

**DEPARTMENT OF THE ARMY SUPPLY BULLETIN**  
**DISPOSITION OF USED AMMUNITION PACKING MATERIAL AND CERTAIN**  
**SPECIFIED AMMUNITION COMPONENTS**

**Headquarters, Department of the Army, Washington, DC**  
20 March 1981

1. Purpose. This bulletin supplements DOD 4160.21-M, and DOD 4160.21-M-1, by providing criteria for disposition of packing material and certain specified ammunition components.

2. Scope. The US Army Armament Materiel Readiness Command (USARRCOM), Defense Ammunition Supply Directorate, ATTN: DRSAR-DAP, Rock Island, IL 61299, is responsible for the procedure contained herein and the submission of changes as required. The provisions of this bulletin are applicable to all Army organizations and installations which generate, collect or store packing material.

3. Instructions. *a. General.* Packing material includes material such as, grommets for separate loading projectiles, closing plugs, fin lock nut protectors, shipping bands for bombs, crates, metal containers for complete rounds, propelling charge metal containers, steel and wood pallets, etc.

*b. Disposition instructions for all CONUS Army installations other than depots and arsenals.*

(1) Local disposal is authorized under current regulations or instructions pertaining to sale of scrap or salvage for the following items:

(a) All Army conventional ammunition components and packing materials not listed in HQ, ARRCOM, DRSAR-DAA annual letter, subject: Disposition of Used Packing Material and Certain Specified Ammunition Components and changes thereto.

(b) All unserviceable, uneconomically repairable packing material.

(c) All types of brass or steel cartridge cases except those covered by separate NICP direction.

(d) All single, end item metal containers except those covered by separate N ICP direction.

(e) Inner packing cartons and fiber containers for Jungle Pack, (wax dipped).

(2) Except for items authorized for local disposal, requests for disposition instructions will be sent to the N ICP, (USARRCOM), in accordance with Chapter 7, AR 725-50. Only packing material which is listed in the annual USARRCOM letter and meets the following criteria will be considered for return shipment from posts, camps, and stations.

(a) Wooden boxes and crates.

1. Boards with cracks between 1/4 and 3/8 inch in width and 3 to 4 inches long, repairable using corrugated fasteners, are acceptable, provided splits are not closer than 1 inch from the edge of the board or another split and if each piece is securely nailed where the split terminates at the end of the board.

2. Warps are permissible provided they do not preclude sealing of box/crate or prevent insertion of ammunition.

3. Loose knots are acceptable, provided they are less than 1/3 the width of the board and not more than 1 1/2 inch in the largest diameter.

4. Boxes equipped with cleats and ends are acceptable with cleats and ends missing.

5. Light mold, which can be brushed off, is acceptable.

\*This bulletin supersedes SB 755-140-1, 20 April 1967.

6. If available, filler material such as chipboards and spacers, will be replaced in boxes and containers.

7. Only treated wooden boxes and pallets determined by appearance (green cast) and/or identified by the letter "P" stenciled or embossed are acceptable.

(b) Fiber containers, except wax dipped:

1. Metal ends must be securely crimped to the body and cap of the container. Perforations, excessive rust, or any type of deformation of the ends are not acceptable.

2. Cuts, tears, or gouges in the closure area which do not materially weaken the container or destroy waterproofing and which can be corrected by application of acid proof black paint are acceptable.

3. Containers must be free of mildew and mold.

4. Containers must be free of wrinkles caused by looseness between impregnated layers.

5. Blisters are acceptable if their removal will not destroy the waterproofing.

6. Containers must be complete, including all internal parts and matching cap.

7. Slight discoloration of containers is acceptable.

8. Containers with loose or missing neck ring are not acceptable.

(c) Metal containers:

1. Acceptable dents are those less than 10 square inches or 1/4 inch deep and any larger dents removed without weakening the container.

2. Container flanges which can be straightened to allow closure and opening of cover with normal hand pressure are acceptable.

3. Seams must be tight to prevent entry of moisture.

4. Containers exhibiting removable rust are acceptable.

5. Covers with dents preventing assembly are not acceptable.

6. Covers having damaged threads in air test holes are not acceptable.

(3) Packing of fired saluting cartridge cases. Fired saluting cases will be reported to the NICP, ARRCOM, in accordance with AR 725-50. Fired cases are to be repacked in the original fiber containers and boxes for shipment.

(4) Copper based alloy ammunition scrap, except that covered by special instructions will be disposed of in accordance with DOD Manual 4160.21-M.

*c. Disposition for CONUS Army Ammunition Depots.* Excess items at depots will be reviewed semiannually by the N ICP. Items for which there are no tentative worldwide requirements, within the Five Year Plan, will be authorized for demilitarization or released to the Defense Property Disposal Office. Items will be inspected and certified to be free from explosives, hazardous contamination and extraneous materials IAW DARCOM-R 385-100.

*d. Disposition for Oversea Commands.*

(1) Packing material excess to command requirements and fired steel cartridge cases will be disposed of locally in accordance with existing regulations pertaining to sale of scrap or salvage except those covered by special instructions.

(2) Excess serviceable explosive components will be reported to the Commanding General, USAARRCOM, in accordance with Chapter 7, AR 725-50.

(3) Copper-based alloy ammunition scrap will be processed in accordance with DOD Manual 4160.21-M.

*e. Method of Shipments.* Material will be generated in quantities required for complete carload or truckload shipments when possible. Segregation by type of material within each transportation unit is required. All items must be palletized or placed on skidded base. Instructions for proper loading, bracing, and blocking will be obtained from the local transportation office.

*f. Freight Classification.* The latest Uniform Freight Classification (Rail) and National Motor Freight Classification (Motor) Publication will be used to obtain the correct freight classification to describe the commodity on the Bill of Lading.

*g. Transportation Funds.* Transportation funds will be furnished by the NICP, with each disposition instruction for the movement of excess material from posts, camps, and stations.

By Order of the Secretary of the Army:

Official:

**J. C. PENNINGTON**  
*Major General, United States Army*  
*The Adjutant General*


**E. C. MEYER**  
*General, United States Army*  
*Chief of Staff*

DISTRIBUTION:

To be distributed in accordance with DA Form 12-34B, Requirements for Ammunition, Transportation and Storage.

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RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

 <div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block; margin-left: 20px;"> <p style="font-size: small; margin: 0;">THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.</p> </div>		SOMETHING WRONG WITH PUBLICATION		
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## The Metric System and Equivalents

### Linear Measure

1 centimeter = 10 millimeters = .39 inch  
 1 decimeter = 10 centimeters = 3.94 inches  
 1 meter = 10 decimeters = 39.37 inches  
 1 dekameter = 10 meters = 32.8 feet  
 1 hectometer = 10 dekameters = 328.08 feet  
 1 kilometer = 10 hectometers = 3,280.8 feet

### Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .035 ounce  
 1 decagram = 10 grams = .35 ounce  
 1 hectogram = 10 decagrams = 3.52 ounces  
 1 kilogram = 10 hectograms = 2.2 pounds  
 1 quintal = 100 kilograms = 220.46 pounds  
 1 metric ton = 10 quintals = 1.1 short tons

### Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce  
 1 deciliter = 10 centiliters = 3.38 fl. ounces  
 1 liter = 10 deciliters = 33.81 fl. ounces  
 1 dekaliter = 10 liters = 2.64 gallons  
 1 hectoliter = 10 dekaliters = 26.42 gallons  
 1 kiloliter = 10 hectoliters = 264.18 gallons

### Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch  
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches  
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet  
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet  
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

### Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches  
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

## Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

### Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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