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## MILITARY SPECIFICATION

CRYPTOGRAPHIC EQUIPMENT DESTROYER  
INCENDIARY, TH4, M1A2

This specification is approved for use by the U.S. Army Armament Research and Development Command, and is available for use by all Departments and Agencies of the Department of Defense.

## 1. SCOPE

1.1 This specification covers the requirements, quality assurance provisions, and packaging for one type of equipment destroyer.

## 2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. Unless other specified (see 6.2), the following specifications and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation, form a part of this specification to the extent specified herein.

## SPECIFICATIONS

## MILITARY

MIL-B-117	- Bag, Sleeve and Tubing - Interior Packing
MIL-A-48079	- Ammunition, Standard Quality Assurance Provisions, General Specification For

## STANDARDS

## MILITARY

MIL-STD-105	- Sampling Procedures and Tables for Inspection by Attributes
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FSC 1375

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, US Army Armament Research and Development Command, Attn. DRDAR-QA, Dover, New Jersey 07801 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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**2.1.2 Other Government documents, drawings, and publications.** The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein.

## DRAWINGS

## U.S. ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND

C4-4-50	-	Card, Instruction
C4-4-55	-	Palletization
C4-2-113	-	Packing, Cryptographic Equipment Destroyer, Assembly and Bill of Material
C4-2-115	-	Packaging, Cryptographic Equipment Destroyer
IDL4-4-46	-	Cryptographic Equipment Destroyer, Incendiary, TH4, M1A2 - Inspection Data List
D4-4-46	-	Cryptographic Equipment Destroyer, Incendiary, TH4, M1A2
D4-4-56	-	Marking Drawing

## CODE OF FEDERAL REGULATIONS

## Title 49 - Transportation, Parts 0-190

(The Code of Federal Regulations is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Orders should specify, "49 CFR 0-190 (latest revision)").

(Copies of specifications, standards, drawings and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

**2.1.3 Order of precedence.** In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

**2.2 Other publications.** The following document(s) form a part of this specification to the extent specified herein. The issue of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable".

## AMERICAN SOCIETY FOR TESTING AND MATERIALS

ASTM B-117 - Standard Method of Salt Spray  
(Fog) Testing.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

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## 3. REQUIREMENTS

3.1 Materials. Materials shall be in accordance with applicable drawings and specifications.

3.2 Components and assemblies. The components and assemblies shall comply with all requirements specified on Dwg. DL4-4-46, all associated drawings, and with all requirements specified in applicable specifications and standards. The cryptographic equipment destroyer shall be loaded and assembled as specified on Dwg. D4-4-46. The fuzes shall not be assembled with the equipment destroyer until after leakage test. Insulated electric wire shall not be exposed to acid fumes at any time.

3.3 Main incendiary charge. The main incendiary charge shall conform to Dwg. B143-13-6 and shall be loaded to a minimum weight of 28 pounds. Test as specified in 4.5.3. (See Note 6.4)

3.4 First fire mixture.

3.4.1 Loading and weight. The igniter charge assembly (Dwg. B4-4-49) shall be loaded with first fire mixture conforming to Dwg. B143-9-4. The weight of the mixture shall be no less than 34 grams when tested as specified in 4.5.2.1.

3.4.2 Moisture content. Moisture content of first fire mixture (Dwg. B143-9-4) shall not exceed 0.10% when tested as specified in 4.5.2.2.

3.5 Leakage

3.5.1 Body. The body assembly (Dwg. E4-4-4-47A) shall not leak when subjected to an air pressure of  $5 + 0.5$  PSIG for a minimum period of 15 seconds and tested as specified in 4.5.4a.

3.5.2 Cover and adapter. The cover (Dwg. E4-4-47B) and the adapter (Dwg. B4-4-14) assembled as shown on Dwg. D4-4-46 shall not leak when subjected to an air pressure of  $5.0 + 0.5$  PSIG for a minimum period of 15 seconds and tested as specified in 4.5.4b.

3.5.3 Destroyer. The destroyer (Dwg. D4-4-46) shall not leak when subjected to a pressure differential of  $14 + 2$  inches of water maintained in a bottle for a minimum of 15 seconds as specified in 4.5.4c.

3.6 Functioning. Burning of the incendiary filling shall be initiated by either type fuze and shall continue until the destroyer is completely consumed when tested as specified in 4.5.5. The term "completely consumed" means that there shall be no unburned incendiary filling in the ash after burning ceases and at least 50% of the body and cover shall be consumed or burned.

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3.7 First article inspection. This specification contains technical provisions for first article inspection. Requirements for submission of first article samples shall be specified in the contract.

3.8 Workmanship. All parts and assemblies shall be fabricated, loaded and assembled in a thorough, workmanlike manner. They shall be free from burrs, chips, sharp edges, cracks, surface defects, dirt, grease, rust, corrosion products and other foreign matter. The cleaning method and cleaning agent shall not be injurious to any part. All required markings shall be neat and sharply defined.

## 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection and standard quality assurance provisions. Unless otherwise specified herein or in the contract, the provisions of MIL-A-48078 shall apply and are hereby made a part of this detail specification.

4.2 Classification of inspection. The following types of inspection shall be conducted on this item:

- a. First Article Inspection
- b. Quality Conformance Inspection

4.3 First article inspection.

4.3.1 Submission. The contractor shall submit a first article sample as designated by the contracting Officer for evaluation in accordance with provisions of 4.3.2. The first article sample shall consist of the following items in sample quantities as indicated.

<u>Part description</u>	<u>Drawings</u>	<u>Quantity</u>
Body	E4-4-47A	15
Cover	E4-4-47B	15
Adapter	B4-4-14	15
Cover & Adapter, Assy	D4-4-46 Sect. A-A	15
Support Assembly	E4-4-47C	15
Container, Igniter Chg	B4-4-48	15
Charge, Igniter, Assy	B4-4-49	15
First fire mixture V (FF-30)	B143-9-4	5 grams
Destroyer, M1A2	D4-4-46	26

4.3.2 Inspections to be performed. See MIL-A-48078 and Table I specified herein.

4.3.3 Rejection. See MIL-A-48078.

TABLE I. First article inspection

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**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	SHEET		NO. OF SAMPLE UNITS	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	DRAWING NUMBER	
		1	2					See below	NEXT HIGHER ASSEMBLY
CATEGORY								PARAGRAPH REFERENCE / INSPECTION METHOD	
	Cryptographic Equipment Destroyer Incendiary, TH4, MIA2								
	<u>Body</u> (Dwg. E4-4-47A) Examination of defects		3.2	15				4.4.2.1	
	<u>Cover</u> (Dwg. E4-4-47B) Examination of defects		3.2	15				4.4.2.2	
	<u>Support Assembly</u> (Dwg. E-4-4-47C) Examination of defects Salt Spray		3.2 3.2	15 5(a)				4.4.2.3 4.5.6	
	<u>Adapter</u> (Dwg. B4-4-14) Examination of defects		3.2	15				4.4.2.4	
	<u>Cover &amp; Adapter Assembly</u> (Dwg. D4-4-46 Section AA) Examination of defects		3.2	15				4.4.2.5	

NOTES: (a) Sample taken from the 15

TABLE I. First article inspection**CLASSIFICATION OF DEFECTS & TESTS**

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PARAGRAPH	TITLE	SHEET		NO. OF SAMPLE UNITS	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	DRAWING NUMBER	
		2	2 OF					See below	NEXT HIGHER ASSEMBLY
CATEGORY								PARAGRAPH REFERENCE / INSPECTION METHOD	
	Cryptographic Equipment Destroyer Incendiary, TH4, M1A2								
	Container, Igniter Charge (Dwg. B4-4-48) Examination of defects			15			3.2	4.4.2.6	
	Charge, Igniter, Assembly (Dwg. B4-4-49) Examination of defects			15			3.2	4.4.2.7	
	First Fire Mixture V, (FF - 30) (Dwg. B143-9-4) Examination of defects			5 gr			3.4.2	4.4.2.8	
	Destroyer, M1A2 (Dwg. D4-4-46) Examination of defects Functioning			26 8			3.2 3.6	4.4.2.9 4.5.5	

NOTES:

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4.4 Quality conformance inspection

4.4.1 Inspection lot formation. Inspection lots shall comply with the lot formation provisions of MIL-A-48078. In addition, inspection lots of destroyers shall contain:

a. Parts bearing the same lot interfix number from one manufacturer.

b. Fuzes from not more than one lot interfix number from one manufacturer.

c. First fire mixture from not more than one lot interfix number from one manufacturer.

d. Incendiary mixture from not more than one lot interfix number from one manufacturer.

4.4.2 Examination. See MIL-A-48078.

a. Sampling plans. Unless otherwise specified in the Classification of Defects and Test tables, sampling plans for major and minor defects shall be in accordance with MIL-STD-105, Inspection Level II.

## CLASSIFICATION OF DEFECTS & TESTS

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PARAGRAPH	TITLE	1 1 SHEET OF		NO. OF SAMPLE UNITS	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	DRAWING NUMBER
CATEGORY								
4.4.2.1	Body							E4-4-47A
								NEXT HIGHER ASSEMBLY D4-4-46
								PARAGRAPH REFERENCE /INSPECTION METHOD
<u>Critical</u>								
Major								
101	None defined							
102	Length					0.40%	3.2	Gage
103	Width					0.40%	3.2	Gage
104	Height					0.40%	3.2	Gage
105	Soldering unsatisfactory					0.40%	3.2	Visual
	Leakage			(a)		1.5%	3.5.1	4.5.4.a
Minor								
201	Zinc coating improper or missing					0.65%	3.2	Visual
202	Evidence of poor workmanship					1.0%	3.8	Visual

NOTES:

(a) Table I, Level S-4 of MIL-STD-105

QUALITY CONFORMANCE INSPECTION**CLASSIFICATION OF DEFECTS & TESTS**

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PARAGRAPH	TITLE	NO. OF SAMPLE UNITS	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	SHEET 1 OF 1	DRAWING NUMBER
4.4.2.2	Cover						E4-4-47B NEXT HIGHER ASSEMBLY
CATEGORY							D4-4-46 PARAGRAPH REFERENCE / INSPECTION METHOD
<u>Critical</u>	None defined						
Major 101	Inside length			0.40%	3.2		Gage
102	Inside width			0.40%	3.2		Gage
103	Height			0.40%	3.2		Gage
104	Diameter of fuze holes (3 places)			0.40%	3.2		Gage
105	Location of fuze holes (3 places)			0.40%	3.2		Gage
106	Welding unsatisfactory			0.40%	3.2		Visual
107	Soldering unsatisfactory			0.40%	3.2		Visual
Minor 201	Diameter of vent holes (4 places)			0.65%	3.2		Gage
202	Location of vent holes (4 places)			0.65%	3.2		Gage
203	Zinc coating improper or missing			0.65%	3.2		Visual
204	Evidence of poor workmanship			1.0%	3.8		Visual

NOTES:

QUALITY CONFORMANCE INSPECTION**CLASSIFICATION OF DEFECTS & TESTS**

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER	
4.4.2.3	Support Assembly			E4-4-47C NEXT HIGHER ASSEMBLY	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
<u>Critical</u>	None defined				
Major 101	Length		0.40%	3.2	Gage
102	Outside width		0.40%	3.2	Gage
103	Height		0.40%	3.2	Gage
104	Location of holes for bushing (3 places)		0.40%	3.2	Gage
105	Diameter of holes for bushing (3 places)		0.40%	3.2	Gage
106	Bushing outer diameter		0.40%	3.2	Gage
107	Bushing length		0.40%	3.2	Gage
108	Brazing unsatisfactory		0.40%	3.2	Visual
Minor 201	Protective finish inadequate (base metal exposed)		0.65%	3.2	Visual
202	Evidence of poor workmanship		1.0%	3.8	Visual
NOTES:					

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QUALITY CONFORMANCE INSPECTION**CLASSIFICATION OF DEFECTS & TESTS**

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER
CATEGORY	EXAMINATION OR TEST	ADL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.4	Adapter			B4-4-14 NEXT HIGHER ASSEMBLY
				D4-4-46
<u>Critical</u>	None defined			
Major	None defined			
Minor	Small outer diameter	0.658	3.2	Gage
201	Flange length	0.658	3.2	Gage
202	Pitch diameter of thread	0.658	3.2	Gage
203	Evidence of poor workmanship	1.08	3.8	Visual
204				
NOTES:				

## QUALITY CONFORMANCE INSPECTION

## CLASSIFICATION OF DEFECTS &amp; TESTS

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER	
4.4.2.5	Cover and Adapter			D4-4-46 (Section A-A) NEXT HIGHER ASSEMBLY	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
<u>Critical</u>	None defined				
Major 101	Crimping of adapter to cover (3 places)		0.40%	3.2	Visual
102	Soldering unsatisfactory (3 places)		0.40%	3.2	Visual
103	Leakage	(a)	1.5%	3.5.23	4.5.4b
Minor 201	Evidence of poor workmanship		1.0%	3.8	Visual
<b>NOTES:</b> (a) Table I, Level S-4 of MIL-STD-105.					

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QUALITY CONFORMANCE INSPECTION**CLASSIFICATION OF DEFECTS & TESTS**

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PARAGRAPH	TITLE	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	SHEET 1 OF 1		DRAWING NUMBER
				AQL OR 100%	REQUIREMENT PARAGRAPH	
4.4.2.6	Container, Igniter Charge					B4-4-48 NEXT HIGHER ASSEMBLY B4-4-49
CATEGORY						PARAGRAPH REFERENCE / INSPECTION METHOD
<u>Critical</u>	None defined					
Major 101	Inner diameter			0.408	3.2	Gage
102	Outer diameter			0.408	3.2	Gage
103	Length			0.408	3.2	Gage
104	bond unsatisfactory			0.408	3.2	Visual
Minor 201	Evidence of poor workmanship			1.08	3.8	Visual
NOTES:						

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QUALITY CONFORMANCE INSPECTION**CLASSIFICATION OF DEFECTS & TESTS**

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER
4.4.2.7	Charge, Igniter, Assembly			B4-4-49 NEXT HIGHER ASSEMBLY
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH
<u>Critical</u>	None defined			PARAGRAPH REFERENCE / INSPECTION METHOD
Major 101 102	Igniter charge weight Igniter charge loose, cracked, or improperly consolidated		0.40% 0.40%	4.5.2.1 Visual
Minor 201 202	Igniter charge cavity depth Evidence of poor workmanship		0.65% 1.0%	Gage Visual
NOTES:				

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER
4.4.2.8	First Fire Mixture V, (FF-30)			B143-9-4 NEXT HIGHER ASSEMBLY B4-4-49
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH
<u>Critical</u>	None defined			
<u>Major</u> <u>101</u>	Moisture content	(a)	0.408	3.4.2
<u>Minor</u>	None defined			4.5.2.2
<b>NOTES:</b> (a) Sample shall be taken at each shift at time of loading.				

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PARAGRAPH	TITLE	SHEET 1 OF 2		DRAWING NUMBER
4.4.2.9	Cryptographic Equipment Destroyer, Incendiary TH4, M1A2			D4-4-46 NEXT HIGHER ASSEMBLY
CATEGORY	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
<u>Critical</u> <u>I</u>	Lead wire not shunted and soldered (Dwg. 36-7-25)	100%	3.2	Visual
Major <u>I01</u>	Taping of bushing to igniter charge container loose or not adhering (3 places)	0.40%	3.2	Visual
102	Incendiary mixture weight	0.40%	3.3	4.5.3
103	Length, cavity for igniter charge container (3 places)	0.40%	3.2	Gage
104	Diameter, cavity for igniter charge container (3 places)	0.40%	3.2	Gage
105	Minimum Torque, Smoke pot fuze, electric (2 places)	0.40%	3.2	Gage
106	Minimum Torque, Incendiary Fuze, M210	0.40%	3.2	Gage
107	Tape on side seam loose or not adhering	0.40%	3.2	Visual
108	Tape on cover loose or not adhering	0.40%	3.2	Visual
NOTES:				

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PARAGRAPH	TITLE		SHEET 2 of 2		DRAWING NUMBER	
4.4.2.9	Cryptographic Equipment Destroyer, Incendiary TH4, M1A2				D4-4-46	
					NEXT HIGHER ASSEMBLY	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE /INSPECTION METHOD	
109	Tape on pull ring loose or not adhering		0.40%	3.2	Visual	
110	Component missing or incorrectly assembled		0.40%	3.2	Visual	
111	Marking incorrect, missing, or illegible		0.40%	3.2	Visual	
112	Leakage	(a)	1.5%	3.5.3	4.5.4C	
113	Functioning	(a)	1.5%	3.6	4.5.5	
Minor 201	Tape on vent hole loose or not adhering (4 places)		0.65%	3.2	Visual	
202	Protective finish inadequate (base metal exposed)		0.65%	3.2	Visual	
203	Evidence of poor workmanship		1.0%	3.8	Visual	

NOTES: (a) Table I, Level S-4 of MIL-STD-105

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER
CATEGORY	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.10	Packaging (prior to closing box) Cryptographic Equipment Destroyer, Incendiary, TH4, MIA2			C4-2-115 NEXT HIGHER ASSEMBLY C4-2-113
<u>Critical</u>	None defined			
Major <u>101</u> 102 103	Spacer improperly placed or missing Filler improperly scored or missing Instruction card incorrect or missing	0.40% 0.40% 0.40%	3.2 3.2 3.2	Visual Visual Visual
Minor <u>201</u>	Evidence of poor workmanship	1.0%	3.8	Visual
NOTES:				

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**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	SHEET 1 OF 1		DRAWING NUMBER
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH
				PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.11	Packaging, Cryptographic Equipment Destroyer, TH4, M1A2			C4-2-115 NEXT HIGHER ASSEMBLY C4-2-113
<u>Critical</u>	None defined			
Major 101 102	Box punctured, cut, or torn Tape strip incomplete or badly wrinkled		0.408 0.408	Visual Visual
Minor 201 202 203	Contents move when shaken Marking incorrect or incomplete Evidence of poor workmanship		0.658 0.658 1.008	Manual Visual Visual
NOTES:				

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PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH
				PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.12	Packing (prior to closing wooden box) Cryptographic Equipment Destroyer, TH4, M1A2			C4-2-113 NEXT HIGHER ASSEMBLY
<u>Critical</u>	None defined			
Major 101	Less than 3 nangers (Dwg. #B4-4-7)		0.40%	Visual
102	Bag with hardware missing		0.40%	Visual
103	Any hardware missing		0.40%	Visual
Minor 201	Evidence of poor workmanship		1.0%	Visual
NOTES:				

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PARAGRAPH	TITLE	SHEET 1 OF 1		DRAWING NUMBER	
4.4.2.13	Packing, Cryptographic Equipment Destroyer, TH4, MIA2			C4-2-113 NEXT HIGHER ASSEMBLY	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
<u>Critical</u>	None defined				
Major 101 102	Box, broken or split Stapping missing or loose		0.408 0.408	3.2 3.2	Visual Visual
Minor 201 202 203	Contents move when shaken Marking incorrect or incomplete Evidence of poor workmanship		0.658 0.658 1.008	3.2 3.2 3.8	Manual Visual Visual
NOTES:					

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4.4.3 Testing. Testing is described in the First Article and Quality Conformance Inspection tables.

4.4.4 Inspection equipment. The inspection equipment required to perform the examinations is identified, either, directly or by reference, in the "Paragraph Reference/Inspection Method" column of the First Article or Quality Conformance Inspection Tables herein. The contractor shall submit inspection equipment designs to the Government for approval in accordance with the terms of the contract. See Section 6 of MIL-A-48078 and 6.3 herein.

4.5 Test methods and procedures

4.5.1 Materials, components and processes. Compliance with all requirements of Section 3 of this specification shall be ascertained by current and continuing examination of inspection and test data to determine that all components (parts, subassemblies, and materials) have been inspected and tested and found to comply with their respective drawing and specification requirements, and that all specified manufacturing processes have been followed.

4.5.2 First fire mixture.

4.5.2.1 Weight. Weigh the igniter charge container before and after loading to calculate the net weight of the first fire mixture.

4.5.2.2 Moisture content. Place 5 grams of the material to be tested into a tared weighing dish. Place in an oven maintained at 100°C for 3 hours. Cool in a desicator and weigh. Calculate the loss in weight of contents as the percent moisture.

4.5.3 Main incendiary charge. The destroyer body shall be weighed prior to and after loading in order to determine weight of main incendiary charge.

4.5.4 Leakage.

(a) Body. Mount the body assembly in a suitable fixture in which a positive pressure can be maintained inside the body. Subject the body to the specified air pressure for the required period of time. Coat the seams with a soap solution. Bubbles shall indicate leakage.

(b) Cover. Mount the cover assembly in a suitable fixture in which a positive pressure can be maintained inside the cover. Subject the cover to the specified air pressure for the required period of time. Coat the seams and the adapter's soldered joints with a soap solution. Bubbles shall indicate leakage.

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(c) Destroyer. The assembled destroyer shall have plugs in place of fuzes. Place 1 inch of water in a bottle and close with a two hole stopper. Insert a glass tube through one of the holes until the tube dips about 1/2 inch below the surface of the water. Connect the other end of the tube to a suitable trap, then through a flexible hose to a suitable adapter screwed into the fuze adapter hole in the cover. Connect the second hole in the stopper to a source of vacuum so that a pressure differential of  $14 \pm 2$  inches of water is maintained in the bottle. A continuous stream of bubbles will be emitted from the tube and below the surface of the water until equal pressures exist between the bottle and the destroyer, at which time a definite break in bubbling continuity should occur. Continuous bubbling, evidenced by absence of the break in bubbling continuity, indicates a leak in the destroyer. If bubbles do not appear for a minimum period of 15 seconds subsequent to this definite break in bubbling continuity, the destroyer shall be considered intact. Intermittent bubbling subsequent to the 15 seconds break shall not be cause for rejection. All taped areas including the immediately adjacent metal surfaces shall be given at least one additional coat of paint on each test unit following any leakage testing.

4.5.5 Functioning. Sample destroyers will be functioned by alternate use of the mechanical and electrical fuzes (i.e., function one destroyer with mechanical fuze and next destroyer with electric fuze). All destroyers shall be functioned in accordance with the instruction card, Dwg. C4-4-50 except that instead of being installed in a safe, the destroyer shall be functioned while resting on the ground on its broadside and the electric circuit shall be capable of furnishing 1 amp at 1.5 volts maximum (a standard 1.5 volt battery may be used).

4.5.6 Salt spray. The support assembly shall be subjected to the salt spray test in accordance with ASTM B-117.

## 5. PACKAGING

### 5.1 Level A.

5.1.1 Cleaning. The hardware consisting of screws, nuts and washers, as shown on Dwg. C4-2-113, shall be free of corrosion, dirt and other foreign matter when preservative is applied. The cryptographic equipment destroyer shall be clean.

5.1.2 Hardware. The screws, nuts, and washers, after preservative application, shall be sealed within a bag conforming to size 3, type I or II, class C, style 1, 2, or 3, MIL-B-117.

5.1.3 Cryptographic equipment destroyer. The equipment destroyer, with an instruction card (Dwg. C4-4-50) shall be packaged in accordance with Dwg. C4-2-115.

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5.2 Packing.

5.2.1 Level A. The equipment destroyer, instruction card, and hardware, packaged in accordance with 5.1, and 3 hangers, Dwg. B4-4-7, shall be packed together in a wood box in accordance with Dwg. C4-2-113. The wood box shall be preservative treated.

5.2.2 Level C. The equipment destroyer, instruction card, hardware and hangers shall be packed together in accordance with Dwg. C4-2-113. The wood box shall not be preservative treated.

5.3 Marking. In conjunction with information furnished in the contract or order, marking shall be as specified herein.

5.3.1 Package marking. The equipment destroyer package shall be marked in accordance with Dwg. C4-2-115. If the bag containing the nuts, screws, and washers is opaque, it shall be marked with the identity and quantities of items. The hangers shall be marked "hanger, cryptographic equipment destroyer," either by tag, label, or applied directly on the item.

5.3.2 Pack marking. The shipping container shall be marked in accordance with Dwg. D4-4-56.

5.4 Palletization. When specified in the contract or order, shipping containers shall be palletized in accordance with Dwg. C4-4-55.

## 6. NOTES

6.1 Intended use. This item is intended to destroy cryptographic equipment during emergencies.

6.2 Ordering data. See MIL-A-48078.

6.3 Submission of inspection equipment designs for approval. See MIL-A-48078. Submit equipment designs, as required, to Commander, US Army Armament Research and Development Command, ATTN: DRDAR-QAT-I, Dover, NJ 07801.

6.4 Loading. A satisfactory loading procedure has been experienced by loading in six approximately equal increments individually tamped and pressed into the assembly.

6.5 Advisory note - Sealing procedure. Prior to placing the cover (E4-4-47B) onto the body (E4-4-47A), perform the following operations:

a. Clean the inside of the cover and the mating surface of the body thoroughly, then wipe with acetone.

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b. Apply Dow Corning 1203 primer (red) to the cleaned surfaces and allow to dry for two hours at room temperature.

c. Apply Dow Corning 3145 RTV adhesive/sealant as a 3/16 uniform bead around the inside top of cover. Also, apply a 3/16 continuous uniform bead along outside of the body approximately 1" from the top.

d. Assemble the cover to the body and allow the unit to stand undisturbed at room temperature for 24 hours.

e. Next proceed to tape, paint, add the fuzes and complete assembly.

The above procedure has been found to produce a satisfactory seal in laboratory tests on a limited quantity of six items. This advisory note is furnished for informational purposes and this particular procedure is not a requirement of the contract. The contractor is required to meet the contractual requirements of the contract regardless of whether or not the contractor uses the note. The Government makes no warranty of representations that the use of the note will result in items conforming to contractual requirements.

**6.6 Drawings.** Drawings listed in Section 2 of this specification under the heading US Army Armament Research and Development Command (ARRADCOM) may also include drawings prepared by, and identified as Edgewood Arsenal, Frankford Arsenal, Rock Island Arsenal or Picatinny Arsenal drawings. Technical data originally prepared by these activities is now under the cognizance of ARRADCOM.

**6.7 Changes to Previous Issue.** Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

Custodian:  
Army-AR  
Navy-OS  
Air Force-99

Preparing activity:  
Army-AR

Review Activities:  
Army-EA  
Air Force-70

(Project 1375-0279)

**STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL***(See Instructions - Reverse Side)*

<b>1. DOCUMENT NUMBER</b> MIL-C-12469K		<b>2. DOCUMENT TITLE</b> CRYPTOGRAPHIC EQUIPMENT DESTROYER INCENDIARY. TH4.M1A2	
<b>3a. NAME OF SUBMITTING ORGANIZATION</b>		<b>4. TYPE OF ORGANIZATION (Mark one)</b> <input type="checkbox"/> VENDOR <input type="checkbox"/> USER <input type="checkbox"/> MANUFACTURER <input type="checkbox"/> OTHER (Specify): _____	
<b>3b. ADDRESS (Street, City, State, ZIP Code)</b>			
<b>5. PROBLEM AREAS</b>			
a. Paragraph Number and Wording:			
b. Recommended Wording:			
c. Reason/Rationale for Recommendation:			
<b>6. REMARKS</b>			
<b>7a. NAME OF SUBMITTER (Last, First, MI) - Optional</b>		<b>8. WORK TELEPHONE NUMBER (Include Area Code) - Optional</b>	
<b>9. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional</b>		<b>6. DATE OF SUBMISSION (YYMMDD)</b>	