

This copy is a reprint which includes current pages from Changes 3 and 4.

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL
CARTRIDGE, 40-MILLIMETER: RIOT CONTROL CS, XM674
AND
CARTRIDGE, 40-MILLIMETER: RED SMOKE RS, XM675

Headquarters, Department of the Army, Washington, D. C.
6 September 1968

SAFETY PRECAUTIONS

Do not fire any damaged, corroded, or separated XM674 or XM675 cartridges.

Wear a field protective mask when firing an XM674 cartridge.

Point muzzle end of cartridge or launcher away from body, friendly personnel, and flammable materials. When hand firing, (a) do not hold cartridge with primer end pointing toward body, and (b) make sure no personnel are standing immediately in rear of the cartridge.

Always wait 30 seconds before disposing of a cartridge or unloading a cartridge that has failed to fire. Do not hand fire the XM674 or XM675 munition without prior training in all hand-firing procedures. When hand firing, make sure the hands are as dry as possible, and maintain a *very tight* grip on both the firing-cap assembly and cartridge barrel. If the munition is loosely held when fired, recoil forces will tear both the cartridge barrel and firing cap from the hands and may cause injury, to personnel in its path.

Under no circumstances should the round be fired directly at an individual at ranges less than 35 meters (114.8 feet).

When hand firing, make sure that (a) the left hand is positioned at least one-fourth inch from the muzzle end of the munition, and (b) no part of the right hand (fingers or palm) is positioned over either end of the firing cap. Failure to follow these instructions could result in injury to the firer when the munition is functioned.

Always use caution when *placing* the firing cap over the primer end of the cartridge barrel or when removing the

firing cap from the primer end of the cartridge barrel, to prevent accidental functioning of the cartridge.

Do not drop a cartridge. If the munition accidentally functions, the cartridge barrel may travel rearward and may cause injury to personnel in its path.

Cartridges must be free of sand, mud, grease, or other foreign matter when loaded into an M79 grenade launcher or an AN-M8 pyrotechnic pistol.

Any time a cartridge fails to fire, keep the muzzle end of the M79 grenade launcher, AN-M8 pistol, or cartridge barrel on target. Keep all friendly personnel clear of the muzzle end of the launcher, pistol, or cartridge barrel.

Refer any damaged or misfired munition to Explosive Ordnance Disposal (EOD) personnel.

Always remove, and discard the firing-cap assembly from the muzzle end of an XM674 or XM675 cartridge before loading an M79 grenade launcher.

Before loading an AN-M8 pyrotechnic pistol, always remove and discard the firing-cap assembly from the muzzle end, and the launcher adapter from the primer end, of an XM674 or XM675 cartridge.

Make sure that smoke produced by the burning agent/pyrotechnic filling does not interfere with operations of nearby friendly personnel.

The XM674 and XM675 cartridges can cause ignition of flammable material, and firing at such targets should be avoided when possible.

Impact of body assembly (projectile) on personnel can cause injury including burns. Aiming to hit personnel should be avoided when possible injury is unacceptable.

Changes in force: C 3

CHANGE

NO. 3

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 27 January 1970

Operator's Manual
CARTRIDGE, 40-MILLIMETER: RIOT CONTROL CS, XM674
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TM 3-1310-244-10, 6 September 1968, is changed as follows:

Page 1. "SAFETY PRECAUTIONS" is changed to WARNINGS.

The following warning is added:

Prolonged exposure to heavy concentrations of colored smoke may cause skin irritations.

Page 2, paragraph 3a. In line 6, "TM 3-315" is changed to read TM 3-215.

Paragraph 3c is superseded as follows:

c. *XM674 and XM675 Cartridges.* The XM674 or XM675 cartridge can be fired from the M79 grenade launcher (TM 9-1010-205-12), from the AN-M8 pyrotechnic pistol (TM 9-1095-201-15), or by hand.

Page 3, paragraph 4b. In line 2, "(7, fig. 1)" is changed to read (6, fig. 1).

In line 5, "(6)" is changed to read (5).

Last two sentences are superseded as follows:

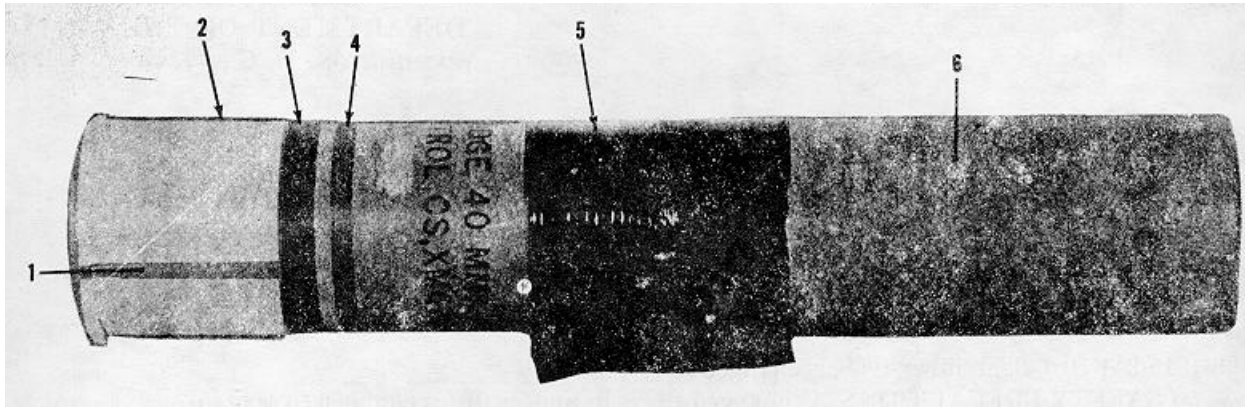
The cartridge barrel is marked with the cartridge nomenclature, lot number, a red identification band (3), and a brown identification band (4).

Paragraph 4c is superseded as follows:

c. *XM675 Cartridge.* The XM675 cartridge (fig. 2) is identical to the XM674 cartridge (*b* above), except that the XM675 cartridge barrel is marked with the cartridge nomenclature, lot number, and one brown identification band.

* This change supersedes C1, 4 December 1968, and C2, 3 October 1969.

Figure 1 is superseded as follows:



MU-E-622-10-1

- 1 Cartridge barrel
- 2 Launcher adapter
- 3 Identification band (red)
- 4 Identification band (brown)
- 5 Waterproof pressure-sensitive tape
- 6 Firing cap assembly

Figure 1. XM674 riot control CS40-millimeter Cartridge

Page 5, paragraph 7c. In line 1, "cleated" is changed to read packed.

The following is added to paragraph 7c:

The M19A1 ammunition box and the inner fiber-board box are marked with the nomenclature, quantity, contract number, and identification markings that are located on two diagonally opposite edges (one brown and one red stripe on a gray background for XM674 cartridges; one brown stripe on a green background for XM675 cartridges).

Paragraph 7d is added after paragraph 7c.

d. Packaging and Packing (Alternate Method).

(1) *Packaging.* Four cartridges are placed, with primer ends up, in a cloth bandolier. The bandolier is folded to make two rows of two cartridges each. An instruction sheet is wrapped around the folded bandolier. The web strapping of the bandolier is wound around the assembly. Two bandoliers, with fiberboard filler pads, are placed in an M19A1 small arms ammunition box which is then closed.

(2) *Packing.* Four M19A1 small arms ammunition boxes, with fiberboard filler pads, are packed in a wirebound box. The packed box, which is 17 3/4 inches long, 12 1/4 inches wide, and 8 1/4 inches deep, weighs approximately 50 pounds and displaces about 1 cubic foot. Palletization consists of either 40 packed boxes placed in five rows of eight each, or 32 packed boxes placed in four rows of eight each.

Paragraph 8a. The second sentence is rescinded.
Page 6, paragraph 8b. The second sentence is rescinded.

Paragraph 9f is added after paragraph 9e.

f. Unpacking (Alternate Method) (para 7d).

- (1) Separate the boxes from the pallet.
- (2) Open the top of a wirebound box and remove the four M19A1 ammunition boxes.
- (3) Open the number of M19A1 ammunition boxes needed for the mission. Remove the cloth bandolier with four cartridges and instruction sheet.
- (4) Fit the bandolier in a carrying position to

suit the person (fig. 4).
Page 7, Section III, Operating Instructions. The following warning is added:

WARNING
Prolonged exposure to heavy concentrations of colored smoke may cause skin irritations.

Page 12. Paragraph 10*h* is superseded as follows:
 h. With the right hand, slide the open end of the firing cap over the primer end of the cartridge barrel until the edge of the firing cap just covers the brown band.
Page 13, paragraph 10*j*, *Note*. In line 3, "airborn" is changed to read airborne.
(fig. 6) is added after paragraph 11 title.
Page 15. (fig. 7) is added after paragraph 12 title. Paragraph 12*g*. In line 2, "M8" is changed to read AN-M8.
Page 18. Paragraphs 15 and 16 are superseded as follows:

15. Shipment
The XM674 and XM675 cartridges are classified as chemical ammunition by the Department of Transportation (DOT) as follows:
 a. *XM674 Cartridge.*
Hazard class Explosive, Class C: Poison C, Tear Gas.

Shipping box marking... Small Arms Ammunition, Tear Gas Cartridges (Tear Gas label required).

b. *XM675 Cartridge.*
Hazard class Explosive, Class C
Marking..... Smoke Signals, Handle Carefully, Keep Fire Away.

16. Storage

The XM674 and XM675 cartridges are classified for storage purposes in accordance with TM 9-1300-206 as follows:
 a. *XM674 Cartridge.*
Hazard 1
Compatibility Group A
Chemical Storage Group..... B
 b. *XM675 Cartridge.*
Hazard Class..... 1
Compatibility Group A
Chemical Storage Group..... B

Appendix. The following reference is added:
TM 3-250 Storage, Shipment, Handling and Disposal of Chemical Agents and Hazardous Chemicals