

**TECHNICAL MANUAL**

**DEMILITARIZATION PROCEDURES**

**F O R**

**NIGHT SIGHT VISION, INFRARED,  
AN/TAS-4, AN/TAS-4A, AN/TAS-4B,  
AN/TAS-4C, AN/TAS-6, AND AN/TAS-6A;  
AND BORESIGHT COLLIMATORS  
SU-93/TAS AND SU-93A/TAS**

**THERMAL IMAGERY**

TECHNICAL MANUAL )  
 )  
 No. 43-0003-38 )

HEADQUARTERS  
 DEPARTMENT OF THE ARMY  
 Washington, D. C., 5 March 1986

**DEMILITARIZATION PROCEDURES**  
**FOR**  
**NIGHT SIGHT VISION, INFRARED, AN/TAS-4, AN/TAS-4A,**  
**AN/TAS-4B, AN/TAS-4C, AN/TAS-6, AND AN/TAS-6A; AND**  
**BORESIGHT COLLIMATORS SU-93/TAS AND SU-93A/TAS**  
**THERMAL IMAGERY**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

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**CHAPTER 1**

**INTRODUCTION**

**1-1. Scope.**

This manual provides additional technical instructions covering the methods and degree of demilitarization of surplus military items as required by DOD 4160.21-M-1. Where this manual conflicts with DOD 4160.21-M-1, the latter takes precedence.

**1-2. Authorization.**

Demilitarization of surplus military materiel shall be limited to that which the National Inventory Control Points (NICP) have identified as requiring demilitarization. Demilitarization of those items which are not normally physically accepted by a Property Disposal Officer (PDO) will be accomplished by the activity having physical custody of the property upon completion of all required utilization and donation screening. Such action will be coordinated with the PDO. Where appropriate, demilitarization of this property may be accomplished as a condition of sale,

provided that there are effective controls and surveillance to ensure proper demilitarization. Where the PDO is the custodian of the property and is unable to perform the required demilitarization, he may require demilitarization as a condition of sale, with proper inspection and surveillance, or may obtain assistance from the activity turning in the property.

**1-3. Certification.**

A certificate reading substantially as quoted below and signed by two qualified Government representatives will be executed and placed in the applicable contract or property disposal file for all items demilitarized.

"I certify that (indicate items) were demilitarized in accordance with (cite specific instructions which were complied with; e.g., Defense Demilitarization Manual, DOD 4160.21-M-1 and TM 750-262-4-6)."

**1-4. Reporting Demilitarization.**

Refer to AR 755-2 for instructions on the records required when non-classified items are demilitarized and reclassified from items to scrap. Refer to TB 9-298 for instructions on the records required when classified items are demilitarized. For accounting purposes, a signed and countersigned certificate (see

para 1-3 above) will accompany all demilitarized equipment or materiel turned in to the PDO for disposition. Demilitarization certificates for classified equipment or materiel are covered in AR 380-5.

**1-5. Items to be Demilitarized.**

Table 1 shows the Thermal Imagery items which require demilitarization.

*Table 1. Thermal Imagery Items Requiring Demilitarization*

Component	Part No.	NSN
Night Vision Sight, AN/TAS-4	SM-C-772000	5855-01-037-7339
Night Vision Sight, AN/TAS-4A	13220197	Not Assigned
Night Vision Sight, AN/TAS-4B	13220201	5855-01-154-1402
Night Vision Sight, AN/TAS-4C	Not Assigned	Not Assigned
Night Vision Sight, AN/TAS-6	SM-C-771739	5855-01-037-7340
Night Vision Sight, AN/TAS-6A	SM-C-806738	Not Assigned
Boresight Collimator, SU-93/TAS	SM-D-775002	5855-01-029-8730
Boresight Collimator, SU-93A/TAS	SM-D-775002	5855-01-109-6433

## CHAPTER 2

METHODS OF DEMILITARIZATION

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**2-1. Equipment Required.**

- a. Hammer
- b. Blanket
- c. Gloves
- d. Safety Goggles

**2-2. Safety Precautions.****WARNING****RADIOACTIVE MATERIAL**

**The antireflective coating on the infrared optics contains thorium flouride which is slightly radioactive. The only potential hazard involves ingestion (swallowing or inhaling) of the coating materiel. Dispose of broken lens, etc., in accordance with AR 385-11.**

When smashing the visible light, uncoated optical components, safety goggles and gloves must be worn.

**2-3. Operations.**

a. The Thermal Night Sights and Boresight Collimators are demilitarized by the following procedures:

(1) Remove the thorium coated optical lens from the Afocal housing or Boresight Collimator. Dispose of these lens, etc., in accordance with AR 385-11.

(2) After removal of thorium coated lens, the Night Sight or Boresight Collimator maybe demilitarized by covering with a blanket and smashing with a hammer.

b. In combat, Army units must use the most expeditious means available to dispose of any radioactive item that cannot be evacuated normally or that must be transported with the unit. When possible, follow the guidance in paragraph 2-2.

c. Commanders of combat zone supply and operational units should preplan to prevent devices containing large amounts of radioactive material, individually or collectively (bulk storage), from falling into enemy hands. When items cannot be evacuated, they will be destroyed. Radioactive materials will be disposed of to prevent enemy use as much as circumstances permit. Devices containing low activity sources will be destroyed by crushing, burying, or by scattering them over an area large enough to make salvaging impossible. On a firm terrain, items may be crushed by running over them with a vehicle.

**APPENDIX**  
**REFERENCES**

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AMC Safety Manual	AMCR 385-100
Defense Disposal Manual	DOD 4160.21-M
Defense Demilitarization Manual	DOD 4160.21.1-M
Destruction of Classified Ordnance-Procured Items of Guided Missile Materiel	TB 9-298
Disposal of Excess, Surplus, Foreign Excess, Captured, and Unwanted Materiel	AR 755-2
Handling and Disposal of Unwanted Radioactive Material	TM 3-261
Ionizing Radiation Protection (Licensing, Control, Transportation, Disposal, and Radiation Safety)	AR 385-11
Mechanized Accounting Procedures for Property Disposal Activities	AMCR 755-3
Reporting, Utilization, and Redistribution of Installation, US Army Materiel Command, and Overseas Command Excess Personal Property	AR 755-1
Requisitioning, Receipt, and Issue System	AR 725-50
Storage and Shipment of Supplies and Equipment	AMCR 740-3
Department of the Army Information Security Program	AR 380-5

**By Order of the Secretary of the Army:**

**Official:**

**JOHN A. WICKHAM, JR.**  
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*Chief of Staff*

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*Brigadier General, United States Army*  
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# THE METRIC SYSTEM AND EQUIVALENTS

## WEIGHT MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches  
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches  
 1 Kilometer = 1000 Meters = 0.621 Miles

## WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces  
 1 Kilogram = 1000 Grams = 2.2 lb.  
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

## LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces  
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

## SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches  
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet  
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

## CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches  
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

## TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$   
 212° Fahrenheit is equivalent to 100° Celsius  
 90° Fahrenheit is equivalent to 32.2° Celsius  
 32° Fahrenheit is equivalent to 0° Celsius  
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

## APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
its	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
ometers per Liter	Miles per Gallon	2.354
ometers per Hour	Miles per Hour	0.621





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