

D E P A R T M E N T O F T H E A R M Y T E C H N I C A L B U L L E T I N

FIELD DESTROYER, INCENDIARY, ABC-M4
(Refs: SR 55-730-10; TM 3-250; SB 725-1300-1)

Headquarters, Department of the Army, Washington, D. C.
19 February 1964

1. Scope. This bulletin describes the File Destroyer, Incendiary, ABC-M4 and gives information on its handling, functioning, storage, shipment, and destruction.

2. Purpose. The ABC-M4 file destroyer (fig. 1) is used primarily to destroy classified material in filing cabinets. It is intended for use outside CONUS. It is designed to effect maximum destruction of classified material with minimum damage to the premises where the filing cabinets are kept. One ABC-M4 file destroyer provides sufficient material to completely destroy the contents of a normal four-drawer file cabinet. Combustible material other than files can be destroyed with this incendiary if the installation procedures are varied to suit the circumstances. The ABC-M4 file destroyer is requisitioned and issued in accordance with SB 7251300-1.

3. Safety Precautions. Protect the igniter and oxidizer boxes from accidental ignition by sparks or flame. In situations where the premises must be protected from damage by fire, remove any combustible materiel from near the cabinet. After ignition, move away from the cabinet to avoid acrid smoke which is produced. If incendiary file destroyers in several cabinets are to be ignited individually, provide means to ignite each incendiary separately from a remote point not subjected to smoke from the first incendiary fired.

4. Description. The ABC-M4 incendiary file destroyer consists of 44 oxidizer boxes (1, fig. 2), 4 igniter boxes (2), and 4 racks (3). The oxidizer boxes furnish oxygen to permit papers to be burned in a closed file drawer. The igniter boxes set fire to the papers and

oxidizer boxes. The racks compress the papers and oxidizer boxes while the papers are burning. Forty-four pounds of paper can be destroyed with this incendiary.

a. Oxidizer Boxes. The oxidizer boxes are made of cellulose nitrate. They measure 10-inches long by Y4 - inches wide by Y-inch deep and are filled with approximately 26M ounces of sodium nitrate.

b. Igniter Boxes. The igniter boxes are also made of cellulose nitrate, the same size as the oxidizer boxes, and are filled with approximately 12 ounces of a mixture of sodium nitrate and finely powdered wood (wood flour). Each igniter box contains two squibs connected in parallel to a pair of igniter wires that are used to connect the squibs to a power source.

c. Racks. The racks are flexible mats made of interlocking links of heavy wire formed into a rectangle measuring 12 inches by 29 inches and weighing 63 pounds. The flexible construction of the racks allows them to follow the contours of the tops of the papers in a file drawer and to keep the papers compressed while they are burning.

5. Installation. *a.* Install one oxidizer box in the front of the file drawer and one behind each -inch thickness of paper in the drawer until all papers in the drawer are sandwiched between oxidizer boxes. Prepare other drawers in the same manner.

b. Place an igniter box ahead of the first oxidizer box in each file drawer. Run the wires from the igniter box out of the drawer passing them either

*This bulletin supersedes so much of TM 3-300, 14 August 1956, including C 2, 5 May 1958, and C 3, 25 August 1959, as pertains to File Destroyer, Incendiary, ABC-M4.

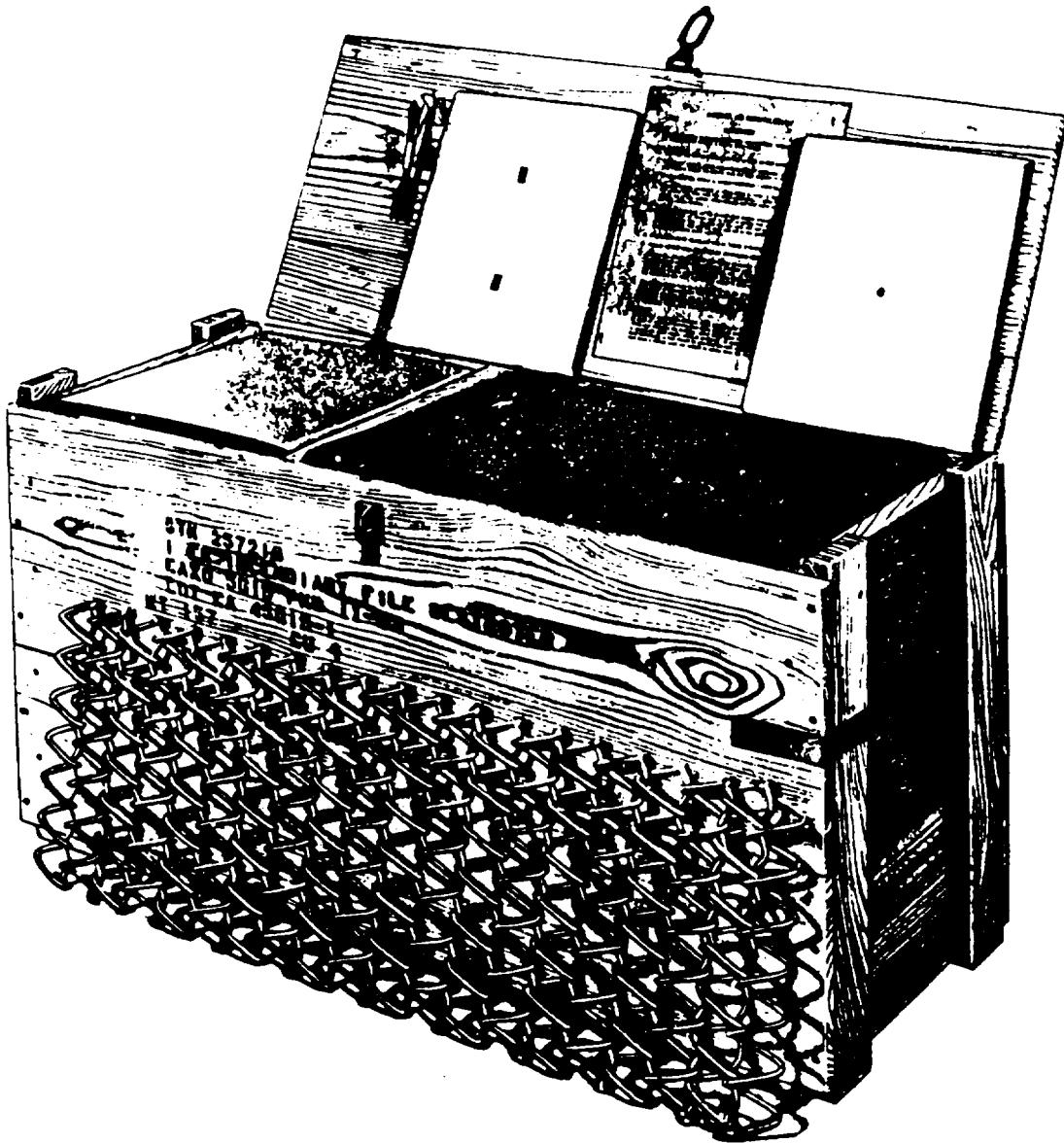


Figure 1. File Destroyer, Incendiary, ABC- M4.

over the edge of the drawer or through the hole used for the rod that holds the file separators in place. Be careful not to cut the insulation on the wires or the wires themselves.

c. Place a rack on top of the papers and boxes in each drawer prepared as described above adjusting the rack so that it will remain in contact with the contents of the file as burning progresses.

d. Close all drawers and lock them if possible.

6. Ignition. Connect the wires from all igniter boxes to a firing circuit. Use parallel connections so that an open circuit in one igniter box will not prevent other

boxes from igniting. To ignite the incendiary, connect the firing circuit to a source of electricity capable of furnishing at least 1 ampere per igniter box. Use a minimum of 2 volts if there is no more than 10 feet of wire between the igniter box and the electric source. Use a minimum of 6 volts for wire lengths between 10 and 100 feet. Longer wires require proportionately higher voltages. Possible sources of electricity are house lighting current, a portable radio "B" battery, or a blasting machine. A BA 30 one-cell flashlight battery can be used to ignite one igniter box at a time if the wires are

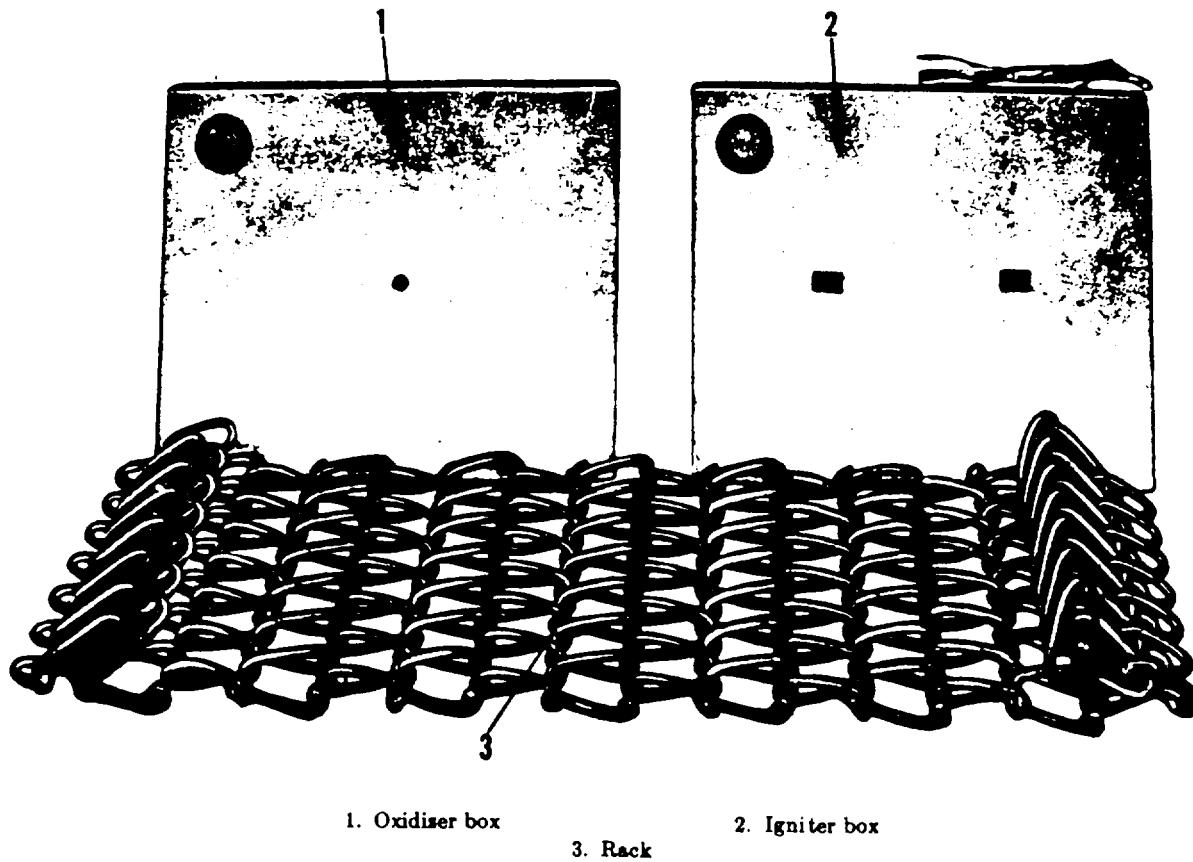


Figure 2. Oxidizer box, igniter box, and rack.

not longer than 10 feet and the battery is in good condition. If it is necessary to keep a filing cabinet in readiness for destruction on very short notice, the files can be prepared as described in paragraph 5 and the firing circuit can be connected to the electric source through a switch which is left open.

7. Functioning. Closing the electric firing circuit causes the squibs in the igniter boxes to ignite and set fire to the wood-flour-and-sodium nitrate mixture. The sodium nitrate furnishes oxygen to support combustion in the closed file. Papers adjacent to the igniter box ignite and the sodium nitrate in the next oxidizer box furnishes the necessary oxygen for combustion. Combustion progresses in this way until the entire contents of the drawer are burning. The weight of the rack keeps the contents of the file compressed, thereby providing maximum contact between the paper and the sodium nitrate and maximum effectiveness of the incendiary. A file destroyed by an ABC-M4 incendiary emits large volumes of acrid black smoke while burning.

8. Marking and Packing. The incendiary is packed in a wood box which weighs approximately 117 pounds when filled and displaces 3.5 cubic feet. One corner of each box containing an ABC-M4 incendiary file destroyer

is color coded for identification. Boxes of incendiary file destroyers manufactured prior to January 1961 are marked with a purple stripe on a gray background; boxes of file destroyers manufactured after January 1961 are marked with a light red stripe. Nomenclature and other data are lettered in black on the box.

9. Shipment. Storage and shipment of chemical munitions are covered in detail in TM 3-250. Army regulations and Interstate Commerce Commission regulations govern the shipment of chemical munitions within the zone of interior. Oversea shipments should be made in compliance with instructions contained in SR 5730-10 and TM 3-250.

10. Storage. The ABC-M4 incendiary file destroyer is classified for storage purposes as a class D (incendiary and readily flammable) chemical munition.

See TM 3-250 for detailed information on storing chemical munitions.

11. Evacuation and Destruction to Prevent Enemy Use. *a. General.* When ABC-M4 incendiary file 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 file

destroyers must be obtained from the responsible commander.

b. Destruction. Destroy stocks of ABC-M4 incendiary file destroyers by burning them.

- (1) Pile the file destroyers in a pit or defiladed location with all available flammable material such as brush or dunnage.
- (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:

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

NG: State AG (3).

USAR: None.

For explanation of abbreviations used, see AR 320-50.

* U.S. GOVERNMENT PRINTING OFFICE : 1994 O - 300-421 (82800)

AGO 8051A

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



SOMETHING WRONG WITH THIS PUBLICATION?

**THEN. . JOT DOWN THE
DOPE ABOUT IT ON THIS
FORM, CAREFULLY TEAR IT
OUT, FOLD IT AND DROP IT
IN THE MAIL.**

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE BENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT...PIN-POINT WHERE IT IS

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

PAGE NO.	PARA-GRAPH	FIGURE NO	TABLE NO.
----------	------------	-----------	-----------

YEAR ALONG PERFORATED WINE

PRINTER NAME, GRADE OR TITLE, AND THE REMOTE 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: 009844-000