# TECHNICAL REGULATIONS No. 1350-2:24A

WAR DEPARTMENT, Washington, August 6, 1931.

## INFANTRY AND AIRCRAFT AMMUNITION

### AMMUNITION FOR 2.24-INCH TANK GUN, MK. II (BRITISH)

#### Prepared under direction of the Chief of Ordnance

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## Section I

#### GENERAL

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- 1. Purpose and scope.—These regulations are intended for the using arms and the Ordnance Department. They give all necessary information regarding the construction, functioning and identification of the different types of ammunition for the 2.24-inch tank gun, Mk. II (British).
- 2. References.—a. Before attempting to handle ammunition of any type personnel should be thoroughly familiar with TR 1370-A.
- b. For the preparation and use of blank ammunition generally, see TR 1270-B.
  - c. Drill ammunition generally is described in TR 1370-D.
- d. Proper nomenclature for ammunition described herein is given in Standard Nomenclature List (S. N. L.) No. R-1. "Ammunition. Fixed, all Types, for Pack, Light and Medium Field Artillery." This nomenclature is mandatory and will be used in all requisitions.
- e. TR 1300-2.24A describes the operation, care, and maintenance of the 2.24-inch (6-pdr.) tank gun and mount for which this ammunition is designed.

Paragr	aph
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- 3. General.—The ammunition used in the 2.24-inch tank gun is known as fixed ammunition because the ammunition is issued with the cartridge case containing the propelling charge and primer firmly secured to the projectile. Thus all the components of the round are loaded into the gun as a unit and in one operation.
- 4. Types of ammunition.—a. The ammunition authorized for use in the 2.24-inch tank gun consists of high-explosive shell, canister and target-practice shell.
- b. Components.—The components and weights thereof for each type are given in the following tables:

Components of complete rounds 1

Components	High-explosive 2 shell (fig. 1)	Canister (fig. 2)	Target-practice shell (fig. 3)
Projectile	High-explosive shell	Canister, Mk. I	Target practice.
Fuze	Base detonating	None	Base percussion.
Bursting charge	T. N. T.	Shrapnel bails	Black powder.
Cartridge case	2.24-inch (6-pdr.) cartridge case.	2.24-inch (6-pdr.) cartridge case.	2.24-inch (6-pdr.) cart ridge case.
Primer (see par. 15)	100-grain percussion prim- er. M1.	100-grain percussion pri.n- er. M1.	100-grain percussion prim- er, M1.
Propelling charge	Nitrocellulose smokeless	Nitrocellulose smokeless powder.	Nitrocellulose smokeless powder.

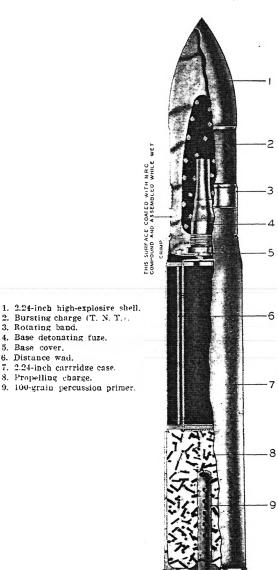
#### Weight of components

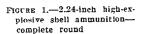
Components	High- explosive ammunition	Canister ammuni- tion	Target- practice am- munition
Projectile (empty) Fuze (loaded) Bursting charge Cartridge case with primer assembled Propelling charge	. 27 . 25 2. 10	Pounds 1. 52 None. 4. 48 2. 10 . 60	Pounds 5. 66 . 14 . 20 2. 10 . 60
Total weight of complete round	8. 70	8. 70	8. 70

A complete round as referred to herein means all the necessary components of the round of ammunition assembled into one unit for firing the gun once.
The high-explosive shell is a substitute standard for the armor-piercing shell which is under develop-

ment.

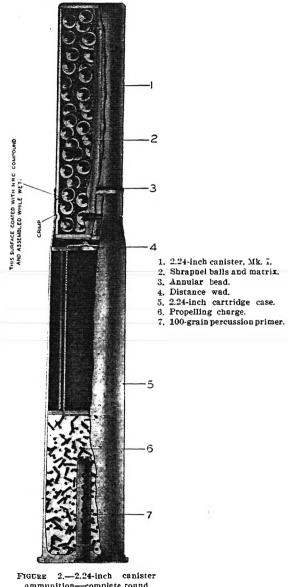
AMMUNITION FOR 2.24-INCH TANK GUN, MK. H (BRITISH)





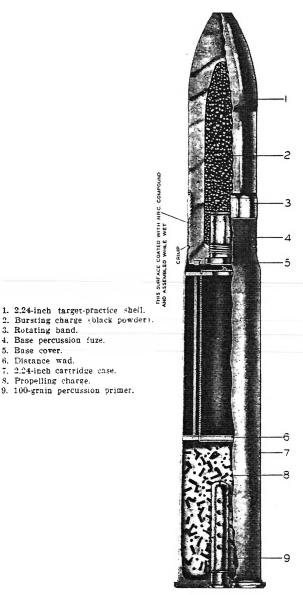
3. Rotating band. 4. Base detonating fuze. 5. Base cover. 6. Distance wad. 7. 2.24-inch cartridge case. 8. Propelling charge.

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ammunition-complete round

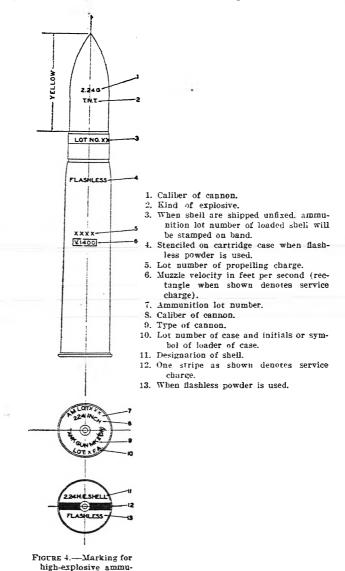
## AMMUNITION FOR 2.24-INCH TANK GUN, MK. II (BRITISH)



4. Base percussion fuze. 5. Base cover. 6. Distance wad. 7. 2.24-inch cartridge case. 8. Propelling charge. 9. 100-grain percussion primer.

FIGURE 3 .- 2.24-inch targetpractice ammunition-complete round

5. Marking.—Service marking by means of painting, stenciling, and stamping on the complete rounds is shown in Figures 4, 5, and 6.



nition for 2.24-inch tank gun, Mk. H

(British)



1. Caliber of cannon. 2. Mark number of canister.

charge). 6. Ammunition lot number. 7. Caliber of cannon. 8. Type of cannon.

less powder is used. 4. Lot number of propelling charge.

bol of loader of case.

10. When dashless powder is used. 11. Lot number of canister.

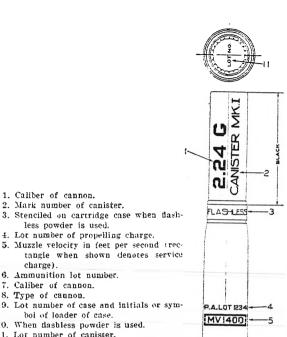
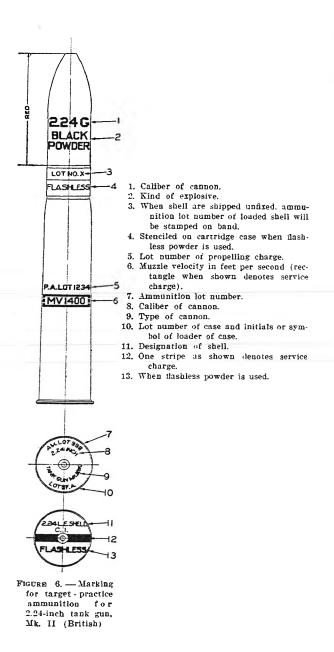




FIGURE 5 .- Marking for canister ammunition for 2.24-inch tank gun, Mk. II (British)

## INFANTRY AND AIRCRAFT AMMUNITION



## SECTION III

## **PROJECTILES**

Paragr	aph
General remarks	6
Shell. high-explosive, 2:24-inch	7
Canister, Mk. I, 2:24-inch	8
Shell, target-practice, 2.24-inch	9

- 6. General remarks.—a. The projectile is forced into the cartridge case and secured by crimping the cartridge case into a groove near the base of the projectile. (See fig. 1.)
- b. Rotating band.—(1) The functions of the rotating band are to impart rotation, thereby maintaining the stability of the projectile during flight, and to prevent the propelling charge gases from escaping past the projectile when the gun is fired.
  - (2) Description.
    - (a) The rotating band is a cylindrical ring of copper or copper alloy, pressed into a groove or rotating band seat near the base of the projectile. The surface of this groove is scored or knurled to provide a means for preventing the rotating band from slipping while the projectile is being rotated in the bore of the gun.
    - (b) Rotating bands necessarily are made of a comparatively soft metal that will flow readily and fill the rifling grooves in the gun barrel. The material, while sufficiently soft to prevent excessive wear of the lands in the gun barrel, is at the same time hard enough to withstand the stresses due to the resistance offered when the projectile is passing through the bore.
- (3) Action on firing gun.—When the gun is fired, the rotating band is forced into engagement with the rifling in the gun barrel, which consists of helical grooves cut in the surface of the bore. The projectile is forced out of the barrel of the gun with a twist or rotation, thus making it stable in flight. Since the diameter of the rotating band is greater than the diameter across the grooves of the rifling in the bore, the rotating band completely fills the bore of the gun barrel and prevents the propelling charge gases from escaping past the projectile.
- c. Base cover.—A base cover is a metal disk firmly secured to the base of a projectile for the purpose of sealing it, thereby preventing the propelling charge gases from working into the shell cavity and coming in contact with the shell filler. Base covers are used on shell

filled with explosive, and usually consist of a circular sheet lead disk over which is placed a circular copper disk, the periphery of which is so formed as to permit the copper disk to be secured to the base of the projectile either by a circular crimp or a circular lead calking wire. These covers provide a positive seal for any screw thread joints in the base of the projectile and also compensate for any defects that may be present in the metal.

d. Painting and marking.—(1) All projectiles are painted both as a means for ready identification and as a protection against

oxidizing and corrosive influences.

(a) Projectiles containing high explosive (T. N. T., amatol, etc.) such as'the high-explosive shell used in this gun are painted vellow.

(b) Projectiles containing low explosive (black powder) such as the target-practice projectile are painted red.

(c) Projectiles containing no explosive such as the canister are painted black.

(2) Projectiles are also stenciled to show the caliber, type of cannon in which used, ammunition lot number, and kind of filler. For marking and painting of projectiles, see Figures 4, 5, and 6.

7. Shell, high-explosive, 2.24-inch.—a. Description.—(1) The 2.24-inch high-explosive shell (fig. 1) is made of steel and has a sharp pointed nose or ogive, the radius of the ogive being approximately 21/2 calibers.1

(2) The volume of the shell cavity is 5.48 cubic inches, and when loaded and fuzed contains 0.25 pound of T. N. T. The service

velocity is 1,400 feet per second.

- (3) The base of the shell is provided with a central threaded opening and a counterbored seat for assembling the fuze to the projectile. The base is also provided with a dovetailed slot for calking the base cover in place.
- (4) When assembled, the projectile extends into the mouth of the cartridge case for a distance of 1.49 inches, which includes that portion of the projectile rearward of the rotating band. projectile is provided with an annular groove near its base for the purpose of crimping the cartridge case to the projectile.

(5) The weight of the shell, loaded and fuzed, is approximately 6 pounds.

b. Action on firing.—See paragraph 11 b and c.

By caliber is meant the diameter of the bore of the gun measured diametrically from the top of opposite lands. It is the minimum diameter of the rifled portion of the bore.

- c. Performance data.—(1) Maximum range, 5.500 yards.
- (2) Effective range, 2.000 yards.
- (3) Effective radius of exploding projectile. 2 yards.
- (4) Range table.

	Time of	Dispersion—30 per cent zone		
Range	ilight	Range	Deflection	
Yaras	Seconds	Yards	Yards	
100	1.0	23	0.8	
500	1.5	23	1.0	
500	2.0	23 23	1.3	
1,000	2. 5	23	1.5	
1, 200	3.1	24	1.7	
1, 400	3.7	25	1.9	
1, 600	4.3	25	2.1	
1, 800	5. 0 5. 7	26	2.3 2.3	

(5) Penetration of projectile.

Range	Armor piate	Masonry concrete	Masonry stone	Brick- work	Sandy earth	Plowed earth	Clay
Yards .	Inches	Feet	Feet	Feet	Feet	Feet	Feet
100	1. ti	1.7	2, 5	4. 3	7.8	10.3	15.6
200	1. 5	1.6	2.4	4. 2	7.6	10.0	15. 2
300	1. 5	1.6	24 23 22 2	4. 1	7. 1	9.8	14. 3
400	1.4	1.6	2.3	4.0	7.3	9.6	14.5
500	1.4	1.5	2.3	3.9	7.1	9.3	14. 2
600	1.3	1.5	2.2	3. 8	6.9	9.2	13. 9
700	1. 3	1.5	2.2	3. 7	6.7	8.9	13. 6
500	1.2	1.4	2.1	3, 6	n. 5	8.7	13. 3
900	1. 2	1. 4	2.1	3. 6	6.4	8. 5	13.0
1,000	1. 1	1. 4	2.0	3. 5	i 5.3	8.9 8.5 8.3 8.0 7.5 7.3	12.7
1, 200	1, 1	1.3	2.0	3.4	3.1	3.0	12.2
1, 400	i. 0	1.3	1.9	3. 3	5.9	7.8	11. 8
1,600	1.0	1, 2	1.8	3. 2	5. 6	7.5	11. 4
1,800	0.9	1.2	1.8	3. 1	5. 6	7.3	11. 1
2,000	0. 9	1, 2	1.7	3. 0	5. 4	7.1	10.8
2, 500	0.8	1, 1	1.6	2.8	5. 1	6.7	10. 2
3,000	0. 8	1.0	1.5	2.6	4.8	6.3	9. 5
3, 500	0.7	1.0	1.4	2. 6 2. 5	4. 5	5.9	9.0
4,000	0.7	0.9	1.4	2.4	4.3	5.6	8.6
4. 500	0.6	0.9	1. 3	2.3	4.1	5. 6 5. 4	8 2
5,000	0.6	0.9	1.2	2.3	3. 9	5. 2	7.8
5, 500	0. 5	0.8	1. 2	$\frac{2}{2}, \frac{2}{1}$	3. 8	5.0	8. 2 7. 8 7. 5

- d. Marking.—The high-explosive shell is painted yellow and marked for ready identification, as shown in Figure 4.
- 8. Canister, Mk. I, 2.24-inch.—a. Description.—(1) The canister used with the 2.24-inch tank gun, Mk. II (British), is known as canister, Mk. I (see fig. 2).
- (2) The canister filling consists of 172 lead shrapnel balls. The voids are filled with a resinous matrix. The case is provided with three longitudinal slots. When assembled, the edges of the segments are about 0.1 inch to the right or left of the corresponding slots in



the case. The raised bead on the case serves to stop the canister at its proper seating in the cartridge case. It will be noted that the canister filling consists only of inert materials and does not require a fuze.

- (3) The assembled canister is painted with a black waterproof paint.
  - (4) The total weight of the canister is approximately 6 pounds.
- b. Action on firing.—When the gun is fired the shock of discharge ruptures the case and the resinous matrix disintegrates and frees the balls. When the case bursts, the balls leave the case in a cone-shaped pattern with a velocity practically equal to that of the muzzle velocity, which is 1,400 feet per second. The canister bursts within 100 feet of the muzzle and the penetration of wood, earth, or brick by the balls is very small. The maximum effective range of shrapnel balls from the muzzle against personnel is 400 yards.
- c. Marking.—The stenciling on the canister is lengthwise and in accordance with Figure 5, which shows the marking and stenciling of the complete round.
- 9. Shell, target-practice, 2.24-inch.—a. Description.—(1) The target-practice shell used in this gun is shown in Figure 3. It is prepared from components of obsolete 2.24-inch seacoast ammunition. The radius of the ogive is the same as that of the high-explosive shell, but the point is cut off and the projectile is approximately ½ inch longer.
- (2) The material used for this projectile is cast iron. This projectile does not make use of a base cover, due to the fact that the bursting charge consists of black powder.
- (3) The rotating band used with the target-practice projectile is the same as that used for the high-explosive shell.
- (4) The total weight of the target-practice projectile, loaded and fuzed, is approximately 6 pounds.
- (5) The weight of the black powder charge is 0.2 pound. The service velocity is 1,400 feet per second.
  - b. Action on firing.—See paragraph 12 b.
- c. Performance data.—The data given in paragraph 7 c may be used for safety purposes when firing the target-practice projectile.
- d. Marking.—The stenciling and marking on the projectile are in accordance with Figure 6, which gives the marking and stenciling of the complete round. The projectile is painted red to indicate that it contains black powder.

#### SECTION IV

#### **FUZES**

Paragr	aph
General	10
Base detonating fuze	11
Base percussion fuze	12

10. General.—a. Function.—A fuze is a mechanism designed to initiate the detonation or explosion of the bursting charge of a

projectile at the time or place desired.

b. Types.—The two fuzes used with the ammunition for this gun are the base detonating fuze (fig. 7) and the base percussion fuze (fig. 8). Both fuzes are designed for nondelay action, that is, no deliberate delay element is present in the explosive train. These fuzes function when the projectile is sufficiently retarded to cause the energy of the firing pin to overcome the resistance of the safety ring and fire the primer. This action is practically without delay.

c. How issued.—Both types of fuzes are issued assembled in the base of the projectile and are not visible when the ammunition is

received for use.

d. Caution.—Due to the inherent characteristics of these fuzes, great care must be exercised in handling the complete rounds. It must be remembered that the only resistance to arming the fuze is offered by the resistance ring and that excessive jolting or dropping of a round may result in a serious accident.

11. Base detonating fuze.—a. Description.—(1) The base detonating fuze, shown in Figure 7, is used with the 2.24-inch high-explosive shell. It is designed to function on impact with an obstacle and cause a high order of detonation of the shell charge without

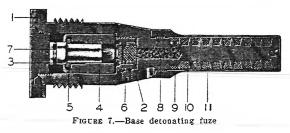
appreciable delay.

(2) The fuze stock (1) is provided with a plunger and firing pin cavity and also a cavity for the initiating explosives. The fuze stock contains 10 annular grooves or rings which are loaded with fulminate of mercury. The quantity of fulminate used to fill these grooves is 50 grains and is used as an intermediate or a detonating element to cause a high order of detonation of the T. N. T. charge.

A guncotton lead transmits the action of the percussion element to the detonating element. An acetate film having a thickness of about 0.003 inch is wrapped around the stock to cover the fulminate rings. A forged steel casing is assembled to the stock concealing the fulminate rings and the acetate film. The primer mixture is contained in a shell which is screwed into the cavity provided and held secure by means of a set screw (6).

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- b. Action on firing.—When the gun is fired the firing-pin sleeve (4), due to mass inertia or setback, exerts sufficient force on the split resistance ring (5) to force it back over the enlarged diameter of the firing pin. The rearward movement of the ring is checked when it reaches the annular locking groove (7) near the base of the firing pin, at which time the split resistance ring snaps into the groove, thereby locking the sleeve in the armed position.
- c. Action on impact.—When the projectile strikes an object its motion is retarded. The firing pin and sleeve, however, are free to move, and the set forward force drives the firing pin forward to function the primer. The flash from the primer is then transmitted through the guncotton lead to the rear fulminate ring, and complete detonation is then propagated through the remaining rings.



- 1. Fuze stock.
- 2. Percussion primer.
- 3. Firing pin.
- Firing-pin sleeve.
   Resistance ring.
- 6. Primer set screw.

- 7. Locking groove.
- Guncotton lead.
- 9. Casing.
- 10. Fulminate cover.
- 11. Fulminate rings.
- 12. Base percussion fuze.—a. Description.—(1) The base percussion fuze shown in Figure 8 is used with the 2.24-inch target-practice shell. It is designed to function on impact of the projec-

<sup>&</sup>lt;sup>a</sup>The term "setback" is used to indicate the reaction to the force required to give any part of the projectile a forward movement in the bore of the gun. The expansion of the gases from the propelling charge creates a pressure in the chamber and bore of the gun, which results in a linear acceleration of the projectile. The inertia of any mass within the projectile resists this acceleration and tends to remain stationary. This resistance to the force accelerating the projectile is termed "setback" and is expressed in pounds per grain of the mass. Therefore any mass not rigidly supported in the projectile will be given a relative motion toward the base of the projectile by this force, when the projectile is being accelerated in the bore of the gun.

tile with some obstacle. This fuze is obsolete for service ammunition and is only authorized for use in target-practice ammunition.

(2) The only explosive contained in this fuze is the percussion primer. Since the use of this fuze is confined to target-practice ammunition and the bursting charge is black powder, a detonating element is unnecessary. The fuze body (1) is recessed for the components which, when in action, constitute the means for percussion action. These components are of the same general design as those used in the base detonating fuze. The percussion element is contained in a closing cap (2), which is screwed into the fuze body and locked in the assembled position.

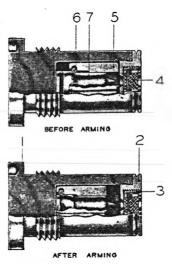


FIGURE 8 .- Base percussion fuze

- 1. Body.
- 2. Closing cap.
- 3. Primer cup.
- 4. Percussion primer.

- 5. Firing-nin sleeve.
- 6. Resistance ring.
- 7. Firing pin.

b. Action on firing.—The action of the percussion element, when the gun is fired, during flight, and on impact, is the same as that described for the base detonating fuze, except that the flash from the primer passes directly to the black powder bursting charge.

#### SECTION V

#### CARTRIDGE CASE

					1 11 1	agrapa
General						13
13.	General.—a.	Description	The cartr	idge case	used wit	h the
2.24-in	ch tank gun is	known as the	2.24-inch	(6-pdr.)	cartridge	case.
It is st	amped and ma	rked as shown	in Figure	4.		

b. The case is made of drawn brass and is 12.09 inches long. A projecting flange or rim is formed at the base of the case. This rim or flange functions as a stop for the round of ammunition when loaded into the gun. The extractor of the gun engages this rim to eject the cartridge case from the gun. The base of the cartridge case is drilled and counterbored to provide a seat for the primer.

## Section VI

#### PRIMER

Paragra	apn
General	14
100-grain percussion primer, M1	15

- 14. General.—To insure the ignition of smokeless powder in cartridge cases it is necessary that a primer contain, in addition to the percussion composition, an auxiliary charge of black powder to communicate the flash from the percussion primer to the smokeless powder, thus igniting the propelling charge.
- 15. 100-grain percussion primer, M1.—a. Type.—The 2.24-inch tank gun makes use of a primer known as the 100-grain percussion primer, M1 (fig. 9), because it contains 100 grains of grade A—4 glazed black powder as an auxiliary charge. For ammunition now in storage the 110-grain percussion primer was used.
- b. Action.—The firing plug in the rear of the primer, when struck by the firing pin of the gun, moves forward and deforms the percussion cup, thereby exploding the percussion composition. The flash caused by this explosion passes through a central hole and ignites the black-powder charge which in turn ignites the propelling charge. The flash or vent holes provide a means for uniform ignition of the propelling charge. A tin-foil wrapper seals the vents against moisture. The percussion primer composition is sensitive and care must be taken to avoid striking the primer cup with any hard object. A blow simulating that of a firing pin attached to a 1-pound weight and dropped through a height of 3 inches might cause the primer to function.

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- c. Marking.—The 100-grain percussion primer, M1, is identified by the stamping on the bottom of the primer case, as shown in Figure 9.
- d. Shipment.—The primers are shipped assembled to the complete round of ammunition.

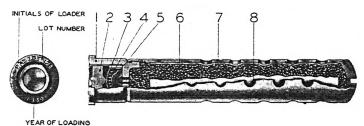


FIGURE 9 .- 100-grain percussion primer, M1

- 1. Head.
- 2. Firing plug.
- 3. Primer cup.
- 4. Percussion composition.

- 5. Anvil.
- 6. Black powder.
- 7. Body.
- 8. Paper wrapper.

#### SECTION VII

#### PROPELLING CHARGE

Paragraph

Propelling charge

approximately 0.6 pound.

- 16. Propelling charge.—a. General.—(1) The propelling charge used in the 2.24-inch tank gun is nitrocellulose smokeless powder. The quantity used is the same for all rounds authorized for use with this gun. Since the weight of all types of projectiles is approximately the same, they have a muzzle velocity of approximately 1,400 feet per second. The weight of the propelling charge used varies slightly with the different lots of powder and is adjusted to give the prescribed muzzle velocity. The propelling charge weighs
- (2) The propelling charge is contained in the cartridge case, as shown in Figure 1.
- (3) The smokeless powder used in this gun is granulated in the form of a single perforated grain and is about 0.0527 inch in diameter and about 0.2693 inch long. The diameter of the perforation is about 0.0167 inch, leaving a web thickness of approximately 0.018 inch.
- (4) This powder is affected by moisture, and extreme care should be exercised to keep the complete round in a dry condition.

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(5) The maximum allowable pressure for the 2.24-inch tank gun, Mk. II (British), is 20,000 pounds per square inch.

b. Action.—The propelling charge, which is ignited by means of the black powder, burns rapidly, generating a large volume of gas, thus forcing the projectile from the bore. The rate of burning of the propelling charge is dependent upon the area of the burning surface, which is, in turn, dependent upon the form of grain and grain dimensions.

## SECTION VIII

## PACKING -

Paragra	aph
Packing of assembled rounds	17
Packing box	18
Marking of packing box	19

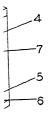
17. Packing of assembled rounds.—a. General.—Complete rounds of ammunition for the 2.24-inch tank gun are packed and shipped in wooden boxes, which are lined with zinc as a means of protecting the rounds from moisture. The ends of the boxes are recessed to provide a means for handling. The lid or cover is secured by wood screws, the heads of which are countersunk below the surface of the cover and over which are placed seals, 1 inch in diameter, as shown in Figure 10. The zinc liner is made in the form of a box to such dimension as will permit it to fit within the wooden box. There are four white-pine diaphragms or supports used when packing the rounds. Each support is cut into three sections in order to permit the removal of a round from a layer without necessitating removal of all the ammunition at one time. These supports protect the ammunition in transportation. Each packing box contains an ammunition data card, which gives the following information:

#### AMMUNITION DATA CARD

	Ammunition Lot No.					
	Date					
Quantity rds.	Expected M. V f/s pressure					
Propelling charge ozs.	Projectile wt. filled and fuzed lbs.					
Specification No	Drg. No					
Remarks						
Certified by—						

Inspector.

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mmunition

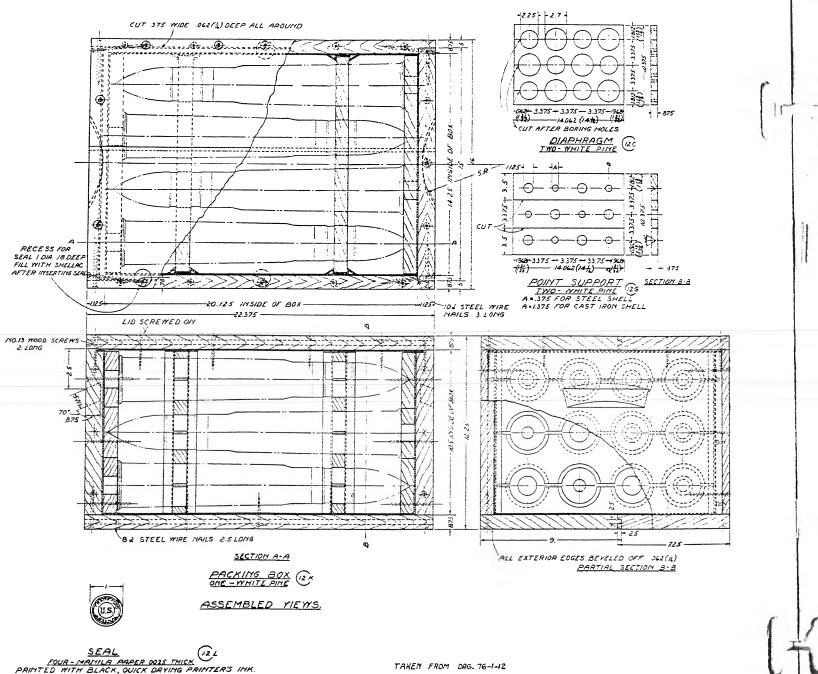
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s used for this gun.

ensions of width, 16 2.52 cubic

ls, and the use, is 145

of box and handle on termediate



TAKEN FROM DRG. 76-1-12

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FIGURE 11.—Packing box and method of packing for 2.24-inch ammunition

AMMUNI

FIGURE 10.-

1. United States

2. To comply w

3. Inspection st

4. Number of a

caliber of :

5. Weight mark:

b. Packing rounds, see 1 packing the Twelve round

18. Packi the packing inches: and feet.

b. Weight .weight of a b. pounds.

c. Unpackii remove the sc: the cover of t! r si p

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AMMUNITION FOR 2.24-INCH TANK GUN, MK. H (BRITISH) 17-18

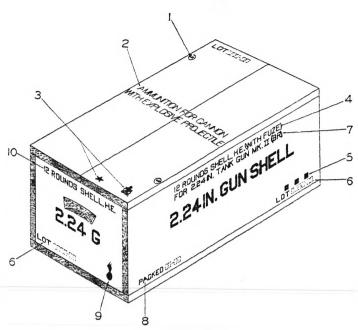


FIGURE 10 .- Marking of packing box for 2.24-inch high-explosive shell ammunition

- 1. United States seal over screw head.
- 2. To comply with I. C. C. regulations.
- 3. Inspection stamp.
- 4. Number of complete rounds, type and caliber of projectile, how fuzed.
- 5. Weight marks.

- G. Ammunition lot number.
- 7. Caliber and type of cannon.
- S. Month and year of packing,
- 9. Ordnance insignia.
- 10. Type of projectile.
  Number of rounds in box.
- b. Packing of rounds.—For method of packing the complete rounds, see Figure 11. The same type of packing box is used for packing the three kinds of ammunition authorized for this gun. Twelve rounds of ammunition are packed in each box.
- 18. Packing box.—a. Dimensions.—The over-all dimensions of the packing box are as follows: Length, 223% inches; width, 16 inches; and height, 1214 inches, the displacement being 2.52 cubic feet.
- b. Weight.—The weight of a packing box is 32 pounds, and the weight of a box containing 12 complete rounds, ready for use, is 145 pounds.
- c. Unpacking for use.—Break the seals on cover side of box and remove the screws and top cover. By means of the brass handle on the cover of the zinc liner the cover is torn loose. The intermediate

18-19

#### INFANTRY AND AIRCRAFT AMMUNITION

diaphragms are cut in three sections, thereby permitting the removal of a complete round from one layer without disturbing the remaining rounds. The ammunition as packed in the box is ready for use. The zinc liner should not be opened until such time as the ammunition is to be used. It must be remembered at all times that the ammunition is loaded and fuzed and lack of care in handling may be the cause of a serious accident.

19. Marking of packing box.—The marking and stenciling of the packing boxes are shown in Figure 10. Markings shown on one end appear on both ends. Figure 12 illustrates the markings placed on the address side of all packing boxes.

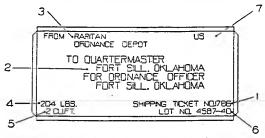


FIGURE 12.-Address side for all packing boxes

- 1. Number of shipping ticket.
- 2. Designation and address of consignee (as
- shown on shipping instructions).

  3. Consignor.
- 4. Gross weight in pounds.
- 5. Cubic displacement in cubic feet.
- 6. Ammunition lot number.
- 7. To indicate United States property.

Note.-Shipping officer may omit 2 and 3 in carload shipments.

[A. G. 062.12 (5-24-29).]

BY ORDER OF THE SECRETARY OF WAR:

DOUGLAS MACARTHUR,

General.
Chief of Staff.

OFFICIAL:

C. H. BRIDGES.

Major General, The Adjutant General.

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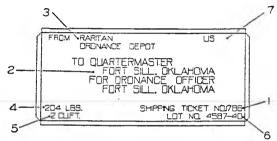


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## INFANTRY AND AIRCRAFT AMMUNITION

### AMMUNITION FOR 2.24-INCH TANK GUN, MK. II (BRITISH)

#### Prepared under direction of the Chief of Ordnance

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## SECTION I

## GENERAL

Purpose	and	scope			 	 	. 1
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- 1. Purpose and scope.—These regulations are intended for the using arms and the Ordnance Department. They give all necessary information regarding the construction, functioning and identification of the different types of ammunition for the 2.24-inch tank gun, Mk. II (British).
- 2. References.—a. Before attempting to handle ammunition of any type personnel should be thoroughly familiar with TR 1370-A.
- b. For the preparation and use of blank ammunition generally, see TR 1370-B.
  - c. Drill ammunition generally is described in TR 1370-D.
- d. Proper nomenclature for ammunition described herein is given in Standard Nomenclature List (S. N. L.) No. R-1. "Ammunition. Fixed, all Types, for Pack. Light and Medium Field Artillery." This nomenclature is mandatory and will be used in all requisitions.
- e. TR 1300-2.24A describes the operation, care, and maintenance of the 2.24-inch (6-pdr.) tank gun and mount for which this ammunition is designed.