DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CRYPTOGRAPHIC EQUIPMENT DESTROYERS, INCENDIARY, TH4, M1A2; TH1, M1A2; and TH1, M1A1

Ref: FM 5-25; SR 55-730-10; TM 3-250; TA 23-100; SB 725-1300-1

Headquarters, Department of the Army, Washington, D.C.
29 June 1964

SAFETY PRECAUTIONS

Use extreme caution when igniting incendiary cryptographic equipment destroyers in arctic climates. They deteriorate after 2 years storage in arctic climates and may explode violently when ignited.

Do not store incendiary cryptographic equipment destroyers with any other type of munitions or components.

Do not withdraw the safety pin or separate the ends of the fuze wire until the incendiary is to be ignited.

Do not attempt to extinguish the incendiary with water or a liquid fire extinguisher. In an emergency cover with sand to confine heat.

1. Scope. This bulletin describes the Cryptographic Equipment Destroyers, Incendiary, TH4, M1A2; TH1, M1A2; and TH1, M1A1 and gives information on handling, functioning, storage, shipment, and destruction.

2. Purpose. *a.* Incendiary cryptographic equipment destroyers are designed for the sole purpose of destroying specific cryptographic devices stored in CH-76 safes.

b. M1A1 TH1 and M1A2 TH1 destroyers are used within CONUS as authorized in TA 23-100.

c. M1A2 TH4 destroyers are used only outside CONUS in accordance with SB 7251300-1.

3. Description. *a. M1A2 TH4 Incendiary Cryptographic Equipment Destroyer*. The M1A2 TH4 incendiary cryptographic equipment destroyer (fig. 1) is a sheet metal box, 21 inches long, 15 inches wide, and 11/4 inches deep. The box is filled with approximately 28 pounds of TH4 incendiary mixture consisting of granular aluminum, iron oxide, and barium nitrate combined in a laminated resin. The destroyer is fitted with two M209 electric floating smoke pot fuzes (fig. 2) and an M210 manual ignition fuze. (The M210 manual ignition fuze is equipped with a spring loaded striker which is controlled by a safety ring, a safety pin, and a delay element. The body of

---

***This bulletin supersedes so much of TM 3-300, 14 August 1956, including Changes 2 and 3, as refers to Cryptographic Equipment Destroyers, Incendiary, TH1, M1A2 and TH1, M1A1.**

TAGO 5016A-June

the fuze is filled with a primer and an ignition mixture.) A cellulose acetate cup filled with first-fire mixture is imbedded in the TH4 incendiary mixture directly beneath each fuze. Three metal hangers and six 1/4-inch bolts, washers, and nuts are packed with each destroyer to provide the means for installing it. An instruction card is also packed with each destroyer.

b. M1A2 TH1 Incendiary Cryptographic Equipment Destroyer. The M1A2 TH1 incendiary cryptographic equipment destroyer is similar to the M1A2 TH4 destroyer except that it is filled with approximately 28 pounds of TH1 incendiary mixture consisting of powdered iron oxide and powdered aluminum.

c. *M1A1 TH1 Incendiary Cryptographic Equipment Destroyer*. The M1A1 TH1 incendiary cryptographic equipment destroyer (fig. 3) is an earlier model of the M1A2 TH1 incendiary cryptographic equipment destroyer and differs from it in that the M1A1 TH1 destroyer has two electric squibs and an M201A1 manual ignition fuze for igniting it. (The M201A1 fuze is an earlier model of the M210 manual ignition fuze (a above.)

4. Functioning. *a. Electric.* An electric current flowing through the electric fuze (squib) causes the fuze to ignite the first-fire mixture which ignites the incendiary mixture. The incendiary mixture burns at approximately 4,000° F. and ignites combustible material with which it comes in contact.

b. Manual. When the safety pin is withdrawn from the manual ignition fuze, a safety lever is released which allows a striker to hit

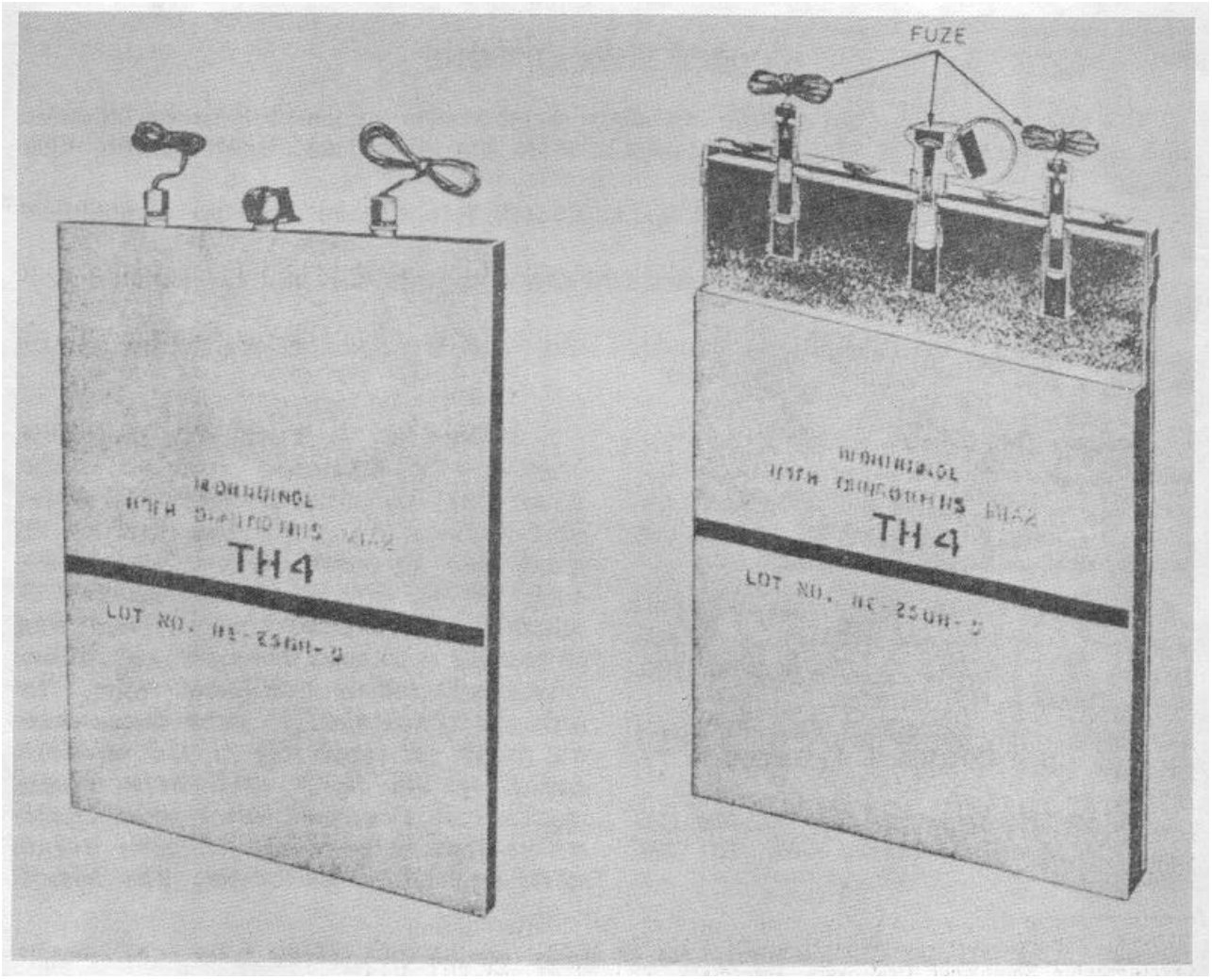

Figure 1. M1A2 TH4 incendiary cryptographic equipment destroyer.

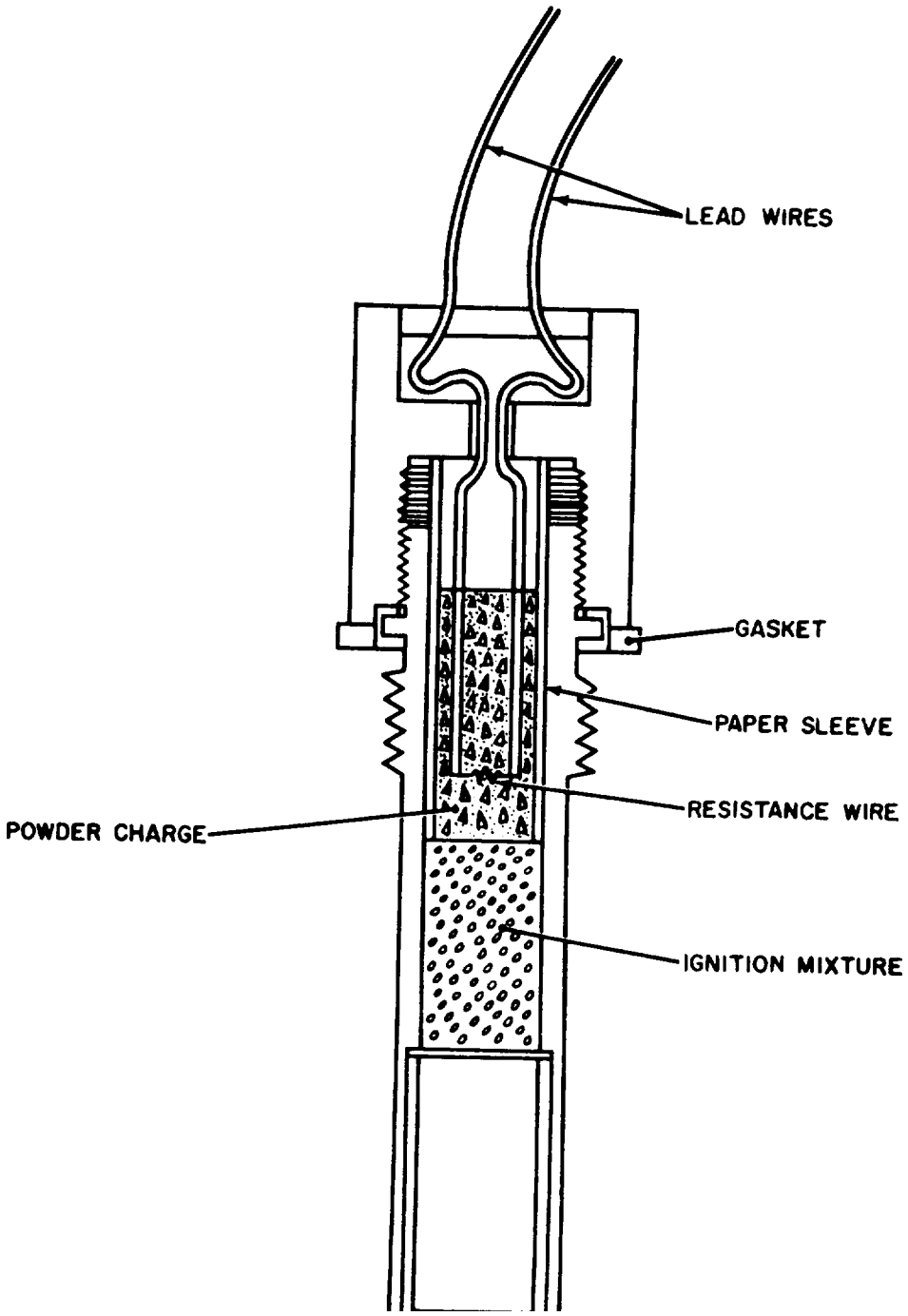

Figure 2. M209 electric floating smoke pot fuze.

the primer. This action ignites a delay element that burns for 1.2 to 2 seconds. Upon expiration of the delay time, flame from the fuze ignites the first-fire mixture which ignites the incendiary mixture. The incendiary mixture burns at approximately 4000° F. and ignites combustible material with which it comes in contact.

5. Installation. Install the hangers in the upper section of the CH-76 safe using the

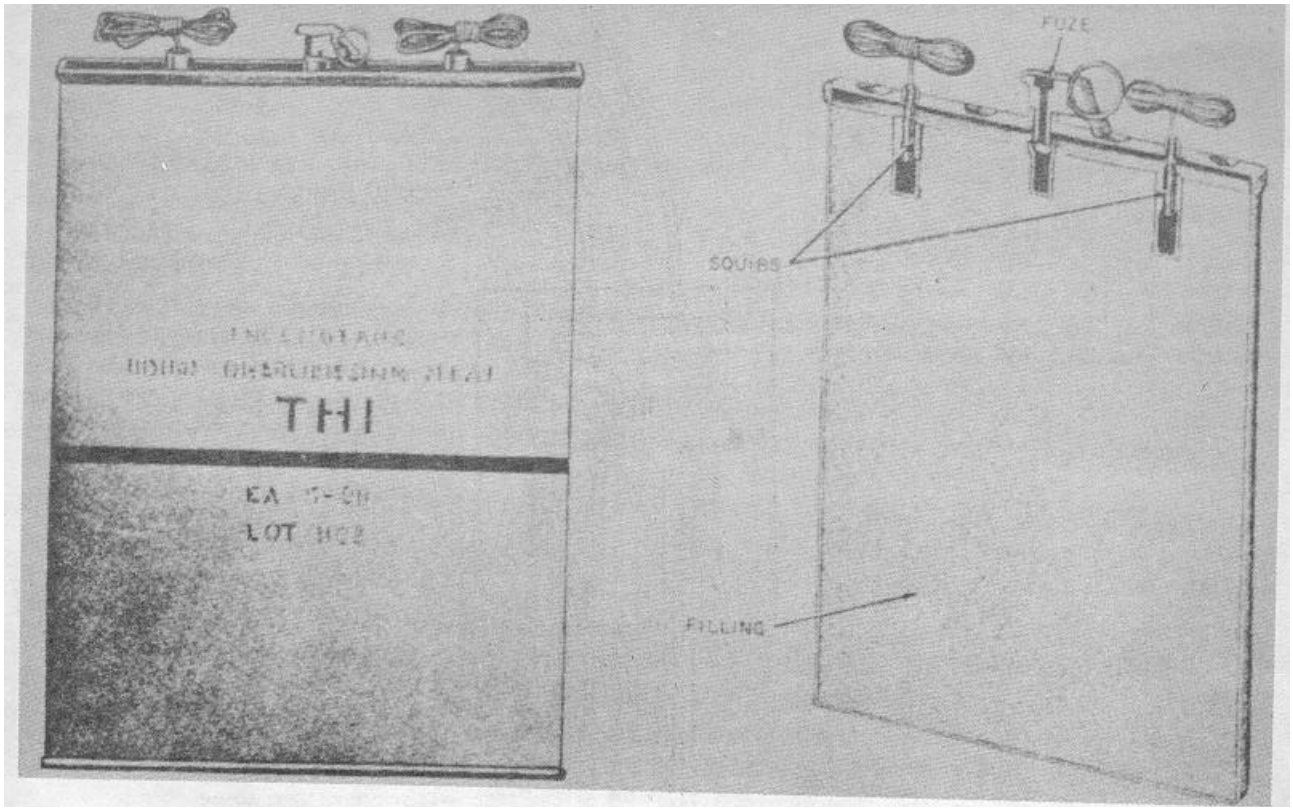

Figure 3. M1A1 TH1 incendiary cryptographic equipment destroyer.

hardware packed with the destroyer and place the destroyer in the hangers.

Warning: **Do not withdraw the safety pin or separate the ends of the fuze wire until the incendiary is to be ignited.**

6. Ignition.

Warning: **Use extreme caution when igniting incendiary cryptographic equipment destroyers in arctic climates. They deteriorate after 2 years storage in arctic climates and may explode violently when ignited. Do not attempt to extinguish the incendiary with water or a liquid fire extinguisher. In an emergency cover with sand to confine heat.**

To ignite the incendiary electrically, connect the squib lead wires to a source of electric current. For connecting the wiring of fuzes or squibs, refer to FM 5-25. A single fuze or squib may be used or two fuzes or two squibs may be connected to the source of current in series or in parallel. If it is anticipated that the destroyer will have to be ignited electrically on very short notice, insert a switch between the source of electric current and the fuzes or squibs in the destroyer and complete all electrical connections. Closing the switch will ignite the destroyer.

7. Marking and Packing. *a.* The M1A1 TH1 and the M1A2 TH1 destroyers are identified by a gray body with purple band and black lettering. Each destroyer is packed in a wood box which weighs 55 pounds when filled and displaces 1.1 cubic feet. One corner of the wood box is color coded with a purple stripe on a gray background.

b. M1A2 TH4 destroyers are identified by a red body with a black band and black lettering. Each destroyer is packed in a wood box which weighs 55 pound when filled and displaces 1.1 cubic feet. One corner of the wood box is color coded with a light red stripe.

8. Storage and Shipment. Storage and shipment of incendiary cryptographic equipment destroyers are covered in detail in TM 3-250. Army regulations and Interstate Commerce

Commission regulations govern the shipment of incendiary cryptographic equipment destroyers within the zone of the interior. Oversea shipments should be made in compliance with instructions contained in SR 55-730-10 and TM 3-250.

9. Storage. Incendiary cryptographic equipment destroyers are classed for storage purposes as Group D (incendiary and readily flammable) chemical munitions. See TM 3250 for detailed information on storing chemical munitions.

10. Evacuation and Destruction to Prevent Enemy Use. *a. General*. When incendiary cryptographic equipment destroyers are in danger of being captured by an enemy, the decision must be made to evacuate, destroy, or abandon them. Evacuation is preferable to destruction and destruction is preferable to abandonment. The authority to evacuate, destroy, or abandon the incendiary cryptographic equipment destroyers must be obtained from the responsible commander.

b. Destruction. Destroy stocks of incendiary cryptographic equipment destroyers by burning them.

(1) Pile the destroyers along with all available flammable material such as brush or dunnage in a pit or trench.

(2) Pour gasoline over the pile and ignite it from a safe distance.

By Order of the Secretary of the Army:

EARLE G. WHEELER,
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army:

USASA (10)
CNGB (1)
USA Maint Bd (2)
USACBRCDA (2)
USACDC (2)
USAADCDA (2)
USAARMCDA (2)
USAARTYCDA (2)
USAAVNCDA (2)
USAICDA (2)
USASWCDA (2)
USAARMC (2)
USAAMC (2)
USA Engr Cen (2)
USAGM Cen (2)
USAIC (2)
USCONARC (10)
ARADCOM (5)
ARADCOM Rgn (5)
OS Maj Comd (5)
Armies (5)
Corps (1)
USA Corps (1)
USMA (10)
Svc Colleges (10)
Br Svc Sch (10) except
USACMLCSCH (50)
GENDEP (OS) (5)
Dep (OS) (5)
Army Dep (5)
USASMCOM (1)
USAMUCOM (5)
USAMC (5)
POE (1)
Instl (2)
USA Trans Tml Comd (1)
USA Tml (1)
USAOSA (2)
Arsenals (3) except Edgewood (50)
PG (5)

NG: State AG (3).
USAR: None.
For explanation of abbreviations used, see AR 320-50.

AGO 5016A

*U.S. GOVERNMENT PRINTING OFFICE : 1994 0 - 300-421 (82773)

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE

BE EXACT. . .PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO	TABLE NO.

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.—IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

PIN:009843-000