

CHAPTER 1

GENERAL

Section 1. PURPOSE, APPLICABILITY, AND POLICY

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1-101. Purpose and Applicability

a. This regulation establishes uniform storage and materials handling policies, procedures, and responsibilities for use by DOD supply installations/activities involved in the receipt, storage, issue and care of military supplies and equipment, except for preservation-packing and operation, defense property disposal storage facilities, and maintenance of bulk petroleum fuel handling facilities.

(1) Preservation-packing of military supplies and equipment is contained in joint services publications DSAM 4145.2/TM **38-230-1/NAVSUP PUB 502/AFP 71-15/MCO 4030.31B, Vol I, Preservation and Packing**, and DSAM 4145.2, Vol 11/TM **38-230-2/NAVSUP PUB 503, Vol II/AFP 71-16/MCO 4030.21C, Packing**. Guidance applicable to bulk petroleum fuel handling facilities is set forth in **MIL-HDBK-201, Petroleum Operations**.

(2) DPDS Manual 4160.5, Storage Operations (Warehousing) at the Defense Property Disposal Offices provides guidance on storage of excess and **surplus** materials.

b. The provisions of this regulation apply to the Department of the Army (DA), the Department of the Navy (**DN**), the Department of the Air Force (**DAF**), the Marine **Corps (MC)**, and the Defense Logistics Agency (**DLA**) (referred to collectively as "DOD Components").

1-102. Policy

a. Implementation of this regulation also requires compliance with DOD Directives 4165.60, Solid Waste Management-Collection, Disposal, Resource Recovery, and **Recycling** Program and 6050.1, Environmental Considerations in DOD Actions. **Ad-**

ditionally, implementation outside the United States requires consideration of host nation environmental quality laws and regulations.

b. Storage and materials handling policies, procedures, and methods at DOD Component supply installations/activities will be uniform to the maximum practicable extent. Policies, procedures, and methods indicated herein by directive words such as "will," "shall," or "must," are mandatory in both the Continental United States (CONUS) and overseas. The use of such words **as** "may" or "should" indicates that the procedures and methods described are recommended but not necessarily mandatory.

c. The following DOD regulations will be used in conjunction with this regulation:

Number	Title
DOD 4145. 19-R	Storage and Warehousing Facilities and Services
DOD 4145. 19-R-2	Storage and Materials Handling Standard Methods
DOD 4145. 19-R-3	Storage Modernization

d. When necessary, DOD Components may authorize temporary deviations when **compliance** with mandatory provisions is temporarily impracticable or the deviation is required as an exigency measure. Temporary deviations, including any extensions thereto, will not exceed 90 days. DOD Components may authorize interim deviations from the mandatory provisions of the regulation. Advice of any authorized deviation which may extend beyond **90** days will be forwarded to the Department of Army (DA), ATTN: **DALO-SMS**, WASH DC 20310, within 15 days of the date of authorization, for a coordinated determination as to whether it should

be (a) incorporated into the regulation, (b) continued as an authorized deviation, (c) withdrawn, or (d) referred to the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) (ADS (MRA&L)) for approval.

1-103. Organization and Use

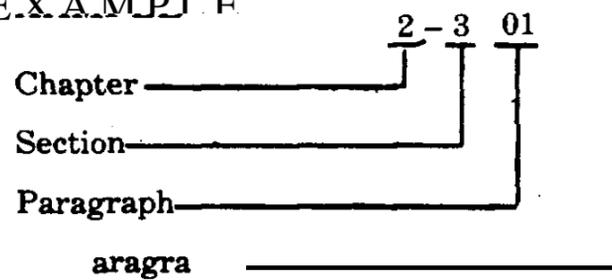
a. Organization. This publication is organized by major subjects (chapters) and functions (sections). A **table of contents** reflects the scope of subjects included. The looseleaf format of the regulation facilitates changes and additions to the text.

b. Table of contents and index. The organization of this publication is such as to make it possible to locate desired information easily by referring to the table of contents in front of the manual to determine general locations, and to the table of contents at the beginning of each section for specific locations. Information that is too detailed for identification by this method may be located by reference to the topical index.

c. Paragraph numbering system. The chapter, section and paragraph numbering system identifies the appropriate chapter followed by the section, and the applicable paragraph number within the chapter. Subparagraphs are identified by lower

case alphabetic followed by numerics and lower case alphabetic in parentheses:

E.X.A.M.P.L.E.



d. Page numbering. Pages are numbered consecutively in a separate series for each chapter. Each page number will be preceded by the appropriate chapter number, e.g., 3-15 (page 15 of Chapter 11).

e. Illustrations. The purpose of the illustrations is to show by means of photographs, charts, or filled-in forms, the principles and procedures explained in the text. The illustrations do not necessarily show current names, dates, and figures, but are included in order that the principles outlined in the written instructions may be clarified.

f. Publication of changes. The DA will coordinate all changes or revisions to this regulation with the DOD Components and ASD (MRA&L) prior to publication. Authorized changes to this regulation will be issued as required upon approval of the ASD (MRA&L).

Section 2. GLOSSARY OF TERMS

Uniform terminology is basic to uniform operating procedures. Following is a glossary of words and terms making up the language of storage and materials handling for operating personnel.

Advanced decay—The stage of decay in which the disintegration is readily recognized because the wood has become punky, soft and spongy, stringy, pitted, or crumbly.

Air dried or air seasoned—Dried by exposure to the air, usually in a yard, without artificial heat.

Air shipment—Transportation by air either inside or outside continental limits of the United States.

Aisle—Any passageway within a storage area.

Allocated space—A definite number of net square feet of a specified type of storage space formally apportioned for use.

Assembly—Area used for collecting and combining material components.

Assignment of space—Designation of specific space within the installation for storage purposes.

Attainable cubic feet—The product of net storage space (sq ft) multiplied by the stacking height(s) permitted by safety regulations/restrictions and floor load limitations with available materials handling equipment (MHE) and storage aids.

Backlog—An accumulation of incomplete work.

Bale—Articles or materials compressed in a shaped unit and usually bound with cord or metal ties under tension. May be wrapped in paper, thin veneer wood, textile material, or combinations thereof.

Bay—Designated area within a section of a ware-

house or depot shop, usually outlined or bounded by posts, pillars, columns, or painted lines.

Bill of lading-Acknowledgement of the receipt of goods for movement by the carrier and the contract for **the movement**.

Bin area-An area for the storage of supply items which are **binnable**.

Binder—Any material such as burlap, heavy paperboard, or thin lumber placed between layers of **stock** to stabilize stacks.

Bin storage **space**—**Area** in which bins have been erected; includes the aisles and working space between bins.

Blitz can-The standard US Government issue 5-gallon container used especially to transport water or gasoline.

Block-Self supporting regular stack of supplies, two or more **units** wide, two or more deep, and two or more high. A block maybe rectangular or pyramidal.

Block storing-Storage of similar containers or material in a block.

Blue stain-A bluish or grayish discoloration of the sapwood caused by the growth of certain **moldlike** fungi on the surface and in the **interior**; made possible by the same conditions that favor the growth of other fungi.

Bolster—Block of hardwood supporting drafts of lumber and used when transporting the drafts by means of truck straddle **carriers**.

Box—A rigid container having closed faces, usually constructed of wood, metal, paperboard, fiberboard, plywood, plastic, or a combination of such materials. Strength and stability is dependent upon the material of the faces and the fastening of faces in assembling the box.

Box car-A fully enclosed **freight** car having doors on both sides and/or sometimes on the ends. Used for general **freight** services.

Box **pallet**—A pallet with framework back and sides, so constructed that several may be stacked, one upon another, without the weight being borne by the supplies but only by the pallets.

Box shop-Area used for fabricating, **manufactur-**

ing, assembly, or repair of containers and storage aids.

Bridge **plate**—**Plate**, usually of metal, used to span the space between freight cars or trucks and the loading platform.

Brown stain-A rich brown to deep **chocolate**-brown discoloration of the sapwood in some pines caused by a fungus that acts similarly to the **blue**-stain fungus.

Bulk liquid storage **space**—**Space** inside tanks designed for the storage of liquid bulk.

Bulk **storage**—**Storage** in warehouses of any large quantity of supplies usually in original containers or storage of liquids or solids such as coal, lumber, rubber bales, petroleum products, or ores in tanks or piles.

Bursting strength-The pressure required to rupture a container when it is tested in a specified instrument under specified conditions.

Butt boards-Boards arranged at an angle on a sorting platform to facilitate the formation of lumber drafts with uniform faces.

Caged **storage**—**Storage** space segregated within a building and specially screened or barricaded to prevent pilferage or to isolate hazardous materials.

Care of supplies in **storage**—**A** program whereby supplies and equipment in storage are preserved in a serviceable condition through inspection and action taken to correct any forms of deterioration and to restore the supplies to ready-for-use condition.

Carrier-A commercial transportation media providing railroad cars, motor trucks, ships, airplanes, or other conveyances for transporting supplies.

Check—A lengthwise separation of wood, the greater part of which occurs across the rings of **annual** growth.

Chemical brown stain-A discoloration of wood, that sometimes occurs during the air or kiln **drying**, apparently caused by the oxidation of extractives.

Chill **space**—**Refrigerated** warehouse area in which the temperature can be controlled between **36° F.** and **46° F.** (2° C. and 8° C).

Chute—Usually an inclined trough, sometimes a tube, used to convey supplies **from** an upper to a lower level.

Cleated-fiberboard box—A rigid container constructed by joining six panel faces which are made of plywood, reinforced with wood edges or intermediate cleats.

Commodity—A specified grouping of items of supply.

Common **carriers**—See carrier.

Condensation—Moisture resulting from condensing, such as the **moisture** gathered on a cold surface in a warm room.

Consolidation station—Place to which less than carload lots of freight are relayed so that they **can** be grouped with other **freight** to make **full** carloads for the same delivery point.

Container—A receptacle such as a bag, barrel, drum, box, crate **or** package used to hold and to protect contents. (See also the definition of **container, intermodal, ISO.**)

Container, **intermodal, ISO**—An article of transport equipment which meets the standards of the International Organization for Standardization (ISO) designed to facilitate and optimize the carriage of goods by one or more modes of transportation without intermediate handling of the contents and equipped with features permitting its ready handling and transfer from one mode **to** another. Containers maybe fully enclosed with one or more doors, open top, tank, refrigerated, open rack, gondola, **flatrack**, and other designs. Included in this definition are modules or arrays that are so **configured** they can be coupled to form an integral unit regardless of intention to move singly or in multiplex configuration.

Contamination—Any matter foreign to the finished element, compound or part, which has an adverse effect on the material.

Controlled humidity (CH) warehouse space—Space which has been especially prepared for and equipped with equipment for control of humidity.

Cooper—To cover holes and cracks from the inside (e.g., **freight** car, bags, containers) to prevent leakage of bulk grain.

Comer marker—A conspicuous marker placed at

aisle intersections as a caution to personnel to prevent bumping stacks, or other fixed objects.

Corrosion—Deterioration of material by chemical action, usually as a result of galvanic acid, or alkaline action, or oxidation of metals.

Corrosion **preventive**—Any agent such as oil, plastic, paint, wrap or other surface treatment of metals whose primary function is to prevent, inhibit, or deter corrosion.

Corrosion preventive compound—A compound applied to metal surfaces to prevent, inhibit, or deter rust or **corrosion**. The term is usually applied to compounds which can be removed by water or solvent cleaners **in** order to distinguish compound from paint films.

Covered **space**—Area within any roofed structure.

Crate—A rigid shipping container constructed of structural members fastened together to hold and protect the contents. It maybe sheathed or **un**-sheathed.

Critical item—Essential item which is in short supply or expected to be in short supply for an extended period. (Not to be **confused** with “critical application item” which is defined as an item essential to preservation of life in emergencies.)

Cross **aisle**—A passageway at right angles to main aisles, used for the movement of supplies, equipment, and personnel.

Cross stacking—The placing of one layer of containers at right angles to those just below **to** increase the stability of the stack.

Cross **tie**—Cross layers of supplies as in cross stacking, except that only an occasional layer is crossed, and not every other one.

Cube—The product of length by width by depth.

Decay —Disintegration of wood substance through the action of wood-destroying **fungi**.

Deck **boards**—Top or bottom surface of a **pallet**.

Defect—Any nonconformance with **specified requirements**.

Degreasing—Solvent cleaning by dipping, using hot vapor.

Demurrage—An assessment against the shipper or consignee for the detention of common carrier

equipment beyond the period of free time allowed for loading or unloading.

Direction of storage—A method used to gain maximum storage space and various aisle arrangements to **provide** flexibility for storage operations.

Desiccant—A material which will absorb moisture by physical or chemical means.

Deterioration—Any impairment of item quality, value, or usefulness. Includes damage caused by **erosion**, oxidation **corrosion**, or contamination.

Draft of' lumber—Lumber arranged and stacked in a bundle so as to facilitate shipment, storage, and handling.

Draw-bar pull—The pulling power exerted at the draw-bar (as by a locomotive or tractor).

Drum—Metal container for liquids, usually **pre-**ceded by the quantity, e.g., 5-gallon drum, 55-gallon drum.

Dry tank space—**Area** in tanks designed for the storage of supplies other than bulk liquids or gases.

Dry rot—A term loosely applied in many types of decay but especially to that which, when in an advanced stage, permits the wood to be easily crushed to a dry powder. The term is actually a misnomer for any decay, since all fungi require considerable moisture for growth.

Dunnage—Any material (boards, planks, blocks, pneumatic pillows) used to support or secure supplies in storage or while in transit.

End item—A final combination of a product, component part and/or material which is ready for its intended use,

Fire aisle—A passageway established to aid in fighting or preventing the spread of fire, or for access to **fire** fighting equipment.

Fiberboard box—A **rectangular** three dimension shipping container, made either of solid fiberboard or corrugated fiberboard. Distinguished from a carton which is not designed as an outer shipping container.

Flammable warehouse—**Area** designed for the storage of highly flammable material.

Floor load—Weight that can safely be supported

by a floor, expressed in pounds per square foot of floor space.

Floor plan—A scale drawing of the floor area of a building showing columns, stair wells, elevator shafts, offices, washrooms, doors, and other structural features.

Fogging—Application of chemical compound, in the form of vapor, to interior surfaces or relatively inaccessible surfaces.

Fragile—**Delicate**, weak and easily damaged.

Freeze space—**Refrigerated** warehouse area where temperatures can be controlled below a level of 32° F. (0° C).

Freight—All material, products or commodities, express and mail, shipped by rail, water, highway or air.

Fungus—A germlike parasite which flourishes on organic material in a humid atmosphere at moderate and high temperatures.

Gondola—An open-top freight car with sides and ends.

Grain thief—Device consisting chiefly of a long tube used for taking grain samples **from** various depths in a load of grain.

Gross space for storage operations—**That** amount of gross storage space less unusable space, standby space, and outgranted space.

Gross space used in support of storage operations—**That** area used for preservation and packaging, assembly, packing and crating, container manufacturing, receiving, shipping, inspection and identification, administrative storage offices, rest areas, tool rooms, battery charging stations, and other similar support areas.

Gross storage space—Gross area, regardless of its location or the purpose for which the space was designed or designated, which is assigned or used for any operation concerning storage or the support of storage functions.

Gross weight—The weight of the container **plus** its contents.

Hazardous commodities—Material consisting of explosives, flammables, corrosives, **combustibles**, oxidizers, poisons, **toxics**, sources of ionizing

radiation or radiant energy, biological and **radiologicals, magnetics**, and compressed gases, which because of their nature, are dangerous to store or handle and present real or potential hazards to life and/or property.

Heartwood—The hard wood at the core of a tree trunk.

Honeycombing—The storing or withdrawing of supplies in a manner which results in vacant space that is not usable for storage of other items.

Humidity—Moisture in the air.

Humping—The switch of railroad car(s) in classification yards where the car(s) are pushed over a mound (hump) and the slope of the hump used to supply the motivation power for switching the car(s) onto the desired track(s). The “hump” track may or may not be equipped with car retarders.

Igloo space—Area in an earth-covered structure of concrete and/or steel designed for the storage of ammunition and explosives.

Incipient decay—The early stage of decay in which the disintegration has not proceeded far enough to soften or otherwise perceptibly impair the hardness of the wood.

Inspection—Examination and testing of supplies and services (including, where appropriate, raw materials, components and intermediate assemblies) to determine whether the supplies and services conform to contract requirements.

Intermediate pack—A wrap, box, or bundle which contains two or more unit packs of identical items.

Inventory—A physical count performed to determine the on hand quantity of an item or group of items.

Ionizing **radiation**—Any electromagnetic or particulate radiation capable of producing ions, directly or indirectly, in its passage through matter. (See *radioactive material*.)

Kiln dried—Dried in a **kiln** with the use of artificial heat.

Labor pool—A centrally controlled group of workers who are assigned to particular jobs or areas when needed.

Large-lot **storage**—A quantity of supplies, four or

more stacks, stored to maximum height, usually accepted as stock stored in carload or greater quantities.

Layout—A floor plan showing assignment of gross space for storage operations and supporting functions.

LCL (less-than-carload)—A quantity of freight less than that required for the application of a carload rate.

Leaker—A container which, through mechanical maladjustment or damage, is not hermetically sealed, permitting air to enter and product to exude.

Levels of packaging—A term used to refer to the degree of protection required during shipment, handling, and storage of supplies.

Line **item**—A separate item of supply on a transaction document.

Loading platform—A flat surface to facilitate loading or unloading, usually erected alongside a warehouse at the approximate level of a rail car or truck floor.

Location audit reconciliation—Match between valid location records and the accountable records, in order to identify and correct situations where items are in physical storage but not on record, on record but not in storage, or where common elements of data (other than quantity) do not match. Research of mismatches, including special inventories when required, result in corrective action.

Location survey—A physical verification, other than actual count, between actual assets and recorded location data to insure that **all** assets are properly recorded as to location, identity, condition, and unit of issue.

LTL (less-than-truckload)—A quantity of freight less than that required for the application of truckload rate.

Low combustibility—Materials which, in themselves, will not normally ignite, but which, in combination with their packaging, will contribute fuel to fire.

Magazine—Area in a warehouse-type structure above or below ground designed for storage of ammunition and explosives.

Main aisle-A passageway wide enough to permit the easy flow of equipment, supplies, and personnel; generally runs the length of the building.

Major discrepancy—When the total dollar value of the overage or shortage for the stock number exceeds \$200.00. Major discrepancies are used to compute and report error rates on a line item basis as a percentage of items inventoried.

Marking—Numbers, nomenclature or symbols stamped, painted, or otherwise affixed to items or containers.

Materials handling—The movement of materials (raw materials, scrap, semifinished, and finished) to, through, and from productive processes; in warehouses and storage; and in receiving and shipping areas.

Materials handling equipment—Materials handling equipment as discussed in this regulation is defined as any stationary or mobile equipment, powered, mechanical, or hand operated, that is used for the physical handling, storage, and movement of supplies.

Medium lot storage-A quantity of supplies, one to three stacks, stored to a maximum height.

Metric system—A decimal system of weights and measures based on the meter as a unit length and the kilogram as a unit mass. Derived units include the “liter” for liquid volume, and “stere” for solid volume, and “are” for area.

Mezzanine—Area provided by the construction of an intermediate or fractional story between any floor and ceiling of any building used for storage operations.

Moderate combustibility—Materials and their packaging, both of which will contribute fuel to fire.

Moisture content of wood-Weight of the water contained in the wood usually expressed in percentage of the weight of the oven-dry wood.

Nailed wood box-A box constructed of wood/face-boards assembled by fastening top, sides, and bottom to the ends with nails or screws or sides to ends with interlocking mortise and tenon corners.

Net storage **space**—Gross space for storage oper-

ations minus gross space used for aisles, structural loss and support space.

Net weight—The weight of the contents, not including the container.

Nomenclature—A noun and any necessary modifying adjectives required to describe and identify an item of supply.

Noncombustibility—Materials and their packaging which will neither ignite nor support combustion.

Nonperishable items-Items which do not require refrigeration during transportation and storage.

Nonstorage **space**—Area within gross space which is not used for storage because of structural loss or designation for other than storage purposes.

Obligated-Portion of net usable storage area earmarked by depot authority for the storage of supplies due in.

Occupied net storage space (cu ft)—The product of net square feet occupied, multiplied by actual storage heights, or representative storage heights determined by statistical sampling when applicable.

Occupied net storage space (sq ft)—Floor area which is actually occupied by material plus the entire bin and rack areas less aisles.

Office space—Space utilized by storage personnel in the performance of routine office-type duties. Excludes office space located in warehouses or other buildings not used in support of storage operations.

Open **space**—Improved or unimproved area designated for use in storing material.

Open **improved space**—Area which has been graded and hard surfaced or prepared with topping of some suitable material so as to permit effective material handling operations.

Open unimproved **space**—Area which has not been surfaced but is used for storage purposes.

Open unimproved wet space-Water area specifically allotted to and usable for the storage of floating equipment.

Original pack—The first pack applied to a specified quantity of items.

Osnaburg—A rough, coarse, durable cotton fabric in plain weave used for bagging and industrial purposes.

Other space—Any area assigned for storage operations, within a structure designed for other than **storage** purposes. Dry tank space is included.

Oversea shipment—Supplies consigned to a destination outside the continental limits of the United States.

Packaging—The process and procedures used to protect material from deterioration and/or damage. Includes cleaning, drying, preserving, packing, marking, and unitization. (See **preservation and packaging**.)

Packing—Assembly of items into a unit, intermediate, or exterior pack with necessary blocking, bracing, cushioning, weatherproofing, reinforcement and marking.

Packing and crating area—Area used for the application of exterior shipping containers.

Pallet—A low portable platform of wood, metal, or fiberboard to facilitate the act of moving, storing, and transporting of supplies as a unit.

Pallet support sets—Intended to form box-type pallets when assembled onto flat wood pallets, to allow for stacking of pallets containing irregularly shaped commodities that are susceptible to crushing.

Palletized unit load—Quantity of any item, packaged or unpackaged, arranged on a pallet and securely fastened thereto, so that the whole is handled as a unit.

Palletizing—The placement and securing, when necessary, of units or containers on pallets.

Perishable items—Items which require refrigeration during transportation and storage.

Pile—A quantity of material that can be stacked or stored in a specified area.

Planograph—A scale drawing of a storage area showing the approved layout.

Pocket rot—Advanced decay which appears in the form of a hole, pocket, or **area of soft rot** usually surrounded by apparently sound wood.

Portable tank—A closed container having a liquid capacity over 60 US gallons and not intended for fixed installation. (29 CFR 1910.106)

Potential vacant space—That portion of occupied net usable space which is temporarily not used for storage because of space voids in front of stacks of material (honeycombing) or space voids at the height of stacks which can be made available by rewarehousing or utilization of maximum heights in stacking.

Preservation—Application of protective measures including cleaning, drying, preservative “materials, barrier materials, cushioning, and containers when necessary.

Preservation area—Area used for preserving, unit/intermediate packing, and marking of materials.

Preservative—Any substance that, when suitably applied to wood, makes it resistant to wood-destroying fungi, borers of various kinds, and similar destructive life for a reasonable length of time.

Rack space—Floor area occupied by racks, box pallets, or pallets with metal superstructures installed when such are used as permanent storage **aids**, identified as a specific location, and as distinguished from bulk storage. (See also **storage space**.)

Radioactive material—Any material or combination of materials which spontaneously emits ionizing radiation; includes natural elements such as radium and accelerator-produced **radionuclides**.

Rail storage space—Trackage allotted for the purpose of storing rolling stock.

Ramp—An inclined plane serving as a way between different levels.

Receiving—The receipt of inbound supplies; includes planning, handling, and document processing incident thereto.

Receiving area—Area used for checking, inspecting, and preparing incoming material (both new procurements and returns), prior to its delivery to storage areas.

Rejection—Nonacceptance of material.

Requisition—Authoritative demand or request for

supplies or services on form(s) authorized for such requests.

Rewarehousing—Relocation of supplies within the same storage activity.

Security—Protection of supplies against theft, sabotage, or other malicious acts.

Seasoning—Removing moisture from green wood in order to improve its serviceability.

Shed—A building without complete side and end walls.

Shipping—Actions necessary to deliver material to a carrier for movement to a consignee.

Shipping area—Area used to assemble material pending its loading for shipment,

Shipping container—Any suitable exterior container used for shipment of supplies.

Shipping document—Form used to authorize the shipment of Government property.

Shooks—A bundle or set of tops, bottoms, sides and ends of boxes ready to be put together; a veneer of wood out of which boxes (as wire-bound boxes) are made.

Small lot **storage**—A quantity of supplies, comprising less than **one** stack.

Spacers—Wooden strips inserted between drafts of lumber to induce sufficient air currents between, through, and under the stacks to carry off moisture saturated air.

Spot—The placing of a truck or freight car in a desired location preparatory to loading or unloading.

Springer—A filled can with ends bulged as a result of overfilling, insufficient exhausting, or evolution of hydrogen or carbon dioxide gas through bacterial actions or action of acid contents on metal can.

Stack—A quantity of supplies stored vertically, occupying approximately one pallet space on floor, utilizing necessary storage aid to assure stability.

Sticker—A wooden stick or strip placed between boards or plywood sheets stacked in piles to hasten drying and reduce warping—also called “crosser.”

Stock number—National stock number (NSN) assigned to an item.

Storage—The keeping or placing of property in a warehouse, shed, or open area; or the state of being stored.

Storing—The orderly arranging of supplies in storage.

Strapping—Metal or nonmetallic materials used, or their application, for the reinforcing or securing of crates, boxes, bales or bundles.

Structural **loss**—Space not usable for storage because of construction, subterranean or physical characteristics.

Supplies—All items necessary for the equipment, maintenance, and operation of a military command.

Support set—A knockdown metal framework consisting of upright side sections, top supporting crossbars, and one or more bottom tie rods to be affixed to a pallet. (See **pallet support set.**)

Tally-in—Itemized list of supplies received or process of recording the number of containers or quantity of material received.

Tally-out—Itemized list of supplies included in an issue or shipment or process of recording the number of containers or quantity of material issued or shipped.

Tank **storage**—See **dry tank.**

Tarpaulin—Canvas or other materials usually treated to resist moisture and chemicals, used as a protective covering.

Temperature controlled **space**—Space in which the temperature can be controlled within specific limits.

Tier—A horizontal layer of a column, row or stack.

Total cubic feet—The product of net storage space (sq ft) multiplied by the unobstructed stacking height permitted by safety **regulations/restrictions** in a particular storage area.

Transitory shelter—A prefabricated, sectional, metal structure, normally with complete sides and ends but without utilities, classed as a storage aid rather than a real property facility. When

used for storage, is reported as "other nonwarehouse space." (See also **storage space**.)

Transportation-Media for the movement of personnel and material.

Type of loads—**Type** of loads as relating to stackability of material.

Type I—easy load. The load is single item or single interior container which provides complete and uniform support to all faces of the shipping container. The contents are of moderate density **and relatively** sturdy. Some examples are wood or metal chests, tool kits, and canned and boxed items packed in a fiberboard box which completely fills the shipping container.

Type II—average load. The load is composed of more than one item or interior container which gives some support to all faces of the shipping container. The contents are of moderate density and are relatively sturdy. Some examples are goods in metal cans which are not packed in the interior containers, bottles individually cushioned, hardware in cartons, etc.

Type III—difficult load. The load gives little or no support to the shipping container. The contents can be extremely heavy, very **fragile**, very irregular in **shape**, bulk materials which are free to shift and flow, or a combination of several of these factors. Some examples are rivets, bolts and nuts, delicate instruments, machined parts and assemblies, etc.

Unheated space—**Area** not equipped with heating facilities.

Unit of issue—Designation of the item unit; as each, number, dozen, gallon, pair, pound, ream, set, yard.

Unit pack—**The first** tie, wrap, or container applied to a single item or quantity unit thereof, or to a group of items of a single stock number, preserved or unpreserved, which constitutes a complete or identifiable package.

Utilities—**Facilities** constructed for the service of

the depot, such as boiler rooms, power plants, etc.

V-board—Weather-resistant fiberboards of various grades and types.

Vacant net space—Usable space which is not occupied by material or storage bins or racks.

Vacuum packed—Package from which air has been withdrawn, prior to hermetic sealing.

Vacuum packaging—A packaging method in which a commodity is sealed under vacuum.

Vault—A specially constructed, nonportable, burglarproof, fire-resistant structure for storage of material requiring maximum protection against pilferage or destruction.

W-board—Weather-resistant fiberboards of various grades and types.

Warehouse—A building designed for storage purposes and constructed with roof and complete side and end walls.

Warehouse chart—(See *planograph*.)

Warehouse denial—**Advice** that a specific item required on a shipping directive is not available due to stock exhaustion or other reasons.

Warehousing—The performance of physical functions incident to receipt, storage, and issue of supplies. (See definition of **storage**.)

Wet storage—**Storage** of ships or other floating equipment, afloat.

Wet tank—A tank designated for the storage of liquids.

Whipping of yarn—Material with which a rope end is bound.

Wirebound box—A shipping container whose sides, top, and bottom are of rotary cut lumber, sliced lumber, resawn lumber, fiberboard or combinations thereof, usually three eighths of an inch or less in thickness, fastened to cleats and to each other by means of binding wire and staples.