock for storage • 5-8, *page 11*

Single stock fund and national maintenance items • 5-9, *page 11*

Protecting retrograde materiel • 5-10, *page 12*

Excess materiel • 5-11, *page 12*

## **Chapter 6**

**Preparing Materiel for Air Shipment,** *page 12*

General • 6-1, *page 12*

Preparing shipment • 6-2, *page 12*

Unit protection • 6-3, *page 13*

## **Chapter 7**

**Small-Parcel Shipments,** *page 13*

Preservation and packing • 7-1, *page 13*

Consolidation of parcel post shipments to the same consignee • 7-2, *page 13*

Exterior containers • 7-3, *page 13*

Registered and numbered insured parcel post • 7-4, *page 13*

Required mail classification markings • 7-5, *page 13*

Fast-pack containers • 7-6, *page 14*

## **Contents—Continued**

### **Chapter 8**

#### **Packaging of Guided Missile and Large Rocket Systems, Ammunition, Explosives, and Other Hazardous Materials, *page 14***

Introduction • 8-1, *page 14*

Preparing and documenting • 8-2, *page 14*

Preservation • 8-3, *page 14*

Marking • 8-4, *page 14*

Safety and security measures • 8-5, *page 14*

### **Chapter 9**

#### **Preparing Vehicles and Aircraft for Shipment and Storage, *page 15***

Preparing vehicles for shipment • 9-1, *page 15*

Preparing vehicles for overseas shipment • 9-2, *page 15*

Preparing vehicles for shipment to continental United States requisitioners • 9-3, *page 16*

Preparing aircraft for shipment and storage • 9-4, *page 16*

### **Chapter 10**

#### **Special Shipments, *page 17***

General • 10-1, *page 17*

Electrostatic discharge sensitive items • 10-2, *page 17*

Security of sensitive items • 10-3, *page 17*

Direct vendor delivery shipments • 10-4, *page 17*

Security assistance and foreign military sales • 10-5, *page 17*

Army prepositioned stock shipments and shipments in support of deployments • 10-6, *page 17*

Phytosanitary measures for wood packaging material transiting international borders • 10-7, *page 17*

### **Chapter 11**

#### **Army Packaging Policy Work Group, *page 18***

Army Packaging Policy Work Group objectives • 11-1, *page 18*

Army Packaging Policy Work Group functions • 11-2, *page 18*

Functions • 11-3, *page 19*

Procedures • 11-4, *page 19*

Army packaging awards • 11-5, *page 20*

#### **Appendix A. References, *page 21***

### **Glossary**



## Chapter 1 General

### 1-1. Purpose

- a.* This publication provides uniform guidelines for packaging within the U.S. Army. It covers—
- (1) Packaging of Army-used and Army-managed materiel that is stocked, stored, and shipped.
  - (2) Development and application of packaging requirements.
  - (3) Selection of the appropriate levels of protection.
  - (4) Evaluation of packaging methods and selection of materials.
  - (5) Packaging performed at Army and contracted activities.
  - (6) Packaging educational programs.
  - (7) Application of specialized packaging requirements.
  - (8) Setup and maintenance of logistics management information (LMI) for item distribution and packaging.
  - (9) Coordination of Army packaging policy.
- b.* Packaging for the Army shall conform to this publication, DODD 4140.1, AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7, and Military Standard 2073-1 (MIL-STD-2073-1) regardless of where performed. Materiel offered for storage and shipment shall be adequately protected; be consolidated for effective handling; be safe for transport; and be properly marked and identified per MIL-STD-129.

### 1-2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

### 1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this pamphlet are explained in the glossary.

### 1-4. Functions

- a.* The Deputy Chief of Staff, G-4—
- (1) Provides oversight of the Army packaging program.
  - (2) Provides logistics policy guidance and doctrine.
  - (3) Provides interagency coordination on packaging issues.
- b.* The Commander, U.S. Army Materiel Command (AMC) —
- (1) Provides technical support to Headquarters (HQ), Department of the Army (DA), Army Commands (ACOMs), Army Service Component Commands (ASCCs), and Direct Reporting Units (DRUs) on packaging policy issues.
  - (2) Defines data format and content of LMI and packaging data for contracted materiel acquisition programs, for transfer into Army data repositories, and for transfer into Department of Defense (DOD) data repositories (see AR 708-1 and DA Pamphlet (DA Pam) 708-2).
- c.* The Commanders of ACOMs, ASCCs, and DRUs—
- (1) Provide oversight to installation management to all Army installations, except chemical sites and Government owned, contractor-operated (GOCO) facilities.
  - (2) Ensure all Army installations appoint and maintain a primary installation packaging activity competent in packaging knowledge, skills, and abilities and able to perform all packaging operations in support of Army single stock fund (SSF) materiel.
  - (3) Budget for all required packaging training needs in their installations.
- d.* The Commanders of AMC life-cycle management commands (LCMCs)—
- (1) Ensure that the development, documentation, and maintenance of packaging requirements occurs, through coordination with program managers and managers for research development and engineering (RDE).
  - (2) Ensure that the appropriate packaging is acquired, through coordination with acquisition and contracting managers.
  - (3) Ensure supportability planning addresses packaging as an element of logistics.
- e.* Program executive officers, program managers, managers of RDE programs and other materiel developers manage and provide funding resources for development and maintenance of packaging requirements. Each materiel acquisition and development program—
- (1) Provides for development and maintenance of LMI and packaging data; as part of these efforts, address associated packaging data rights issues; and arranges for packaging development support from their associated logistics center or functional area experts, to include receipt and approval of certain contract deliverable LMI and packaging data.
  - (2) Ensures agreements for packaging development support include understandings concerning the funding, update, transfer, and use of packaging data. (Because a materiel developer must normally provide for development of

packaging data on new items prior to assignment of a source of supply (SOS), potential gaining commands, including affected defense acquisition and defense storage activities, must agree on update, transfer, and use of packaging data.)

(3) Provides for application of packaging through coordination with managers of maintenance and supply logistics and coordination with industrial enterprise activities, including resources to protect returned items from further deterioration in storage prior to repair, and resources to repackage after repair, as part of maintenance work requests to depots and troop installations. (An item should not be authorized for return and repair without a memorandum of understanding and/or funded maintenance work request.)

(4) Provides for acquisition of appropriate packaging through coordination with managers of acquisition contracting including resources to protect and repackage items. (Repackaging an item from a supply contract, which is accepted at receiving or accepted at source but found to have damaged packaging at receiving, shall not be approved unless endorsed by the responsible contracting officer.)

(5) Provides storage activities with advance notice of any deliveries that should require packaging upgrades.

*f.* Commanders of activities responsible for life-cycle support—

(1) Provide requirements for format and content of LMI and packaging data to materiel acquisition programs.

(2) Ensure support to materiel acquisition programs for design, development, applicable testing, and documentation of packaging.

(3) Support updates to packaging data for item engineering and logistic changes. Maintain configuration control of packaging data.

(4) Provide for entry of specified LMI and packaging data in the prescribed format to data repositories.

(5) Provide applicable packaging requirements received from acquisition programs in all spare and repair part acquisition and supply transactions for supported items/commodities.

(6) Procure packaging data at the time of acquisition of new system components through contract data requirements, where current LMI for packaging is not available from materiel development programs.

(7) Provide in-the-clear data in addition to LMI data for applicable items.

(8) Provide resources and funding to designated activities for necessary packaging support including upgrades and care of supplies in storage (COSIS) as required for stock readiness (SR) (see AR 740–3).

(9) Provide resources and funding for projects involving effort for packaging and give storage activities advance notice of any deliveries that shall require packaging upgrades.

(10) Stay apprised of new methods and materials.

(11) Comply with all national and international environmental laws and regulations.

(12) Consider the environmental effect of disposal of a packaging material before specifying its use.

(13) Consider materials that can be reused or recycled.

*g.* Commanders of shipping and storage activities—

(1) Apply the specified levels of pack when packaging materiel (see MIL–STD–2073–1).

(2) Follow the applicable packaging requirements (for example, drawings, packaging management data, instructions, specifications, standards, and so on).

(3) Use the prescribed practices and materials to consolidate and unitize shipments.

(4) Inspect materiel upon receipt, in storage, and at time of shipment. Report any packaging or shipping discrepancies, including materiel returns, attributable to the shipper (including contractors/manufacturers or vendors). Use Standard Form (SF) 364 (Report of Discrepancy (ROD)), DD Form 1225 (Storage Quality Control), or the Army Electronic Product Support (AEPS) Web site (<http://aeprs.ria.army.mil>) and include all pertinent information per AR 735–11–2. Use DD Form 361 (Transportation Discrepancy Report (TDR)) for transportation discrepancy reports per DOD 4500.9–R, Parts I–IV. Use SF 368 (Product Quality Deficiency Report) per DA Pamphlet (DA PAM) 738–751 and DA PAM 750–8 for quality discrepancies.

(5) Correct reported deficiencies and take action to prevent future discrepancies.

(6) Maintain current data files.

(7) Consult Army/Federal Logistics (FED LOG) for latest data.

(8) Consult major subordinate command (MSC) packaging points of contact if data are not available.

(9) Keep all published requirements and references readily available to packaging personnel.

(10) Assess, budget, staff, and provide any training needed at the operational level.

(11) Per AR 740–3, ensure COSIS is performed on stock and it is rotated (on a first-in/first-out basis) and shipped. Stock shall be packaged in accordance with military requirements identified in FED LOG Army Master Data File (AMDF) unless otherwise identified by the requesting command.

*h.* The Adjutant Generals, Army National Guard, ensure funding for packaging training and operations is provided for each State/Territory.

## Chapter 2 Preparation, Application, Control, and Evaluation of Packaging Requirements

### Section I Preparation

#### 2-1. Developing requirements

Packaging requirements shall conform to DODD 4140.1, AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7, MIL-STD-2073-1, and this pamphlet, and—

- a. Specify commercial packaging when the item is not entering the Military Distribution System and when the packaging meets the needs of the Army.
- b. Require packaging-related LMI and packaging data sufficient for supportability for items uniquely developed for the Army and commercial/nondevelopment items used by the Army, including procurement support, shipment planning, and distribution of the item. Information is not required for emplacements, facilities, fixed items, and items not distributed for military use. Materials and cited packaging methods shall comply with DOD standard practice. Expendable and recoverable item packaging shall preserve and protect to military level and shall provide for commercial distribution and any necessary field handling.
- c. Be described in appropriate detail with explicit terms to assure that packaging can normally be obtained from multiple sources.
- d. Limit the number of methods and designs to simplify buying and stocking materials but allow for an appropriately wide selection of material types, classes, grades, styles, and sizes to preserve flexibility.
- e. Strive for minimum weight and cube that provides required protection.

#### 2-2. Prescribing requirements

a. *Logistics management information for distribution and packaging.* Preparing activities and product support providers refer to appropriate data item descriptions and MIL-STD-2073-1 when determining packaging requirements.

(1) The concept of "packaging design for the item" shall be used. Item characteristics, including size, weight, fragility, and related data, shall be identified to ensure item integrity in the packaged configuration.

(2) The concept of "minimum weight and cube" shall be used. Protect items within the minimum weight and cube consistent with efficient distribution. When developing packaging, include requirements and levels of packing sufficient for the intended distribution. Clearly state when packing and unitization requirements for a lower level are the same as for a higher level. A reference of "NA" indicates that a requirement is not applicable.

b. *DD Form 2169 (Special Packaging Instructions).* When DD Form 2169 and DD Form 2169C (Special Packaging Instruction (Continuation Sheet)) are used, the first position of the SPI number must be an "A" for Army. The second position of the SPI number must equal the first position of the Army materiel category (MATCAT) code listed in the AMDF/management section of FED LOG. See AR 710-1, table 5-1, for a description of the MATCAT codes. The remaining eight positions may be alphanumeric and are provided by the approving activity.

c. *Standard-sized modular units, intermediate, and exterior packs.* These shall be compatible with established pallet, containerization, and air cargo transport system sizes that are approved by the International Organization for Standardization and the American National Standards Institute.

d. *Other actions to be taken by AMC MSCs or LCMCs.* These actions include—

- (1) Maintaining an electronic copy of each prepared SPI. The AMC MSCs, LCMCs, and RDE Centers maintain an electronic copy of each prepared SPI in Adobe PDF file format.
- (2) Maintaining configuration control of packaging data.
- (3) Electronically sending SPIs to the gaining command upon transfer of an item.
- (4) Ensuring contracts contain packaging and marking requirements.

e. *Specifications and standards.*

(1) Packaging prescriptions in Federal and military specifications and standards shall conform to the format prescribed in MIL-STD-961 and MIL-STD-962.

(2) Preservation and packing requirements for a group or category of items may be prescribed in a specification.

(3) Commodity specifications should not repeat requirements found in separate specifications, standards, or SPIs. Instead, the following shall be referenced: "See MIL-STD 2073-1 and the packaging and delivery requirements of the contract or order delivery."

(4) Special packing instructions or packaging requirement codes shall be developed when detailed requirements are not included in a specification.

(5) Citing a general-type packaging reference in the AMDF is acceptable only when providing interim item coverage.

f. *Packaging requirements in technical publications (technical bulletins and technical manuals).* These must conform to the guidance prescribed in AR 25-30 and AR 25-51. Packaging requirements to be included shall—

- (1) Conform to published requirements for like items, when possible.
- (2) Be maintained in a current state to conform to latest standardization documents.
- (3) Be subsequently reviewed when changes are made to the original document.

### **2-3. Coordinating requirements**

Army activities that prepare and coordinate military specifications (MIL-STD-961), standardization documents (MIL-STD-962), military handbooks (MIL-STD-967), and commercial item descriptions/Federal specifications and standards (Federal Standardization Manual) and technical publications that contain packaging requirements, in detail or by reference, shall submit draft copies to the Chief, LOGSA PSCC, ATTN: AMXLS-AT, 11 Hap Arnold Boulevard, Tobyhanna, PA 18466-5097, for review and comments. SPIs and coded packaging data listings are excluded.

*a. Standardization documents include—*

- (1) Documents relevant to the PACK area (to include all “packaging of” documents).
- (2) Documents having packaging requirements applying to Army-managed or Army-used items. (Army preparing activities and document custodians shall ensure that Army policy is included in commodity specifications.)
- (3) Industry standards dealing with packaging machinery, methods, materials, procedures, or packaging operations.
- (4) Documents for packaging related items and materials (for example, Military Handbook 774A (MIL-HDBK-774A) and Military Performance Standard 131 (MIL-PRF-131)).

*b. Publications dealing with installation, operation, maintenance, and repair parts in support of Army materiel are excluded.*

### **2-4. Determining availability of packaging documentation**

The FED LOG AMDF is used to find current packaging requirements. If requirements cannot be found in the FED LOG AMDF, contact the appropriate activity.

## **Section II**

### **Control and Evaluation**

### **2-5. Control of repackaging**

The DOD SR Program was developed to ensure that all DOD materiel is properly identified, classified, packaged, and stored. The SR Program guidance is in accordance with AR 740-3. Packaging discrepancies must be documented on SF 364 or DD Form 1225 (Storage Quality Control Report) for reimbursement.

*a. Shipment.* Materiel is repackaged if deterioration or damage has occurred to the packaging.

- (1) Complete or partial repackaging shall conform to the national stock number (NSN) packaging requirements (SPI) or the original method of preservation and scope of work.
- (2) Any remarking required must conform to MIL-STD-129 and this pamphlet.

*b. Storage.* Materiel coming out of maintenance or storage intended for shipment is packaged and marked in accordance with the level identified on the materiel release order or the issue release/receipt document.

- (1) Packaging materials, specified for an item, shall not be removed to save storage space.
- (2) Items shall be stored in their original unit pack.

### **2-6. Control of packaging requirements in shipment and storage applications**

*a. Request to change packaging.* Activities responsible for the item packaging requirements receive, evaluate, and approve requests for waivers from specified packaging.

*b. Coordination for general cargo.*

- (1) Proposed waivers affecting packaging are coordinated with the activity responsible for the item.
- (2) Requests for waivers are transmitted by phone, message, or letter, depending on urgency. Approved waivers shall be documented through an engineering change process and configuration controlled.

*(a)* The responsible packaging activity reviews item packaging requirements, ownership purpose, historical packaging and distribution data for the item and provides a response. If approved, the requesting activity has permission to proceed with the waiver. Approved waivers shall be signed off by the responsible item configuration manager.

*(b)* When waivers are required and the responsible activity cannot be contacted, the waiver may be approved locally if urgency dictates. The waiver is recorded and sent to the activity responsible for the item. The activity responsible for the item evaluates the waiver after the fact and contacts the installation regarding their decision.

*c. Coordination for hazardous material.*

- (1) No waiver for hazardous material (HAZMAT) shipments are approved locally.
- (2) Requests for Department of Transportation (DOT) special permits (formerly Exemptions), DOT Certificate of Equivalency and Competent Authority Approvals, or packaging waivers must be submitted to the Army Service Focal Point for HAZMAT: U.S. Army Materiel Command Logistics Support Activity (LOGSA) Packaging, Storage, and

Containerization Center (PSCC) ATTN: AMXLS-AT 11 Hap Arnold Blvd Tobyhanna, PA, 18466-5097, or by e-mail to toby.pt@us.army.mil.

*d. Notice of packaging waiver in shipments.*

(1) Waivers, special permits, DOT Certificates of Equivalency or Competent Authority Approvals from packaging requirements and accepted nonconforming materiel from contractors shall have a description of the waiver and the approving authority, date, and number noted in the acquisition receipt document or in the contract or modifications.

(2) A description of each waiver and the approving authority, including number and date of approval, shall be written on DD Form 1348-1A (Issue Release/Receipt Document).

(3) Waivers in preparing (preserving) unboxed or uncrated vehicles and equipment shall be shown on two copies of DA Form 2258 (Depreservation Guide for Vehicles and Equipment). Notations shall describe waivers involved. The approving authority, date, and number are also shown on the form.

## **2-7. Analysis of packaging requirements and applications**

*a. Objective.* Packaging analysis is used to find improved requirements where inadequate, excessive, or nonuniform requirements are apparent. Packaging analysis shall be applied when inadequate methods, materials, or designs are suspected in a packaging requirement.

(1) Value engineering (VE) principles are used in analyzing packaging design and performance. Standardizing packaging material, reducing footprint, and reducing cost are also considered.

(2) Packaging analysis complements the Supply Discrepancy Report (SDR) Program and does not lessen the need for reporting packaging deficiencies. Packaging analysis shall be focused on items likely to result in cost saving and supply efficiency.

*b. Participation in the analysis program.*

(1) Army shipping and storage activities—

(a) Provide requests for packaging analysis to appropriate activities, with NSNs and nomenclatures of Army-owned items that need packaging improvements or VE.

(b) Give the AMC MSC the basis for the recommended analysis.

(c) For other than Army-owned items, LOGSA PSCC is contacted, which in turn contacts the owner service for guidance.

(2) Activities execute the program by—

(a) Maintaining a record of analyses performed and acknowledging requests upon receipt.

(b) Analyzing packaging requirements based on SDRs, packaging document reviews, and documented field observations.

(c) Coordinating with the other packaging activities to determine the standards and supply status of the item.

(d) Analyzing the current packaging for adequacy, and coordinating the development of alternate packaging.

(e) Advising requesting activities of the action taken or planned.

(f) Providing for distribution of changes in packaging and ensuring that revised packaging requirements are reflected in the applicable documents.

## **2-8. Evaluation of suggestions**

*a. Submission to LOGSA PSCC.* A suggestion dealing with packaging, storage, transportation, or HAZMAT materials is sent to LOGSA PSCC (logsapt@logsa.army.mil) for evaluation when—

(1) The suggestion has been locally adopted and is deemed to have a broader than local application.

(2) The subject of the suggestion does not pertain to any local activity, though it is considered useful to other activities.

(3) The suggestion is recommended for adoption, but approval is not within the authority of the office making the evaluation because of commodity or functional level.

*b. Participation by AMC MSCs, LCMCs, installations, and activities.* Each AMC, LCMC, MSC, installation, and activity—

(1) Provides a supporting evaluation per AR 672-20.

(2) Provides LOGSA PSCC an estimate of tangible and intangible benefits to be derived, if adopted.

(3) Provides comments and recommendations to LOGSA PSCC on suggestions initiated elsewhere, when requested.

(4) Evaluates suggestions received from LOGSA PSCC covering single stock numbered items or single commodities. Replies directly to the activity requesting evaluation with an information copy to LOGSA PSCC.

*c. The LOGSA PSCC.* This center—

(1) Receives and evaluates suggestions based on data on hand or obtained through DOD-wide coordination.

(2) Forwards suggestions covering a single stock numbered item or single commodity to the applicable MSC or LCMC for evaluation and direct reply to the activity requesting evaluation.

## **Section III Packaging Data Files**

### **2-9. Packaging data files**

*a. Packaging data file content.* The authoritative packaging data file available for use in retrieving individual item packaging requirements for storage and shipment is the Federal Logistics Information System (FLIS) FED LOG AMDF packaging file. The Army FED LOG product contains packaging data elements extracted from the packaging segment of AMDF. Packaging requirements are developed from two major sources. Development may be external where weapon system developers provide packaging instructions or specifications to the cognizant MSC or LCMC, who reviews and approves. Otherwise, the cognizant MSC or LCMC develops the packaging requirements internally. LOGSA is the Army activity responsible for procuring, establishing, collecting, compiling, and issuing nonquantitative logistics management data, which include the AMDF worldwide, per AR 708-1.

*b. Use of packaging data files.*

(1) The AMDF packaging file contains packaging requirements and logistical information that shall be used to determine packaging material requirements and the packaging procedures for a given NSN.

(2) The packaging segment of AMDF is used to transmit packaging data by computer record to FEDLOG.

(3) The FLIS data segment of the AMDF for individual items occasionally contains packaging data elements. If packaging data for an item cannot be found in the Army AMDF packaging data files, check the FLIS data files for item packaging data. If item packaging data requirements can be found in the Army AMDF packaging data files and the FLIS data files, then the Army AMDF packaging data files take precedent over the FLIS data files. Item packaging data in the FLIS is a new data process and it has not been determined where the approved and authorized packaging data will be maintained for users, in the FLIS or the Army AMDF.

### **2-10. Development of packaging data by Army installations and activities other than Army Materiel Command, major subordinate commands, and life-cycle management commands**

*a.* Army installations that perform the actual packaging of items are authorized to develop packaging data for an item only when the data are not available in FED LOG or from any other source, and urgency dictates that the appropriate AMC MSC or LCMC cannot be contacted. The AMC MSC or LCMC shall be informed of this action the next business day and a detailed description shall be provided. A record shall be kept at the installation and the AMC MSC or LCMC in the event that the packaging is questioned. For Army-managed items, the SOS code shall be used as the basis for determining the AMC MSC or LCMC to contact. For non-Army-managed items, weapon system/end item identification shall be used as a basis for determining the AMC MSC or LCMC to contact.

*b.* When weight and dimension data for a given item are not available in automated data systems, the data are developed locally (except for items having acquisition advice codes L, N, T, V, W, and Y). The data are then submitted to the appropriate AMC MSC or LCMC for review. This managing activity reviews weight and dimension data and determines its validity. Data accepted for use are entered into an AMC MSC or LCMC automated packaging data system with subsequent migration of the data to the packaging segment of AMDF.

## **Chapter 3 Design and Performance Criteria for Preservation and Packing Levels, Prescription, and Application**

### **3-1. Criteria for developing preservation and packing requirements**

Development of preservation and packing requirements shall conform to the criteria specified in AR 700-15/NAV-SUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7 (chap 3) and herein. Item preservation and levels of packing are developed from the standard practice specified in MIL-STD-2073-1. Good packaging practices result from testing of designs and materials and from evaluation of records (history) indicating adequate protection. The LMI for distribution and packaging data is required at the time the new item is provisioned for store, stock, and issue within DOD. No item may be procured or presented for transport or distribution within the military supply distribution system without LMI for distribution and documented packaging data.

*a.* The packaging design shall be obtained from the prime contractor, and the data shall be approved and maintained by the responsible AMC MSC or LCMC.

*b.* A Government facility is used to develop LMI for distribution and packaging data when—

(1) The commander approves a request;

(2) It is determined to be cost effective and the facility has the personnel and equipment to design, fabricate, and test the package; and

(3) The commercial sources cannot provide the services within a required timeframe.

### **3-2. Commercial packaging**

*a.* When items are not entering the Military Distribution System, commercial packaging is authorized in accordance with AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7, paragraph 2-1, and MIL-STD-2073-1, paragraph 1.2.2.

*b.* Commercial packaging must meet the requirements of American Standards of Test Measurement 3951 (ASTM-D3951) or the specific industry packaging standard for the commodity being purchased. Tailoring may be required to ensure proper marking and safe arrival at final destination. Commercial packaging is acceptable as an alternative to military packaging when the technical design of the package meets or exceeds all condition of the military packaging and is more cost effective. The acquisition manager shall obtain each item's identity, characteristics, size, and weight and coordinate the appropriate LMI for distribution and packaging data with the responsible packaging office for data approval and data maintenance.

*c.* Commercial packaging will not be used in lieu of military packaging when required by MIL-STD-2073-1.

*d.* Marking shall be in accordance with MIL-STD-129.

*e.* Use of commercial packaging is contingent upon its ability to provide adequate protection to the item, with no increase in packaging charges, size, or weight or delay in delivery.

(1) Bulk practices used in interplant and intraplant movements or shipments to jobbers are not acceptable unless they are the usual trade practices for individual commodities such as coal, bulk petroleum, and fresh produce.

(2) Packaging details are incorporated into standardization and acquisition documents when applicable. Specific standards of industries are used when appropriate.

## **Chapter 4 Training**

### **4-1. General**

Personnel who design packaging, develop packaging data, apply data requirements, and inspect/certify completed packages or who are involved in other packaging operations shall be trained in military packaging techniques and methods. As applicable to the specific functions mentioned, packaging personnel assigned under the Logistics Career Field of the Army Acquisition corps shall be at least Level 1 certified. The unit commanders and Directors of Logistics (DOLs) are responsible for assessing packaging training of their organizations. Career development of individuals working in the packaging fields is essential. Organizational leadership, in conjunction with their command, establishes developmental training programs for individuals based on command missions, and functions.

### **4-2. The School of Military Packaging Technology**

The School of Military Packaging Technology (SMPT), Aberdeen Proving Ground, MD, is the DOD prime source of military packaging training. SMPT offers resident courses, onsite courses, and correspondence courses. Courses may be reviewed at the SMPT Web site (<http://smpt.apg.army.mil>). These courses, which cover all aspects of military packaging, are announced in DOD 4500.9-R, Part II.

*a.* Enrollment in SMPT resident and onsite courses is through The Army Training Requirements and Resources System (ATRRS), which is the DA Management Information System of record for managing student input to training. The system maintains a data base of course information on virtually every course that is taught at military and DOD training institutions.

(1) If the nominating official or training coordinator has access to ATRRS, nominations must be made through ATRRS.

(2) Otherwise, applicant's name, social security number, organization's mailing address, email address, position title, grade or rank, series or military occupational specialty, clearance status, title of the course, and date should be submitted by e-mail to [smptreregistrar@apg.army.mil](mailto:smptreregistrar@apg.army.mil).

*b.* The School of Military Packaging Technology also provides correspondence courses administered by the Army Institute of Professional Development. Organizations unable to fund resident or onsite training from SMPT are encouraged to utilize the correspondence course program. Personnel may enroll in SMPT correspondence courses only through the Army Training Support Center Web page (<http://atsc.army.mil/accp/aipdnew.asp>). The correspondence course numbers and subcourse numbers can also be reviewed on the SMPT Web site under the services heading (School Code: 908).

## **Chapter 5**

### **Application of Packaging Requirements for Shipment and Storage**

#### **5-1. General**

This chapter defines the actions for which an activity prepares materiel, which includes all classes of supply for shipment and storage, and addresses—

- a.* Selection and application of the correct level of protection.
- b.* Documentation and marking requirements.
- c.* Unitization, palletization, and consolidation.
- d.* Preparing Army prepositioned stock for storage.
- e.* Single stock fund.
- f.* Retrograde and excess materiel.

#### **5-2. Levels of protection**

*a.* Army Materiel Command major subordinate commands, life-cycle management commands packaging office personnel should determine the correct level of protection for all materiel movements. The level of protection is determined using the criteria contained in AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7. The level of protection is identified in FED LOG. Special packaging not covered by the requirements contained in the FED LOG shall be communicated by the AMC MSC and LCMC packaging specialist via phone, written instructions, fax, or e-mail.

*b.* Shipping activities shall comply with the AMC MSC and LCMC packaging specialist's selection of the level of protection and follow the preservation and packing codes in MIL-STD-2073-1, SPIs, packaging data sheets, specification/standards, and/or vehicle processing sheets.

#### **5-3. Documentation and marking requirements**

*a.* Markings, applications, placements, bar codes, and materials for all classes of supply, to include vehicles, HAZMAT, ammunition/explosives, sensitive/pilferable, multipacks, and unitized loads, must comply with MIL-STD-129.

*b.* In addition to the requirements contained in MIL-STD-129, aircraft are marked per the applicable preparation for shipment TM.

*c.* Continental United States (CONUS) and outside continental United States (OCONUS) address markings shall comply with the documents below, as applicable:

- (1) MIL-STD-129.
- (2) Shipping orders.
- d.* Documentation complies with AR 725-50.

*e.* Radio frequency identification shall be applied in accordance with MIL-STD-129 and applicable contract documents.

#### **5-4. Distinctive markings**

*a.* Distinctive markings, including labels, are applied only when specified to expedite segregation and distribution of supplies. These markings are used to identify special projects, project or product manager equipment, and special equipment. Markings are applied by means of labels, stenciling, painting, or any combination of these per MIL-STD-129. Distinctive markings not provided for per MIL-STD-129 or this pamphlet are not used unless approved by LOGSA PSCC.

*b.* Requests for changes or use of distinctive markings shall be submitted to the Chief, LOGSA PSCC, ATTN: AMXLS-AT, 11 Hap Arnold Boulevard, Tobyhanna, PA 18466-5097, or by e-mail request to toby.pt@us.army.mil.

*c.* Requests for approval of markings not in MIL-STD-129 or this pamphlet shall include the following:

- (1) Sample of the desired marking.
- (2) Instructions for use and applications.
- (3) Evidence that existing markings are not suitable or adequate.

*d.* Markings approved are referred for later inclusion in MIL-STD-129 or this pamphlet.

#### **5-5. Unitization**

Unitization loads commensurate with the level of packing specified in the contract or order shall be used whenever the total quantity for shipment to one destination exceeds 250 pounds (excluding the pallet) or 20 cubic feet. All shippers of military supplies shall adhere to the following unitization tasks:

- a.* Unitize materiel at shipment origin or at the earliest point thereafter.
- b.* Unitize items for a single destination at the source to avoid unitizing at terminals or other intermediate points.

c. Ship materiel in unitized loads as a part of acquisition actions whenever the quantity can be unitized. Unitize ammunition and explosives according to approved drawings that show the technique designed for the specified items.

d. Use shipment planning in accordance with DODD 4500.9 and AR 725-50 to ensure efficient unitization of materiel for movement.

e. Segregate materiel into separate unit loads when loads are sent to a single break-bulk point or central receiving point for distribution to supply support activities, to include—

- (1) Materiel with different project codes.
- (2) Unitization of project and nonproject materiel.

f. Ensure that technical requirements for unit loads on pallets are compatible with levels of protection prescribed for the shipment. Level B packing may be used for shipments when added item protection is provided by an intermodal container during all overseas distribution to the final destination.

g. Place three drums per pallet when shipping materiel in 55-gallon drums. Drums shall be on standard 40- by 48-inch four-way entry pallets and be secured to the pallet by shrink or stretch film. Any drums containing HAZMAT must comply with HAZMAT regulations.

(1) When shrink (MIL-HDBK-774A) or stretch film (MIL-HDBK-774A) is not available, or the commodity is not compatible with shrink film processes (for example, petroleum, oils, and lubricants or explosives), drums shall be secured with the appropriate strapping per ASTM-D3953.

(2) Nonmetallic strapping shall be used per ASTM-D3950 (use with ASTM-D4675) as an alternate, when available, subject to the criteria of MIL-HDBK-774A. If fewer than three drums are shipped, they need not be placed on a pallet.

h. Ensure that unitizing is compatible with the characteristics of the commodities and the need for protection during handling, storage, and movement. Materiel designed to be handled, stored, and shipped, as a complete unit need not be further unitized.

i. Unitize loose cargo of compatible items for reshipment at terminals and freight consolidation (or other assembly points), and overall economy results.

j. Mark unitized loads so that the items within the load can be identified without disassembly of the load. The use of marking boards shall be in accordance with MIL-STD-129.

k. Unitize nonaircraft pneumatic tires, per MIL-DTL-4M. Unless otherwise specified, pallets shall not be used to unitize tires.

(1) When unitized, the shrink film or stretch film bonding method shall be used instead of metallic strapping. Tires with different NSNs are unitized for shipment in the same bundle if—

- (a) The tires are individually identified within the bundle.
- (b) The tires are all for the same final consignee and all have the same priority designator.

(2) Shrink film for Level A packing shall be type V (ultrainhibited (weatherable)) of A-A-3174, 6-mil thickness.

## 5-6. Palletization

Palletization shall be prepared based on guidance in MIL-HDBK-774A and this document.

a. Loads shall be unitized on pallets intended for military use, provided in American Society of Mechanical Engineers (ASME) MH1, Part 9.

b. For shipments when the total weight is less than 1,500 pounds evenly distributed, pallets shall comply with ASME MH1, part number MH1/9-03SW4048. For shipments when the total weight is greater than 1,500 pounds, but less than 3,000 pounds evenly distributed, pallets shall comply with ASME MH1, either part number MH1/9-03SW4048 or MH1/9-10BW4048.

c. The 4-way entry, double-wing pallet of MIL-P-15011, also listed in ASME MH1, Part 9, shall be used when 4-way entry is required and in support of North Atlantic Treaty Organization (NATO) forces.

d. Pallets shall have a length of 40 inches and a width of 48 inches. Pallet load, including the pallet, shall not exceed 54 inches in height, 43 inches in length, and 52 inches in width.

e. Quantity for shipment to one destination of less than 250 pounds or 20 cubic feet need not be palletized.

f. Pallets shall conform to the compliant wood requirements for wood packaging materials (WPM). Wood shall meet guidelines of International Standards for Phytosanitary Measures (ISPM) 15, issued by the International Plant Protection Convention (IPPC).

g. Use of palletized unit loads shall meet these criteria:

(1) The amount of materiel to be loaded on a pallet shall—

- (a) Exceed a total of 250 pounds (excluding the pallet).
- (b) Exceed a volume of 20 cubic feet.

(2) The maximum weight limit for palletized unit loads is 3,000 pounds except for ammunition. The maximum weight for depot pallet ranges from 3,600 to 3,700 pounds per pallet.

(3) Minimum overhang is permitted beyond the perimeter of a pallet deck when using expendable-type pallets to unitize fiberboard containers for CONUS shipments.

*h.* Commodity managers shall prescribe palletization requirements in specifications, standards, drawings, contract documents, and SPIs for handling, storage, or issue of the item.

*i.* Shipping activities shall palletize unit loads based on the guidance in MIL-HDBK-774A, as follows:

(1) *Shrink film.* Shrink film bonding, to include multipacks, is appropriate for all commodities except ammunition; nuclear explosives; petroleum, oils, and lubricants; and HAZMAT. Polyethylene shrink wrap for use in pallet-load bonding shall conform to type IV, class 3, grade A, finish 1, of A-A-3174. Use thermoplastic films of 6-mil polyethylene for loads up to 2,000 pounds. Use a polyethylene film of 8 mil from 2,000 to 3,000 pounds.

(2) *Markings.* Address markings are inserted face out under the shrink film bag before shrinking or are attached to the outside of the bag after shrinking with ASTM-D5486 tape (clear) applied over the entire address label. Use of marking boards shall be in accordance with MIL-STD-129.

(3) *Stretch film.* Stretch wrap bonding, to include multipacks, is used for all commodities and types of palletized loads shipped in CONUS or when shipped containerized.

(a) Stretch wrap shall be clear, extruded polyethylene, 0.9-mil minimum thick, or ethylene vinyl acetate, 0.8 mil minimum thickness. Multiwraps of polyethylene shall add up to a minimum of 2.7 mils, on loads up to 1,000 pounds, 4.5 mils on loads up to 2,000 pounds, and 5.6 mils on loads up to 3,000 pounds.

(b) A sheet of weather-resistant fiberboard or plastic film, the same size as the perimeter of the load, is placed on top of the load prior to wrapping to provide additional protection.

(c) Pressure-sensitive labels containing identification and contract data markings and the address are placed on the outermost layer of wrap to enhance handling and shipping of the palletized load.

(d) A marking board positioned on the pallet before the last layer of wrap is applied is authorized on the basis of local operations and capabilities.

(e) Guidance on the use of stretch film packaging can be found in ASTM-D5458 and ASTM-D5459.

(4) *Strapping.* Use of strapping is per MIL-HDBK-774A. Secondary straps on pallets without strapping slots in the stringers are laid flat on the pallet and the load assembled and strapped before the load is bonded to the pallet. Primary and horizontal straps are applied based on the guidance in MIL-HDBK-774A.

*j.* When pallets are used to contain loose items for protection and handling during shipment and storage under level A or B pack conditions, engineered unit load requirements are prescribed for the item as follows:

(1) A detailed description of the unit load is provided.

(2) Applicable requirements (for example, specifications, standards, or data sheets) are referenced.

(3) A standard 40- by 48-inch (1,000 by 1,200 millimeters (mm)), four-way entry, wing-type, softwood pallet of type MH1b-2000, type IV, size 2, NN-P-71, is used to build palletized unit loads.

*k.* Palletized unit load requirements are stated by reference to load types in MIL-HDBK-774A, when engineered unit loads are not required.

(1) Requirements for items and containers that require stacking and handling aids because of quantity, design, weight, or protection needs are prescribed.

(2) Weight and overall dimensional limits of palletized unit loads shall be based on the guidance in MIL-HDBK-774A, except where prohibited by item or container characteristics. This is also true in separate directives for a specific use, commodity, geographical area, or mode of shipment.

## **5-7. Consolidation**

*a.* Use appropriate containers to consolidate mixed NSNs into one outside shipping container to ease handling during shipment.

(1) When packing quantities of mixed items in consolidation containers, they shall be positioned and secured in a manner that shall permit ready identification upon opening. As an alternate, they are consolidated by bagging, bundling, tying, wrapping, packing in cartons, and so forth. The consolidated items and quantity are identified before being placed in the outside shipping container.

(2) Heavy items are centered on the bottom of the container. Light, critical items and transportation priorities are placed on top. All voids are filled with cushioning material.

(3) Identification and documentation per MIL-STD-129 shall be included.

*b.* Consolidation containers are not used as individual outside containers for a single line item. The exception is when the container is the unit package container for a complete or partial set, kit or outfit. This does not bar their use in specifications, standards, or SPIs for a broad group of items where consolidation is feasible and likely to occur in shipments from contractors or Army activities.

*c.* Consolidation containers protect the contents during shipment to the final destination. The type of consolidation containers used is based on the specified levels of protection.

*d.* Dimensions for consolidation containers for overseas shipment are compatible with containerization media to permit the greatest use of available space. Length of individual consolidation containers shall not exceed 86 inches.

*e.* Consolidation containers on 40- by 48-inch four-way entry pallets must not exceed the maximum length and

width permitted by MIL-HDBK-774A for conventional shipment. When shipped overseas within containerization media, consolidation containers shall not exceed the dimensions of the pallet.

f. Containerized shipments of ammunition and military explosives are prepared per specifically approved drawings, permits, and procedures for the items involved and as directed by the applicable commodity command.

g. Clearly mark and label all Class VIII, medical supplies. Segregate perishable and high priority Class VIII supplies from consolidated packs.

#### **5-8. Preparing Army prepositioned stock for storage**

Army prepositioned stock (APS) materiel shall be prepared for storage in accordance with TM 38-470.

*a. Materiel and equipment (nonself-propelled).*

(1) Preservation requirements for secondary items shall follow AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7 and are developed in accordance with MIL-STD-2073-1.

(2) Level A packing for items is provided if not consolidated in intermodal containers. Level B packing can be used if materiel shall be consolidated and deployed in these consolidation containers.

(3) Any packaging may be used when it shall meet or exceed the requirements in paragraphs 5-8a(1) and (2) and is approved by the responsible packaging activity.

(4) Army Materiel Command Major subordinate commands, Life Cycle Management Commands or applicable owning command shall ensure that materiel moved to APS sites are packaged in accordance with paragraph 5-8a(1), (2), and (3) above.

(5) Items repaired or unpackaged for maintenance or inspection at APS sites shall be repackaged at that site in accordance with AMC MSC and LCMC packaging requirements.

(6) All Supply Class V is packaged in accordance with appropriate packaging drawings and palletization procedures.

*b. Self-propelled equipment.*

(1) Army Materiel Command Major subordinate commands and Life Cycle Management Commands packaging office personnel should develop preservation requirements that shall: minimize the cost of labor and materials to store the equipment; allow for rapid deployment; and provide adequate protection between maintenance cycles.

(2) APS site personnel ensure that self-propelled equipment is stored and maintained in accordance with TM 38-470 requirements.

#### **5-9. Single stock fund and national maintenance items**

a. Materiel that is repaired as part of the National Maintenance Program shall be packaged in accordance with the National Maintenance Repair Statement of Work approved by the applicable national inventory control point (NICP). If packaging requirements are not specified in the statement of work, National Maintenance Work Requirement, and Depot Maintenance Work Requirement, then the appropriate AMC MSC packaging office shall be contacted before an estimate is submitted or work begins.

b. Unserviceable materiel shipped for repair is processed to prevent further deterioration. Reusable containers and closure instructions shall not be waived.

c. Reusable containers accompany the item throughout its life-cycle, unless directed otherwise by the appropriate AMC MSCs packaging office personnel.

(1) In accordance with AR 710-1, paragraph 3-22—

(a) Policies for container use and turn-in are as follows:

1. Do not send containers with condemned contents to the property disposable office.

2. Account for the container (serviceable or unserviceable) on the stock record account. That is, upon receipt of any item coded to be disposed at Defense Reutilization Management Office (DRMO), remove any multiapplication reusable containers prior to transferring to DRMO. The item NSN is the NSN being turned into DRMO, not the container NSN.

(b) Use containers costing less than \$200 as long as possible. Stock record accounting is not required for such containers. (To further explain, do not put the containers on record if the value is less than \$200, FED LOG prices. This will include any Stock Class 8145—white modular containers—as well as Stock Class 8110—green metal drums. Be sure to report these containers to the DOL stock readiness coordinator. The assigned stock readiness coordinator can verify the containers required to be placed on record and those to remain off record. Containers remaining off record will receive disposition from Aviation and Missile Command Stock Readiness Container Management located at Redstone Arsenal, AL. If these containers are not required for items that are warehoused at the DOL, the containers will be shipped out weekly).

(2) In accordance with AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7, paragraph 3-2c, when necessary, procedures for selecting and applying packaging protection will be developed by shipping activities as follows:

(a) Establish internal procedures to ensure maximum use and reuse of containers. Procedures will include provision to provide the managing item materiel manager (IMM) with container status upon removal of an item from a long-life

reusable containers, and a statement to the effect that reusable containers will not accompany condemned contents to the DRMO.

*b.* Report reusable containers for which no requirement exists to integrated materiel or inventory managers, according to individual service or agency procedures. Disposal of these containers will not be initiated until guidance is received from the IMM. If disposition instructions are not provided by the IMM within 45 working days of notification, shipping activities will use local procedures to determine container disposition action.

*d.* Items that are or consist of HAZMAT and regulated for shipment by DOT are prepared for shipment in accordance with Sections 100–180, Title 49, Code of Federal Regulations (49 CFR 100–180) and/or TM 38–250. Additionally, shipments of HAZMAT shall comply with DODD 4500.9, International Air Transport Association (IATA) Dangerous Goods Regulations, and International Maritime Dangerous Goods (IMDG) (United Nations) codes.

*e.* All shipments shall be marked in accordance with MIL–STD–129. Special markings required by the NICP or the National Maintenance Office shall be applied, as applicable.

### **5–10. Protecting retrograde materiel**

Serviceable and unserviceable returns are protected in accordance with AR 700–15/NAVSUPINST 4030.28E/AFJMAN 24–206/MCO 4030.33E/DLAR 4145.7, MIL–STD–2073, and this pamphlet. All materiel shall be properly marked in accordance with MIL–STD–129. To support in-transit visibility and total asset visibility, accurate and complete markings must be accomplished during the packaging operation, to include the application of radio frequency automatic identification technology.

*a.* Depot-level repairables, serviceable and unserviceable, whose packaging prescription dictates the use of reusable containers, shall be afforded that protection throughout their life-cycle. Not all retrograde materiel requires special packaging. However, retrograde of items, such as repair parts, requires enough packing protection to keep them from being further damaged during shipment, handling, and storage.

*b.* Unserviceable repair parts/components will be turned in to the basic support battalion and will be job ordered to the appropriate maintenance repair facility or evacuated to an intermediate staging base, forward operating base, or other predesignated element at echelons above brigade for repair or disposition.

*c.* The customer unit will classify items for which a replacement is required. Items will have been cleaned within the customer unit's capability.

*d.* All communications security equipment items and unclassified controlled cryptographic items are specifically prohibited from disposal through DRMO channels. If any of these items are unserviceable/uneconomically repairable, they must be evacuated through supply channels to the Commander, Tobyhanna Army Depot, Tobyhanna, PA.

### **5–11. Excess materiel**

Consumable, serviceable excess returns for credit will be retrograded from the materiel collection points and will be—

*a.* Turned in using the standard procedures contained in AR 710–2 and associated pamphlets. Packaging and preservation may be required to protect the items while in transit.

*b.* Returned in the original pack or in a pack which is the equivalent of the original pack to prevent deterioration and damage. To minimize the possibility of credit loss, it is imperative that the item not be removed from the original pack until ready for use.

## **Chapter 6 Preparing Materiel for Air Shipment**

### **6–1. General**

*a.* These procedures apply to all Army materiel (except security assistance shipments or hazardous cargo) shipped by air and originating at CONUS activities.

*b.* Shipments of air-eligible materiel are consolidated whenever practical within the limits of DOD 4500.9–R Part II and this chapter.

### **6–2. Preparing shipment**

*a.* Materiel destined for one consignee is consolidated on 40- by 48-inch pallets or in consolidation containers, when possible, before shipping to a consolidation/containerization point. Direct-to-user shipments may be made on 463L pallets if the shipment is to one consignee and can be made within the timeframes in AR 725–50.

*b.* Assorted stock numbers of small parts shall be consolidated as multipacks.

*c.* Standard 40- by 48-inch palletized unit loads, consolidation containers, random size exterior containers, and loose items are palletized on 463L pallets.

(1) If there is not enough cargo available to fill (gross or cube) a 463L pallet (5,000 to 10,000 pounds or 116 to 485

cubic feet), the shipment moves as a unit load on standard 40- by 48-inch pallets or as loose cargo to the consolidation and containerization point (CCP).

(2) Consolidation containers and random-size exterior containers are shipped to a CCP only when the quantity is insufficient to palletize on a 463L pallet or on a 40- by 48-inch pallet or both. It shall be noted that the maximum weight is 5,000 pounds for the half-size 463L pallet and 10,000 pounds for the full-size 463L pallet. Because the maximum weight for the standard 40- by 48-inch pallet is 3,000 pounds, it must be ensured that the 463L pallet is not overloaded.

### **6-3. Unit protection**

To provide adequate protection without adding unnecessary weight, it is essential that shipping activities adhere to the guidelines below when preparing materiel for air shipment.

*a.* Although, the cost for military air shipments is normally based on tonnage, designated, required packing materials such as wood pallets, wood boxes, and metal shipping containers will not be eliminated to reduce the tonnage.

*b.* Materiel for air shipments shall be repacked when tare weight and cube can be reduced; the required level of protection and security of the materiel must remain intact. The performance of special engineered container design must not be affected.

## **Chapter 7 Small-Parcel Shipments**

### **7-1. Preservation and packing**

*a.* A small parcel generally is defined as a pack that meets the size and weight limits and other requirements set by the carrier (for example, U.S. Postal Service (USPS), commercial parcel service, and so on). The USPS manual is used to determine—

(1) Which shipments can go by parcel post.

(2) The limits placed on these shipments.

*b.* The level of preservation applied shall provide item protection and ensure acceptance and safe delivery by commercial carrier.

### **7-2. Consolidation of parcel post shipments to the same consignee**

*a.* Parcel post shipments are consolidated at the source, when possible. Activities with automated systems consolidate by means of machine-generated shipment planning.

*b.* Activities that do not operate under mechanized procedures consolidate shipments manually to one consignee.

### **7-3. Exterior containers**

*a.* Shrink film may be used to pack and unitize small-parcel shipments whenever the item size permits.

(1) Items to be packed may be placed on trays (A-A-1253B) or locally fabricated fiberboard sheets.

(2) In some cases, because of item size or configuration, a tray or sheet may not be required.

*b.* Items not packed per paragraph 7-3*a* are packed as follows:

(1) *CONUS shipments.* Containers conform to the Domestic Mail Manual, section 601, Mailability. Closure of fiberboard containers, except for registered parcel post, is done in a way to ensure acceptance and safe delivery by the USPS or commercial small-parcel carrier.

(2) *OCONUS shipments.*

*(a)* Containers for overseas parcel post shipments are class weather-resistant of ASTM-D5118M, closed and sealed in accordance with ASTM-D1974. Reinforced or cushioned paper shipping sacks and cotton mailing bags may be used when they meet the needs of the shipment.

*(b)* Fiberboard boxes are closed and reinforced in accordance with ASTM-D1974. Staples are not used when a barrier bag is used as an element of the method of preservation. If staples are present in the manufacturer's joint, a strip of tape shall be applied over the staples.

### **7-4. Registered and numbered insured parcel post**

Completely seal fiberboard containers used for registered shipments with type I or II, class 2 (nonstrippable) A-A 1671 tape. The USPS does not accept pressure-sensitive tapes for sealing registered packages.

### **7-5. Required mail classification markings**

All official mailings (except letter-size first-class mail) are marked below the postal indicia with the designated postal

service (mail classification) with a rubber stamp or by hand if a rubber stamp is unavailable. Any official mailing without the proper mail classification markings shall be returned to sender.

### **7-6. Fast-pack containers**

- a. PPP-B-1672 containers (fast packs) are used for shipping by parcel post or commercial small-parcel service—
  - (1) For items under repair and return programs.
  - (2) When a container capable of withstanding multiple uses is required.
  - (3) For items susceptible to damage in shipment. For example, delicate or fragile electronics items may be shipped in fast pack containers if the item's size is compatible with the container's guidance.
- b. Fast packs are identified as reusable containers. Each activity shall reuse the fast packs, especially for return of repairables. However, do not return empty containers to shippers.

## **Chapter 8**

### **Packaging of Guided Missile and Large Rocket Systems, Ammunition, Explosives, and Other Hazardous Materials**

#### **8-1. Introduction**

This chapter sets procedures for packaging and marking ammunition, explosives, and other HAZMAT within the Army.

#### **8-2. Preparing and documenting**

Requirements for packaging and marking ammunition, explosives, and other HAZMAT are developed per military and regulatory requirements and approved container specifications of DOT and international regulatory requirements and are documented on engineering drawings, on packaging data sheets, and SPIs or in specifications.

#### **8-3. Preservation**

- a. Preservation of conventional chemical and nuclear ammunition, missiles, explosives, or other HAZMAT complies with approved drawings, SPIs, packaging data sheets, or specifications.
- b. The packing of ammunition items and other HAZMAT complies with approved drawings and specifications, SPIs, or packaging data sheets, and, when applicable, certificates of equivalency.
- c. In addition to the above, all HAZMAT that fall within the realm of performance oriented packing must be tested and certified to meet both national and international regulations.
  - (1) When a HAZMAT/dangerous good is regulated to move within CONUS by—
    - (a) Highway, rail, or vessel, it must be shipped in accordance with 49 CFR Parts 100-180.
    - (b) Commercial air, it must be shipped in accordance with 49 CFR and the IATA Dangerous Goods Code.
    - (c) Vessel, it must be shipped in accordance with 49 CFR.
    - (d) Military air/Government air, it must be shipped in accordance with TM 38-250.
  - (2) When a HAZMAT/dangerous good is regulated to move OCONUS by—
    - (a) Commercial air, it must be shipped in accordance with IATA Dangerous Goods Code.
    - (b) Vessel, it must be shipped in accordance with IMDG.
    - (c) Military air/Government, it must be shipped in accordance with TM 38-250.

#### **8-4. Marking**

Markings for ammunition items and other HAZMAT shall comply with MIL-STD-129, the item or general marking drawing, DOD and DOT regulations, and international regulatory requirements.

#### **8-5. Safety and security measures**

Separate instructions—such as AR 11-9, AR 385-10, TM 38-250, AR 700-141, 49 CFR 100-180, 29 CFR 1910, other applicable DOD and DOT regulations, IATA, IMDG, and international regulatory requirements—are followed when shipping and storing ammunition, explosives, toxicants, or other dangerous goods.

## Chapter 9 Preparing Vehicles and Aircraft for Shipment and Storage

### 9-1. Preparing vehicles for shipment

The following requirements apply to shipments of vehicles and related equipment from CONUS supply sources (vendors and Army activities).

*a. Long-term protection.* Long-term protection is specified to protect combat vehicles during shipment, handling, and storage for more than 90 days from the date of processing. Periodic care of the equipment is required under the COSIS Program. Long-term protection is specified for wheeled vehicles for outside storage for a period of 2 years in any worldwide environment without any exercising or maintenance. This level of protection is suitable for shipments to any destination.

*b. Short-term protection.* Short-term protection is specified to protect vehicles during shipment, handling, immediate use, or storage not to exceed 90 days from date of processing. Periodic care of the equipment while in storage is required under the COSIS Program. Short-term protection for wheeled vehicles is specified to provide protection for controlled humidity storage for a period of 48 months and processing for shipment, drive-on/drive-off, and temporary outside storage for 90 days maximum without any exercising or maintenance. This level of preservation is suitable for either domestic or overseas shipment (except for open deck loading aboard ship). For tracked vehicles:

(1) Vehicle is closed, air vents are left open for recirculation, floor drains are opened, screens are installed to prevent insect infestation, and additional ventilation is installed to minimize condensation inside the vehicle. All openings that could permit free entry of water to the inside of the vehicle are sealed with tape.

(2) Drive-away capability is provided, when required.

*c. Manufacturers domestic/export practice.* Manufacturer's procedures may be used provided they are approved by the activity responsible for the vehicle. Marking shall reflect appropriate level.

*d. Mounted equipment and components.* Mounted equipment and components of vehicles and equipment, other than those that must remain operable, are provided a level of preservation equal to that required for the vehicle. Adequate protection and security are provided for mounted equipment and components for conditions incidental to shipment.

*e. Basic issue items (BII).* BII are preserved, packaged, and packed to prevent damage and pilferage during shipment and storage. Guidance provided in MIL-STD-3003A(AT) is used for wheeled vehicles.

*f. Batteries.* All batteries are activated and fully charged for all drive-on/drive-off equipment. Wet-charged batteries are removed and dry-charged batteries are packaged for long-term storage either in bulk or with the equipment, as appropriate. When stowed with the equipment, batteries are separate from but near the equipment, as appropriate. When stowed with the equipment, batteries are separate but near the BII.

*g. Shipment in support of combat operations.* Wheeled and tracked vehicles shipped in support of combat operations are given specific protection as required by the requisitioner or as directed by the item manager, based on agreement between the shipper and the requisitioner or the major commander.

*h. Air shipment of vehicles.* Air shipment of vehicles is governed by carrier rules for that mode of shipment. MIL-HDBK-1791(2) gives general requirements for air transport. Observe general precautionary measures that apply to shipping these items by air.

*i. Shipments to arctic regions.* Shipping activities ensure that any type of vehicular equipment shipped to arctic regions is winterized to withstand the mean ambient temperatures of the locale to which shipment is made. Winterization measures include, at the least, use of arctic lubricants and fluids, proper antifreeze protection, and other specific winterization measures required by the responsible activity responsible for the vehicle.

### 9-2. Preparing vehicles for overseas shipment

The requirements specified below apply to shipments of vehicles and related equipment from CONUS supply sources (vendors and Army activities) to overseas requisitioners.

*a. Protection.* Wheeled vehicles are provided the protection specified in MIL-STD-3003A(AT). Tracked vehicles are provided protection as specified by vehicle specific shipment and storage instructions, obtainable from U.S. Army Tank Automotive-Armaments Command.

(1) Vehicles to be stored are given the level of preservation required for planned storage conditions.

(2) Vehicles should only be stowed on a deck of a ship if circumstances necessitates and the SOS has provided special preservation instructions.

*b. Security assistance shipments (long-term protection).* Maximum preservation is provided for all vehicles shipped to security assistance customers, except when a lower level is—

(1) Requested by the receiving country and supply support arrangements.

(2) Recommended by the responsible military assistance advisory group, security assistance office, or implementing service.

*c. Responsibilities for preparing vehicles for overseas shipment.* CONUS shipping activities shall—

(1) Process vehicles per applicable procedures, as referenced in the packaging segment of FED LOG, and with exterior dimensions reduced per TB 55-46-1.

(2) Replace or repair, upon request of the commander of a terminal, any vehicle damaged in transit that requires repair beyond the abilities of the terminal.

(3) Advise the Military Surface Deployment and Distribution Command (MSDDC) of the preservation that has been given the vehicles.

*d. Military Surface Deployment and Distribution Command CONUS terminal responsibilities for preparing vehicles for overseas shipment.* Military Surface Deployment and Distribution Command CONUS terminal personnel shall—

(1) Determine if damage to the vehicles has occurred in transit. Make repairs within the capability of the terminal.

(2) Remove vehicles to designated repair facilities as instructed by the item manager when vehicles are damaged beyond the repair capability of local terminal shops.

(3) Secure doors to prevent accidental opening.

*e. Shipments in support of overseas movement of troops.* Unit commanders ensure that unit vehicles are prepared for overseas movement. The provisions herein do not change the responsibilities of the MSDDC ocean terminals.

### **9-3. Preparing vehicles for shipment to continental United States requisitioners**

*a.* All shipments to CONUS using units shall be considered to be for immediate use. Vehicles shall be processed for shipment with appropriate protection and shall be drivable (if self-propelled) and towable. All fluids and lubricants shall be at operating level and contain enough fuel in the fuel tanks of self-propelled vehicles to permit off-loading and movement of 10 miles at the receiving point. Unit commanders shall be responsible for sustaining vehicles repositioned but not issued.

*b.* The following apply to preparing vehicles for shipment to CONUS storage facilities:

(1) *New vehicles.* Vehicles shall be processed prior to shipment based on known or projected storage times and location. Unique requirements shall be coordinated with storage activities, including exercising, inspection, and deterioration prevention procedures.

(2) *Vehicle turn-ins.* Unit commanders ensure that required maintenance is performed and all preventive maintenance requirements have been performed. Unit commanders ensure that vehicles are processed to prevent deterioration as specified in the applicable TM. Upon receipt from units, storage activities shall process the vehicles per applicable vehicle preservation requirements based on known or anticipated storage times and location.

(3) *Retrofitted/overhauled vehicles.* Retrofitted or overhauled vehicles are processed for shipment and storage as specified by the maintenance work directive. Materiel acquisition and development managers shall ensure that requirements are developed for each maintenance work request.

### **9-4. Preparing aircraft for shipment and storage**

Aircraft for shipment are prepared per applicable preparation for shipment technical manual.

*a. Preservation.* Preservation requirements for aircraft are determined by the mode of shipment and the period of time the aircraft shall remain inactive.

(1) Preservation instructions contained in the applicable preparation for shipment manual normally provide protection for 45 days.

(2) When an aircraft remains inactive for more than 45 days, or when it is to be shipped by truck or on the weather deck of a vessel, it is preserved for intermediate storage per applicable aircraft unit and intermediate maintenance manual.

*b. Storage.* The types of storage applicable to aircraft are defined in TM 1-1500-204-23-1. Specific requirements are provided in the applicable aircraft unit and intermediate maintenance manual.

(1) Flyable storage maintains the aircraft in operable condition. There is no time limit for flyable storage; however, flyable storage requires periodic inspection and ground run of the aircraft.

(2) Short-term storage procedures preserve aircraft for up to 45 days. These procedures require extensive preservation, but the requirement is eliminated for periodic ground run of the aircraft.

(3) Intermediate storage procedures preserve aircraft for a period of 46 to 180 days. These procedures require very extensive preservation of the aircraft. Intermediate storage is the longest term of storage applicable to aircraft. At the end of a 180-day period, the aircraft must be de-preserved, have all required maintenance operations performed, be operated, and returned to flyable status. If further storage is required, it may then be re-preserved for storage.

## Chapter 10 Special Shipments

### 10-1. General

Preservation and packing for shipment of items requiring special or unique considerations shall conform to AR 700-15/NAVSUPINST 4030.28E/AFJMAN 24-206/MCO 4030.33E/DLAR 4145.7 and this pamphlet.

- a. Shipments to the DRMO must be prepared for safe transport and carrier acceptance but do not require preservation.
- b. Reusable containers that are part of the item accompany the item unless otherwise directed by the AMC MSCs and LCMCs packaging office personnel. Challenges shall be directed to the item manager.
- c. Items shall be properly identified.
- d. Items shall be palletized or otherwise provided with skids to provide for safe handling.

### 10-2. Electrostatic discharge sensitive items

Electrostatic discharge (ESD) sensitive items protective workstations (or field service kits) are utilized in all areas where ESD sensitive items are handled and packaged. ESD sensitive items are protected at all maintenance and supply levels. Personnel are trained in the proper packaging and handling of ESD sensitive items. ESD sensitive items are prepared per MIL-HDBK-773.

### 10-3. Security of sensitive items

- a. Shipments of sensitive items shall comply with AR 190-11. Sensitive items include those items shown in AR 740-26.
- b. The requirement for overpacking, for security reasons, of sensitive item shipments to achieve a specified minimum weight per shipment unit (AR 190-11) is not excessive packaging per this pamphlet. Such overpacking shall be done on an individual case basis in the absence of required cargo containers.

### 10-4. Direct vendor delivery shipments

- a. Direct vendor delivery (DVD) shipments shall be adequately protected, consolidated for effective handling, safe for transport, and properly marked and identified. Refer to ASTM-D3951 for guidance.
- b. Only packaging designed and approved for specific items should be used for DVD of items to field locations. Appropriate packaging and packing may be required by the packaging specialist for specific items, depending on the logistics environment or anticipated time of storage.

### 10-5. Security assistance and foreign military sales

- a. Army Materiel Command major subordinate commands packaging office personnel shall ensure that the correct protection is specified following the sales agreement with a foreign government.
- b. If the sales agreement does not specify a specific level of packaging, packaging is military preservation and Level A pack.
- c. Marking is in accordance with MIL-STD-129. Special markings are applied if identified in the sales agreement.

### 10-6. Army prepositioned stock shipments and shipments in support of deployments

- a. Shipments of non self-propelled equipment shall be packaged in accordance with MIL-STD-2073-1.
- b. When the total shipment weight is less than 25 pounds and the total shipment cube is less than 1 cubic foot, a Level B pack can be specified.
- c. Self-propelled equipment shall be prepared for shipment and remain safe to drive (drive-on/drive-off condition). The exceptions will be when the equipment is in a roll-on/roll-off condition because—
  - (1) It was or will be weather-deck loaded on the ship.
  - (2) The site or theater commander specifically requested roll-on/roll-off condition.

### 10-7. Phytosanitary measures for wood packaging material transiting international borders

- a. *Phytosanitary requirements.* These requirements for WPM have been imposed by the United Nations guidelines protecting forests worldwide against pest infestation. WPM includes pallets, crates, boxes, reels, and dunnage composed of nonmanufactured wood. Manufactured wood products are not affected (for example, plywood, particle board, oriented strand board and finished woods used in furniture).
  - (1) U.S. Army activities engaged in packaging of material for transnational shipments shall comply with the procedures contained within DOD 4140.01-M-1 in order to gain access to aerial and water ports.
  - (2) If these procedures are not followed, there is a strong risk that unmarked or improperly marked material shall become frustrated cargo and destroyed at the port of debarkation, or shall be required to be repacked at the port or CCP, causing increased cost and time delays to the Army.
  - (3) The Army shall actively promote, implement, monitor, and measure procedures within DOD 4140.01-M-1 to

ensure the elimination of “pests” using WPM as a host. As such, the intent is to treat, test, replace, or phase-out of inventory all noncompliant WPM over time.

(4) LOGSA PSCC is the Army DOD component point of contact (POC) for the Army WPM Program.

*b. Management controls.* ACOMs/ASCCs/DRUs shall maintain documentation for compliance purposes throughout the process. ACOMs/ASCCs/DRUs shall audit, report and enforce WPM standards and measures. Audit and enforcement shall include onsite inspections and may also include the use of a centralized DOD Web-based program. Each activity certifying WPM shall be audited in accordance with Army audit procedures. ACOM/ASCC/DRU activities shall provide monthly reports, coordinated through their chain of command, to the DOD centralized Web site. The reports must be posted to the DOD centralized Web site within 2 weeks of the end of the reported month. The reporting instructions in DOD 4140.01-M-1 are required.

(1) *On-line report validation.* Reports for DOD activities authorized to apply the IPPC or DOD “Pest Free” mark shall be validated monthly using the current WPM Standards. Each reporting activity shall register their Department of Defense Activity Address Code (DODAAC), site auditor, and site custodian via the Web site. Each validating activity shall register their DODAAC and WPM program manager via the Web site. The ACOM WPM program manager or DOD component POC shall validate the monthly reports.

(2) *Onsite audits.* Trained site auditors shall perform initial and annual onsite audits using DA Form 7635 (U.S. Army Wood Packaging Material Site Self-Certification Auditor’s Checklist). Auditors shall physically inspect DOD-certified material stamped/stenciled with the IPPC mark or DOD “Pest Free” mark to ensure compliance. Auditors shall document discrepancies and compliance data on line or forward to the WPM program manager or component POC for comparison with on-line/collected report verification data. Auditors shall provide detailed report of the audit and status of the DOD WPM Program through their chain-of-command WPM POCs to their DOD component WPM POC.

*c. Training.* The Army ACOMs/ASCCs/DRUs shall utilize the DOD comprehensive WPM Web-based training course ([https://www.icptarp.net/wpm/wpm\\_training.nsf](https://www.icptarp.net/wpm/wpm_training.nsf)).

(1) It is available to all military, DOD civilian, and contractor personnel operating GOCO facilities.

(2) The course provides self-certification and familiarization training.

(3) Personnel shall retake the training once every 2 years. This practice shall ensure inspectors, packers, wood fabricators, and assemblers stay current with IPPC, USDA/APHIS, and DOD WPM policy and procedural changes.

(4) For those sites where personnel do not have Common Access Cards, contact LOGSA PSCC, the Army WPM POC, for instructions on how to obtain WPM training.

## **Chapter 11**

### **Army Packaging Policy Work Group**

#### **11–1. Army Packaging Policy Work Group objectives**

The Army Packaging Policy Work Group (APPWG) is a permanent forum established to develop and recommend changes to policy, guidance, and standardization of packaging throughout the Army as it relates to the overall Federal and DOD distribution system. The Chair of the APPWG is the Deputy Chief of Staff, G–4 (DCS, G–4) and the Deputy Chair is the LOGSA PSCC representative. The APPWG provides a forum to discuss and disseminate the following items of interest to the Army packaging community:

- a.* Domestic and international packaging requirements.
- b.* Packaging equipment, methods, and technology.
- c.* Engineering and data development and maintenance.
- d.* Education and training.
- e.* Productivity cost improvement and effectiveness.
- f.* International and domestic distribution and transportation requirements.
- g.* Environmental issues and mandates.
- h.* Information systems for Logistics Management Information and packaging data.
- i.* Army projects affecting the DOD distribution system.
- j.* DOD acquisition initiative issues.
- k.* Industry standardization organizations, committees, and documents.
- l.* Packaging career issues and the Army packaging workplace.
- m.* Areas of interest to the DCS, G–4.

#### **11–2. Army Packaging Policy Work Group functions**

*a.* The Army Packaging Policy Work Group is responsible for the tasks in paragraphs 11–3 and 11–4 and for initiating issues and resolving differences. Chair and Deputy Chair recommend specific membership using selection criteria developed by the APPWG and approved by the DCS, G–4. In the absence of the Chair, the Deputy Chair shall

assume this duty. Advisory members shall participate in every capacity as a primary member, with the exception of voting (see para 11-4g ).

b. The APPWG comprises:

(1) The DCS, G-4, who—

(a) Serves as chair.

(b) Approves meeting site and agenda.

(c) Directs ACOMS, ASCCs, and DRUs and AMC MSCs participation.

(d) Assigns projects and suspense.

(e) Approves/disapproves work group recommendations.

(f) Initiates coordination with other services/agencies, as applicable.

(2) The LOGSA PSCC representative, who—

(a) Serves as Deputy Chair for the Chair, or Chair in the absence of the DCS, G-4 representative.

(b) Coordinates meeting dates and arranges for facilities through host activity.

(c) Notifies members of the meeting and requests agenda topics.

(d) Prepares agenda, meeting minutes, and correspondence for DCS, G-4 approval.

(e) Serves as the coordinator and point of contact for all activities of the APPWG and task groups and provides to DCS, G-4 status on all directed actions.

(f) Obtains packaging information from industry trade shows, periodicals, and other sources and distributes all information obtained to the packaging community.

(g) Reviews test reports concerning research and development in the field of packaging.

(h) Serves as the Army representative to the Office of the Secretary of Defense chaired Defense Packaging Policy Group.

(i) Maintains and distributes a current list of APPWG members, phone numbers, addresses, and e-mail addresses.

c. Army Packaging Policy Work Group members, who—

(1) Appoint a command representative and alternate.

(2) Serve as an advisory staff for the Army on matters related to packaging.

(3) Provide agenda topics and discussion papers for meetings.

(4) Participate at APPWG meetings.

(5) Provide a channel for the interchange of information on packaging problems and information.

(6) Coordinate with the Deputy Chair prior to local test evaluations on packaging or packaging related materials, equipment, or processes.

(7) Complete special studies, surveys, and provide recommendations on all actions directed by the DCS, G-4.

(8) Possess a thorough knowledge of packaging as it pertains to that individual's command.

(9) Inform the Deputy Chair of changes to command representative and/or alternates.

d. Advisory members, who—

(1) Provide technical or administrative support to ongoing or unique APPWG projects.

(2) Attend meetings or participates in studies, as required.

### 11-3. Functions

a. The APPWG members provide and exchange information and develop, coordinate, and recommend packaging policy to the DCS, G-4; work together to detect and recommend solutions to systemic and Army packaging policy problems; and promote the standardization of packaging within the Army and DOD. Consideration shall be given to individual ACOMs, ASCCs, and DRUs or organization unique requirements.

b. The APPWG provides a forum to advise the U.S. Army Training and Doctrine Command on the development and improvement of training pertaining to packaging.

c. The APPWG establishes working groups, as required, to improve operational packaging; to study and resolve packaging policy issues; and to promote DOD standardization.

### 11-4. Procedures

a. *Organization.* The APPWG is chaired by the DCS, G-4; LOGSA PSCC representative serves as the Deputy Chair. The Deputy Chair functions as the Chair in the absence of the DCS, G-4. ACOMs, ASCCs, and DRUs and AMC MSC representatives should make up the APPWG membership.

b. *Meetings.* The APPWG meets annually or at the call of the Chair, who approves the dates and locations of meetings. The Deputy Chair notifies APPWG membership/invited activities and requests proposed agenda topics at least 90 days before the meeting date. APPWG member organizations not able to provide a representative notify the Deputy Chair in writing. Commands failing to attend constitute agreement with majority vote.

c. *Agenda.* Members provide proposed agenda topics with information papers, to the Deputy Chair 45 days before

the meeting. The Deputy Chair coordinates the agenda with the Chair and distributes the final agenda at least 30 days prior to the meeting.

*d. Minutes.* The Deputy Chair prepares the meeting minutes and submits them to the Chair within 15 working days after each meeting for approval, and disseminates copies to members within 5 working days after approval by the Chair.

*e. Annual report of accomplishments.* The Deputy Chair submits a coordinated report of accomplishments to the Chair for approval and distribution to the APPWG members once each year.

*f. Funding.* Funds for travel and participation in APPWG activities are provided by the member's parent organization.

*g. Decisionmaking process.* The APPWG is a decisionmaking work group that recommends packaging policy to the DCS, G-4. Policy recommendations are determined by consensus. When consensus of members cannot be reached, the issue is resolved by one vote per member, with the majority opinion prevailing. Specific procedures include—

- (1) Discussing the issue in need of consensus.
- (2) All members (primary and advisory) providing input and/or requesting more information.
- (3) Discussing alternatives (primary and advisory members).
- (4) Determining if consensus can be reached (all members can support the decision).
- (5) If consensus cannot be reached, identifying points of conflict and agreement and attempting to negotiate a solution.
- (6) If consensus still cannot be reached by all members (primary and advisory), making a decision by a majority vote of the primary members.
- (7) Providing to the Chair, in writing, detailed rebuttals concerning majority approved issues no later than 45 days after publication of the meeting minutes, for timely review and decision. Rebuttals must be fully substantiated to support opposing positions.

*h. Communication.* APPWG members may communicate directly with the HQDA DCS, G-4, Chair.

*i. Guests.* Members are responsible for the invitation of their respective service/agency guests. In order to maintain the effectiveness of the APPWG, guests shall be limited to those who can contribute significantly to the established agenda. Guest attendance is subject to approval by the Chair or by the Deputy Chair in the absence of the Chair.

*j. Army Knowledge Online.* All APPWG members shall maintain an Army Knowledge Online (AKO) account to access APPWG group documents.

#### **11-5. Army packaging awards**

*a.* The Army participates in the DOD Packaging Awards as identified in DODD 4140.1. The APPWG is the forum to announce, solicit, and evaluate Army candidates for these awards.

*b.* The Army candidates selected to compete for the DOD awards shall be recognized by HQDA at the annual APPWG meeting.

## **Appendix A References**

### **Section I Required Publications**

This section contains no entries.

### **Section II Related Publications**

A related publication is a source of additional information. The user does not have to read it to understand this publication. American Standards of Test Measurements are available from [www.astm.org](http://www.astm.org). A–A, MIL–B, MIL–HDBK, and MIL–STD are available from <http://assist.daps.dla.mil/quicksearch>. Department of Defense publications are available at <http://www.dtic.mil/whs/directives>.

#### **AR 11–9**

The Army Radiation Safety Program

#### **AR 25–30**

The Army Publishing Program

#### **AR 25–51**

Official Mail and Distribution Management

#### **AR 190–11**

Physical Security of Arms, Ammunition, and Explosives

#### **AR 385–10**

U.S. Army Explosive Safety Program

#### **AR 672–20**

Incentive Awards

#### **AR 700–15/NAVSUPINST 4030.280/AFJMAN 24206/MCO 4030.330/DLAR 4145.7**

Packaging of Materiel

#### **AR 700–141**

Hazardous Materials Information Resource System (HMIRS) (RCS DD–FM & P(A Q,&AR) 1486)

#### **AR 708–1**

Logistics Management Data and Cataloging Procedures for Army Supplies and Equipment

#### **AR 710–1**

Centralized Inventory Management of the Army Supply System

#### **AR 710–2**

Supply Policy Below the National Level

#### **AR 725–50**

Requisition, Receipt, and Issue System

#### **AR 735–11–2/DLAI 4140.55/SECNAVINST 4355.18A/AFJMAN 23–215**

Reporting of Supply Discrepancies

#### **AR 740–3**

Stock Readiness

#### **AR 740–26**

Physical Inventory Control

**DA Pam 708-2**

Cataloging and Supply Management Data Procedures for the Army Central Logistics Data Bank

**DA Pam 738-751**

Functional Users Manual for the Army Maintenance Management System (TAMMS)

**DA Pam 750-8**

The Army Maintenance Management System (TAMMS) Users Manual

**TB 55-46-1**

Standard Characteristics (Dimensions, Weight, Cube) for Transportability of Military Vehicles and Other Outside/Overweight Equipment. (Available at <https://www.logsa.army.mil>.)

**TM 38-250/AFJMAN 24-204(I)/NAVSUP PUB 505/MCO P4030.191/DCMAD1, CH3.4(HM24)**

Preparing Hazardous Materials for Military air Shipments. (Available at <https://www.logsa.army.mil>.)

**TM 38-470**

Storage and Maintenance of Army Prepositioned Stock Material. (Available at <https://www.logsa.army.mil>.)

**TM 1-1500-204-23-1**

General Aircraft Maintenance (General Maintenance and Practices). (Available at <https://www.logsa.army.mil>.)

**DOD 4140.01-M-1**

Compliance for Defense Packaging: Phytosanitary Requirements for Wood Packaging Material (WPM)

**DOD 4500.9-R, Part I**

Passenger Movement

**DOD 4500.9-R, Part II**

Cargo Movement

**DOD 4500.9-R, Part III**

Mobility

**DOD 4500.9-R, Part IV**

Personal Property

**DOD 4500.9-R, Part V**

Department of Defense Customs and Boarder Clearance Policies and Procedures

**DOD 4500.9-R, Part VI**

Management and Control of Intermodal Containers and Systems 463-L Equipment

**DODD 4140.1**

Supply Chain Materiel Management Policy

**A-A-1253B**

Board, Prepacking (Paperboard & Molded Pulp Trays)

**A-A-1671**

Tape, Gummed (Paper, Reinforced, Asphalt, Laminated)

**A-A-3174**

Plastic Sheet, Polyolefin

**MIL-B-2427G(9)**

Box, Ammunition Packing: Wood, Nailed

**MIL-DTL-4M**

Tires and inner Tubes (Non-Aircraft); Packaging of

**MIL-HDBK-773**

Electrostatic Discharge Protective Packaging

**MIL-HDBK-774A**

Palletized Unit Loads

**MIL-HDBK-1791(2)**

Designing for Internal Aerial Delivery in Fixed Wing Aircraft

**MIL-PRF-131K**

Barrier Materials, Water Vaporproof, Greaseproof, Flexible, Heat-Sealable

**MIL-STD-129P(3)**

Military Marking for Shipment and Storage

**MIL-STD-961**

Defense and Program-Unique Specifications Format and Content

**MIL-STD-962**

Defense Standards Format and Content

**MIL-STD-967**

Defense Handbooks Format and Content

**MIL-STD-2073-1**

DOD Standard Practice for Military Packaging

**MIL-STD-3003A(AT)**

Vehicles, Wheeled: Preparation for Shipment and Storage of

**PPP-B-1672D**

Boxes, Shipping, Reusable with Cushioning. (Available at <http://assist.daps.dla.mil/quicksearch>.)

**7 CFR 319.40**

Logs, Lumber, and Other Unmanufactured Wood Articles. (Available at [www.access.gpo.gov/nara/cfr/index/html](http://www.access.gpo.gov/nara/cfr/index/html).)

**29 CFR 1910**

Occupational Safety and Health Administration, Department of Labor. (Available at [www.access.gpo.gov/nara/cfr/index/html](http://www.access.gpo.gov/nara/cfr/index/html).)

**49 CFR 100-180**

Research and Special Programs Administration, Department of Transportation. (Available at [www.access.gpo.gov/nara/cfr/index.html](http://www.access.gpo.gov/nara/cfr/index.html).)

**DMM**

601, Mailability. (Available at [http://pe.usps.gov/text/dmm300/dmm300\\_landing.htm](http://pe.usps.gov/text/dmm300/dmm300_landing.htm).)

**Allied Administrative Publication 15 (AAP-15)**

NATO Glossary of Abbreviations used in NATO Documents and Publications/Glossaire OTAN des abréviations utilisées dans les documents et publications OTAN. (Available at [www.nato.int/docu/standard.htm#AAP](http://www.nato.int/docu/standard.htm#AAP).)

**ASME-MH1**

Pallets, Slip Sheets and Other Bases for Unit Loads (Available at <http://asme.org>.)

**ASTM-D1974**

Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes

**ASTM-D3950**

Standard Specification for Strapping, Nonmetallic (and Joining Methods)

**ASTM–D3951**

Standard Practice for Commercial Packaging

**ASTM–D3953**

Standard Specification for Strapping, Flat Steel and Seals

**ASTM–D4169**

Standard Guide for Performance Testing of Shipping Containers and Systems, E1–2000

**ASTM–D4675**

Standard Practice for Selection and Use of Flat Strapping Materials

**ASTM–D5118/D–5118M–05ae1**

Standard Practice for Fabrication of Fiberboard Shipping Boxes

**ASTM–D5458–95**

Standard Test Method for Peel Cling of Stretch Wrap Film

**ASTM–D5459–95**

Standard Test Method for Machine Direction Elastic Recovery and Permanent Deformation and Stress Retention of Stretch Wrap Film

**ASTM–D5486**

Standard Specification for Pressure-Sensitive Tape for Packaging, Box Closure and Sealing

**ASTM–D5749–01**

Standard Specifications for Reinforced and Plain Gummed Tape for Sealing and Securing

**IATA**

Dangerous Good Regulation. (Available at <http://www.iata.org>.)

**IMDG**

IMDG Code. (Available at <http://hazmat.dot.gov/regs/intl/imdg.htm>.)

**ISPM 15**

International Standard for Phytosanitary Measures. (Available at [www.ippc.int/ipp/en/default.jsp](http://www.ippc.int/ipp/en/default.jsp).)

**Section III****Prescribed Forms**

This form is available on the Army Publishing Directorate Web site ([www.apd.army.mil](http://www.apd.army.mil)).

**DA Form 7635**

U.S. Army Wood Packaging Material Site Self-Certification Auditor's Checklist (Prescribed in para 10–7b(2).)

**Section IV****Referenced Forms**

DA Forms are available on the Army Publishing Directorate Web site (<http://www.apd.army.mil>). DD Forms are available from the OSD Web site (<http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm>). SFs are available from the GSA Web site (<http://www.gsa.gov>).

**DA Form 2028**

Recommended Changes to Publications and Blank Forms

**DA Form 2258**

Depreservation Guide for Vehicles and Equipment

**DD Form 61**

Request for Nomenclature

**DD Form 361**

Transportation Discrepancy Report (TDR)

**DD Form 1225**

Storage Quality Control Report

**DD Form 1348-1A**

Issue Release/Receipt Document

**DD Form 2169**

Special Packing Instruction

**DD Form 2169C**

Special Packing instruction (Continuation Sheet)

**SF 364**

Report of Discrepancy (ROD)

**SF 368**

Productivity Quality Deficiency Report

## **Glossary**

### **Section I Abbreviations**

**ACOM**

Army command

**AFJMAN**

Air Force joint manual

**AKO**

Army Knowledge Online

**ALSC**

American Lumber Standard Committee

**AMC**

Army Materiel Command

**AMDF**

Army materiel data file

**APHIS**

Animal and Plant Health Inspection Service

**APPWG**

Army Packaging Policy Work Group

**APS**

Army prepositioned stock

**AR**

Army regulation

**ASCC**

Army Service Component Commands

**ASME**

American Society of Mechanical Engineers

**ASTM**

American Standards of Test Measurement

**ATRRS**

Army Training Requirements and Resources System

**BII**

basic issues items

**CCP**

consolidation and containerization point

**CFR**

Code of Federal Regulations

**CONUS**

continental United States

**COSIS**

care of supplies in storage

**DA**

Department of the Army

**DCMAD**

Defense Contract Management Agency directive

**DCS**

Deputy Chief of Staff

**DLA**

Defense Logistics Agency

**DLAR**

Defense Logistics Agency regulation

**DLAI**

Defense Logistics Agency instruction

**DMM**

Domestic Mail Manual

**DOD**

Department of Defense

**DODAAC**

Department of Defense Activity Address Code

**DODD**

Department of Defense directive

**DOL**

Director of Logistics

**DOT**

Department of Transportation

**DRMO**

Defense Reutilization and Marketing Office

**DRU**

Direct Reporting Unit

**DTS**

Defense Transportation System

**DVD**

direct vendor delivery

**ESD**

electrostatic discharge

**FED LOG**

Federal Logistics

**FLIS**

Federal Logistics Information System

**GOCO**

Government owned, contractor operated

**HAZMAT**

hazardous material

**HT**

heat treated

**HQ**

headquarters

**IATA**

International Air Transport Association

**IMDG**

international maritime dangerous code

**IMM**

item materiel manager

**IMPAC**

International Merchants Purchase Authorization Card

**IPPC**

International Plant Protection Convention

**ISPM**

International Standards for Phytosanitary Measures

**LCMC**

life-cycle management command

**LMI**

Logistics management information

**LOGSA**

Logistics Support Activity

**MATCAT**

materiel category

**MB**

methyl bromide

**MCO**

Marine Corps Order

**MIL-HDBK**

military handbook

**MIL-PRF**

military performance standard

**MIL-STD**

Military standard

**mm**

millimeter

**MSC**

major subordinate command

**MSDDC**

Military Surface Deployment and Distribution Command

**NATO**

North Atlantic Treaty Organization

**NAVSUPINST**

Navy supply instruction

**NAVSUP PUB**

Naval Supply Systems Command publication

**NICP**

national inventory control point

**NPPO**

National Plant Protection Organization

**NSN**

national stock number

**NWPCA**

National Wood Pallet and Container Association

**OCONUS**

outside continental United States

**Pam**

pamphlet

**POC**

point of contact

**PSCC**

Packaging, Storage, and Containerization Center

**RDE**

research, development, and engineering

**SDR**

supply discrepancy report

**SECNAVINST**

Secretary of the Navy Instruction

**SF**

standard form

**SMPT**

School of Military Packaging and Technology

**SPI**

special packaging instruction

**SR**

stock readiness

**SMPT**

School of Military Packaging Technology

**SOS**

source of supply

**SPI**

special packing instructions

**SSF**

single stock fund

**TB**

technical bulletin

**TM**

technical manual

**USDA**

U.S. Department of Agriculture

**USPS**

United States Postal Service

**VE**

value engineering

**WPM**

wood packaging material

**Section II****Terms****American Lumber Standard Committee**

Organization comprising manufacturers, distributors, users, and consumers of lumber that serves as the standing committee for the American Softwood Lumber Standard (ALSC) (Voluntary Product Standard (PS) 20) and in accordance with PS 20 and administers an accreditation program for the grade marking of lumber produced under the system. The ALSC also administers accreditation programs for the quality marking of treated lumber produced under standards written and maintained by the American Wood Preserver's Association (AWPA) and for the labeling of wood packaging material produced.

**Auditor**

A trained, independent, and impartial inspector assigned by the DOD certified WPM site commander.

**Bag**

A preformed container of tubular construction made of flexible material, generally enclosed on all sides except one forming an opening that may or may not be sealed after filing.

**Barcode**

An array of rectangular bars and spaces in a predetermined pattern representing coded elements of data that can be automatically read and interpreted by automatic bar code reading devices.

**Bark-Free Wood**

Wood from which all bark excluding the vascular cambium, ingrown bark around knots, and bark pockets between rings of annual growth has been removed (ISPM 15).

**Box**

Rigid, closed container usually rectangular/prismatic in shape.

**Bulk packaging**

A method of containing loose or granular materials for shipping or storage. A method of assembling many items into a container for shipment or storage.

**Bundle**

Two or more articles held together by whatever means (for example, banding, strapping, tying, shrink/stretch wrap, and so on) so as to form a shipping unit.

**Carton**

A folding, collapsible container generally made from fiberboard or paperboard.

**Closure**

A means of closing a container to retain the contents.

**Consignee (receiver)**

Party to whom materiel is shipped and whose name and address appear in the "ULTIMATE CONSIGNEE OR MARK FOR" block of the shipping label.

**Consignor (shipper)**

Party who ships materiel and whose name and address appear in the "FROM" block of the shipping label.

**Consolidation container**

A container used to consolidate more than one line item into a single shipping container to be shipped to one destination, but not necessarily to one addressee.

**Crate**

A rigid shipping container of framed construction joined together with nails, bolts, or other means of fastening. The framework may or may not be enclosed with sheathing. In may be demountable or nondemountable.

**Critical item**

Items that would become unfit for use as a result of physical action on the item or any integral surfaces thereof. This includes, but is not limited to items having a surface finish of 64 micro inches root mean square or less, items which have surfaces that mate with surfaces of other parts, optical and reflective devices having highly polished surfaces, items requiring a high degree of cleanliness, and items requiring special protection against shock, vibration, or abrasion.

**Cube**

The volume or space occupied by the unit under consideration computed by multiplying overall exterior length, width, and height.

**Cushion**

Protection of an item from physical damage by using materials designed to absorb shocks and vibrations by compression.

**Cushioning material**

A material used to isolate or reduce the effect on a product of externally applied shock or vibration force, or both.

**Dangerous goods**

Articles or substances which are capable of posing a significant risk to health, safety, or property, and which are subject to special regulations for its storage and transport.

**Department of Defense Activity Address Code**

A distinct six-position alphanumeric code assigned to identify specific units, activities, or organizations as found in the Department of Defense Activity Address Directory (DODAAC). The DODAAC may also be found in the acquisition document "SHIP TO" information.

**Dimensions**

The measurement of length, width (or diameter), and depth of containers, expressed in that order, it shall be stated as "inside" or "outside."

**Drum**

A cylindrical shipping container having straight sides, and flat, convex, or embossed ends, designed for storage and shipment as an unsupported outer package that may be shipped without boxing or crating. It may be made of metal, or of plywood, or of fiber with wooden, metal, or fiber ends. Drums are also made of rubber or plastics.

**Dunnage**

Materials not constituting a part of the container, frequently byproduct or scrap, used for filling space, for blocking and bracing, or otherwise to protect and secure the contents dunnage. WPM used to secure or support a commodity but which does not remain associated with the commodity.

**Electrostatic discharge**

The transfer of electrostatic charge between bodies at different electrostatic potential.

**Electrostatic discharge sensitive devices**

Electrical and electronic devices that are susceptible to damage from electrostatic discharge (static electricity). These devices include, but are not limited to, integrated circuits and discrete devices (for example, resistors, transistors, and other semiconductor devices).

**Expendable pallet**

A pallet intended to be discarded after a single use.

**Exterior container**

A container, bundle, or assembly that is sufficient by reason of material, design, and construction to protect unit packs and intermediate containers and their contents during shipment and storage. It can be a unit pack or a container with a combination of unit packs or intermediate containers. An exterior container may or may not be used as a shipping container.

**Exterior pack**

A container, bundle, or assembly that is sufficient by design and construction to protect unit and intermediate packs and contents during shipment and storage. This can be a unit pack or a container with any combination of unit or intermediate packs.

**Fast pack container**

A standard size, reusable container with foam cushion inserts.

**Federal Logistics Database**

Federal Logistics Database (FED LOG) is a logistics information system that allows retrieval of information from the FLIS and service specific databases (see <http://www.dlis.dla.mil/fedlog>).

**Federal Logistics Information System**

Federal Logistics Information System (FLIS) is a logistics data base of over six million active and six million inactive items of supply providing information for the military services, civilian agencies, contractors, NATO countries, and other friendly foreign governments. FLIS contains information about manufacturers, item characteristics, item logistics, management, transportation, packaging, and use for specific items. FLIS-E collects, stores, processes, sorts, and distributes data to provide information products and services to thousands of customers worldwide (see <http://www.dtic.mil/whs/directives/corres/pub1.html>).

**Fiberboard box**

A container made of one or more pieces of corrugated or solid fiberboard.

**G**

Symbol for the acceleration of gravity at the earth's surface.

**Gross mass**

The combined mass of the container, packing material and contents.

**Hazardous materials**

An item of supply consisting of materiel that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed (This includes all items listed as hazardous in 29, 40, 49 CFR and other applicable modal regulations effective at the time of shipment.).

**Heat treated**

Heated to a minimum core temperature of 56 degrees Celsius for 30 minutes.

**Inspection certificate (U.S.)**

A certificate, issued by the USDA satisfying import regulations of foreign countries and indicating that a U.S. export shipment has been inspected and is free from harmful pests and plant diseases.

**Intermediate pack**

A wrap, box, or bundle that contains two or more unit packs of identical items.

**International Plant Protection Convention (IPPC)**

An international treaty relating to plant health, to which 138 governments, including the United States (as of 25 April 2005), currently adhere. Its main purpose is to secure action to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control.

**International Standard for Phytosanitary Measure (ISPM)**

An international standard adapted by the Conference of Food and Agriculture Organization, the Interim Commission on Phytosanitary measures, or the Commission on Phytosanitary measure, established under the IPPC.

**Item description (nomenclature)**

The name and description of an item as it appears in the contract, purchase order, or requisition. The source document for this information is DD Form 61 (Request for Nomenclature), which contains the exact name and description of an item.

**Label**

A piece of paper or other material to be affixed to a package, container, or article, and on which is printed either information concerning the product or addressees.

**Levels of protection**

A means of specifying the level of military preservation and packing that a given item requires to ensure that it is not degraded during shipment and storage.

**Load**

Types of loads are determined by the degree of structural strength supplied to the shipping container by the contents. Loads are classified as Type 1, easy loads; Type 2, average loads; and Type 3, difficult loads.

*a. Type 1, easy load.* A Type 1, easy load, is developed from an item which completely fills the outer shipping container or from items of moderate density prepackaged in an interior container which completely fill the outer shipping container. Easy load items are not easily damaged by puncture or shock and do not shift or otherwise move within the package. Examples include items packaged in boxes or cans which are prepackaged in fiberboard boxes prior to over packing in the shipping container; chests; tool kits; and sturdy instruments which are fully in contact with, and support, all faces of the shipping container.

*b. Type 2, average load.* A Type 2, average load, is developed from item(s) of moderately concentrated weight which are packed directly into the shipping container and provide partial support to all panels thereof. It also includes item(s) prepackaged by wrapping or by positioning in partitions, cells or paperboard boxes, or by other means which provide support to all panels of the shipping container. Examples include items packaged in boxes or cans which are not prepackaged in an interior container; bottles individually separated one from the other by cells or partitions.

*c. Type 3, difficult load.* A Type 3, difficult load is developed from item(s) which require a high degree of protection to prevent puncture, shock, or distortion of the shipping container. It also includes item(s) which do not provide complete support to the panels of the shipping container. Examples include wrenches, long bolts, and rods which exert concentrated forces on the shipping container; motors, telephones, typewriters, drop forgings, rivets, hardware, or other items that are random packed in bulk; and fragile or delicate items requiring special protection.

**Loose or unpacked item**

An identifiable item that is unencumbered by a tie, wrap, or container.

**Lumber**

The product of the saw and planing wood mill, not further manufactured than by sawing, resawing, planing, crosscutting to length, and matching.

**Marking**

Application of numbers, letters, labels, tags, symbols, or colors for handling of identification during shipment and storage.

**Military levels of packing**

The packing levels are level A, which provides maximum protection to meet the most severe worldwide shipment, handling, and storage conditions; and level B, which provides protection to meet moderate worldwide shipment, handling, and storage conditions.

**Multipack**

A consolidation of packages containing nonidentical items.

**Multiple unit**

The group of items, subassemblies, and components comprising a single unit for a specific assignment.

**National Wooden Pallet & Container Association (NWPA)**

The international trade association represents manufacturers, recyclers and distributors of pallets, containers and reels.

**Pack**

To place materiel into a container for handling, storage, or transport.

**Package**

One or more articles or pieces contained or secured into a single unit.

**Packaging**

An all-encompassing term describing the methods and materials used to protect materiel from deterioration or damage. Packaging includes the processes of preservation, cleaning, drying, packing, marking, and unitization.

**Packing**

The assembly of items into unit packs and intermediate or exterior containers, with the necessary blocking, bracing, cushioning, weatherproofing, reinforcement, and marking.

**Palletized load**

A load made up of articles, loose or in containers placed on pallets or skids.

**Parcel post**

Any packed materiel placed in USPS channels.

**Performance oriented packaging**

Type of packaging based on the ability of packaging to perform to a specified level of integrity when subjected to performance test.

**Phytosanitary**

Plant health including the protection of natural flora and plant products. It also includes both direct and indirect damage by pests.

**Phytosanitary measure**

Any legislation, regulation or official procedure used to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated nonquarantine pests.

**Phytosanitary procedure**

Any officially prescribed method for implementing phytosanitary regulations including the performance of inspections, tests, surveillance or treatments in connection with regulated pests.

**Phytosanitary regulation**

Official rule to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated nonquarantine pests, including establishment of procedures for phytosanitary certification.

**Preservation**

The processes and procedures used to protect materiel against corrosion, deterioration, and physical damage during shipment, handling, and storage. As applicable, preservation includes cleaning, drying, application of preservative, wrapping, cushioning, containers (unit and intermediate) and complete identification markings up to but not including the exterior shipping container. Military methods of preservation are defined in MIL-STD-2073-1.

**Preservative**

A substance which when applied directly to an item provides initial environmental protection.

**Pressure-sensitive labels**

A label that has a backing coated so as to permit it to adhere instantaneously to most surfaces with the application of slight pressure.

**Processed wood material**

Products that are a composite of wood constructed using glue, heat and pressure, or any combination thereof (ISPM 15). Examples are plywood, particleboard, oriented strand board, veneer, wood wool, and so on.

**Project code**

A three-position alphanumeric code which identifies plans, programs, and exercises.

**Quantity**

The number of units of issue contained in a unit pack, intermediate pack, shipping, container, bundle, or secure lift.

**Recyclable**

Capable of being removed, separated, or diverted from the solid waste stream in an available program, established by, but not limited to, manufacturers, retailers, or municipalities; processed and returned to use in the form of raw materials or products.

**Recycled**

Diverted, separated, or removed from the solid waste stream, processed and returned to use in the form of raw materials or products.

**Reel**

A cylindrical device that has a rim at each end and an axial hole for shaft or spindle, and on which a product is wound to facilitate handling and shipping.

**Required delivery date**

The day of the year (for example, 087 and 198) specified on the requisition when material is required by the requisitioner or the consignee.

**Remediation**

To provide remedial aid.

**Reusable**

Intended to be used for its original purpose one or more times.

**Reusable container**

A shipping and storage container that is designed for reuse without impairment of its protective function. A shipping and storage container that can be repaired, refitted, or both to prolong its life or to adapt it for shipment of items other than that for which it was originally intended.

**Seal**

Means of securing a container to prevent undetected loss or deterioration of contents.

**Sealed**

An item is considered sealed if the entrances to the interior of the item are sealed with gaskets or closely mated surfaces under mechanical pressure or are sealed by threaded closure devices (except plastic caps). Sealed items also include assemblies which are encapsulated in plastics, ceramics, glass or metal with completely cemented seams or joints closing the interior to the entrance of liquid water. Hermetic sealing is a seal that will exclude air and will be leakproof at ambient temperatures and atmospheric pressures and is usually glass to glass, metal to metal or metal to glass.

**Self-certifier**

An organization or person who acts as a certifier in his own packaging regard, approved by the competent authority.

**Shipping container**

A container which meets minimum carrier regulations and is of sufficient strength by reason of material, design, and construction to be shipped safely without further packing.

**Shrink film**

Thermoplastic film which shrinks when subjected to heat.

**Site custodian**

A trained local individual within the packaging or WPM fabrication areas assigned by the DOD certified WPM site commander as the commander's WPM responsible representative.

**Skid**

An adjustable flat surface pallet designed to fit the size of the container being shipped. One of a pair of series of parallel runners, usually wood, affixed to the underside of boxes, crates, or an item to allow entry of trucks, forks or to facilitate sliding.

**Stretch wrap**

A thermoplastic material having elastic properties to permit stretching and wrapping around small unit packs or pallet loads.

**Unitization**

Assembly of exterior packs of one or more line items of supply into a single load so that the load can be handled as a unit through the distribution system. Unitization (unitized loads or unit loads) encompasses consolidation in a container, placement on a pallet or load base, or securely binding together.

**Unit load**

A single item or an assembly of items (in or out of containers) designed so that the whole is handled as a single entity.

**Unit pack**

The first tie, wrap, or container applied to a single item, or a quantity thereof, or to a group of items of a single stock number, preserved or unpreserved, that constitutes a complete or identifiable package. A unit pack is also often referred to as a "package" or merely as a "pack."

**Weight**

Force exerted by a mass due to acceleration submitted; force measured by a scale.

**Wood packaging material (WPM)**

Hardwood and softwood packaging material used in supporting, protecting, or carrying a commodity (includes dunnage) (ISPM 15). Examples of WPM include but are not limited to pallets, skids, pallet collars, containers, crates, boxes, cases, bins, reels, drums, load boards, and dunnage. Wood packaging made of exempt materials but combined with solid wood components must still be treated and marked. Does not include processed wood materials and manufactured wood products. (WPM was previously known as nonmanufactured wood packaging or solid wood packaging material.)

**WPM component POC**

The DOD Component's representative to the Defense Packaging Policy Group (DPPG).

**WPM program manager**

Any identified ACOMs, ASCCs, and DRUs or subordinate command WPM representative responsible for WPM compliance program in their command. If no subordinate representative assigned, duties revert to the WPM component POC.

**WPM compliance**

Satisfying the intent and provisions of the IPPC guidelines of March 2002, as implemented by the United States (7 CFR 319.40), U.S. allies, and other friendly governments.

**Wrap**

Piece of flexible material either precut or cut to length for manual or mechanical wrapping of the item to be packaged.

**Section III**  
**Special Abbreviations and Terms**

This section contains no entries.

**UNCLASSIFIED**

**PIN 080641-000**