# TECHNICAL MANUAL

# ARMY AMMUNITION DATA SHEETS SMALL CALIBER AMMUNITION FSC 1305

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Technical Manual	)
	)
No. 43-0001-27	)

# HEADQUARTERS DEPARTMENT OF THE ARMY Washington, DC, 29 April 1994

# ARMY AMMUNITION DATA SHEETS SMALL CALIBER AMMUNITION FSC 1305

# REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can improve this manual. If you find any mistakes or know of a way to improve the procedures, please let us know. Mail your DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to Commander, U.S. Army Armament Research, Development and Engineering Center, ATTN: SMCAR-LSB, Picatinny Arsenal, NJ 07806-5000. A reply will be furnished to you.

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<sup>\*</sup>This manual supersedes TM 43-0001-27, 29 June 1981, including all changes.

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# CHAPTER 1 INTRODUCTION

#### 1-1. PURPOSE

This manual is a reference handbook published as an aid in planning, training, familiarization and identification of small arms ammunition, ranging from 22 caliber through 30 millimeter and shotgun ammunition from .410 to 10 gage. This is the Federal Supply Class 1305. Operating instructions are contained in the appropriate weapons manuals.

#### 1-2. SCOPE

- a. For each item of materiel, there are illustrations and descriptions together with characteristics and related data. Included in the related data are weights, dimensions, performance data, shipping and storage data, type classification, and logistics control code (LCC). Refer to SC 1305/30-IL for weight, dimensions and cube of packing boxes for small arms ammunition.
- b. Information concerning supply, operation, and maintenance of the items will be found in the publications referenced for those items. A complete listing of these publications is maintained in DA Pam 310 series indexes.
- c. Within this manual, items with the following type classifications are included:
  - (1) Standard (STD)
  - (2) Contingency (CON)
  - (3) Limited Procurement (LP)
- (4) Reclassified obsolete (OBS) for regular Army use, but used by National Guard or Reserve Units.
- (5) Reclassified OBS for all Army use, but used by Marine Corps, Air Force or Navy.
- (6) Reclassified OBS, no users, but U.S. stocks remain.
- d. Items with the following type classification are not included: Reclassified OBS for all U.S. use. No U.S. stocks remain. (Foreign use or stock may remain.)

e. Numerical values, such as weights, dimensions, candlepower, etc., are nominal values, except when specified as maximum or minimum. Actual items may vary slightly from these values. Allowable limits can be obtained from the drawings indicated in the data sheets.

# 1-3. KEY TO ABBREVIATIONS AND SYMBOLS

A	Army
AF	Air Force
band	bandoleer
belt	linked ammo (cloth or metal)
bx	
cal	caliber
cm	centimeter(s)
comm	commerical
ctg	cartridge
	carton
DODIC	Department of Defense
	Identification Code
DODAC	Department of Defense
	Ammunition Code
ft	foot/feet
fps	feet per second
g	
gr	grain(s)
GSA	General Services Administra
	tion
H	Height
in	inch(es)
L	Length
m	meter(s)
MBR	Meet Ballistic Requirement
MC	Marine Corps
mm	millimeter(s)
MPa	Mega Pascal
mps	meters per second
mtl bx	metal box
mtl lnd bx	metal lined box
N	Navy
NATO	North Atlantic Treaty
	Organization
SCG	Storage Compatibility Group
psi	pounds per square inch
	Width
wdn bx	
wrbnd bx	
vd	mund(a)

# 1-4. METRIC CONVERSION CHART

For approximate conversions to/from metric measures see table 1-1.

Table 1-1. Metric Conversion Chart

Approximate Conversions to Metric Measures

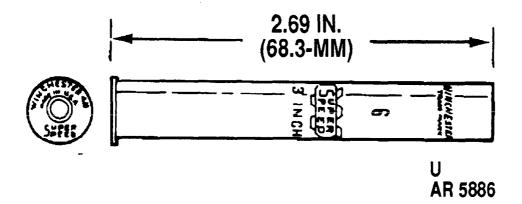
Symbol	When You Know	Multiply By	To Find	Symbol
		LENGT	Н	
in.	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in²	square inches	6.5	square centimeter	s cm²
$\Re^2$	square feet	0.09	square meters	$\mathrm{m}^2$
yd <sup>2</sup>	square yards	0.8	square meters	$m^2$
$\mathbf{m} \mathbf{i}^2$	square miles	2.6	square kilometers	km <sup>2</sup>
	acres	0.4	hectares	ha
		WEIGH	Т	
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	ι
		VOLUM	E	_
	toggnoons	5	milliliters	ml
tsp Tbsp	teaspoons tablespoons	15	milliliters	m
rosp floz	fluid ounces	30	milliliters	ml
11 OZ	cups	0.24	liters	1
	pints	0.47	liters	i
	1	0.95	liters	i
pt	quarts			
pt gt	quarts gallons		liters	1
pt	quarts gallons cubic feet	3.8 0.03	liters cubic meters	l m <sup>a</sup>

#### TEMPERATURE

	ENI EN			
When You		Multiply		
Know	Subtract	by	To Find	Symbol
Fahrenheit	32	0.55	Celsius	°C
		<del> </del>		
pproximate Co	nversions	from Me	ric Measu	res
When You				
Know	By	To Fir	nd	Symbol
	LENG'	тн		
millimatars	0.04	inches		in.
				in.
			,	£.
meters	1.1			yd
kilometers	0.6	miles		mi
	ARE	Δ		
		· •		
square centi- meters	0.16	squar	e inc <b>hes</b>	in <sup>2</sup>
square meter	rs 1.2	squar	e yar <b>ds</b>	yd²
square kilo- meters	0.4	squar	e miles	mi²
hectares (10,000 m <sup>2</sup> )	2.5	acres		
	WEIG	IIT		
grams	0.035	ounce	s	OZ
	2.2			lb
	kg) 1.1	short	tons	
	VOLU	ME		
millilitare	0.03	Onid a	utness	ſl oz
			Airices	pt
		•	i i	qt
liters	0.26	•		gal
		• • •		ft."
cubic meters	1.3	cubi <b>c</b>	yards	yd"
1	remper <i>a</i>	ATURE	·	
When You	Multiple	Add		
Know	by	Auu	To Find	Symbol
Celsius	1.8	32	Fahrenh	eit °F
	Rhow  Fahrenheit  pproximate Co  When You  Know  millimeters centimeters meters meters kilometers square centimeters square kilometers (10,000 m²)  grams kilograms tonnes (1000  milliliters liters liters cubic meters cubic meters	Rhow   Subtract	Fahrenheit 32 0.55  Performance Conversions from Metalog When You Multiply Know By To Fire LENGTH  millimeters 0.04 inchessent on the centimeters 0.4 inchessent on the meters 1.1 yards kilometers 0.6 miles  AREA  square centineters 0.16 square meters 1.2 square square kilonous 0.4 square meters 1.2 square square kilonous (10,000 m²)  WEIGHT  grams 0.035 ounce kilograms 2.5 acres (10,000 m²)  WEIGHT  weight to the first of the first output of the first output of the first output ou	Rhow Subtract by To Find  Fahrenheit 32 0.55 Celsius  pproximate Conversions from Metric Measu  When You Multiply Know By To Find  LENGTH  millimeters 0.04 inches centimeters 0.4 inches meters 3.3 feet meters 1.1 yards kilometers 0.6 miles  AREA  square centineters 1.2 square inches meters square meters 1.2 square miles meters (10,000 m²)  WEIGHT  grams 0.035 ounces kilograms 2.2 pounds tonnes (1000 kg) 1.1 short tons  VOLUME  milliliters 0.03 fluid ounces liters 2.1 pints short tons  VOLUME  milliliters 0.26 gallons cubic meters 1.3 cubic feet cubic meters 1.3 cubic feet cubic meters 1.3 cubic yards  TEMPERATURE  When You Multiply Add Know by To Find

# CHAPTER 2 SHOTGUN CARTRIDGES

# CARTRIDGE, .410, SHOTGUN, NO. M35



# Type Classification:

OBS - MSR 11756003.

# Use:

Rifle/Shotgun, Caliber .22/.410 Bore, Survival, M6. The cartridge is intended for use in survival weapons against small game.

# **Description:**

The cartridge case is all aluminum, and is loaded with smokeless powder and No. 6 coppercoated lead shot.

# **Tabulated Data:**

DODAC	1305-A055
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert
	projectile
Weight	430 gr
Length	2.69 in. (68.3 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Smokeless powder
Weight	7 gr
e e e e e e e e e e e e e e e e e e e	•

# Performance:

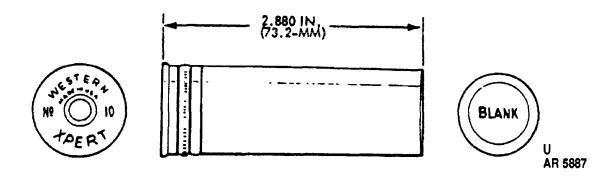
Chamber pressure	13,000 psi
Velocity	960 fps, 3 ft from
	muzzle

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
_	AMMUNITION
Drawing number	7553403

# References:

# . CARTRIDGE, 10 GAGE, SHOTGUN, BLANK



# Type Classification:

STD - OTCM 36524.

#### Use:

This is an optional use item for reveille and retreat salutes, and is fired in the 3-inch gun, 75mm gun, 75mm howitzer, or 105mm howitzer.

# **Description:**

The cartridge is similar to standard shotgun cartridges but it contains no lead shot. It has a paper cartridge case. The forward closing disc is marked "BLANK."

#### **Function:**

The cartridge is designed to produce a noise when initiated. It is used as a salute item in large caliber weapons. The blank is inserted either in a prepared cartridge case or in a breech block of the weapon being used.

----

#### **Tabulated Data:**

DODAC	
UNO serial number	0014
UNO proper shipping	
name	
	weapons, blank
Weight	290 gr

Length	
Primer	Percussion
Explosive:	
Type Weight	NA NA
Incendiary: Type	
Weight	NA
Propellant: Type	Black powder
Weight	

#### **Performance:**

Chamber pressure	NA
	NA

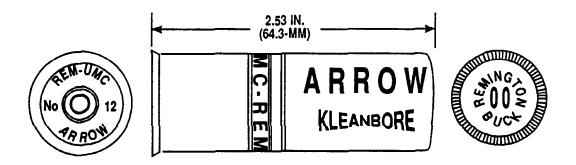
# Shipping and Storage Data:

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	10524632

#### **References:**

AR 5892

# CARTRIDGE, 12 GAGE, SHOTGUN, NO. 00



# Type Classification:

STD - OTCM 36841.

# Use:

Military issue shotgun, 2-3/4 inch chamber. The cartridge is intended for guard and combat use.

# **Description:**

The cartridge case is paper, and is loaded with smokeless powder and No. 00 commercial shot.

# Tabulated Data:

DODAC	
name	Cartridges for
	weapons, inert projectile
Weight	791 gr
Length	2.53 in. (64.3 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

T3 -1	
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NT A
	NA
Propellant:	
Type	Smokeless powder
Weight	MRR
Mergitt	MDIC
D 6	
Performance:	
Chamber pressure	11,000 psi

Velocity ----- 1325 fps, 3 ft from

muzzle

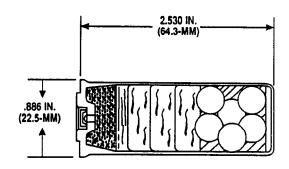
# Shipping and Storage Data:

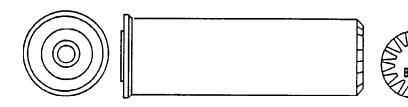
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
201 400.8	AMMUNITION
Drawing number	

# References:

SB 700-20 TM 9-1005-303-14 TM 9-1300-206

# CARTRIDGE, 12 GAGE, SHOTGUN, NO. 00, M162





U AR 5891

# **Type Classification:**

LP - OTCM 38036.

# Use:

Military issue shotgun, 2-3/4 inch chamber. The cartridge is intended for guard and combat use.

# **Description:**

The cartridge case is all plastic, and is loaded with smokeless powder and No. 00 commercial shot.

# **Tabulated Data:**

DODAC	1305-A011
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert
	projectile
Weight	0.736 gr

2.53 in. (64.3 mm) NA
Percussion
NA
NA
NA
NA
NA
• 1• •
Smokeless powder
MBR
MDIC

# Performance:

Chamber pressureVelocity	
	muzzle

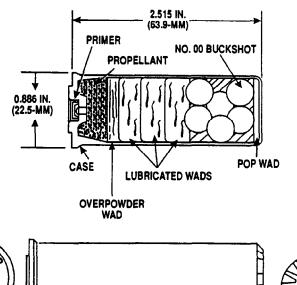
# **Shipping and Storage Data:**

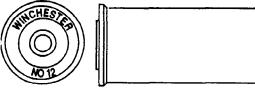
Quantity-distance class/	
SCG	1.4S
Storage code	Class V

# TM 43-0001-27

DOT shipping class	C SMALL ARMS	References:
Drawing number	AMMUNITION	SB 700-20 TM 9-1005-303-14 TM 9-1300-206

# .CARTRIDGE, 12 GAGE, SHOTGUN, NO. M19







U AR 5888

# **Type Classification:**

STD - OTCM 36841.

# Use:

Military issue shotgun, 2-3/4 inch chamber. The cartridge is intended for guard and combat use.

# **Description:**

The cartridge case is all brass, and is loaded with smokeless powder and No. 00 commercial shot.

#### Tabulated Data:

1305-A011
0012
Cartridges for
weapons, inert
projectile
930 gr

Length	2.515 in. (63.9
	mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NΔ
Incendiary:	11/1
Type	NΔ
Weight	
Propellant:	NA
Type	Smokeless powder
Weight	26 gr

# Performance:

Chamber pressure	11,000 psi
Velocity	1125 fps, 3 ft from
	muzzle

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V

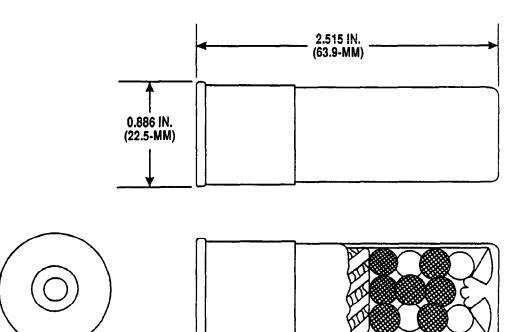
# TM 43-0001-27

DOT shipping class	C
DOT designation	SMALL ARMS
o .	AMMUNITION
Drawing number	7640981

# References:

SB 700-20 TM 9-1005-303-14 TM 9-1300-206

# CARTRIDGE, 12 GAGE, SHOTGUN, NO. M257



U AR 5889

# Type Classification:

Terminated - MSR 08752013.

# Use:

Military issue shotgun, 20-inch full choke barrel. The cartridge is intended for guard duty and for riot control weapons.

# **Description:**

The cartridge case is plastic, and is loaded with smokeless powder and No. 4 hard lead antimony pellets.

# Tabulated Data:

DODACUNO serial number	
UNO proper shipping name	Cartridges for weapons, inert projectile 748 gr
Weight	748 gr

Length	
Tracer	(63.9 mm) NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Smokeless powder
	MBR

# Performance:

Chamber pressureVelocity	11,000 psi 1335 fps, 3 ft from muzzle
	muzzie

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V

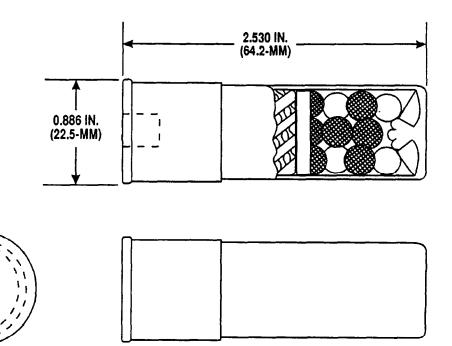
# TM 43-0001-27

DOT shipping class	C
DOT designation	'SMALL ARMS
_ · · · · · · · · · · · · · · · · · · ·	AMMUNITION
Drawing number	10542446

# References:

SB 700-20 TM 9-1005-303-14 TM 9-1300-206

# CARTRIDGE, 12 GAGE, SHOTGUN, NO. M274



U AR 5890

# Type Classification:

OBS - MSR 11756003.

# Use:

Military issue, riot-type shotgun, 20-inch barrel cylinder bore. The cartridge is intended for use against small game and for riot control weapons.

# **Description:**

The cartridge case may be paper or plastic, and is loaded with smokeless powder and No. 4 hard chilled shot.

#### **Tabulated Data:**

1305-A011
0012
Cartridges for
weapons, iner
projectile

Weight	
Length	2.53 in. (64.2 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	- \ \ -
Type	Smokeless powder
Weight	MBR
J	

# Performance:

Chamber pressureVelocity	11,000 psi 1255 fps, 3 ft from
-	muzzle

# **Shipping and Storage Data:**

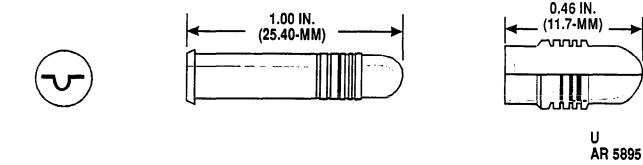
Quantity-distance class/	
SCG	1.4S
Storage code	Class V

# TM 43-0001-27

DOT shipping class DOT designation	C SMALL ARMS	References:
Drawing number	AMMUNITION	SB 700-20 TM 9-1005-303-14 TM 9-1300-206

# CHAPTER 3 CALIBER .22 CARTRIDGES

# CARTRIDGE, CALIBER .22, BALL, LONG RIFLE



# Type Classification:

STD - OTCM 36841.

#### Use:

Subcaliber Rifle M2A1; Winchester Models 52 and 75; Remington Models M40X and 513T; Machine Gun Trainers M3 and M4. The cartridge is intended for marksmanship practice and match use.

# **Description:**

 $\underline{BALL}$  Cartridge. The cartridge is grade match.

# Tabulated Data:

DODAC	1305-A086
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	52 gr
Length	1 in. (25.4 mm)
Tracer	NA
Primer	Percussion
	(Rimfire)
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Smokeless powder
Weight	MBR
<del>-</del>	

# **Performance:**

Chamber pressure	24,000 psi
Velocity	1100 fps, 15 ft from
	muzzle

# **Shipping and Storage Data:**

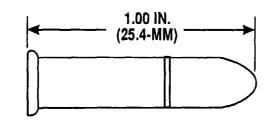
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	7553931

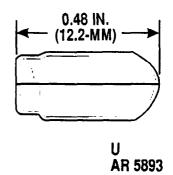
# References:

SB 700-20 TM 9-1005-206-14P/4 TM 9-1005-226-14 TM 9-1300-206

# CARTRIDGE, CALIBER .22, BALL, LONG RIFLE, M24







# **Type Classification:**

OBS - MSR 11756003.

# Use:

Subcaliber Rifle M2A1; Caliber .22 Rifle; Remington Models 40X and M513T; Steven's Model 416-2; Winchester Models 52 and 75; Machine Gun Trainers M3 and M4; pistols for gallery practice and training purposes. The cartridge is intended for use against small game for survival purposes.

# **Description:**

BALL Cartridge.

#### Tabulated Data:

DODAC	1305-A086
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	53 gr
Length	1 in. (25.4 mm)
Tracer	NA
Primer	Percussion
	(Rimfire)
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Smokeless powder
Weight	2.5 gr
Projectile:	8
Weight	40.5 gr

# Performance:

Chamber pressure	24,000 psi
Velocity	1185 fps, 15 ft from
	muzzle

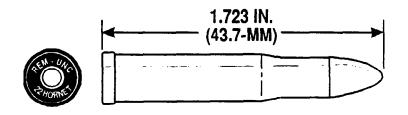
# **Shipping and Storage Data:**

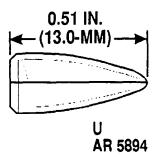
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
•	<b>AMMUNITION</b>
Drawing number	7640995

# References:

SB 700-20 TM 9-1005-206-14P/4 TM 9-1005-226-14 TM 9-1300-206

# CARTRIDGE, CALIBER .22, BALL, HORNET, M65





# · Type Classification:

OBS - MSR 11756003.

# Use:

Caliber .22 Survival Weapons, M4 and M6. The cartridge is intended for use against small game.

# **Description:**

BALL Cartridge.

# Tabulated Data:

DODACUNO serial number	
UNO proper shipping	0012
name	Cartridges for
•	weapons, inert pro-
	jectile
Weight	103 gr
Length	1.723 in. (43.7 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA

Incendiary:	
Type	· NA
Weight	· NA
Propellant:	
Type	Smokeless powder
Weight	12.6 or
VICIBII	75.0 gr

# Performance:

Chamber pressureVelocity	43,000 psi 2750 fps, 15 ft from
	muzzle

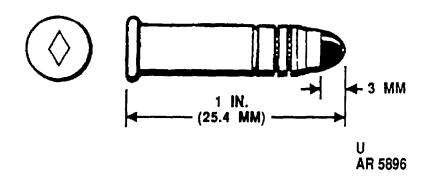
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
	<b>AMMUNITION</b>
Drawing number	7553664

# References:

SB 700-20 TM 9-1005-206-14P/4 TM 9-1005-226-14 TM 9-1300-206

# CARTRIDGE, CALIBER .22, TRACER, LONG RIFLE, M861



#### Type Classification:

STD - DA Letter.

#### Use:

Rifle M16A1 when adapted with the M261 Conversion Kit. The M861 cartridge, when fired from the rim-fired adapter M16A1 Rifle mounted on the Brewster Device, will increase the training proficiency in scaled range tank gunnery exercise by providing a visual display for tracking purposes.

#### **Description:**

TRACER Cartridge. The cartridge M861, .22 Caliber Long Rifle, rimfire with tracer is a commercially produced item, manufactured by Dynamit - Nobel AG. The M861 is designed to be fired in the M16A1 rifle when adapted with the M261 Conversion Kit. It can be fired in the automatic or semi-automatic modes. The tracer (red) is visible between 27 and 192 feet in daylight to allow the gunner to observe and sense the impact of the tracer with normal vision and sighting devices when fired on the scaled range. The M861 is identified by a red painted tip.

#### Tabulated Data:

DODAC	1305-A090
UNO serial number	0012

UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	
Length	1 in. (25.4 mm)
Tracer	NA
Primer	
	(Rimfire)
Fuze	NA
Explosive:	1411
Type	NΔ
Weight	
Incendiary:	MA
Type	NIA
Weight	
Propellant:	INA
Tipenant.	Consideration of the constant
Type	Smokeless powder
Weight	2.5 gr
DaCa	
Performance:	
Chamber pressure	24,000 psi
Velocity	990.75 fps, 302 m/s

**Shipping and Storage Data:** 

SCG ----- 1.4S

Storage code ----- Class V DOT shipping class ---- C

Drawing number ---- 9343015

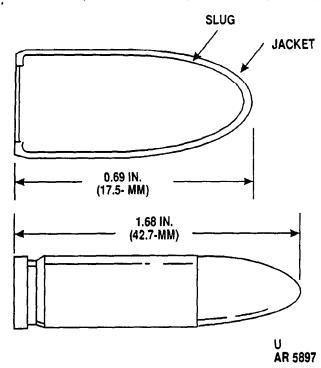
DOT designation ----- SMALL ARMS

Quantity-distance class/

**AMMUNITION** 

# CHAPTER 4 CALIBER .30 CARBINE CARTRIDGES

# CARTRIDGE, CALIBER .30, CARBINE, BALL, M1



# Type Classification:

OBS - MSR 11756003.

# Use:

Caliber .30, Carbine, M1, M2 or M3. The cartridge is intended for use against personnel and unarmored targets.

# **Description:**

BALL Cartridge. The cartridge is identified by the lack of bullet tip color code painting.

# **Tabulated Data:**

DODAC	1305-A181
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	196 gr
Length	1.68 in. (42.7 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	•
Type	NA
Type	NA
Propellant:	
Type	WC 820
Weight	$13~\mathrm{gr}$
Projectile:	-
Weight	111 gr

# Performance:

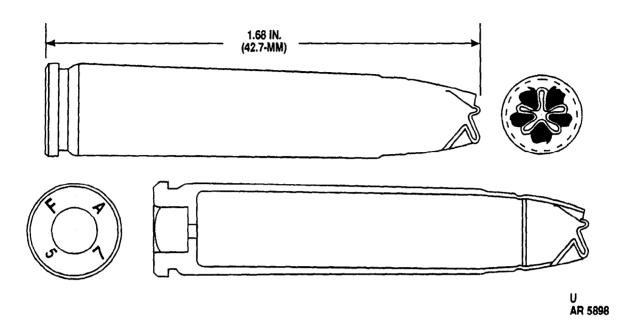
Chamber pressureVelocity	40,000 psi 1900 fps, 53 ft from
·	muzzle

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	
DOT designation	SMALL ARMS
_ 8	AMMUNITION
Drawing number	6200954

# References:

# CARTRIDGE, CALIBER .30, CARBINE, GRENADE, M6



# **Type Classification:**

OBS - MSR 11756003.

# Use:

Caliber .30, Carbine, M1 or M2. The cartridge is currently used as a blank cartridge. The cartridge provides pressure to project grenades by using a grenade projection adapter.

# **Description:**

GRENADE Cartridge. The cartridge identified by the rose-petal (rosette-crimp) closure of the cartridge case mouth.

# **Tabulated Data:**

DODAC	1330-G837
UNO serial number	0014
UNO proper shipping	
name	
	weapons, blank
Weight	103 gr
Length	1.68 in. (42.7 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	IMR 4809 and
• •	black powder
Weight	
	- 67

# Performance:

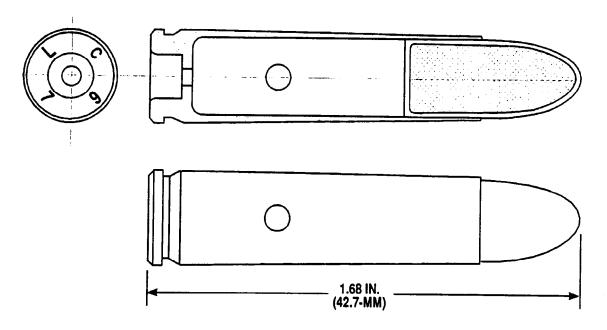
Chamber pressure	NA
Velocity	145 fps, 5 ft from
·	muzzle of projectile
	grenade

# **Shipping and Storage Data:**

Quantity-distance class/ SCG	Class V C SMALL ARMS AMMUNITION

# References:

# CARTRIDGE, DUMMY, CALIBER .30, CARBINE, M13



U AR 5899

# Type Classification:

OBS - MSR 11756003.

# Use:

Caliber .30, Carbine, M1 or M2. The cartridge is completely inert and is used for practice in loading weapons, for simulated firing to detect flinching of personnel when firing, and for inspecting and testing the mechanisms of the weapon.

# **Description:**

DUMMY Cartridge. The cartridge is identified by two holes in the cartridge case and the absence of the primer.

# **Tabulated Data:**

DODAC	1305-A186
UNO serial number	0339
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	177 gr
Length	1.68 in. (42.7 mm)
=	

TracerPrimerFuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	NA
Weight	NA

# Performance:

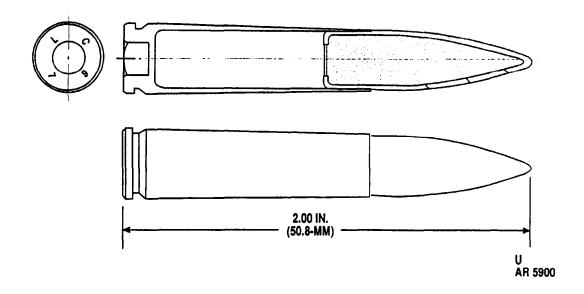
Chamber pressure	NA
Velocity	NA

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT designation	NONEXPLOSIVE
•	AMMUNITION
Drawing number	6177513

# References:

# CARTRIDGE, CALIBER .30, CARBINE, BALL, HIGH PRESSURE TEST, M18



# Type Classification:

STD - OTCM 36841.

# Use:

Caliber .30, Carbine, M1 and M2. The cartridge is used for proof firing of caliber .30 carbine weapons during manufacture, test, or repair.

# **Description:**

BALL Cartridge. The cartridge is identified by the stannic-stained (silvered) cartridge case.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	243 gr
Length	2 in. (50.8 mm)
Tracer	NA
Primer	
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	*
Type	HPC 5
Weight	14 gr

# Performance:

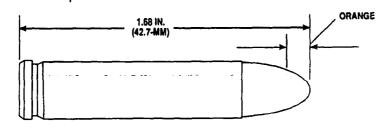
Chamber pressure	47,500 psi
Velocity	NA

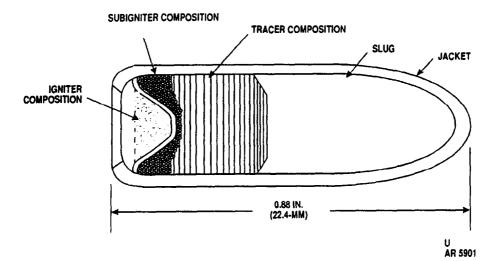
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
_	AMMUNITION
Drawing number	6176267

# References:

# CARTRIDGE, CALIBER .30, CARBINE, TRACER, M27





# Type Classification:

OBS - MSR 11756003.

# Use:

Caliber .30, Carbine, M1 and M2.

# **Description:**

TRACER Cartridge. The cartridge is identified by an orange bullet tip.

# **Function:**

In flight, the bullet exhibits a visible trace of full luminosity from a point not greater than 100 yards from the muzzle of the weapon to a point not less than 400 yards from the muzzle.

# **Tabulated Data:**

DODAC	1305-A183
UNO serial number	

UNO proper shipping name	Cartridges for weapons, inert projectile
Weight	
Weight Length	1.68 in. (42.7 mm)
Tracer	NA
Primer	
Fuze	NA
Explosive:	
Type	NA
Type Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 820
Weight	· 13 gr

#### Performance:

Chamber pressureVelocity	40,000 psi 1800 fps, 53 ft from
•	muzzle

# **Shipping and Storage Data:**

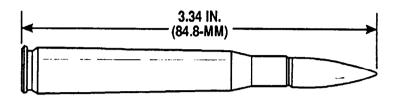
Quantity-distance class/	
SCG	1.4S
Storage code	
Storage code	Class v

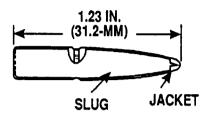
# TM 43-0001-27

DOT shipping class DOT designation	C SMALL ARMS	References:
_	AMMUNITION	SB 700-20
Drawing number	76409309	TM 9-1300-206

# CHAPTER 5 CALIBER .30 RIFLE AND MACHINE GUN CARTRIDGES

# CARTRIDGE, CALIBER .30, BALL, HIGH PRESSURE TEST, M1





U AR 5903

# **Type Classification:**

STD - OTCM 37119.

# Use:

All caliber .30 weapons except carbines. The cartridge is used to proof test caliber .30 rifles and machine guns during manufacture, test, or repair.

# **Description:**

<u>BALL</u> Cartridge. The cartridge is identified by stannic-stained (silvered) cartridge case.

# **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	432 gr
Length	3.34 in. (84.8 mm)
Tracer	NA
Primer	Percussion
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type Weight	NA
Weight	NA
Propellant:	- 1
Type	IMR 4198
Weight	52 gr
B	0 - B.

#### Performance:

Chamber pressure	67,500 psi
Velocity	NÁ

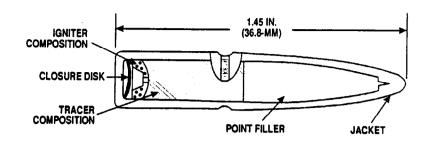
# **Shipping and Storage Data:**

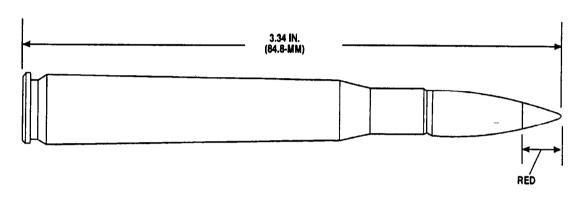
Quantity-distance class/	
SCG	1.48
Storage code	
DOT shipping class	C
DOT designation	SMALL ARMS
3	AMMUNITION
Drawing number	6016308

# References:

SB 700-20 TM 9-1005-222-12P/1 TM 9-1300-206

# CARTRIDGE, CALIBER .30, TRACER, M1





U AR 5902

# **Type Classification:**

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M37, M1919A4 and M1919A6; and Rifle, Caliber .30, M1. The tracer element is intended to permit visible observation of the bullet's in-flight path, or trajectory, to the target.

# Description:

TRACER Cartridge. The cartridge is identified by a red bullet tip.

# **Tabulated Data:**

DODACUNO serial number	
UNO proper shipping name	Cartridges for weapons, inert pro- iectile

Weight	300 or
Length	3 34 in (84 8 mm)
Tracer	R256
Primer	Percussion
Fuze	NA
Explosive:	
Type	
Weight	NA
Incendiary:	
Type	NA
_ Weight	NA
Propellant:	
<u>Type</u>	IMR 4895
Weight	50 gr

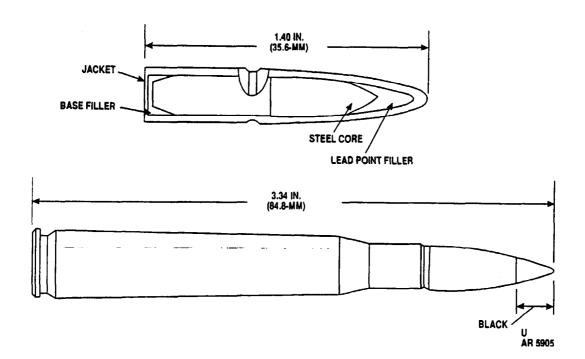
#### **Performance:**

Chamber pressureVelocity	52,000 psi 2665 fps, 78 ft from muzzle
	muzzie

# **Shipping and Storage Data:**

Quantity-distance class/		
SCG		
Storage code	Class V	,

## CARTRIDGE, CALIBER .30, ARMOR PIERCING, M2



#### Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M37, M1919A4 and M1919A6; and Rifle, Caliber .30, M1.

#### Description:

ARMOR PIERCING Cartridge. The cartridge is identified by a black bullet tip.

#### **Function:**

Penetration, fired at 7/8-inch thick homogeneous armor plate at 100 yards, will be not less than 0.42 inch.

#### **Tabulated Data:**

1305-A202
0012
Cartridges for
weapons, inert pro-
jectile
424 gr
3.34 in. (84.8 mm)
NA
Percussion
NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 852
Weight	55 gr
Projectile:	
Weight	165.7 gr
•	

#### Performance:

Chamber pressure	54,000 psi
Velocity	2715 fps, 78 ft from
	muzzle

## **Shipping and Storage Data:**

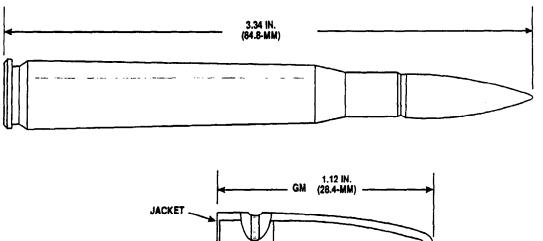
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	С
DOT shipping class DOT designation	SMALL ARMS
_	<b>AMMUNITION</b>
Drawing number	6138194

#### References:

SB 700-20 TM 1005-222-12P/1 TM 9-1300-206

U AR 5904

#### CARTRIDGE, CALIBER .30, BALL, M2



SLUG

GM (28.4-MM)

SLUG

GMCS (28.2-MM)

## Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M37, M1919A4 and M1919A6; and Rifle, Caliber .30, M1. The cartridge is intended for use against personnel or unarmored targets.

#### **Description:**

BALL Cartridge. The cartridge is identified by a plain bullet tip.

#### **Tabulated Data:**

DODAC	1305-A212
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	416 gr
Length	3.34 in. (84.8 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type	IMR 4895
Weight	50 gr
	~ <b>~</b>

## Performance:

Chamber pressureVelocity	2740 fps, 78 ft from
	miizzle

## **Shipping and Storage Data:**

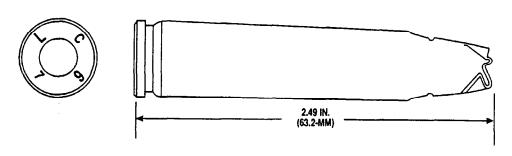
1.4S
Class V
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SMALL ARMS
AMMUNITION
6137544

SB	700-20
TM	I 9-1005-222-12P/1
TM	I 9-1300-206

# CARTRIDGE, CALIBER .30, GRENADE, M3







U AR 5906

## **Type Classification:**

OBS - MSR 11756003.

#### Use:

Rifle, Caliber .30, M1.

#### **Description:**

GRENADE Cartridge. The cartridge is identified by a rose-petal (rosette-crimped) closure of the cartridge case mouth.

#### **Function:**

The cartridge provides the pressure, on functioning, to project rifle grenades when using a grenade projection adapter.

#### **Tabulated Data:**

DODAC	1330-G838
UNO serial number	
UNO proper shipping	
name	
	weapons, blank

Weight	948 or
Length	2.49 in. (63.2 mm)
Tracer	NA
Primer	
<u>Fuze</u>	NA
Explosive:	
Type	
Weight	NA
Incendiary:	X7.1
Type Weight	'NA
	NA
Propellant: Type	IMID 4005
Weight	
11019110	40 E1

#### Performance:

180 fps, 5.5 ft from muzzle/projected
grenade

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V

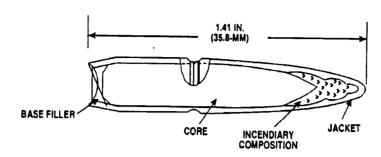
#### TM 43-0001-27

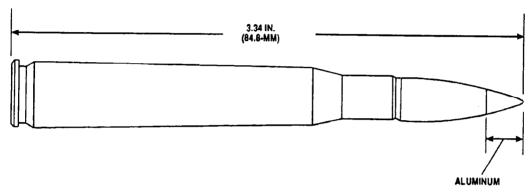
DOT shipping class DOT designation	C SMALL ARMS AMMUNITION
Drawing number	

## References:

SB 700-20 TM 9-1005-222-12P/1 TM 9-1300-206

# CARTRIDGE, CALIBER .30, ARMOR PIERCING INCENDIARY, M14





## Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M37, M1919A4 and M1919A6; and Rifle, Caliber .30, M1.

#### **Description:**

ARMOR PIERCING INCENDIARY Cartridge. The cartridge is identified by an aluminum bullet tip.

#### **Function:**

Penetration, fired at a 7/8-inch steel plate at 100 yards, will not be less than 0.42 inch. Upon impact with a target, the incendiary composition bursts into flame and will ignite flammable material.

#### **Tabulated Data:**

DODAC	1305-A202
UNO serial number	0012

U AR 5907

UNO proper shipping name	weapons, inert pro
Woight	jectile
Weight	407 gr
Length	3.34 m. (84.8 mm)
Tracer	NA
Primer	Percussion
<u>Fuze</u>	NA
Explosive:	
Type	
Weight	NA
Incendiary:	
Type	IM 11
Weight	2 gr
Propellant:	- b-
Type	WC 859
Weight	50 cm
,,c.B.ir	ov gr

#### Performance:

Chamber pressure	54,000 psi
Velocity	2780 fps, 78 ft from
	muzzle

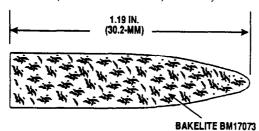
## **Shipping and Storage Data:**

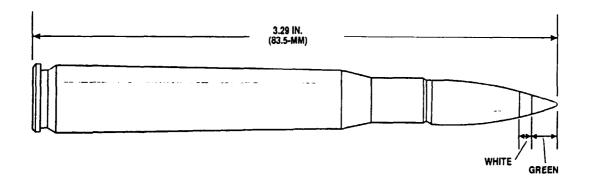
Quantity-distance class/	
SCG	
Storage code	Class V

## **References:**

SB 700-20 TM 9-1005-222-12P/1 TM 9-1300-206

## CARTRIDGE, CALIBER .30, BALL, FRANGIBLE, M22





U AR 5908

#### Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M37 and M1919A4; and Rifle, Caliber .30, M1.

#### Description:

 $\underline{BALL}$  Cartridge. The cartridge is identified by a green bullet tip with a white ring to the rear of the green color.

#### **Function:**

The bullet disintegrates upon striking a hard or armored target, leaving a pencil-like mark to indicate a hit during gunnery practice.

#### **Tabulated Data:**

1305-A220
0012
•
Cartridges for
weapons, inert pro-
jectile
320 gr
3.29 in. (83.5 mm)
NA

PrimerFuze	
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	SR 4759
Weight	11 gr

#### **Performance:**

Chamber pressureVelocity	1320 fps, 53 ft from
	muzzle

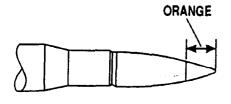
#### **Shipping and Storage Data:**

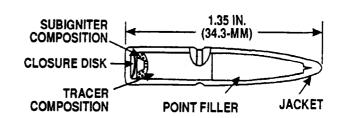
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
_	AMMUNITION
Drawing number	7640951

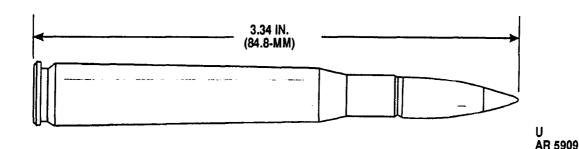
#### **References:**

SB 700-20 TM 9-1300-206

### .CARTRIDGE, CALIBER .30, TRACER, M25







**Type Classification:** 

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M37, M1917A1, M1919A4, and M1919A6; and Rifle, Caliber .30, M1. The cartridge is intended for use against personnel and unarmored targets.

#### **Description:**

TRACER Cartridge. The cartridge is identified by an orange bullet tip.

#### **Function:**

In flight, the bullet exhibits a trace of full luminosity from a point not greater than 75 yards from the muzzle of the weapon to a point not less than 900 yards from the muzzle.

#### **Tabulated Data:**

DODAC	1305-A230
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	401 gr
Length Tracer	3.34 in. (84.8 mm)
Tracer	R321
Primer	Percussion
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	- 1.0.2
	NA
Type Weight	NΔ
Propellant:	
Type	WC 852
Weight	50 m
Projectile:	oo gi
A LUICCUIC.	

Weight----- 145.5 gr

#### Performance:

Chamber pressure	50,000 psi
Velocity	2665 fps, 78 ft from
	muzzle

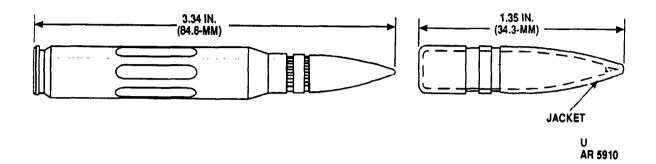
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
C	AMMUNITION
Drawing number	
_	case);
	7553949 (steel
	case)

#### **References:**

SB 700-20 TM 9-1005-222-12P/1 TM 9-1300-206

## CARTRIDGE, DUMMY, CALIBER .30, M40



### Type Classification:

STD - OTCM 37119.

#### Use:

All caliber .30 weapons except carbine. The cartridge is inert, and is used for practice in loading weapons, for simulated firing to detect flinching of personnel when firing, and for inspecting and testing the mechanisms of small-arms weapons.

## Description:

<u>DUMMY</u> Cartridge. The cartridge is identified by six 1-inch longitudinal corrugations (flutings) in the cartridge case. In addition, there is no primer.

#### **Tabulated Data:**

DODAC	1305-A226
Weight	268 gr
Length	3 34 in (84 8 mm)
Tracer	
	- 1
Primer	NA
F1176	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	NA
Weight	NA

#### Performance:

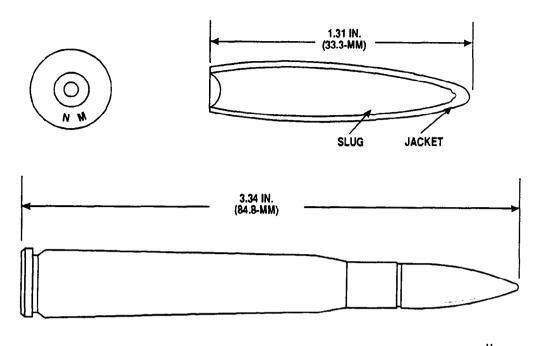
Chamber	pressure	 NA
Velocity	· · · · · · · · · · · · · · · · · · ·	 NA

#### Shipping and Storage Data:

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT designation	
-	AMMUNITION
Drawing number	7553591

SB 700-20
TM 9-1005-222-12P/1
TM 9-1300-206

## CARTRIDGE, CALIBER .30, BALL, MATCH, M72



U AR 5911

## Type Classification:

STD - OTCM 37119.

#### Use:

Rifle, Caliber .30, M1; and Rifle, Caliber .30, National Match. The cartridge is designed to be fired only in weapons designated as competition rifles.

#### **Description:**

BALL Cartridge. The cartridge is identified by head stampings on the base of the cartridge case with either the initials NM (National Match) or the word MATCH. The primer is uncrimped, the bullet has no crimped cannelure, and the case is not crimped to the bullet.

#### **Tabulated Data:**

DODAC	1305-A247
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	425 gr
Length	3.34 in. (84.8 mm)
Tracer	NA
Primer	Percussion

Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
<u>Type</u>	IMR 4895
Weight	50 or
***************************************	UUBI

#### Performance:

Chamber pressureVelocity	2640 fps, 78 ft from
	muzzle

#### **Shipping and Storage Data:**

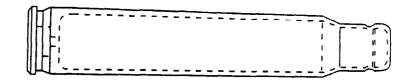
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
C	AMMUNITION
Drawing number	8595432

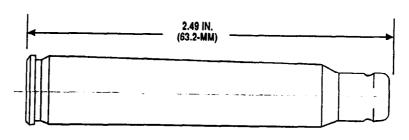
#### References:

SB 700-20 TM 9-1005-222-12P/1 TM 9-1300-206

# . CARTRIDGE, CALIBER .30, BLANK, M1909







U AR 5912

## **Type Classification:**

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .30, M1919A4 and M1919A6; and Rifle, Caliber .30, M1. The cartridge is used for simulated firing in training or for saluting purposes.

#### **Description:**

BLANK Cartridge. The cartridge is identified by the absence of a bullet and has a crimped cartridge case mouth.

## Tabulated Data:

DODAC	1305-A222
UNO serial number	0014
UNO proper shipping	
name	Cartridges for
	weapons, blank
Weight	218 gr
Length	2.49 in. (63.2 mm)
Tracer	NA
Primer	
Fuze	NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	SR 4990
Weight	12 pr
	~- 5-

## **Performance:**

Chamber pressure	NA
Velocity	NA

#### **Shipping and Storage Data:**

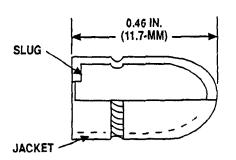
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
<u> </u>	AMMUNITION
Drawing number	6006152

#### References:

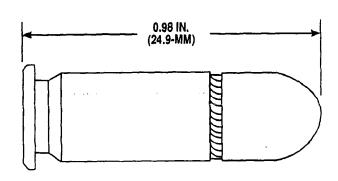
SB 700-20 TM 9-1005-222-12P/1 TM 9-1300-206

# CHAPTER 6 CALIBER .32 CARTRIDGES

## **CARTRIDGE, CALIBER .32, BALL**







U AR 5913

## **Type Classification:**

Commercial.

#### Use:

Caliber .32 weapons. The cartridge is used in caliber .32 automatic pistols for defensive use against personnel.

#### **Description:**

BALL Cartridge.

#### Tabulated Data:

DODAC	1305-A350
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
••••	weapons, inert pro-
	jectile
Weight	115 gr
Length	0.98 in. (24.9 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
1,ypc	• • • •

Weight	NA
Incendiary:	
Type Weight	NA
Propellant:	
Type	Smokeless powder
Weight	MBR

#### Performance:

Chamber pressure	15,000 psi
Velocity	900 fps, 15 ft from
•	muzzle

## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class DOT designation	C
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	10524631

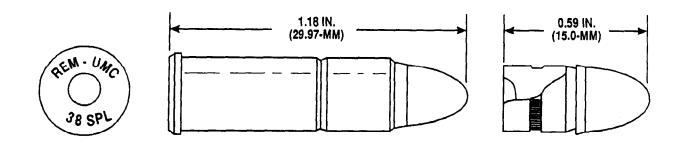
#### References:

SB 700-20 TM 9-1005-206-14P/3 TM 9-1300-206

# CHAPTER 7 CALIBER .38 CARTRIDGES

AR 5914

## CARTRIDGE, CALIBER .38, BALL



**Type Classification:** 

OBS - MSR 11756003.

#### Use:

Caliber .38 weapons. The cartridge is for CONUS-guard or security use in caliber .38 weapons.

#### **Description:**

BALL Cartridge. The cartridge has an unjacketed lead bullet.

#### **Tabulated Data:**

DODAC	1305-A408
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	196 gr
Length	1.18 in. (29.97 mm)
Tracer	NA
Primer	
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	
Type Weight	NA NA
Propellant:	NA
Type	Smokeless powder
Weight	MRK

## Performance:

Chamber pressure	13,000 psi
Velocity	725 fps, 15 ft from
	muzzle

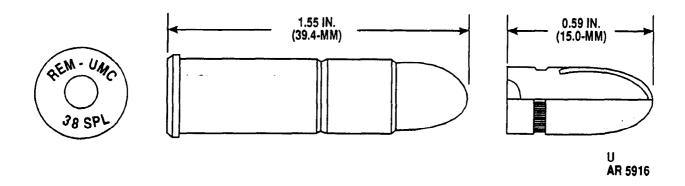
## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
5	AMMUNITION
Drawing number	10524005

#### References:

SB 700-20 TM 9-1005-206-14&P-1 TM 9-1005-206-14P/3 TM 9-1300-206

## CARTRIDGE, CALIBER .38, BALL, SPECIAL, M41



## **Type Classification:**

OBS - MSR 08836015.

#### Use:

Revolver. The cartridge is intended for use in personal defense hand guns.

## **Description:**

 $\underline{BALL}$  Cartridge. The cartridge has a jacketed bullet.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	203 gr
Length	1.55 in. (39.4 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA

Incendiary:	BT A
Type	NA
Described	NA
Propellant:	OD #00#
Type Weight	SR 7325
weight	4.8 gr

## Performance:

Chamber pressure	16,000 psi
Velocity	950 fps, 15 ft from
	muzzle

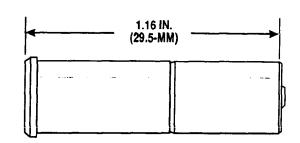
#### **Shipping and Storage Data:**

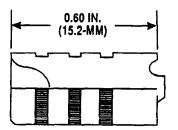
Quantity-distance class/	
SCG	1.48
Storage code	Class V
DOT shipping class	
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	

SB 700-2	0
TM 9-100	5-206-14&P-1
TM 9-100	5-206-14P/3
TM 9-130	0-206

## · CARTRIDGE, CALIBER .38, WAD CUTTER







U AR 5915

#### **Type Classification:**

Commercial.

#### Use:

Revolver, Special, S & W, K-38. The cartridge is used only in pistol competition firing and marksmanship training.

#### **Description:**

WAD CUTTER Cartridge.

#### **Function:**

The bullet is designed with a concave forward end to act as a paper punch cutting a clean hole in targets.

#### **Tabulated Data:**

DODAC	1305-A404
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	220 gr
Length	1.16 in. (29.5 mm)
Tracer	NA
Primer	Percussion
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Smokeless powder
Weight	MBR
•	

#### Performance:

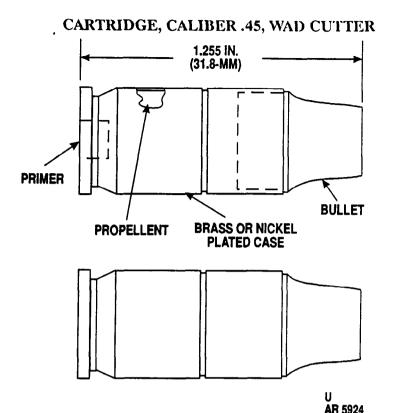
Chamber pressure	16,000 psi
Velocity	800 fps, 15 ft from
	muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
J	AMMUNITION
Drawing number	

SB 700-20
TM 9-1005-206-14&P-1
TM 9-1005-206-14P/3
TM 9-1300-206

# CHAPTER 8 CALIBER .45 CARTRIDGES



## Type Classification:

OBS - MSR 08836015.

#### Use:

Pistol, Caliber .45, M1911A1; and Pistol, Caliber .45, National Match.

#### Description:

WAD CUTTER Cartridge. The cartridge is identified by the bullet shape which has the general appearance of a truncated cone.

#### **Function:**

The ogive of the bullet has a sharp shoulder that acts as a hole punch to cut a clean hole in the target.

#### **Tabulated Data:**

DODAC	1305-A482
IINO serial number	0019

## UNO proper shipping

name ----- Cartridges for weapons, inert projectile Weight ----- 330 gr Length----- 1.255 in. (31.8 mm) Tracer-----NA Primer ----- Percussion Fuze ----- NA Explosive: Type ----- NA Weight----- NA Incendiary: Type ----- NA Weight----- NA Propellant: Type ----- Smokeless powder

#### Performance:

Chamber pressure	18,000 psi
Velocity	765 fps, 15 ft from
	muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V

Weight----- MBR

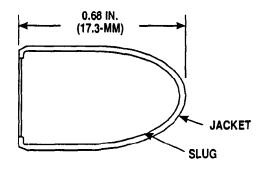
#### TM 43-0001-27

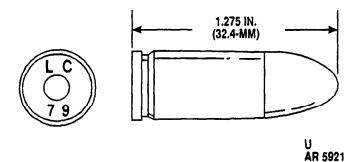
DOT shipping class -------- C
DOT designation ------- SMALL ARMS
AMMUNITION
Drawing number ------ 10521458

# References:

SB 700-20 TM 9-1005-211-12 TM 9-1300-206

## CARTRIDGE, CALIBER .45, BALL, HIGH PRESSURE TEST, M1





## Type Classification:

STD - OTCM 36841.

#### Use:

Test of all caliber .45 weapons. The cartridge is for proof testing caliber .45 pistols and submachine guns during manufacture, test, or repair.

#### Description:

BALL Cartridge. The cartridge is identified by a stannic-stained (silvered) cartridge case.

#### **Tabulated Data:**

DODAC	
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	332 gr
Length	1.275 in. (32.4 mm)
Tracer	NA
Primer	
Fuze	NT A

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type	SR 7970
Weight	7 gr

#### Performance:

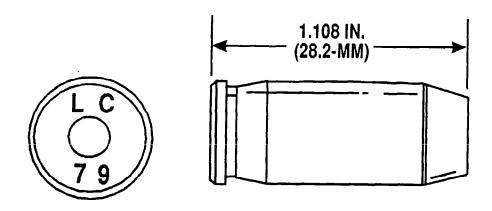
Chamber pressure	22,000	psi
Velocity	NA	

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
8	<b>AMMUNITION</b>
Drawing number	C6000502

SB 700-20
TM 9-1005-211-12
TM 9-1005-229-12
TM 9-1300-206

## CARTRIDGE, CALIBER .45, BLANK, M9



U AR 5918

#### Type Classification:

STD - AMCTC 505.

#### Use:

Pistol, Automatic, Caliber .45, M1911A1. The cartridge is used for simulated firing in training manuevers and for saluting purposes.

#### **Description:**

BLANK Cartridge. The cartridge is identified by the absence of a bullet and the tapered mouth of the cartridge case.

#### **Tabulated Data:**

DODAC	1305-A476
UNO serial number	0014
UNO proper shipping	
name	Cartridges for
	weapons, blank
Weight	104 gr
Length	1.108 in. (28.2 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type Weight	NA
Weight	NA
Propellant:	
Type	SR 4990
Weight	10 gr

#### Performance:

Chamber pressure	NA
Velocity	NA

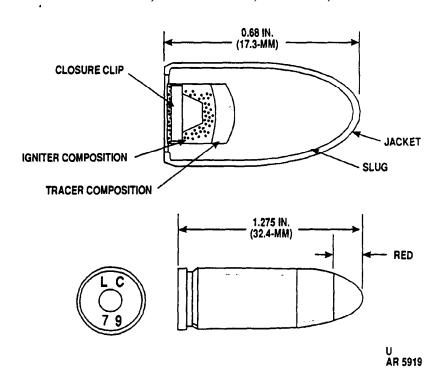
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
C	<b>AMMUNITION</b>
Drawing number	

#### References:

SB 700-20 TM 9-1005-211-12 TM 9-1300-206

#### CARTRIDGE, CALIBER .45, TRACER, M26



## **Type Classification:**

CON - MSR 11756003.

#### Use:

Submachine Gun, Caliber .45, M3A1; and Pistol, Caliber .45, M1911A1. The tracer is intended to permit observation of the bullet's in-flight path or trajectory to the point of impact.

#### Description:

TRACER Cartridge. The cartridge is identified by a red bullet tip.

## Tabulated Data:

)-
1)

Explosive:	
Type	NA
Type Weight	NA
Incendiary:	
Type	NA
Type	NA
Propellant:	
Type	SR 7970
Weight	6 gr

#### Performance:

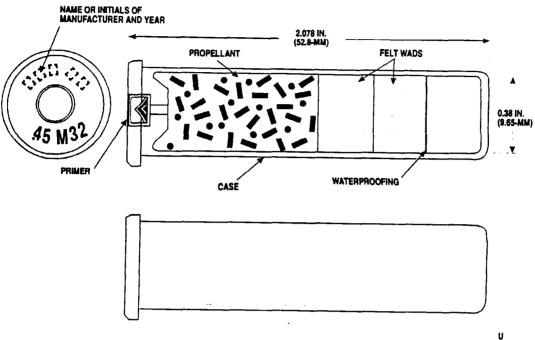
Chamber pressure	
Velocity	885 fps, 25.5 ft
•	from muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
201 400.6	AMMUNITION
Drawing number	

SB 7	700-20
TM	9-1005-211-12
TM	9-1005-229-12
ΤM	9-1300-206

# CARTRIDGE, CALIBER .45, LINE THROWING, M32



U AR 5920

#### Type Classification:

STD A - OTCM 36841.

#### Use:

Line Throwing Gun, Caliber .45/.70.

## **Description:**

LINE THROWING Cartridge. The cartridge is composed of a brass case, primer, commercial smokeless powder, and two felt wads coated on both sides with gummed paper. The wads are sealed with red lacquer. The cartridge case mouth is crimped to prevent entry of the line throwing rod.

#### Function:

The line throwing rod is placed in the weapon barrel. Cartridge initiation provides pressure to force the rod out of the barrel and propel the line to the target.

#### **Tabulated Data:**

DODAC	1305-A477
UNO serial number	

UNO proper shipping	
name	Cartridges for
	weapons, blank
Weight	192 gr
Length	2.078 in $(52.8  mm)$
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	
Propellant:	
Type	Smokeless nowder
Weight	MBR

#### Performance:

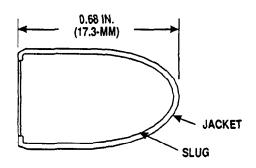
Chamber pressure	20,000 psi
Velocity	NÁ

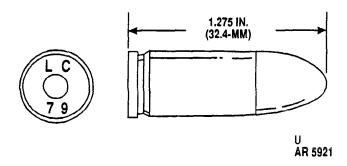
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	

DOT shipping class DOT designation	C SMALL ARMS	References:
_	AMMUNITION	SB 700-20
Drawing number	7553068	TM 9-1300-206

#### CARTRIDGE, CALIBER .45, BALL, M1911





## **Type Classification:**

STD - OTCM 36841.

## Use:

Submachine Gun, Caliber .45, M3A1; and Pistol, Caliber .45, M1911A1. The cartridge is intended for use against personnel.

## **Description:**

BALL Cartridge. The cartridge is identified by the plain bullet tip.

## **Tabulated Data:**

DODAC	
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	331 gr
Length	1.275 in. (32.4 mm)
Tracer	NA
Primer	Percussion
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Type	NA
Propellant:	
Type	SR 7970
Weight	$5\mathrm{gr}$

#### Performance:

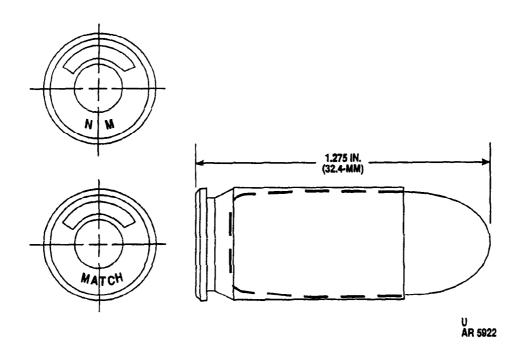
Chamber pressure	19,000 psi
Velocity	$885 \pm 25 \text{ fps},$
·	25.5 ft from muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
8	AMMUNITION
Drawing number	6000503

SB 700-20
TM 9-1005-211-12
TM 9-1005-229-12
TM 9-1300-206

#### CARTRIDGE, CALIBER .45, BALL, MATCH, M1911



## Type Classification:

STD - OTCM 36841.

#### Use:

Pistol, Caliber .45, M1911A1; and Pistol, Caliber .45, National Match. The cartridge is to be used only in those weapons designated as competition pistols.

#### Description:

BALL Cartridge. The cartridge is identified by head stampings, either NM (National Match) or MATCH, on the base of the cartridge case.

#### **Tabulated Data:**

DODAC	1305-A483
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	334 gr
Length	1.275 in. (32.4 mm)
Tracer	NA
Primer	Percussion
F1176	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type	SR 7070
Weight	5.00
weignt	o gr

#### Performance:

Chamber pressure	19,000 psi
Velocity	$885 \pm 25 \text{ fps},$
•	25.5 ft from muzzle

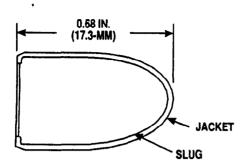
#### Shipping and Storage Data:

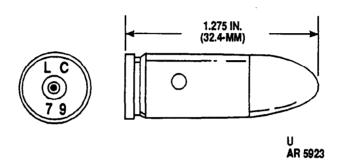
Quantity-distance class/	
SCG	1.4S
Storage code	
DOT shipping class	C
DOT designation	SMALL ARMS
_	<b>AMMUNITION</b>
Drawing number	8596136

#### References:

SB 700-20 TM 9-1005-211-12 TM 9-1300-206

#### CARTRIDGE, DUMMY, CALIBER .45, M1921





## Type Classification:

STD - OTCM 36841.

#### Use:

Submachine Gun, Caliber .45, M3A1; and Pistol, Caliber .45, M1911A1. The cartridge is used during simulated firing exercises to detect flinching of personnel when firing, and to inspect and test the mechanism of the weapons.

#### **Description:**

DUMMY Cartridge. The cartridge is identified by the drilled holes in the cartridge case and the absence of a primer.

#### **Tabulated Data:**

DODAC	1305-A501
Weight	
Length	1.275 in. (32.4 mm)
Tracer	NA
Primer	NA
Fuze	NA
Explosive:	
Type	NA
Weight	NA

Incendiary:	
Type Weight	NA
Propellant:	NA
Type	NΑ
Type	NA

#### Performance:

Chamber pressure	NA
Velocity	NA

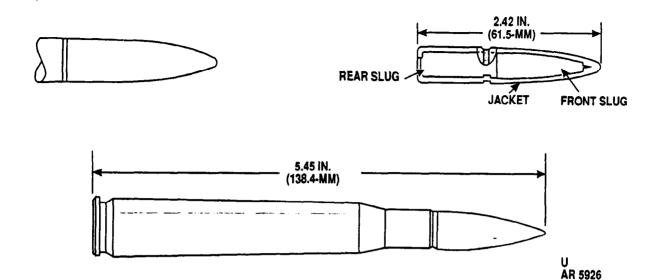
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT shipping class DOT designation	NONEXPLOSIVE
	AMMUNITION
Drawing number	

SB 7	700-20	
TM	9-1005-211-12	2
TM	9-1005-229-12	2
TM	9-1300-206	

# CHAPTER 9 CALIBER .50 CARTRIDGES

# CARTRIDGE, CALIBER .50, BALL, HIGH PRESSURE TEST, M1



#### Type Classification:

STD - OTCM 36841.

#### Use:

All caliber .50 weapons except M8C Spotting Gun. The cartridge is intended for use in proof testing caliber .50 weapons (except the 106mm Spotting Rifle) during manufacture, test, or repair.

#### **Description:**

BALL Cartridge. The cartridge is identified by a stannic-stained (silvered) cartridge case.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
1101116	weapons, inert pro-
	jectile
Weight	2082 gr
Length	5.45 in. (138.4 mm)
Tracer	NA
Primer	
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Type	NA
Propellant:	
Type	WC 860
Weight	240 gr

#### Performance:

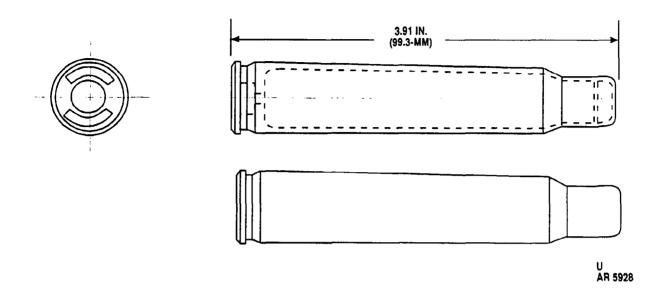
Chamber pressure	65,000 psi
Velocity	NA

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class DOT designation	C
DOT designation	SMALL ARMS
_	<b>AMMUNITION</b>
Drawing number	5544097

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

## CARTRIDGE, CALIBER .50, BLANK, M1



#### Type Classification:

CONT - OTCM 36841.

#### Use:

Machine Gun, Caliber .50, M2 (flexible only). The cartridge is used to simulate firing in training exercises.

#### **Description:**

BLANK Cartridge. The cartridge is identified by the absence of a bullet and has a crimped cartridge case mouth.

#### **Tabulated Data:**

DODAC	1305-A558
UNO serial number	
UNO proper shipping	
name	Cartridges for
	weapons, blank
Weight	
Length	3.91 in. (99.3 mm)
Tracer	NA
Primer	
Fuze	NA
Explosive:	

Type	NA
Type Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	1110 4 = 0
Type Weight	WC 150
weignt	46 gr

#### Performance:

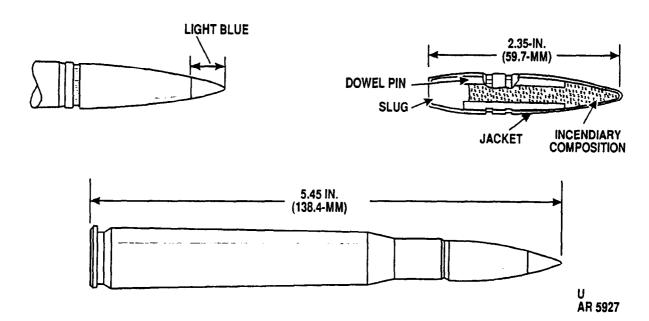
Chamber pressure	NA
Velocity	NA

## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
<b>8</b>	<b>AMMUNITION</b>
Drawing number	7673517

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

## CARTRIDGE, CALIBER .50, INCENDIARY, M1



## Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .50, M2 and M85.

#### **Description:**

 $\underline{INCENDIARY}$  Cartridge. The cartridge is identified by a blue bullet tip.

#### Function:

Upon impact with a hardened or armored target, the incendiary composition bursts into flame and will ignite any flammable material.

#### **Tabulated Data:**

DODAC	1305-A562
UNO serial number	0300
UNO proper shipping	
name	
	incendiary
Weight	
Length	
Tracer	NA
Primer	
Fuze	
Explosive:	

Type Weight	NA NA
Incendiary:	
Type Weight	IM 11
Weight	34 gr
Propellant:	6-
Type	WC 860
Weight	240 gr

#### **Performance:**

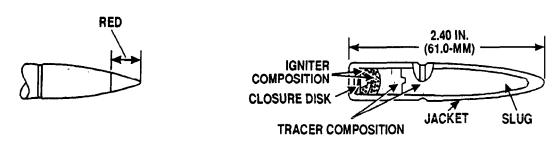
Chamber pressure	54,000 psi
Velocity	2950 fps, 78 ft from
	muzzle

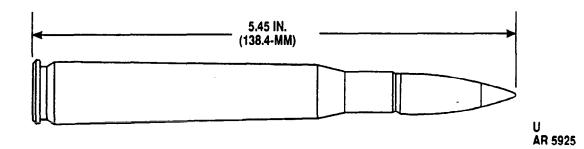
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	
DOT shipping class	C
DOT designation	SMALL ARMS
<u> </u>	<b>AMMUNITION</b>
Drawing number	5579812

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

#### . CARTRIDGE, CALIBER .50, TRACER, M1





#### Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The tracer is intended to permit visible observation of the bullet's in-flight path or trajectory to the point of impact. Limited to CONUS for training purposes only.

#### **Description:**

 $\frac{TRACER}{total}$  Cartridge. The cartridge is identified by a red bullet tip.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Ammunition, practice
Weight	1785 gr
LengthTracer	5.45 in. (138.4 mm)
Primer	Percussion
FuzeExplosive:	NA

Туре	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	IMR 5010
Weight	240 gr

#### Performance:

Chamber pressureVelocity	52,000 psi 2700 fps, 78 ft from
	muzzle

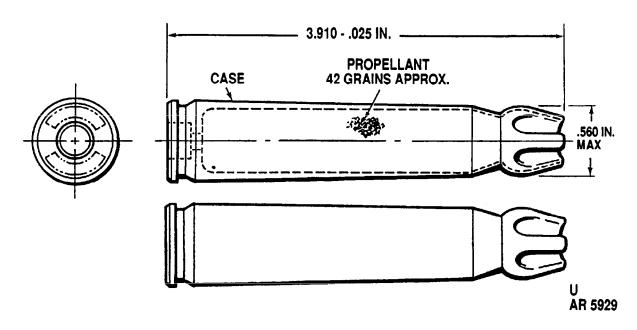
## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	2.10
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
	<b>AMMUNITION</b>
Drawing number	

## References:

SB 700-20 TM 9-1300-206

## · CARTRIDGE, CALIBER .50, BLANK, M1A1



#### Type Classification:

STD - MSR 02806015.

#### Use:

Machine Gun, Caliber .50, M2 with the M19 Blank Ammunition Firing Attachment; and Machine Gun, Caliber .50, M85 with the M20 Blank Firing Attachment. The cartridge is used to simulate firing in training exercises.

#### **Description:**

BLANK Cartridge. The cartridge is identified by the absence of a bullet. The M1A1 differs from the M1 in that the M1A1 has a rosette crimp at the mouth. Also, the M1A1 is loaded with Dupont Hi Skor 700X propellant.

#### **Tabulated Data:**

DODAC	1305-A559
UNO serial number	0338
UNO proper shipping	
name	
	weapons, blank
Weight	915 to 955 gr
Length	3.91 in. (99.3 mm)
Tracer	

Primer	Percussion
Fuze	NA
Explosive:	
Type	
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Dupont Hi Skor
<b>7.1</b>	700X
Weight	
	0

#### Performance:

Chamber	pressure	 NA
Velocity		 NA

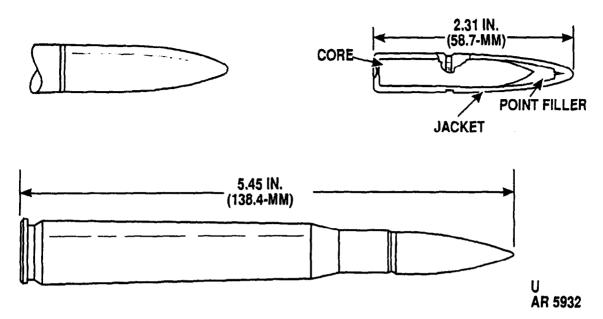
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	2120
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
- · · · - <b>B</b>	AMMUNITION
Drawing number	

#### References:

**DARCOM 700-3-2** 

## CARTRIDGE, CALIBER .50, BALL, M2



## Type Classification:

STD - OTCM 36841.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge is intended for use against personnel or unarmored targets.

#### **Description:**

BALL Cartridge. The cartridge is identified by a plain bullet.

#### Tabulated Data:

DODAC	1305-A552
UNO serial number	0339
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	1813 gr
Length	5.45 in. (138.4 mm)
Tracer	NA
Primer	Percussion
Fuze	

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type	NA
Type	NA
Propellant:	
Type	WC 860
Weight	235 gr

#### Performance:

Chamber pressure	55,000 psi
Velocity	2810 fps, 78 ft from
	muzzle

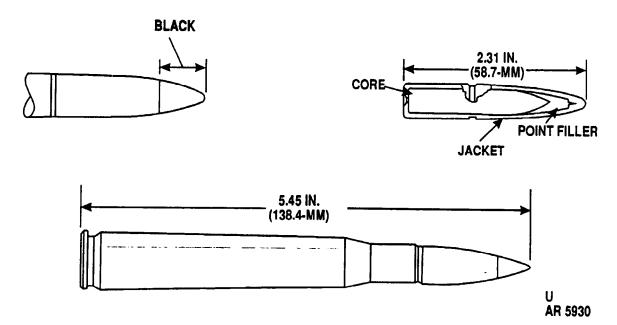
## **Shipping and Storage Data:**

1.4C
Class V
C
SMALL ARMS
AMMUNITION
5577960

#### References:

SB 700-20 TM 9-1005-213-10 TM 9-1005-231-10 TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, ARMOR PIERCING, M2



## Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge is for use against light-armored or unarmored targets, concrete shelters, and similar bullet-resisting targets.

#### **Description:**

BALL Cartridge. The cartridge is identified by a black bullet tip.

#### **Tabulated Data:**

DODAC	1305-A526
UNO serial number	0339
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	iectile
Weight	1812 gr
Length	5.45 in. (138.4 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	• 1••
Type	NA
TypeWeight	NA
Propellant:	
Type	WC 860
Type Weight	235 gr

#### Performance:

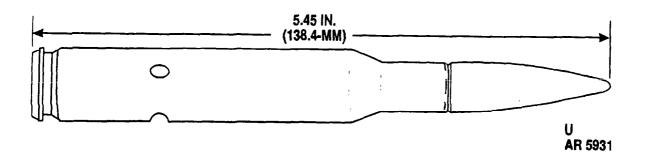
Chamber pressure	53,000 psi
Velocity	2810 fps, 78 ft from
	muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
-	AMMUNITION
Drawing number	5569930

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

# CARTRIDGE, DUMMY, CALIBER .50, M2



# **Type Classification:**

STD - OTCM 36841.

#### Use:

All caliber .50 weapons except M8C Spotting Gun. The cartridge is used for practice in loading for simulated firing and for inspecting and testing the mechanism of the weapon.

#### **Description:**

<u>DUMMY</u> Cartridge. The cartridge is identified by three drilled holes in the cartridge case and the absence of a primer.

#### **Tabulated Data:**

DODAC	1305-A560
Weight	1248 gr
Length	5.45 in. (138.4 mm)
Tracer	
Primer	NA
Fuze	NA
Explosive:	1121
Type	NA
Weight	

Incendiary:	
Type N	ΙA
Weight N	ΙA
Propellant:	
Type N	JA
Weight N	ΪĀ

#### Performance:

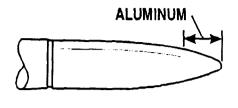
Chamber pressure	NA
Velocity	NA

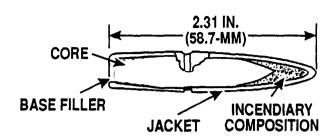
# **Shipping and Storage Data:**

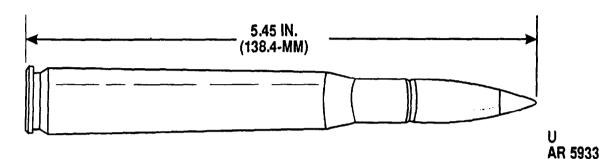
Quantity-distance class/	
SCG	
Storage code	NA
DOT shipping class	NA
DOT designation	NONEXPLOSIVE
v	AMMUNITION
Drawing number	5556579

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, ARMOR PIERCING INCENDIARY, M8







# Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge combines the functions of the M2 armor piercing bullet and the incendiary bullet, and is used against flammable targets and light-armored or unarmored targets, concrete shelters, and similar bullet-resisting targets.

#### Description:

<u>BALL</u> Cartridge. The cartridge is identified by an aluminum bullet tip.

#### Tabulated Data:

DODACUNO serial numberUNO proper shipping	
name	Ammunition, incendiary
Weight	
Length	5.45 in. (138.4 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive: Type	
1 ype	NA

Weight	NA
Incendiary:	IM 11
Type	15 gr
Propellant:	WC 860
Type	233 gr
Projectile: Weight	622.5 gr

#### Performance:

Chamber pressure	59,000 psi
Velocity	2910 fps, 78 ft from
•	muzzle

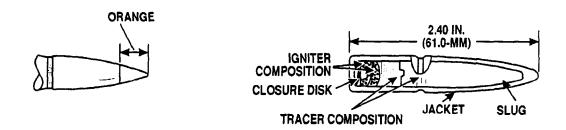
# **Shipping and Storage Data:**

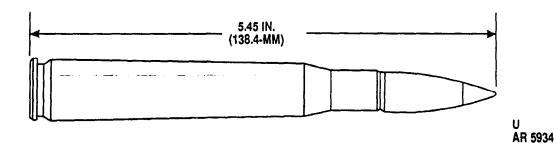
Quantity-distance class/	
SCG	1.4G
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
•	<b>AMMUNITION</b>
Drawing number	7970238

#### References:

SB 700-20 TM 9-1005-213-10 TM 9-1005-231-10 TM 9-1300-206

# . CARTRIDGE, CALIBER .50, TRACER, M10





Type Classification:

STD - OTCM 37107.

Use:

Machine Guns, Caliber .50, M2 and M85.

#### **Description:**

 $\underline{TRACER}$  Cartridge. The cartridge is identified by an orange bullet tip.

#### **Function:**

The tracer cartridge exhibits a visible trace from a point not greater than 100 yards from the muzzle of the weapon to a point not less than 1,600 yards from the muzzle.

#### Tabulated Data:

DODAC	1305-A570
UNO serial number	0339
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	1752 gr
Length	5.45 in. (138.4 mm)
Tracer	R256
Primer	Percussion

Fuze	NA
Explosive:	• • • • • • • • • • • • • • • • • • • •
Type	NA
Weight	
Incendiary:	
Type	NA
Type	NA
Propellant:	- 1
Type	IMR 5010
Weight	240 gr

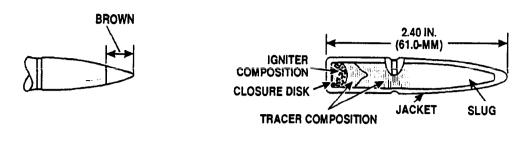
### **Performance:**

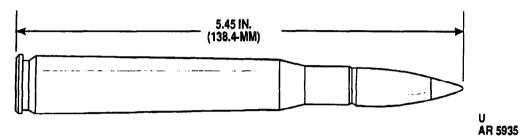
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
6	<b>AMMUNITION</b>
Drawing number	

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

#### . CARTRIDGE, CALIBER .50, TRACER, M17





# Type Classification:

CON - MSR 11756003.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge tracer is intended to permit visible observation of the bullets in-flight path or trajectory to the point of impact.

# **Description:**

TRACER Cartridge. The cartridge is identified by a brown bullet tip.

#### **Tabulated Data:**

DODAC	1305-A571
UNO serial number	
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	1732 gr
Length	5.45 in. (138.4 mm)
Tracer	R256
Primer	Percussion
Fuze	NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
	NA
Type	NA
Propellant:	
Type	IMR 5010
Weight	225 gr
_	<b>J</b>

#### Performance:

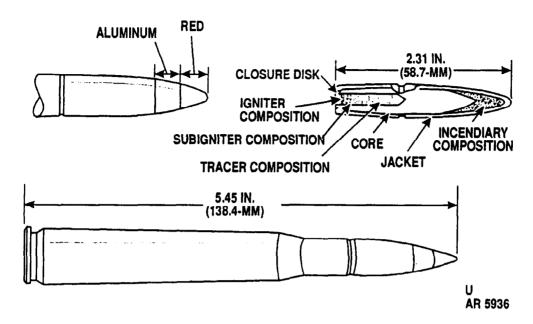
Chamber pressureVelocity	2860 fps, 78 ft from
	muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	- 1.4C
Storage code	- Class V
DOT shipping class	· C
DOT designation	- SMALL ARMS
	AMMUNITION
Drawing number	

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, ARMOR PIERCING INCENDIARY-TRACER, M20



# **Type Classification:**

OBS - MSR 04776009.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge combines the functions of the armor piercing and the incendiary bullet, and is used against flammable targets and light-armored or unarmored targets, concrete shelters, and similar bullet-resisting targets.

#### **Description:**

BALL Cartridge. The cartridge is identified by a red bullet tip with an aluminum colored ring to the rear of the red tip.

#### **Tabulated Data:**

DODAC	1305-A542
UNO serial number	0300
UNO proper shipping	
name	
	incendiary
Weight	1718 gr
Length	5.45 in. (138.4 mm)
Tracer	R256
Primer	
Fuze	

Explosive:	
	NA
Type Weight	NA
Incendiary:	
Type	IM 161
Weight	27 gr
Propellant:	Ü
Type	<b>IMR 5010</b>
Weight	230 gr
Projectile:	O
Weight	619 gr
-	3

#### Performance:

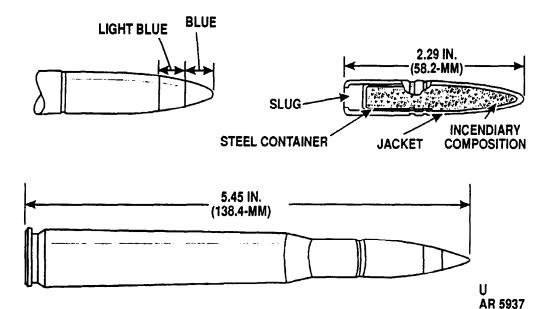
Chamber pressure	55,000 psi
Velocity	2910 fps. 78 ft from
	muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4G
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
2	<b>AMMUNITION</b>
Drawing number	7672003

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

#### **CARTRIDGE, CALIBER .50, INCENDIARY, M23**



#### Type Classification:

STD - OTCM 36841.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge is used against flammable targets.

#### **Description:**

INCENDIARY Cartridge. The cartridge is identified by a blue bullet tip with a light blue ring to the rear of the blue tip.

#### Purpose:

The cartridge is capable of initiating combustion of flammable materials upon target impact at 175 yards.

#### **Tabulated Data:**

DODAC	1305-A563
UNO serial number	0300
UNO proper shipping	
name	Ammunition,
	incendiary
Weight	1581 gr
Length	5.45 in. (138.4 mm)
Tracer	

Primer Fuze Explosive:	Percussion NA
Type	NA NA
Incendiary: Type Weight	IM 28
Propellant: Type Weight	IMR 4831

#### Performance:

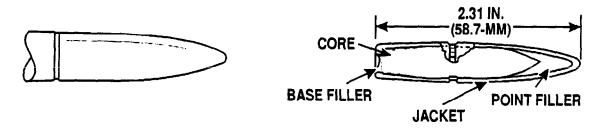
Chamber pressure	58,000 psi
Velocity	3400 fps, 78 ft from
	muzzle

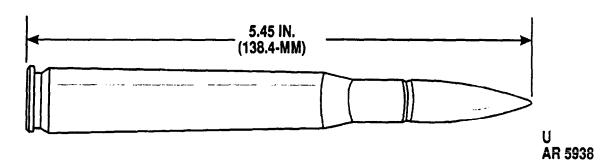
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4G
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
C	AMMUNITION
Drawing number	7673512

SB '	700-20
TM	9-1005-213-10
TM	9-1005-231-10
TM	9-1300-206

# CARTRIDGE, CALIBER .50, BALL, M33





#### Type Classification:

STD - OTCM 36841.

#### Use:

Machine Guns, Caliber .50, M2 and M85. The cartridge is intended for use against personnel or unarmored targets.

#### **Description:**

BALL Cartridge. The cartridge is identified by a plain bullet tip.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	1762 gr
Length	5.45 in. (138.4 mm)
Tracer	
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	NA
Type	NA
Propellant:	WC 860
Type	235 gr

#### Performance:

Chamber pressureVelocity	2910 fps, 78 ft from
	muzzle

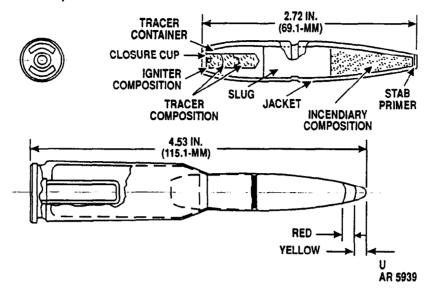
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	7553097

#### References:

SB 700-20 TM 9-1005-213-10 TM 9-1005-231-10 TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, SPOTTER-TRACER, M48A1



#### Type Classification:

STD - AMCTC 7378.

#### Use:

Rifle, Spotting, Caliber .50, M8C.

#### **Description:**

BALL Cartridge. The cartridge has specific features which aid in identification. The cartridge case has a distinctive body design which prevents chambering in other weapons. The total length is only 4.5 inches in comparison with 5.5 inches for a standard round. The bullet has a yellow tip with a red ring to the rear of the yellow tip.

#### **Function:**

In flight, the bullet exhibits a visible trace from a point not greater than 100 yards from the muzzle of the weapon to a point not less than 1,500 yards from the muzzle. The bullet will detonate and produce a flash and a puff of smoke upon impact against a steel plate placed at 175 yards from the muzzle of the weapon at all angles from 90° to 11° with respect to the horizontal.

#### **Difference Between Models:**

The M48A1 differs from the M48A2 in that the M48A1 has a primer in the point of the bullet.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	1744 gr
Length	4.53 in. (115.1 mm)
Tracer	
Primer	Percussion
Fuze	
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	IM 144
Weight	
Propellant:	02 b.
Type	IMR 7383
Weight	110 or
.,018.10	**^ 6*

#### Performance:

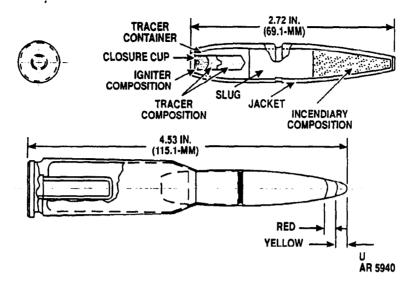
Chamber pressure	38,000 psi
Velocity	1745 fps, 78 ft from
	muzzle

Quantity-distance class/	
SCG	1.4C
Storage code	Class V

# TM 43-0001-27

DOT shipping class	C SMALL ARMS	References:
Drawing number	AMMUNITION 8594735	SB 700-20 TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, SPOTTER-TRACER, M48A2



#### Type Classification:

STD - AMCTC 7378.

#### Use:

Rifle, Spotting, Caliber .50, M8C.

#### **Description:**

BALL Cartridge. The cartridge has specific features which aid in identification. The cartridge case has a distinctive body design which prevents chambering in other weapons. The total length is only 4.5 inches in comparison with 5.5 inches for a standard round. The bullet has a yellow tip with a red ring to the rear of the yellow tip.

#### **Function:**

In flight, the bullet exhibits a visible trace from a point not greater than 100 yards from the muzzle of the weapon to a point not less than 1,500 yards from the muzzle. The bullet will detonate and produce a flash and a puff of smoke upon impact against a steel plate placed at 175 yards from the muzzle of the weapon at all angles from 90° to 11° with respect to the horizontal.

#### **Difference Between Models:**

The M48A2 differs from the M48A1 in that the M48A2 does not have a primer in the point of the bullet.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	0339
name	Cartridges for
	weapons, inert pro-
***	jectile
Weight	1744 gr
Length	
Tracer	
Primer	
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	•
Type	IM 144
Weight	32 gr
Propellant:	0 <b>2</b> g.
Type	IMR 7383
Weight	
Projectile:	-+0 Bt
Weight	833 or
AACIBITO	ooo gi

#### Performance:

Chamber pressure	
Velocity	1745 fps, 78 ft from
	muzzle

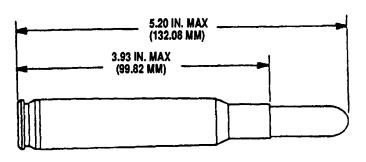
Quantity-distance class/	
SCG	1 4C
Storage code	
Storage code	Class v

# TM 43-0001-27

DOT shipping class DOT designation	C SMALL ARMS	References:
Drawing number	AMMUNITION	SB 700-20 TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, PLASTIC PRACTICE, M858





U AR 5943

#### Type Classification:

STD - dated 24 May 1983.

#### Use:

Machine Gun, Caliber .50, with the M3 Recoil Amplifier. The cartridge is intended for scaled range training purposes.

#### **Description:**

BALL Cartridge. The cartridge is identified by the blue bullet and case which are molded into one piece with high density polyethylene plastic.

#### **Tabulated Data:**

DODAC	1305-A603
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	
Length	5.2 in. (132.08 mm)
Tracer	NA
Primer	
Fuze	NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type	NA
TypeWeight	NA
Propellant:	
Type	10B101
Weight	49 or
	-0 P.

#### Performance:

Chamber pressureVelocity	2790 fps, 78 ft from
Maximum range	muzzle 700 m

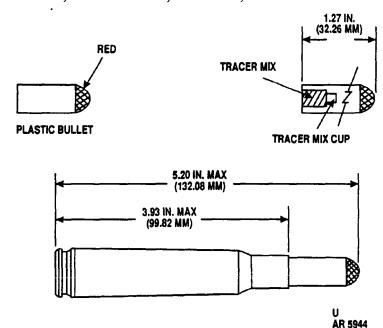
# **Shipping and Storage Data:**

Quantity-distance class/

SCG	1.4S
Storage code	Class S
DOT shipping class	
DOT designation	SMALL ARMS
<b>C</b>	<b>AMMUNITION</b>
Drawng number	9340557

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

# CARTRIDGE, CALIBER .50, TRACER, PLASTIC PRACTICE, M860



# **Type Classification:**

STD - dated 24 May 1983.

#### Use:

Machine Gun, Caliber .50, M2 with the M3 Recoil Amplifier. The cartridge tracer is intended for scaled range training to permit visible observation of the bullet's in-flight path or trajectory to the point of impact. The cartridge is intended for use with the M858 Plastic Practice Ball Cartridge.

#### Description:

TRACER Cartridge. The cartridge is identified by a red bullet tip and the blue bullet and case which are molded into one piece with high density polyethylene plastic.

#### **Tabulated Data:**

DODAC	1305-A595
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	460 gr
Length	5.2 in. (132.08 mm)
Tracer	DAG9591254/4
Primer	Percussion
Fuze	NA

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	•
Type	NA
Type Weight	NA
Propellant:	
Type	10B101
Type	49 or

#### Performance:

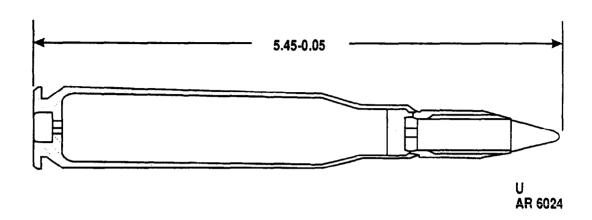
Chamber pressureVelocity	26,100 psi 2790 fps, 78 ft from muzzle
Maximum range	700 m

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class S
DOT shipping class	C
DOT designation	SMALL ARMS
J	AMMUNITION
Drawing number	9340558

SB 700-20
TM 9-1005-213-10
TM 9-1005-231-10
TM 9-1300-206

# CARTRIDGE, CALIBER .50, SABOTED LIGHT ARMOR PENETRATOR (SLAP), M903



# **Type Classification:**

STD - 31 March 1993.

#### Use:

Machine Gun, Caliber .50, M2HB. The cartridge is to be used by soldiers equipped with M2 machine guns.

#### **Description:**

COMBAT Cartridge. The cartridge is identified by an amber sabot (Ultem 1000).

#### **Tabulated Data:**

DODAC	1305-A518
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	1466 gr
Length	5.45 in. (138.4 m)
Tracer	NA
Primer	Percussion

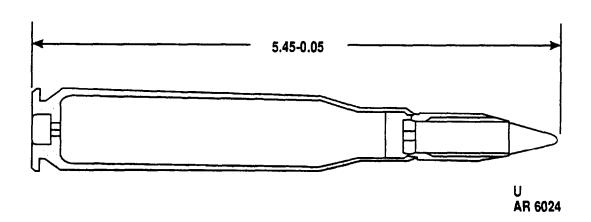
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type Weight	NA
Weight	NA
Propellant:	
Type	WC 856
Weight	275 gr
Projectile:	_
Weight	355-360 gr

#### Performance:

Chamber pressure	55,000 psi
Velocity	
	muzzle

Quantity-distance class/	
SCG	1.4
Storage code	Ċ
DOT shipping class	č
DOT shipping class	CARCEDINGEO
DOT designation	
	SMALL ARMS
	UN0339

# CARTRIDGE, CALIBER .50, SABOTED LIGHT ARMOR PENETRATOR-TRACER (SLAP-T), M962



# **Type Classification:**

STD - 31 March 1993.

#### Use:

Machine Gun, Caliber .50, M2HB. The cartridge is to be used by soldiers equipped with M2 machine guns.

#### **Description:**

COMBAT Cartridge. The cartridge is identified by a red sabot (Ultem 1000).

#### **Tabulated Data:**

DODAC	1305-A518
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	
Length	5.45 in. (138.4 mm)
LengthTracer	5.45 in. (138.4 mm)
TracerPrimer	5.45 in. (138.4 mm) R543 Percussion
Tracer	5.45 in. (138.4 mm) R543 Percussion

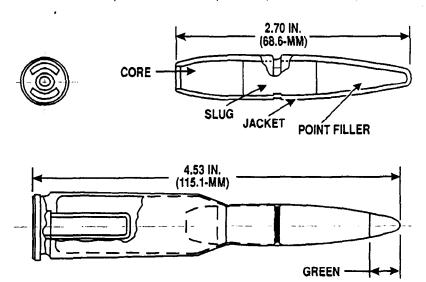
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 856
Weight	282 gr
Projectile:	<b>6</b> -
Weight	350-360 gr
	000 D00 B.

#### Performance:

Chamber pressureVelocity	4000 fps, 78 ft from
	muzzle

Quantity-distance class/	
SCG	1.4
Storage code	C
DOT shipping class	
DOT designation	CARTRIDGES
	SMALL ARMS
	UN0339

#### CARTRIDGE, CALIBER .50, BALL, PRACTICE, T249E2



U AR 5941

#### **Type Classification:**

Not applicable.

#### Use:

Rifle, Spotting, Caliber .50, M8C. The cartridge is used as a less expensive substitute for the M48 series spotter-tracer cartridges. The item uses a small amount of Sodium Carbonate Monohydrate as its spotting charge. It is similar to using a flour bag as a bomb.

#### **Description:**

<u>BALL</u> Cartridge. The cartridge is a duplicate of the M48 series cartridges, a less expensive model used for practice. It is identified by a green bullet tip. It has no tracer or incendiary filler.

#### **Tabulated Data:**

1305-A579
0339
Cartridges for
weapons, inert pro-
jectile
1738 gr
4.53 in. (115.1 mm)

TracerPrimer	Percussion
Fuze	NA
Explosive:	27.4
Type	NA
Weight	NA
Incendiary:	
Type	NA
_ Weight	NA
Propellant:	
Type	IMR 7383
Weight	110 gr
Projectile:	
Weight	817 gr

#### Performance:

Chamber pressure	38,000 psi
Velocity	1745 fps, 78 ft from
-	muzzle

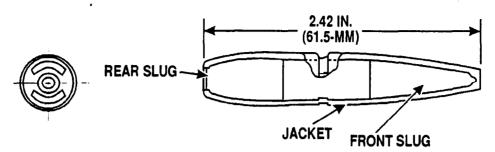
#### Shipping and Storage Data:

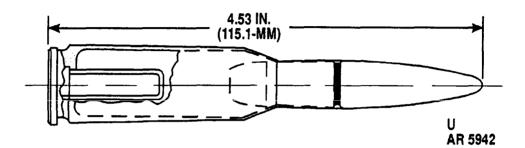
1.4C
Class V
C
SMALL ARMS
<b>AMMUNITION</b>
10534667

#### References:

SB 700-20 TM 9-1300-206

# CARTRIDGE, CALIBER .50, BALL, HIGH PRESSURE TEST, T251





#### Type Classification:

Not applicable.

# Use:

Rifle, Spotting, Caliber .50, M8C. The cartridge is used in proof testing the caliber .50 M8C Spotting Rifle during manufacture, test, or repair.

#### **Description:**

BALL Cartridge. The cartridge is standard small caliber and is identified by a stannic-stained (silvered) cartridge case.

#### **Tabulated Data:**

DODAC	1305-A578
UNO serial number	
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	1902 gr
Length	4.53 in. (115.1 mm)
Tracer	NA
Primer	Percussion

Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	IMR 4831
Weight	142 gr

#### Performance:

Chamber pressure	55,000	psi
Velocity	NA	-

# **Shipping and Storage Data:**

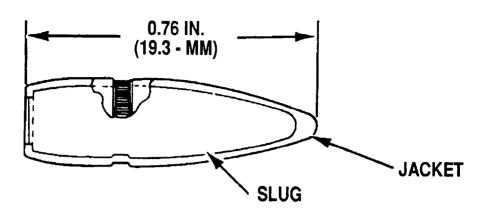
Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
	<b>AMMUNITION</b>
Drawing number	

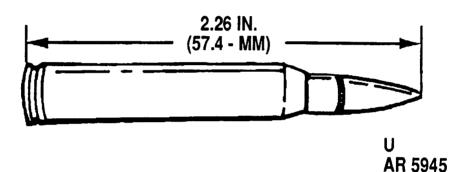
#### References:

SB 700-20 TM 9-1300-206

# CHAPTER 10 5.56MM CARTRIDGES

# CARTRIDGE, 5.56MM, BALL, M193





# **Type Classification:**

STD - AMCTC 5143.

# Use:

Rifles, 5.56mm, M16 and M16A1. The cartridge is intended for use against personnel and unarmored targets.

#### **Description:**

 $\underline{BALL}$  Cartridge. The cartridge is identified by a plain bullet tip.

# **Tabulated Data:**

DODAC	- 1305-A066
UNO serial number	- 0012
UNO proper shipping	
name	- Cartridges for
	weapons, inert pro-
	jectile
Weight	· 182 gr
Length	- 2.26 in. (57.4 mm)
Tracer	

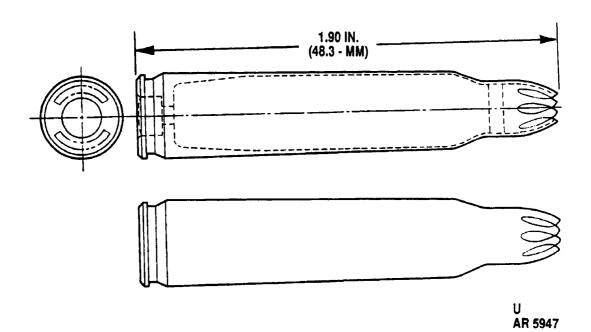
Fuze NA	
Explosive:	
Type NA	
Weight NA	
Incendiary:	
TypeNA	
Type NA Weight NA	
Propellant:	
Type WC 844 or	
CMR 170	
Weight 28.5 or 26.5 gr	r
Projectile:	•
Weight 56 gr	

#### Performance:

Chamber pressure	52,000 psi
Velocity	3250 fps, 15 ft from
	muzzle

Quantity-distance class/	
SCG	1.4S
Storage code	Class V

# CARTRIDGE, 5.56MM, GRENADE, M195



#### Type Classification:

STD - AMCTC 6919.

#### Use:

Rifles, 5.56mm, M16 and M16A1.

# **Description:**

GRENADE Cartridge. The cartridge is identified by a rose-petal (rosette-crimp) closure of the cartridge case mouth sealed with red lacquer.

#### **Function:**

The cartridge provides pressure, on functioning, to project grenades to a desired target using a grenade projection adapter.

#### **Tabulated Data:**

DODAC	
UNO serial number	0014
UNO proper shipping	
name	Cartridges for
	weapons, blank

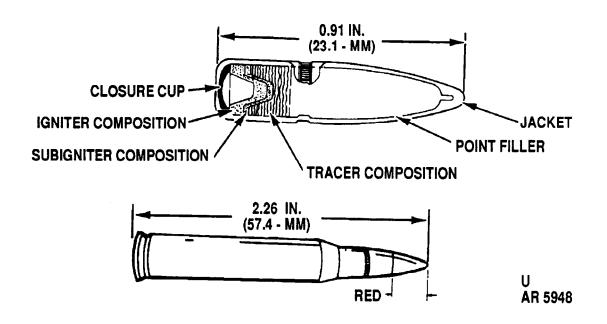
Weight	· 126 gr
Length	1.9 in. (48.3 mm)
Tracer	NA NA
Primer	Percussion
Fuze	
Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	IMR 4475
Weight	25 gr

# Performance:

Chamber pressureVelocity	140 to 165 fps, 5 ft 6 in. from muzzle for projected gre-
	nade

Quantity-distance class/	
SCG	1.4S
Storage code	Class V

# CARTRIDGE, 5.56MM, TRACER, M196



# Type Classification:

STD - AMCTC 5055.

# Use:

Rifles, 5.56mm, M16 and M16A1. The tracer is intended to permit visible observation of the bullet's in-flight path or trajectory to the point of impact.

#### **Description:**

 $\frac{TRACER}{total}$  Cartridge. The cartridge is identified by a red bullet tip.

#### **Tabulated Data:**

DODACUNO serial number	
UNO proper shipping name	
	weapons, inert projectile
Weight	
Length	2.26 in. (57.4 mm)
Tracer	
Primer	Percussion
Fuze	
Explosive:	
Type	NA
Weight	NA

incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type	WC 844 or
•	IMR 8208M
Weight	28.5 gr. 25.3 gr or
5	CMR 170, 26.5 gr
Projectile:	
Weight	.54 gr
8	6-

#### Performance:

Incondiant

Chamber pressure ------ 52,000 psi Velocity ----- 3200 fps, 15 ft from muzzle

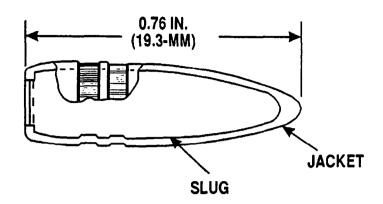
#### **Shipping and Storage Data:**

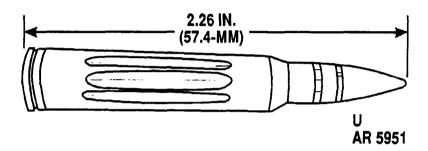
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
_	<b>AMMUNITION</b>
Drawing number	10534193

#### References:

SB 700-20 TM 9-1005-249-10 TM 9-1300-206

#### CARTRIDGE, DUMMY, 5.56MM, M199





# Type Classification:

STD - AMCTC 4662.

# Use:

Rifles, 5.56mm, M16 and M16A1. The cartridge is used for practice in loading 5.56mm weapons, for simulated firing to detect flinching of personnel when firing, and for inspecting and testing the weapon mechanisms.

#### **Description:**

DUMMY Cartridge. The cartridge is identified by six longitudinal corrugations (flutings) in the cartridge case and there is no primer.

#### **Tabulated Data:**

DODAC	
Weight	150 gr
Length	2.26 in. (57.4 mm)
Tracer	NA
Primer	NA
Fuze	NA
Explosive:	
Type	NA
Weight	NA

Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	NA
Weight	NA

#### Performance:

Chamber pressure	NA
Velocity	NA

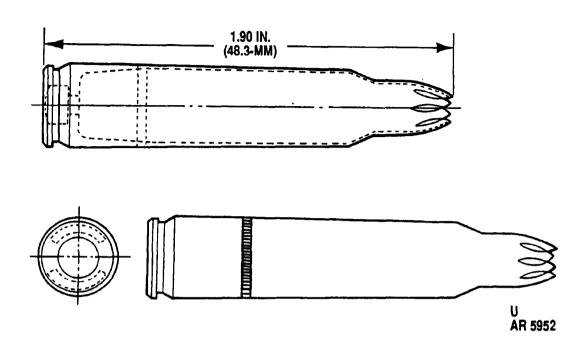
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	NA
DOT shipping class	NA
DOT designation	NONEXPLOSIVE
•	AMMUNITION
Drawing number	10534021

#### References:

SB 700-20 TM 9-1005-249-10 TM 9-1300-206

#### CARTRIDGE, 5.56MM, BLANK, M200



# Type Classification:

STD - AMCTC 5942.

#### Use:

Rifles, 5.56mm, M16 and M16A1. The cartridge is designed for simulated firing in training exercises and for saluting purposes.

#### **Description:**

BLANK Cartridge. The cartridge is identified by a rose-petal (rosette-crimp) closure of the cartridge case mouth. An engraved knurl is located 1/2 inch from the head of the cartridge case.

# **Tabulated Data:**

DODAC	1305-A080
UNO serial number	0014
UNO proper shipping	
name	Cartridges for
	weapons, blank
Weight	107 gr
Length	1.9 in. (48.3 mm)
Tracer	

Explosive:			
Type	***************************************	NA	
Weight	***************************************	NA	
Incendiary:			
Type	********	NA	
Weight	***************************************	NA	
Propellant:			
Type	•••••	HPC 1	l3
Weight		7 gr	
Incendiary: Type Weight Propellant: Type		NA NA HPC 1	18

#### Performance:

Chamber pressure	NA
Velocity	NA

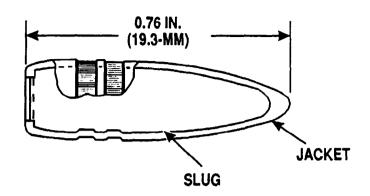
#### **Shipping and Storage Data:**

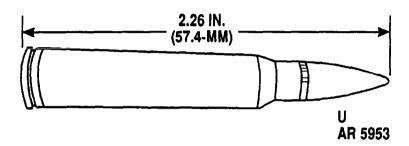
Quantity-distance class	1
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	

#### References:

SB 700-20

#### CARTRIDGE, DUMMY, 5.56MM, M232





# **Type Classification:**

STD - AMCTC 4485.

#### Use:

Rifles, 5.56mm, M16 and M16A1. The cartridge is an inert round used for testing the mechanisms of 5.56 weapons.

#### **Description:**

DUMMY Cartridge. The cartridge is identified by a black chemical finish over the entire round and by the absence of a primer.

#### Tabulated Data:

DODAC	1305-A069
Weight	161 gr
Length	2.26 in. (57.4 mm)
Tracer	NA
Primer	
Fuze	
	MA
Explosive: Type	NTA
Type	NA
Weight	NA

Incendiary:	
Type	NA
Weight	NA
Propellant:	
TVD6	NA
Weight	NA

#### Performance:

Chamber pressure	NA
Velocity	NA

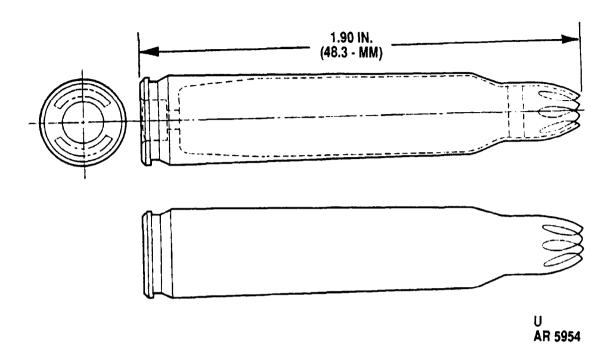
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT designation	NONEXPLOSIVE
	AMMUNITION
Drawing number	10534146

#### References:

SB 700-20 TM 9-1005-249-10 TM 9-1300-206

#### CARTRIDGE, 5.56MM, BLANK, M755



#### Type Classification:

STD - MSR 04786005.

#### Use:

The M755 blank cartridge is especially designed for use with the Sting Ring Airfoil Munition System which consists of the M234 launcher and the 64mm riot control M743 projectile fired from the M16A1 rifle.

# **Description:**

BLANK Cartridge. The cartridge is only for use with the M234 riot control 64mm projectile launcher. The launcher is attached to the flash suppressor of the M16A1 rifle and actuated by firing an M755 5.56mm blank cartridge. The M755 blank cartridge is the only cartridge that will give the projectile M743 the proper velocity. Use of other blank cartridges may damage the system.

The cartridge is loaded with 12 grains of Dupont Hi Skor 700X propellant closed with a seven petal nose crimp and moisture sealed. The crimped tips of the cartridge is painted with yellow lacquer for identification and thus lessen the chance of mixing them with the standard M16A1 rifle blank cartridges.

#### **Function:**

The blank cartridge is fed into the firing chamber. When fired, the primer ignites the propellant. The expanding propellant gases pass from the muzzle of the rifle into the launche manifold. The projectile is ejected from the launcher barrel. The propellant charge is no sufficient to eject the cartridge case which mus be ejected by pulling the charging handle of the rifle all the way back.

#### **Tabulated Data:**

DODAC	TBA
Weight	112 gr
Length	1.9 in. (48.3 mm)
Tracer	NA
Primer	
Fuze	NA
Explosive:	- 11-
Type	NA
Weight	NA
Incendiary:	• • • • • • • • • • • • • • • • • • • •
Type	NA
Weight	
Propellant:	1111
Type	Hi Skor 700X
Weight	12 gr

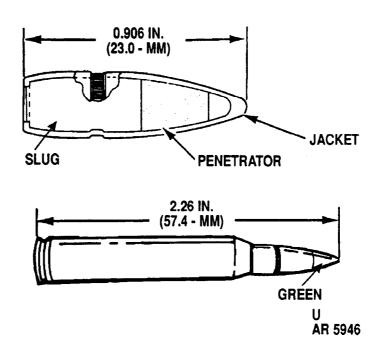
#### TM 43-0001-27

# Performance:

# 

Quantity-distance class/	
SCG	
Storage code	Class I
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
_	<b>AMMUNITION</b>
Drawing number	C122-3-43

#### CARTRIDGE, 5.56MM, BALL, M855



# Type Classification:

STD - MSR 05826003.

#### Use:

Machine Gun, 5.56mm, M249E1; and Rifle, 5.56mm, M16A2. The cartridge is intended for use against personnel and unarmored targets.

# **Description:**

 $\underline{BALL}$  Cartridge. The cartridge is identified by a green bullet tip.

#### **Tabulated Data:**

DODAC	1305-A059
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	190 gr
Length	2.26 in. (57.4 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	
Type	NA
Type	NA
Propellant:	
Type	WC 844
Weight	26.1 gr
Projectile:	20.1 6.
Weight	62 gr

# Performance:

Chamber pressureVelocity	55,000 psi 3025 fps, 78 ft fr muzzle
	muzzie

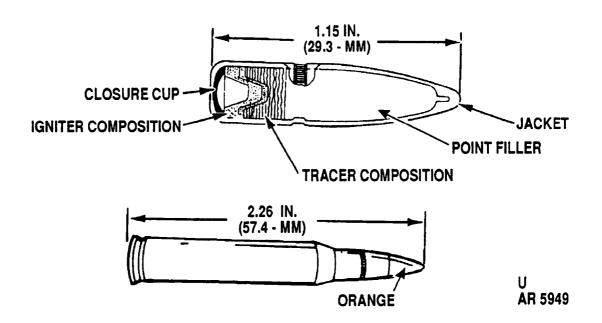
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
C	<b>AMMUNITION</b>
Drawing number	9342862

# **References:**

DARCOM 700-3-2 TM 9-1300-206 TM 9-1305-201-20&P

#### CARTRIDGE, 5.56MM, TRACER, M856



# **Type Classification:**

STD - MSR 05826002.

#### Use:

Machine Gun, 5.56mm, M249E1; and Rifle, 5.56mm, M16A2. The tracer is intended to permit visible observation of the bullet's in-flight path or trajectory to the point of impact.

#### **Description:**

TRACER Cartridge. The cartridge is identified by an orange bullet tip.

#### **Tabulated Data:**

DODAC	1305-A063
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	191 gr
Length	2.26 in. (57.4 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Type	NA
Propellant:	- 1.5.5
Type	WC 844
_ Weight	24.7 gr
Projectile:	8-
Weight	63.7 gr

#### **Performance:**

Chamber pressureVelocity	55,000 psi
	muzzle

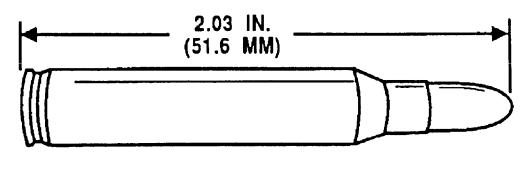
#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
8	<b>AMMUNITION</b>
Drawing number	9342863

#### **References:**

SB 700-20 TM 9-1300-206

# CARTRIDGE, 5.56MM, PLASTIC, PRACTICE, M862



# U AR 5955

#### **Type Classification:**

STD - To be approved.

#### Use:

Rifles, 5.56mm, M16A1 and M16A2 with M2 Practice Bolt. The cartridge is for training in local and urban training areas where range restrictions preclude use of full range standard service ammunition.

#### **Description:**

PLASTIC Cartridge. The cartridge is identified by a blue plastic bullet.

#### **Tabulated Data:**

DODAC	1305-A065
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	108 gr
Length	2.03 in. (51.6 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
	<del>-</del>

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	<b>WPR 260</b>
Weight	8.7 gr
Projectile:	o <b>g.</b>
Weight	3.6 gr

#### Performance:

Chamber pressureVelocity	15,750 psi 4525 fps, 15 ft from
	muzzle

#### **Shipping and Storage Data:**

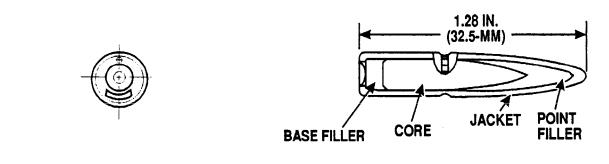
Quantity-distance class/	1 4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
3	<b>AMMUNITION</b>
Drawing number	12598589

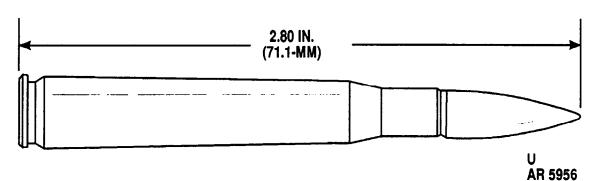
#### References:

SB 700-20 TM 9-1005-249-10 TM 9-1300-206

# CHAPTER 11 7.62MM CARTRIDGES

# CARTRIDGE, 7.62MM, BALL, M59





# **Type Classification:**

STD - OTCM 36841.

#### Use:

Machine Guns, 7.62mm, M60 and M219; and Rifle, 7.62mm, M14. The cartridge is intended for use against personnel and unarmored targets.

#### **Description:**

 $\underline{BALL}$  Cartridge. The cartridge is identified by a plain bullet tip.

#### **Tabulated Data:**

DODACUNO serial number	
UNO proper shipping name	Cartridges for weapons, inert pro-
777. : -J. A	jectile
Weight	აყა gr
Length	2.8 in. (71.1 mm)
Tracer	NA
Primer	NA

Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 846
Weight	46 gr
Projectile:	Ü
Weight	150.5 gr

#### Performance:

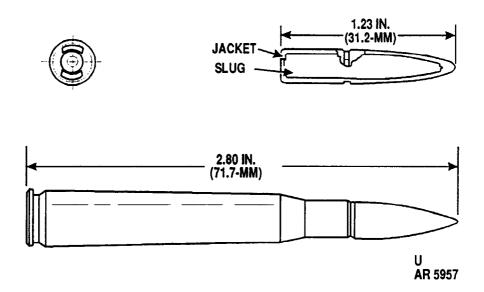
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
· ·	<b>AMMUNITION</b>
Drawing number	7553702

#### TM 43-0001-27

# **References:**

SB 700-20 TM 9-1005-223-10 TM 9-1005-223-12P TM 9-1005-224-10 TM 9-1005-233-10 TM 9-1005-298-12 TM 9-1005-313-10 TM 9-1300-206

#### CARTRIDGE, 7.62MM, HIGH PRESSURE TEST, M60



# Type Classification:

OBS - MSR 11756003.

#### Use:

All 7.62mm weapons. The cartridge is not for field issue, but is used for proof firing of weapons during manufacture, test, or repair.

#### Description:

HIGH PRESSURE TEST Cartridge. The cartridge is identified by a stannic-stained (silvered) case.

#### **Function:**

The cartridge is loaded with a special propellant to produce pressures substantially in excess of the service cartridge.

#### **Tabulated Data:**

DODAC	1305-A129
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	412 gr
Length	2.8 in. (71.1 mm)
Tracer	NA
Primer	Percussion
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	<b>IMR 4475</b>
Weight	41 gr
Projectile:	8-
Weight	171.5 or
	- · - · · · · ·

#### Performance:

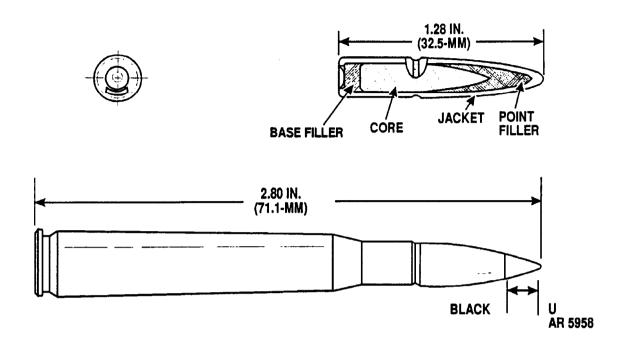
Chamber pressure	67,500	psi
Velocity	NÁ	•

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
_ · · - · · · · · • · · · · · · · · · · ·	<b>AMMUNITION</b>
Drawing number	

SB 700-20
TM 9-1005-223-10
TM 9-1005-223-121
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1300-206

#### **CARTRIDGE, 7.62MM, ARMOR PIERCING, M61**



#### Type Classification:

OBS - MSR 11756003.

#### Use:

Machine Guns, 7.62mm, M60, M219 and M240; and Rifle, 7.62mm, M14. The cartridge is used in rifles and machine guns against personnel and light armored or unarmored targets, concrete shelters, and similar bullet-resisting targets.

#### **Description:**

ARMOR PIERCING Cartridge. The cartridge is identified by a black bullet tip.

#### **Tabulated Data:**

DODAC	1305-A120
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	393 gr
Length	2.8 in. (71.1 mm)
Tracer	NA

Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type Weight	NA
Weight	NA
Propellant:	
Type	IMR 4475
Weight	41 gr
Projectile:	
Weight	150.5 gr

# Performance:

Chamber pressure	50,000 psi
Velocity	2750 fps, 78 ft from
	muzzle

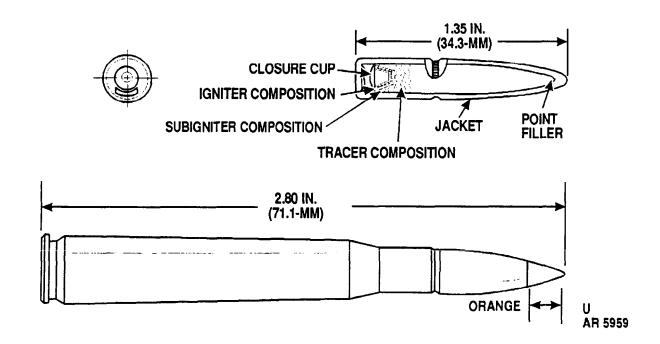
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
	<b>AMMUNITION</b>
Drawing number	7553704

#### TM 43-0001-27

# References:

SB 700-20 TM 9-1005-223-10 TM 9-1005-223-12P TM 9-1005-224-10 TM 9-1005-233-10 TM 9-1005-298-12 TM 9-1005-313-10 TM 9-1300-206

#### CARTRIDGE, 7.62MM, TRACER, M62



#### Type Classification:

CON - MSR 11756003.

#### Use:

Machine Guns, 7.62mm, M60, M219 and M240; and Rifle, 7.62mm, M14. The tracer is intended to permit visible observation of the bullet's in-flight path or trajectory to the point of impact.

#### **Description:**

TRACER Cartridge. The cartridge is identified by an orange bullet tip.

1205 4104

#### **Tabulated Data:**

DATAC

DODAC	1305-A124
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	383 gr
Length	2.8 in. (71.1 mm)
Tracer	R284

Primer	
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 846
Weight	46 gr
Projectile:	_
Weight	$142~\mathrm{gr}$

#### Performance:

Chamber pressureVelocity	50,000 psi 2750 fps, 78 ft from
-	muzzle

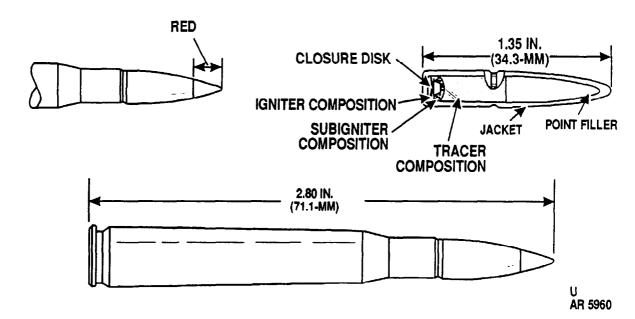
Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
_ · ·	AMMUNITION
Drawing number	

# TM 43-0001-27

# References:

SB 700-20 TM 9-1005-223-10 TM 9-1005-223-12P TM 9-1005-224-10 TM 9-1005-233-10 TM 9-1005-298-12 TM 9-1005-313-10 TM 9-1300-206

# CARTRIDGE, 7.62MM, TRACER, M62 (OVERHEAD FIRE MISSION)



# Type Classification:

CON - MSR 11756003.

#### Use:

Machine Guns, 7.62mm, M60, M219 and M240; and Rifle, 7.62mm, M14. The cartridge is used in weapons for firing over the heads of troops being trained in field exercises. Stringent production control and screening of ammunition lots ensure the safety of personnel operating immediately below the trajectory of the fired bullets.

# **Description:**

TRACER Cartridge. The cartridge is identified by a red bullet tip.

# **Tabulated Data:**

DODAC	
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	387 gr
Length	2.8 in. (71.1 mm)
Tracer	
Primer	
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type	WC 846
Type Weight	46 gr
Projectile:	_
Weight	146 gr

#### Performance:

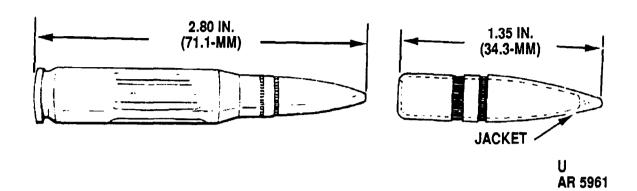
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
8	<b>AMMUNITION</b>
Drawing number	10535493

#### References:

SB 700-20
TM 9-1005-223-10
TM 9-1005-223-12P
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1300-206

# CARTRIDGE, DUMMY, 7.62MM, M63



# **Type Classification:**

STD - OTCM 36841.

## Use:

Machine Guns, 7.62mm, M60, M219 and M240; and Rifle, 7.62mm, M14. The cartridge is used for practice in loading 7.62mm weapons for simulated firing to detect flinching of personnel during firing and for inspecting and testing the weapon mechanism.

# **Description:**

DUMMY Cartridge. The cartridge is identified by six longitudinal corrugations (flutings) on the cartridge case. There is no primer and no vent hole in the primer pocket.

# **Tabulated Data:**

DODAC	258 gr 2.8 in. (71.1 mm) NA NA
Explosive: Type	NA

Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	ŅΑ
Weight	NA
Projectile: Weight	<b>3.7.</b> 4
weight	NΑ

# Performance:

Chamber pressure	NA
Velocity	

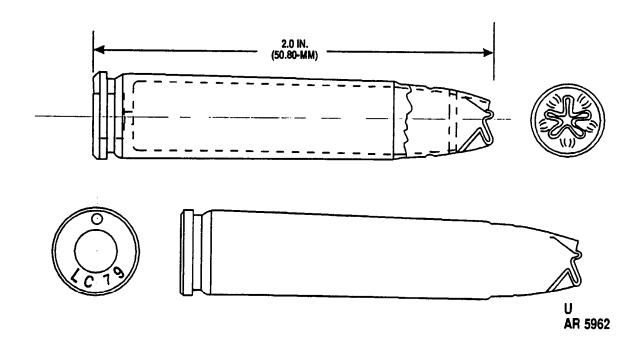
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	NA
DOT shipping class DOT designation	NA
DOT designation	NONEXPLOSIVE
_	AMMUNITION
Drawing number	7553706

#### References:

SB 700-20
TM 9-1005-223-10
TM 9-1005-223-12F
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1300-206

# CARTRIDGE, 7.62MM, GRENADE, M64



# Type Classification:

OBS - MSR 11756003.

# Use:

Rifle, 7.62mm, M14.

# Description:

GRENADE Cartridge. The cartridge is identified by a rose-petal (rosette-crimp) closure of the cartridge case mouth and sealed with red lacquer.

# **Function:**

The cartridge provides pressure upon functioning to project rifle grenade to a desired target when using a grenade projectile adapter and dragon missile launch effect trainer (LET).

# **Tabulated Data:**

DODAC	1330-G839
IINO serial number	0014

UNO proper shipping	
	Cartridges for
	weapons, blank
Weight	295 gr
Length	2 in. (50.8 mm)
	****
	NΔ
Weight	NΔ
	IVA
	MA
	NA
Weight	45 gr
Projectile:	
Weight	NA
	Weight

# Performance:

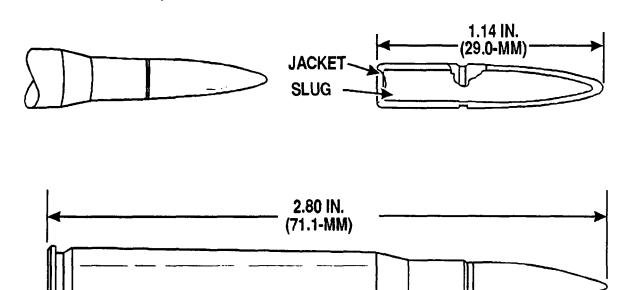
Chamber pressure	NA
Velocity	160 fps, 5.6 ft from
	muzzle for pro-
	jected grenade

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.48
Storage code	Class V

DOT shipping class DOT designation	C SMALL ARMS	References:
Drawing number	AMMUNITION	SB 700-20 TM 9-1300-206

# CARTRIDGE, 7.62MM, BALL, M80



U AR 5963

# Type Classification:

STD - MSR 07798001.

# Use:

Machine Guns, 7.62mm, M60, M219 and M240; and Rifle, 7.62mm, M14. The cartridge is intended for use against personnel and unarmored targets.

# **Description:**

 $\underline{BALL}$  Cartridge. This cartridge is identified by a plain bullet tip.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for weapons, inert pro- jectile
Weight Length Tracer	392 gr 2.8 in. (71.1 mm)

Primer	Percussion
Fuze	NA
Explosive:	
T'vpe	NA
Weight	
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 846
Weight	46 or
Projectile:	- V B1
Weight	146 or
	110 81

# Performance:

Chamber pressure	50,000 psi
Velocity	2750 fps, 78 ft from
•	muzzle

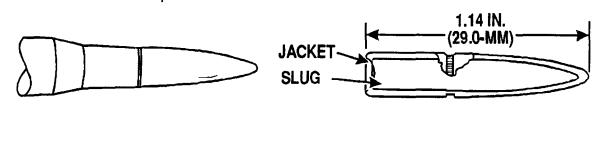
# **Shipping and Storage Data:**

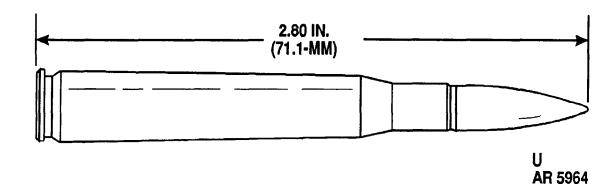
Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
-	AMMUNITION
Drawing number	10521998

# References:

SB 700-20 TM 9-1005-223-10 TM 9-1005-223-12P TM 9-1005-224-10 TM 9-1005-233-10 TM 9-1005-298-12 TM 9-1005-313-10 TM 9-1300-206

# CARTRIDGE, 7.62MM, BALL, M80 (OVERHEAD FIRE APPLICATION)





# **Type Classification:**

STD - MSR 07798001.

# Use:

Machine Guns, 7.62mm, M60, M219 and M240. The cartridge is used in machine guns for firing over the heads of troops being trained in field exercises. Stringent production control and screening of ammunition lots ensure the safety of personnel operating immediately below the trajectory of the fired bullets.

# **Description:**

BALL Cartridge. The cartridge is identified by a plain bullet tip.

#### **Tabulated Data:**

J	DODAC	1305-A166
1	UNO serial number	0012
1	UNO proper shipping	
	name	
		weapons, inert pro-
		jectile
٦	Weight	392 gr
]	Length	2.8 in. (71.1 mm)

Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 846
Weight	46 gr
Projectile:	Ū
Weight	149 gr
	_

# Performance:

Chamber pressure	50,000 psi
Velocity	2750 fps, 78 ft from
	muzzle

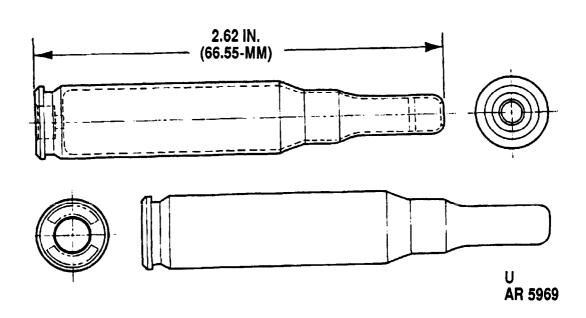
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
3	<b>AMMUNITION</b>
Drawing number	10523088

# References:

SB 700-20 TM 9-1005-223-10 TM 9-1005-223-12P TM 9-1005-224-10 TM 9-1005-233-10 TM 9-1005-298-12 TM 9-1005-313-10 TM 9-1300-206

# CARTRIDGE, 7.62MM, BLANK, M82



# **Type Classification:**

STD - OTCM 36841.

#### Use:

Machine Guns, 7.62mm, M60, M219 and M240; and Rifle, 7.62mm, M14. The cartridge is used in rifles and machine guns equipped with blank firing attachments to simulate firing in training exercises and for saluting purposes.

# **Description:**

BLANK Cartridge. The cartridge is identified by its double tapered neck and absence of a bullet.

# **Tabulated Data:**

DODAC	1305-A112
UNO serial number	0014
UNO proper shipping	
name	Cartridges for
	weapons, blank
Weight	235 gr
Length	2.62 in. (66.55 mm)
Tracer	
Primer	
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type	SR 8231
Type Weight	15 or
11018110	TO ET

# Performance:

Chamber pressure	NA
Velocity	NΑ

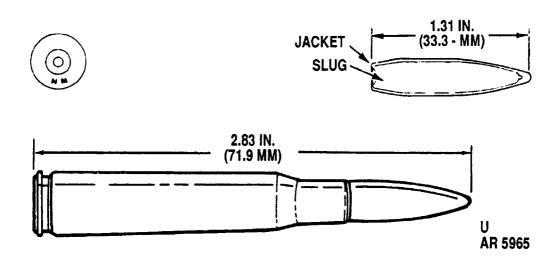
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
S .	<b>AMMUNITION</b>
Drawing number	8597283

#### References:

SB 700-20
TM 9-1005-223-10
TM 9-1005-223-121
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1300-206

# CARTRIDGE, 7.62MM, BALL, SPECIAL, M118



# Type Classification:

STD - MSR 07798001.

# Use:

Rifles, 7.62mm, M14, M21, M24, and M40A1. The cartridge is intended and specifically prepared for use in high accuracy weapons.

# **Description:**

BALL Cartridge. The cartridge is identified by cartridge case head stampings with NATO design mark, manufacturer and year.

# **Tabulated Data:**

DODAC	1305-A136
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	390 gr
Length	2.83 in. (71.9 mm)
Tracer	
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA

Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 846 and
• •	IMR 4895
Weight	44 gr
Projectile:	Ū
Weight	172 gr

# Performance:

Chamber pressure	50,000	psi
Velocity	2640 fp	s

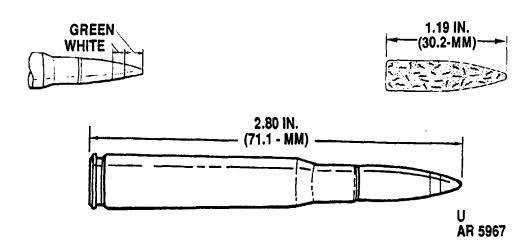
# **Shipping and Storage Data:**

1.4S
Class V
C
SMALL ARMS
<b>AMMUNITION</b>
8597555

# References:

SB 700-20 TM 9-1005-223-12P TM 9-1300-206

# CARTRIDGE, 7.62MM, FRANGIBLE, M160



# **Type Classification:**

**STD - AMCTC 2186.** 

#### Use:

Machine Guns, 7.62mm, M219 and M240. The cartridge is designed for firing single shots in the machine gun for gunnery practice.

#### **Description:**

FRANGIBLE Cartridge. The cartridge is identified by a green bullet tip with a white ring to the rear of the green tip.

#### Function:

The frangible bullet, upon striking a target, disintegrates, leaving a mark at the point of impact. It is not to be fired on indoor ranges unless they are well ventilated to prevent the buildup of bullet "dust," which is toxic.

#### Tabulated Data:

DODAC	1305-A147
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	315 gr
Length	2.8 in. (71.1 mm)
Tracer	NA
Primer	Percussion

Fuze	NA
Explosive:	
Type	NA
Type Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	SR 8074
Weight	10.5 gr
Projectile:	
Projectile: Weight	108.5 gr

# Performance:

Chamber pressure	NA
Velocity	1320 fps, 100 yd
	from muzzle

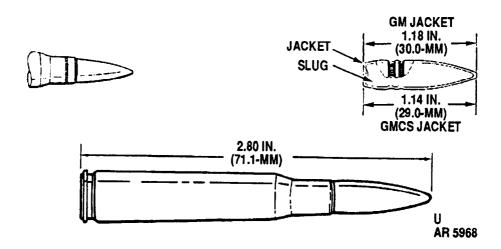
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
_	AMMUNITION
Drawing number	10522476

#### References:

SB 700-20
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1300-206

# CARTRIDGE, DUMMY, 7.62MM, M172



# Type Classification:

STD - AMCTC 4635.

#### Use:

Test of 7.62mm weapons. The cartridge is inert and is used to test the mechanism and metallic link belts of 7.62mm weapons.

# **Description:**

DUMMY Cartridge. The cartridge is identified by a black oxide finish over the entire round and has no primer. There is no vent hole in the primer pocket.

# **Tabulated Data:**

DODAC	1305-A162
Weight	385 gr
Length	2.8 in. (71.1 mm)
Tracer	NA
Primer	
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA

Propellant:	
Type	NA
Weight	NA
Projectile:	
Weight	NA
8	

#### Performance:

Chamber pressure	NA
Velocity	NA

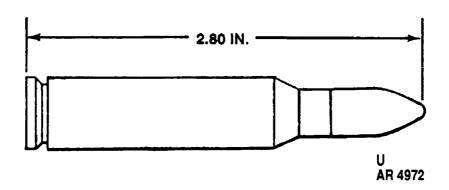
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT shipping class DOT designation	NONEXPLOSIVE
, and the second	AMMUNITION
Drawing number	
•	· ·

#### **References:**

SB 700-20
TM 9-1005-223-10
TM 9-1005-223-12P
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1300-206

# CARTRIDGE, 7.62MM, DIM TRACER, M276



# **Type Classification:**

STD - Being performed.

# Use:

Rifle, 7.62mm, M14; Machine Guns, 7.6mm, M60, M240, M219 and M134. The combat cartridge is to be used by soldiers equipped with night vision equipment.

# **Description:**

COMBAT Cartridge. The cartridge is identified by a pink ring behind a green tip.

# **Tabulated Data:**

DODAC	
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	381 gr
Length	2.8 in.
Tracer	R440 Trace Mix
TracerPrimer	R440 Trace Mix

Explosive:	
Type Weight	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC-846
Weight	46 gr
Projectile weight	140-150 gr

# **Performance:**

Chamber pressure	50,000 psi
Velocity	2750 fps (GMCS)
•	and 2680 fps (GM)
	78 ft from muzzle

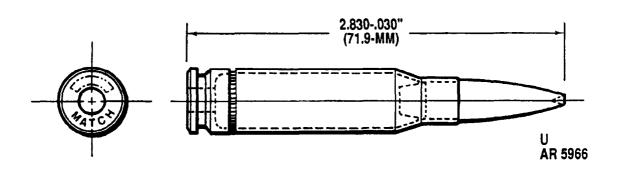
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	C
DOT shipping class	Č
DOT designation	CARTRIDGES
<b></b>	SMALL ARMS

# References:

DMWR 9-1300-0017-D1 TM 9-1305-201-20&P TM 9-1305-201-34&P

# CARTRIDGE, 7.62MM, MATCH, M852



# **Type Classification:**

STD - MSR 09816009.

# Use:

Rifle, 7.62mm, M14, NATIONAL MATCH. The cartridge is intended and specifically prepared for use in those weapons designated as competitive rifles and also for marksmanship training. The cartridge is not for combat use.

# **Description:**

MATCH Cartridge. The cartridge is identified by the cartridge case head stamping of MATCH. It also has a knurl at the base of the cartridge case and a hollow point bullet.

#### **Tabulated Data:**

DODAC	1305-A171
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro-
	jectile
Weight	385 gr
Length	

Tracer	
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	- 1
Type	NA
Weight	NA
Propellant:	- 11.
Type	IMR 4895
Weight	49 or
Bullet:	42 g1
Type	Hallow point
Weight	108 gr

#### **Performance:**

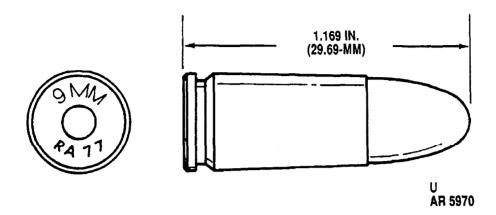
Chamber pressure	50,000 psi
Velocity	2550 fps, 772 mps

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class DOT designation	C
DOT designation	SMALL ARMS
_	AMMUNITION
Drawing number	9341551

# CHAPTER 12 9MM CARTRIDGES

# CARTRIDGE, 9MM, BALL



# **Type Classification:**

Commerical.

# Use:

Modified M3 Submachine Gun or commercial weapons. (The use in M9 Pistol is not authorized.) The cartridge is intended for use against personnel.

# **Description:**

BALL Cartridge.

# **Tabulated Data:**

DODAC	1305-A360
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	
Length	1.169 in.
20115	(29.69 mm)
Tracer	
Primer	Percussion
Fuze	N A
	III
Explosive: Type	NI A
Weight	NY A
Incendiary: Type	NT A
Type	NA

Weight	NA
Propellant:	
Type	Commerical
Weight	MBR
Projectile weight	115 gr

# Performance:

#### NOTE

Mid case pressures normally run 8000 to 10,000 psi higher than case mouth pressure.

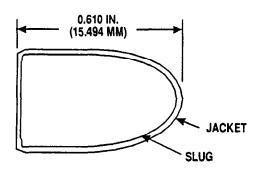
Mid case pressure	38,500 psi (avg),
•	43,000 psi (max)
Velocity	$1125 \pm 90$ fps, 15 f
•	from muzzle

# **Shipping and Storage Data:**

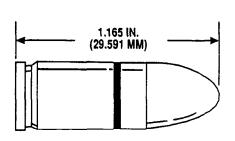
Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	Ċ
DOT shipping class DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	

# **References:**

# CARTRIDGE, 9MM, BALL, NATO, M882







U AR 5971

# **Type Classification:**

HQDA (DAMA-CSM), dated 15 April 85.

# Use:

Pistol, 9mm, M9. The cartridge is intended for use against personnel.

# **NOTE**

M882 ammunition can be used in the following nonstandard weapons:

Pistol	Submachine Guns
HK P7 series (GE) Walther P38 (GE) FN P35 (BE)	HK MP5 (GE) HK MP5SD (GE) IMI Uzi (IS) Baretta M12 (IT) FFV M45/45B (SW) Madsen M50 (DE) CZ M23 (CZ) Sten MK II (UK) Sterling 12A3 (UK)

# **Description:**

 $\underline{BALL}$  Cartridge. The cartridge is identifie by the plain bullet tip.

# **Tabulated Data:**

DODAC	1305-A363
UNO serial number	0012
UNO proper shipping	
	Cartridges for
	weapons, inert
	jectile
Weight	
Length	
206	(29.591 mm)
Tracer	
Primer	
Fuze	
Explosive:	IIA
	NT A
Type	IVA NIA
Weight	NA
Incendiary:	
Type	NA
_ Weight	NA
Propellant:	
Type	
Weight	6 gr
Projectile weight	$112~\mathrm{gr}$

prc

Performance:

from muzzle

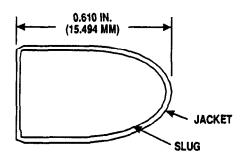
**Shipping and Storage Data:** 

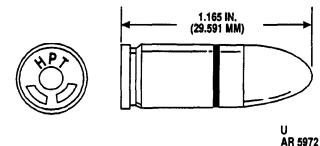
Quantity-distance class/ SCG ----- 1.4S Storage code ------- Class V DOT shipping class ---- C DOT designation ----- SMALL ARMS

Drawing number ----- 9345211

References:

# **CARTRIDGE, 9MM, HIGH PRESSURE TEST, M905**





# Type Classification:

HQDA (DAMA-CSM), dated 15 April 85.

# Use:

Proof testing of M9 pistols. The cartridge is intended for use in proofing new pistols and test barrels to demonstrate safety prior to releasing weapons to the field.

# **Description:**

HIGH PRESSURE TEST Cartridge. The cartridge is identified by a tinned cartridge case and high pressure test head stamp.

# **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	iectile
Weight	179 gr
Weight Length	1.165 in.
	(29.591 mm)
Tracer	
Primer	

Fuze	NA
Explosive:	NA
TypeWeight	NA
Incendiary:	NΔ
Type Weight	NA
Propellant:	WC 370
Type Weight	7.5 gr

#### Performance:

Chamber pressure	50,000 psi
Velocity	

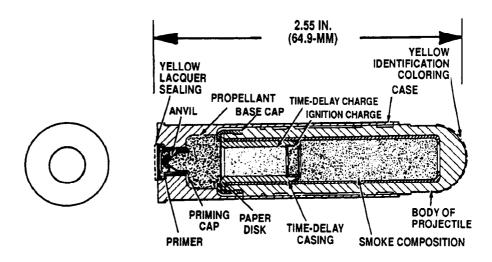
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
- B	<b>AMMUNITION</b>
Drawing number	9378265

#### References:

# CHAPTER 13 14.5MM CARTRIDGES

# CARTRIDGE, 14.5MM, TRAINER-SPOTTER, M181A1



U AR 5973

#### **Type Classification:**

STD - AMCTC 138.

#### Use:

Artillery Trainer, M31.

#### **Description:**

TRAINER-SPOTTER Cartridge. The cartridge has a chemical-filled (smoke composition) projectile. It is identified by the markings on the cartridge case and a yellow projectile tip. The cartridge has no fuze and it uses a time delay element to provide an air burst.

#### Function:

When the cartridge is fired, the heat of the propellant gases ignites the delay element. The delay element burns 3 seconds and, in turn, ignites the smoke composition. The heat and pressure produced by the burning filler rupture the plastic closing disc at the projectile base and a visible puff of smoke is emitted.

#### **Tabulated Data:**

DODAC	1305-A365
UNO serial number	0012
UNO proper shipping	
name	
	weapons, inert pro
	iectile

Weight	1065 gr
Length	2.55 in. (64.9 mm
Tracer	NA
Primer	Percussion
Fuze	
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	• '
Type	Hi Skor 700X
Weight	3.5 gr
··	J. J. B.

#### **Performance:**

XX7. : ..1. 4

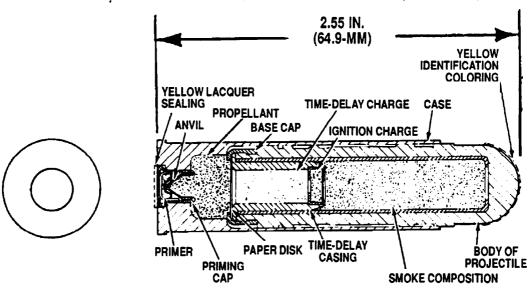
Chamber pressure	NA
Velocity	100 mps, 4 m from
	muzzle; 328 fps,
	15 ft from muzzle

## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
5	<b>AMMUNITION</b>
Drawing number	9098295

#### References:

# CARTRIDGE, 14.5MM, TRAINER-SPOTTER, M182A1



U AR 5974

#### **Type Classification:**

STD - AMCTC 138.

#### Use:

Artillery Trainer, M31.

# **Description:**

TRAINER-SPOTTER Cartridge. The cartridge has a chemical-filled (smoke composition) projectile. It is identified by the markings on the cartridge case and a yellow projectile tip. The cartridge has no fuze and it uses a time delay element to provide an air burst.

#### **Function:**

When the cartridge is fired, the heat of the propellant gases ignites the delay element. The delay element burns 6 seconds and, in turn, ignites the smoke composition. The heat and pressure produced by the burning filler rupture the plastic closing disc at the projectile base and a visible puff of smoke is emitted.

#### **Tabulated Data:**

DODAC	1305-A366
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro
	iectile .

Weight	1065 gr
Length	2.55 in. (64.9 mm)
Tracer	NA
Primer	Percussion
Fuze	Powder train delay
Explosive:	,
Type	NA
Weight	
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Hi Skor 700X
Weight	
T. 0	

#### Performance:

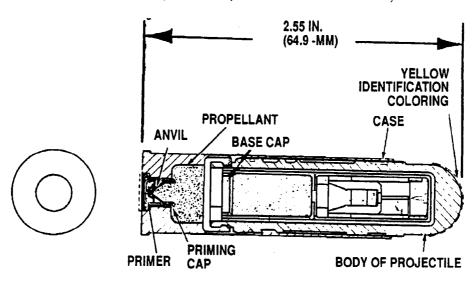
Chamber pressure	NA
Velocity	100 mps, 4 m from
	muzzle; 328 fps,
	15 ft from muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
8	<b>AMMUNITION</b>
Drawing number	9098297

## References:

# CARTRIDGE, 14.5MM, TRAINER-SPOTTER, M183A1



U AR 5975

# Type Classification:

STD - AMCTC 138.

#### Use:

Artillery Trainer, M31.

#### **Description:**

TRAINER-SPOTTER Cartridge. The cartridge consists of a cartridge case, a chemical-filled (smoke composition) projectile, and a fuze with a small explosive charge to provide a visible and audible verification at point of impact. The cartridge is identified by the markings on the cartridge case and a yellow projectile tip.

#### **Function:**

The projectile impacts with the target. The point detonating fuze functions and an explosion charge within the fuze ignites the smoke composition and ejects it out the base of the projectile.

#### **Tabulated Data:**

DODAC	
UNO serial number	0012
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	1065 gr

Tracer	NΔ
Primer	
Fuze	PD
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	Hi Skor 700X
Weight	3.5 gr
	0.0 5.

Length----- 2.55 in. (64.9 mm)

# Performance:

Chamber pressure	NA
Velocity	100 mps, 4 m from
	muzzle; 328 fps,
	15 ft from muzzle

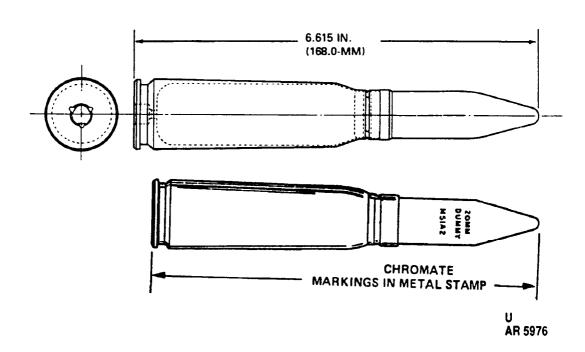
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT shipping class DOT designation	SMALL ARMS
J	<b>AMMUNITION</b>
Drawing number	9098293

# References:

# CHAPTER 14 20MM CARTRIDGES

# CARTRIDGE, DUMMY, 20MM, M51A2



# **Type Classification:**

STD - AMCTC 6900.

# Use:

Guns, 20mm, M39, M61, M139, M168, M195 and M197. The cartridge is a completely inert assembly used for filling the conveyor system during shipment or storage and for nonfiring system checkout.

# **Description:**

**DUMMY** Cartridge.

# **Tabulated Data:**

DODAC	1305-A924
Weight	3850 gr
Length	6.615 in. (168 mm)
Tracer	
Primer	
Fuze	
Explosive:	
Type	NA
Type Weight	NA

Incendiary:	
Type	NA
Type Weight	NA
Propellant:	
Type Weight	NA
Weight	NA

#### Performance:

Chamber pressure	NA
Velocity	NA

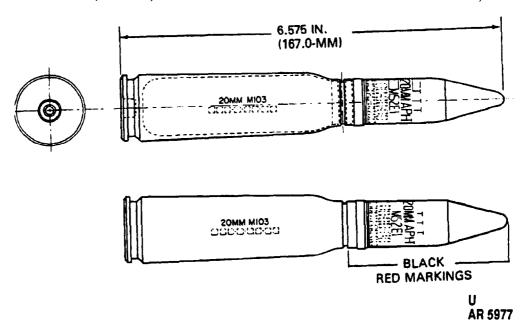
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT shipping class DOT designation	NONEXPLOSIVE
Do I designation	AMMUNITION
Duarring march an	
Drawing number	11070708

# References:

SB 700-20 TM 9-1005-286-10 TM 9-1300-206

# CARTRIDGE, 20MM, ARMOR PIERCING INCENDIARY-TRACER, M52E1



# **Type Classification:**

STD - OTCM 37404.

#### Use:

Guns, 20mm, M39, M61 and M195. The cartridge is used against moderately armed targets and when incendiary effect is needed.

## **Description:**

ARMOR PIERCING INCENDIARY-TRACER Cartridge. The armor piercing shot is the main part of the projectile. The ballsitic cap (ogive) contains an incendiary composition. The cartridge is identified by a projectile painted black with red markings.

#### **Function:**

The nose/ogive of the projectile impacts with the target and ruptures, and the incendiary composition ignites upon exposure to the air.

#### **Tabulated Data:**

DODAC	1305-A870
Weight	3900 gr
Length	
Tracer	R284
Primer	
F1170	

Type	NA
Weight	NA
Incendiary:	
Type Weight	I280
Weight	65 gr
Propellant:	8-
Type	WC 870 or WC 872
Weight	MBR (585-805)

#### Performance:

Explosive:

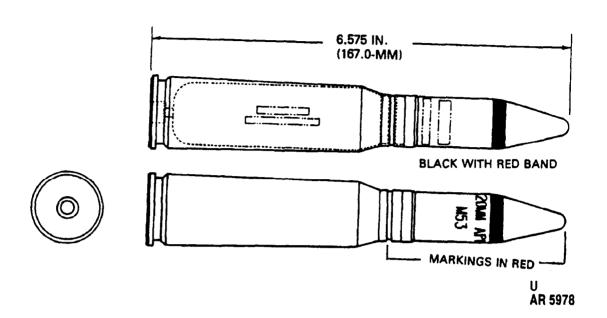
Chamber pressureVelocity	3380 fps, 78 ft from
	m1177 e

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	
DOT shipping class	Α
DOT designation	AMMUNITION
_	FOR SMALL
	ARMS WITH
	INCENDIARY
	PROJECTILES
Drawing number	7259218

#### **References:**

# CARTRIDGE, 20MM, ARMOR PIERCING INCENDIARY, M53



# **Type Classification:**

STD - OTCM 36841.

#### Use:

Guns, 20mm, M39, M61 and M168. The cartridge is used against armored targets, and functions with a combined incendiary and penetrating effect.

# **Description:**

ARMOR PIERCING INCENDIARY Cartridge. The body of the projectile is a solid shot made from bar alloy steel. The nose of the projectile is made from aluminum alloy and is charged with three increments of incendiary composition. The projectile is painted black with red band and red markings.

# Tabulated Data:

DODAC	1305-A798
Weight	3980 gr
Length	6.575 in. (167 mm)
Tracer	
Primer	
Fuze	NA
Explosive:	
Type	NA
Weight	NA

Incendiary:	
Type	No. 23 or No. 136
•	and No. 68
Weight	65 gr
Propellant:	
Type	WC 870 or WC 872
Weight	MBR (585-605 gr)

#### Performance:

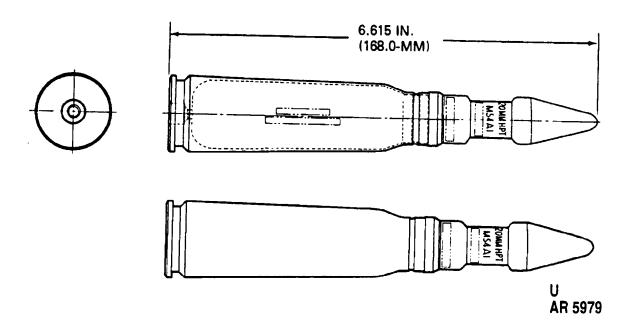
Chamber pressureVelocity	3380 fps, 50 ft fron
	muzzle

#### **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4G
Storage code	Class V
DOT shipping class	Α
DOT designation	AMMUNITION
· ·	FOR SMALL
	ARMS WITH
	INCENDIARY
	PROJECTILES
Drawing number	

# References:

# CARTRIDGE, 20MM, BALL, HIGH PRESSURE TEST, M54A1



# Type Classification:

STD - AMCTC 6899.

#### Use:

Guns, Automatic, 20mm, M39 and M61 chambered for the M103 case configuration. The cartridge is used for proof testing of 20mm weapons and barrels during manufacture and repair.

# **Description:**

<u>BALL</u> Cartridge. The cartridge is a solid steel projectile, under cut behind the ogive to control projectile weight, for developing high chamber pressure. The cartridge is identified by a stannic-stained (silvered) cartridge case.

#### **Tabulated Data:**

DODAC	1305-A892
UNO serial number	0339
UNO proper shipping	
name	
	weapons, inert pro-
	jectiles
Weight	4392 gr
Length	6.615 in. (168 mm)
Tracer	NA
Primer	Electric, M52A3B1

Fuze	NA
Explosive: Type	NΑ
Weight	N/A
	NA
Incendiary:	374
Type	NA
Weight	NA
Propellant:	
Type	WC 870 or WC 872
Weight	MBR

#### **Performance:**

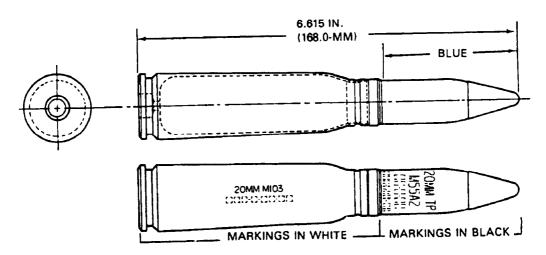
Chamber pressure	
	psi (copper)
Velocity	NA

# **Shipping and Storage Data:**

Explosive hazard class	1
Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	

# References:

# CARTRIDGE, 20MM, TARGET PRACTICE, M55A2



U AR 5980

# Type Classification:

STD - AMCTC 7741.

#### Use:

Guns, 20mm, M39, M61 and M68. The cartridge is a training round intended as a substitute for a service round to be used in target practice.

# **Description:**

TARGET PRACTICE Cartridge. The one piece projectile cavity is hollow. The nose (ogive) made of aluminum or steel is swaged to the projectile body. The projectile is painted blue with markings in black. It consists of a solid projectile without a fuze.

#### **Function:**

The projectile is inert, therefore no specific function takes place upon impact except penetration of the target.

#### **Tabulated Data:**

DODAC	1305-A897
UNO serial number	0339
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectiles
Weight	3935 gr

Length	6.615 in. (168 mm)
Tracer	NA
Primer	Electric, M52A3B1
Fuze	NA
Explosive:	
Type	NA
Weight	
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 870 or WC 872
Weight	MBR (585 or
8	
weignt	605 gr)

#### Performance:

Chamber pressureVelocity	3380 fps, 78 ft fron
	muzzle

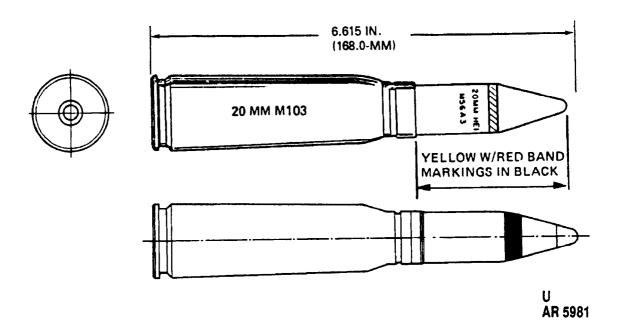
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
_	<b>AMMUNITION</b>
Drawing number	7258817

#### References:

SB 700-20 TM 9-1005-286-10 TM 9-1300-206

# CARTRIDGE, 20MM, HIGH EXPLOSIVE INCENDIARY, M56A3/M56A4



# **Type Classification:**

M56A3: STD - LCC-B, MSR 03816015. M56A4: STD - LCC-A, MSR 03816015.

#### Use:

Guns, 20mm, M39, M61, M168 and M195. The cartridge is for use against ground targets, including lightly armored vehicles, functioning with both explosive and incendiary effect. The projectile consists of a high explosive incendiary (HEI) charge and is assembled with the M505A3 fuze.

# **Description:**

HIGH EXPLOSIVE INCENDIARY Cartridge. The projectile is thin-walled steel. A base plate is attached to the projectile to prevent ignition of the incendiary mixture by the propellant gases. A point-detonating (PD) fuze is screwed into the nose of the projectile.

#### **Function:**

The M505A3 fuze is a point-detonating, single-action fuze intended to function upon impact with the target.

# **Difference Between Models:**

The models differ in the method of loading the projectiles. The M56A3 has the HE mix and the incendiary mix combined in one pellet. The M56A4 has the incendiary pellet inserted into the projectile, then the HE mix pellet is added. This improves fire start capability.

#### **Tabulated Data:**

DODACUNO serial numberUNO proper shipping	
name	Cartridges for
	weapons, with
	bursting charge
Waight	
Weight	อยออ gr
Length	6.615 in. (168 mm)
Tracer	
Primer	Electric, M52A3B1
Fuze	DD M505A2
	I D, MOODAO
Explosive:	
Type	H761
Weight	165 gr
Incendiary:	8
Type	I136
Weight	
	20 g1
Propellant:	
Type	WC 870 or WC 872
Weight	MBR (585 or

 $605 \, \mathrm{gr})$ 

Performance:

Chamber pressure ----- 60,500 psi Velocity ----- 3380 fps, 78 ft from

muzzle

DOT designation ----- AMMUNITION FOR SMALL

ARMS WITH EXPLOSIVE

Drawing number ----- PROJECTILES 7259023 (M56A3); 11075861 (M56A4)

Shipping and Storage Data:

Quantity-distance class/

SCG ----- 1.2E (04) Storage code ----- Class V DOT shipping class ----- A

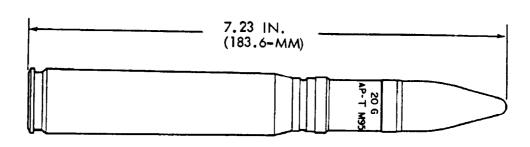
References:

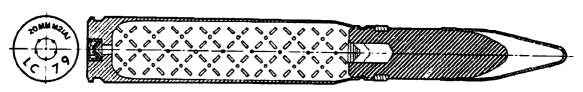
**DARCOM 700-3-2** 

SB 700-20

TM 9-1005-286-10 TM 9-1300-206

# CARTRIDGE, 20MM, ARMOR PIERCING-TRACER, M95





U AR 5982

# Type Classification:

CON - OTCM 36841.

# Use:

Guns, 20mm, M3 and M24A1.

# **Description:**

ARMOR PIERCING-TRACER Cartridge. The projectile is a solid shot type, made from bar or forged steel. A steel windshield is crimped to the forward part of the projectile body. The base of the projectile contains a red tracer composition.

#### **Function:**

When the primer is initiated, the propellant ignites. Ignition of the propellant ignites the tracer composition in the base of the projectile. The tracer burns the first 2.25 seconds of projectile flight, or an approximate range of 1,400 yards.

#### **Tabulated Data:**

DODAC	1305-A848
Weight	3990 gr
Length	7 23 in (183 6 mm)
Tracer	
Tracer	11204

Primer	
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	75-1-177A
Weight	470 or
	-10 pt

#### **Performance:**

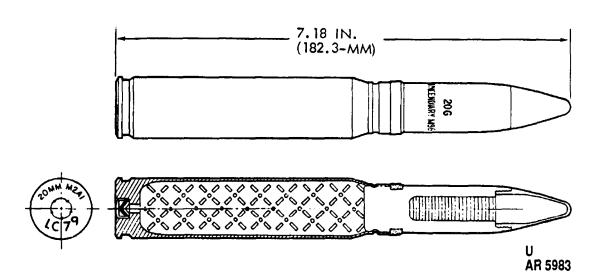
Chamber pressure	51,000 psi
Velocity	2680 fps, 78 ft from
	1111770

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
J	<b>AMMUNITION</b>
Drawing number	75-1-177

#### References:

# **CARTRIDGE, 20MM, INCENDIARY, M96**



# **Type Classification:**

CON - OTCM 36841.

## Use:

Guns, 20mm, M3 and M24A1.

#### **Description:**

INCENDIARY Cartridge. The body of the projectile is made from cold dracon steel. The projectile nose and body are filled with incendiary composition.

#### Function:

Impact with the target by the projectile produces compression of the heat and friction sensitive elements in the incendiary mixture causing ignition of the mixture.

#### **Tabulated Data:**

DODAC	1305-A776
UNO serial number	0009

UNO proper shipping	
name	Ammunition,
	incendiary
Weight	3850 gr
Length	7.18 in. (182.3 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	T 136
Weight	
Propellant:	0.02 02
Type	75-1-178A
Weight	
Weight	410 gr

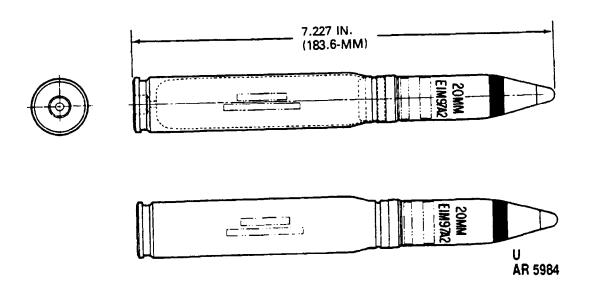
## Performance:

Chamber pressure	51,000 psi
Velocity	2680 fps, 78 ft from
-	muzzle

# **Shipping and Storage Data:**

Quantity-distance class/		
SCG	1.2G	
		<b>T</b> 7
Storage code	Class	V
DOT shipping class	Α	
2 - 1 2		

# CARTRIDGE, 20MM, HIGH EXPLOSIVE INCENDIARY, M97A2



# Type Classification:

STD - AMCTC 4376.

#### Use:

Gun, 20mm, M24A1.

# **Description:**

HIGH EXPLOSIVE INCENDIARY Cartridge. The projectile has a hollow body filled with an incendiary composition and a high explosive (called RDX). The base of the projectile has a base cover and the forward end has a point-detonating (PD) fuze.

#### Function:

When the primer is initiated, the propellant ignites. Ignition of the propellant provides hot gases to propel the projectile from the weapon. Upon impact, the point detonating fuze functions, initiating the high explosive filler and dispersing the incendiary composition.

#### **Tabulated Data:**

DODAC	1305-A845
Weight	4000 gr
Length	7.227 in.
•	(183.6 mm)
Tracer	NA
Primer	Electric, M52A3B1

Fuze	PD, M505A3
Explosive:	
<u>Type</u>	H761
Weight	120 gr
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 875 or
	IMR 7013
Weight	MBR

#### Performance:

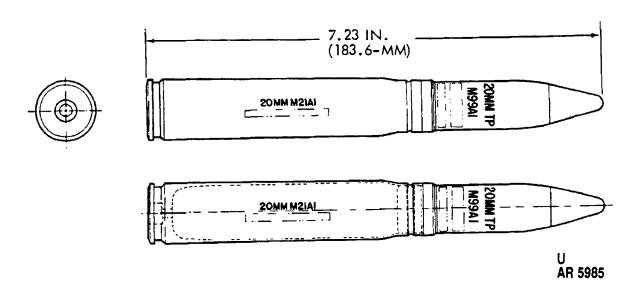
Chamber pressureVelocity	51,000 psi 2680 fps, 78 ft from muzzle
--------------------------	--

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	
DOT shipping class	
DOT designation	
	FOR SMALL
	ARMS WITH
	EXPLOSIVE
	PROJECTILE
Drawing number	7259063

#### **References:**

# CARTRIDGE, 20MM, TARGET PRACTICE, M99A1



# Type Classification:

STD - OTCM 37403.

# Use:

Gun, 20mm, M24A1. The cartridge is used for training, gun testing, and gun system function tests.

## **Description:**

TARGET PRACTICE Cartridge. The cartridge contains a hollow, inert projectile which has a cavity to control the weight. The aluminum nose is swaged to the body.

#### Function:

The projectile is inert, therefore no specific function takes place except target penetration.

# Tabulated Data:

DODAC	1305-A847
Weight	4000 gr
Length	7.23 in. (183.6 mm)
Tracer	NA
Primer	
Fuze	

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	IMR 7013 or
	WC 875
Weight	500 gr

## Performance:

Chamber pressureVelocity	2680 fps, 78 ft from
•	muzzle

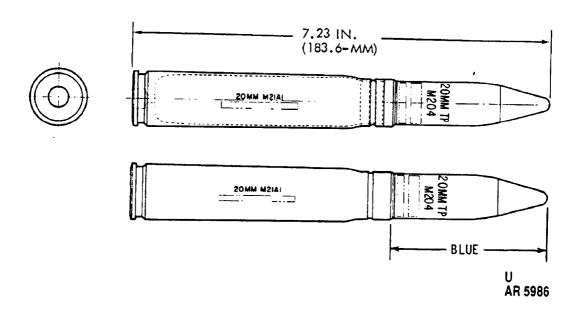
## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS
U	<b>AMMUNITION</b>
Drawing number	7258849

## **References:**

SB 700-20 TM 9-1300-206

# CARTRIDGE, 20MM, TARGET PRACTICE, M204



# **Type Classification:**

STD - AMCTC 4762.

#### Use:

Guns, 20mm, M3 and M24A1. The cartridge with inert projectile is used in training, gun testing, and gun system function testing.

# **Description:**

<u>TARGET PRACTICE</u> Cartridge. The cartridge has a blue painted projectile. The body has a cavity to control the weight and the aluminum nose is swaged to the body.

# **Function:**

No specific function takes place upon impact except target penetration.

## **Tabulated Data:**

DODAC	1305-A777
UNO serial number	

UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectiles
Weight	4000 gr
Length (max)	7.23 in. (183.6 mm)
Tracer	NA
Primer	Percussion, M36A2
Fuze	NA
Explosive:	
Type	NA
Weight	
Incendiary:	- 1
Type	NA
Weight	NA
Propellant:	• 1
Type	WC 875 or
-	IMR 7013
Weight	
-	

# Performance:

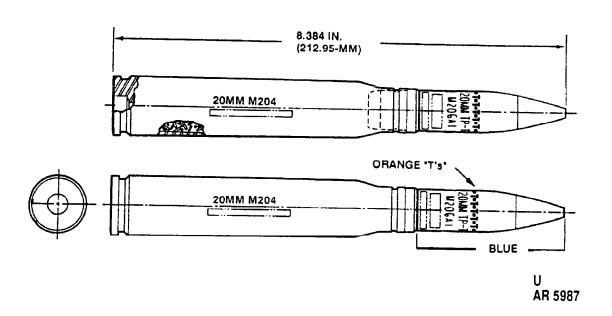
## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	

# TM 43-0001-27

DOT shipping class C DOT designation 'SMALL ARMS	References:
AMMUNITION Drawing number 7259106	SB 700-20 TM 9-1300-206

# CARTRIDGE, 20MM, TARGET PRACTICE-TRACER, M206A1



# **Type Classification:**

STD - AMCTC 4762.

## Use:

Gun, 20mm, Automatic, M139. The cartridge is used in training and operation of gun systems with tracer characteristics for visual sighting to target.

## **Description:**

TARGET PRACTICE-TRACER Cartridge. The cartridge has a blue painted projectile body with a row of orange "T's" at the front of the projectile body.

#### **Tabulated Data:**

1305-A790
0339
Cartridges for
weapons, inert pro-
iecitles
4886 gr
8.384 in.
(212.95 mm)

Tracer	R284
PrimerFuze	Percussion, M115
Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	CR 8325
Weight	MBR (585-605 gr)

# Performance:

Chamber pressure (max) --- 54,000 (copper) Velocity------ 3430 fps, 78 ft from muzzle

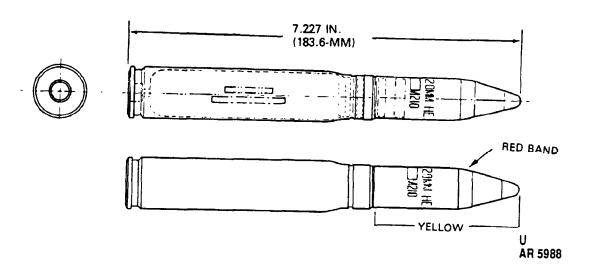
# **Shipping and Storage Data:**

Quantity-distance class/ SCG ----- 1.4C Storage code ----- Class V DOT shipping class ----- C DOT designation ----- SMALL ARMS AMMUNITION Drawing number ----- 10542655

#### References:

SB 700-20 TM 9-1300-206

# CARTRIDGE, 20MM, HIGH EXPLOSIVE INCENDIARY, M210



#### **Type Classification:**

STD - AMCTC 5433.

# Use:

Guns, 20mm, M3 and M24A1. The projectile is effective against aircraft and other targets that are not heavily armored.

#### Description:

HIGH EXPLOSIVE INCENDIARY Cartridge. The cartridge has a yellow painted projectile body with a red band, approximately 1/4 inch wide, at forward end. The projectile has a steel body with a cavity filled with RDX and aluminum and a point-detonating (PD) bore-safe fuze.

#### Function:

The projectile fuze arms in flight. Upon impact, the fuze detonates the projectile causing fragmentation of the body with an incendiary effect.

#### **Tabulated Data:**

DODAC	1305-A863
UNO serial number	0009

UNO proper shipping	
name	Ammunition,
	incendiary
Weight (approx)	4000 gr
Length (max)	7.227 in.
	(183.6 mm)
Tracer	
Primer	Percussion, M36A2
Fuze	PD. M505A3
Explosive:	,
Type	H761
Weight	
Incendiary:	<b>_</b> -
Type	NA
Weight	NA
Propellant:	
Type	WC 875 or
<i>.</i> .	IMR 7013
Weight	
_	

#### Performance:

Chamber pressure (max)	51,000 psi (copper)
Velocity	$2680 \pm 50 \text{ fps}, 78 \text{ ft}$
	from muzzle

#### Shipping and Storage Data:

Quantity-distance class/	
SCG	1.2E(0.4)
Storage code	
DOT shipping class	Δ

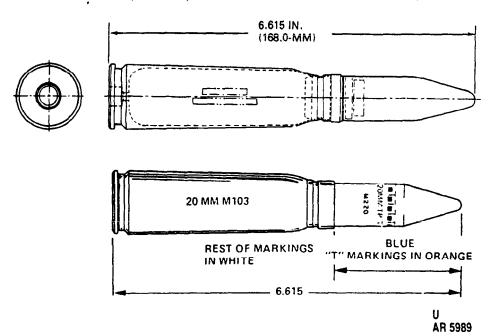
DOT designation ------ AMMUNITION FOR SMALL ARMS WITH EXPLOSIVE PROJECTILES

MS WITH SB 700-20
PLOSIVE TM 9-1300-206

References:

Drawing number ---- 7259105

# CARTRIDGE, 20MM, TARGET PRACTICE-TRACER, M220



# Type Classification:

STD - AMCTC 7404.

#### Use:

Guns, 20mm, M39, M61 and M168. The cartridge is for practice and training.

#### **Description:**

TARGET PRACTICE-TRACER Cartridge. The cartridge is ballistically and physically identical to the M55A2 cartridge except that a tracer element has been added to the base of the projectile. The projectile is painted blue with orange colored markings.

#### **Function:**

The projectile is similar to the M56A3 projectile, but has no high explosive incendiary charge and is assembled with a dummy fuze. The projectile does contain a tracer composition which burns visibly for a minimum of 1.9 seconds.

#### Tabulated Data:

DODAC	1305-A651
UNO serial number	0339
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectiles
Weight	3935 gr

Length	6.615 in. (168 mm)
Tracer	R505 or R403
Primer	Electric
Fuze	NA
Explosive:	
<u>Type</u>	NA
Weight	NA
Incendiary:	
Type	NA
Weight	NA
Propellant:	
Type	WC 870 or WC 872
Weight	MBR (585-605 gr)

#### Performance:

Chamber pressure	
Velocity	3380 fps, 78 ft from
	muzzle

## **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	Class V
DOT shipping class	A
DOT designation	SMALL ARMS
	AMMUNITION
Drawing number	7259146

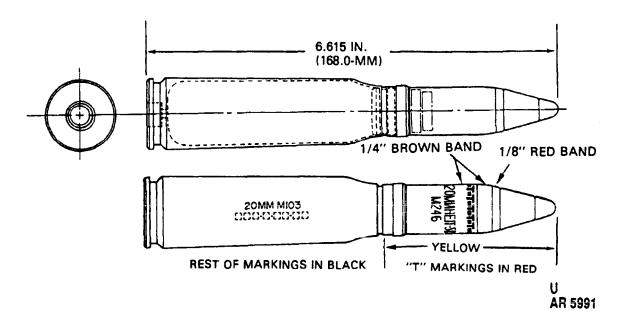
#### References:

SB 700-20 TM 9-1005-286-10 TM 9-1300-206 DOT designation ------ SMALL ARMS
AMMUNITION
WITH
EXPLOSIVE
PROJECTILES
PROJECTILES
7259268 (M242);
9341740 (M242A1)

**References:** 

SB 700-20 TM 9-1300-206

# CARTRIDGE, 20MM, HIGH EXPOSIVE INCENDIARY-TRACER, SELF-DESTROYING, M246/M246A1



# Type Classification:

M246: STD - LCC-B MSR 03816015. M246A1: STD - LCC-A MSR 03816015.

#### Use:

Gun, 20mm, M168. The cartridge is for use against aerial targets.

#### **Description:**

HIGH EXPLOSIVE INCENDIARY-TRACER, SELF-DESTROYING Cartridge.

#### Function:

The cartridge is assembled with an M505A3 point-detonating (PD) fuze. The projectile, in addition to the M505A3 fuze, consists of a high explosive incendiary (HEI) charge, self-destroying (SD) relay charge, and a tracer charge. These charges form the SD chain. The tracer burns for about 3 to 7 seconds, whereupon the relay charge is ignited which detonates the HEI charge low order. If impact with target occurs prior to self-destruction, the M505A3 fuze causes the HEI charge to detonate high order.

# **Difference Between Models:**

The basic difference between the models is in the loading of the projectiles. In the M246

projectile, the incendiary mix and the HE mix are combined in one pellet. In the M246A1 projectile, the incendiary is loaded as a separate pellet. The HE mix is also loaded as a separate pellet along with the SD relay charge pellet and the tracer charge pellet. This improves fire start capability.

DODAC:	
M246	1305-A791
M246A1	1305-A792
UNO serial number	0321
UNO proper shipping	
name	Cartridges for
	weapons, with
	hursting charge
Weight	4070 gr
Length	6.615 in. (168 mm)
Tracer	R505
Primer	Electric, M52A3B1
Fuze	PD. M505A3
Explosive:	,
Type	H761
Weight	115 gr
Incendiary:	8-
Type	NA
Weight	
Propellant:	
Type	WC 870
Weight	MBR (585-605 or)
0	1.1210 (000 000 gr)

Chamber pressure ------ 60,500 psi Velocity ------ 3380 fps, 50 ft from muzzle

DOT designation ----- AMMUNITION FOR SMALL **EXPLOSIVE PROJECTILES** 

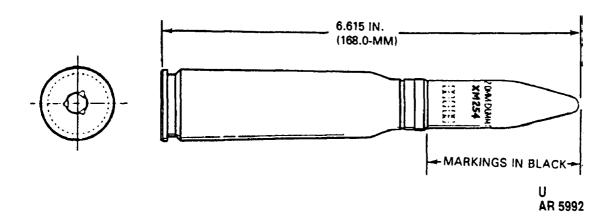
Drawing number:

**Shipping and Storage Data:** 

**References:** 

SB 700-20 TM 9-1005-286-10 TM 9-1300-206

# **CARTRIDGE, DUMMY, 20MM, XM254**



# **Type Classification:**

Not applicable.

# Use:

Guns, 20mm, M39, M61, M139, M168, M195 and XM197. The cartridge is for training of crews. The plastic material, instead of steel, reduces wear on gun components and fire mechanisms.

# **Description:**

 $\underline{DUMMY}$  Cartridge. The cartridge is of plastic construction.

# **Tabulated Data:**

DODAC	1305-A895
Weight	3850 gr
Length	6.615 in. (168 mm)
Tracer	NA
Primer	
Fuze	
Explosive:	
Explosive: Type	NA

Weight	NA
Incendiary:	B.T.A
Type	NA
Type	NA
Propellant:	
Type	NA
Weight	NA

# Performance:

Chamber pressure	NA
Velocity	NA

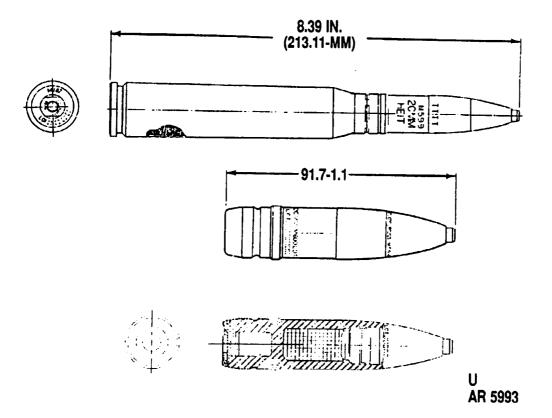
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT designation	NA
Drawing number	7259254

## References:

SB 700-20 TM 9-1005-246-24 TM 9-1005-286-10 TM 9-1300-206

# CARTRIDGE, 20MM, HIGH EXPLOSVIE INCENDIARY-TRACER, M599 FUZE POINT-DETONATING SELF-DESTROYING M594



# **Type Classification:**

STD - AMCTC 6391.

#### Use:

Gun, M139.

#### **Description:**

HIGH EXPLOSIVE INCENDIARY-TRACER Cartridge. The cartridge has a point-detonating (PD) self-destroying (SD) fuze M594. The projectile is a hollow body filled with 120 grams of high explosive incendiary (HEI) mixture with a tracer tablet at the base and the PD SD fuze screwed onto the nose.

#### **Function:**

When fired, the weapon firing pin initiates the primer which ignites the propelling charge. Gases produced by the burning propellant propel the projectile. The projectile shall function with high order detonation upon impact or, if the projectile does not impact on intended target within 4 to 7 seconds, a SD mechanism will cause high order detonation of the projectile.

DODAC	1305-A787
UNO serial number	0321
UNO proper shipping	3321
name	Cartridges for
	weapons, with
Type	bursting charge
Weight (approx)	317 g
Length	8.39 in.
	(213.11 mm)
Projectile (steel):	
Tracer	Tablet 1 17 g
Explosive (HEI mix)	120 σ
Fuze	PD SD M504 alu
1 420	
Color	minum
COM	Yellow with red "I"
	band, black mark-
_	ings
Cartridge case	Steel, M187
Propellant	VTL-1375-502-52 o
Primer percussion	M103

Chamber pressure ------ 49,500 psi
Velocity ------ 3460 fps, 78 ft from muzzle

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.2E
Storage code	Class IV
DOT shipping class	
DOT designation	SMALL ARMS
	AMMUNITION
	WITH
	EXPLOSIVE
	PROJECTILE

M528 shipping and storage of Material	container:
Material	Steel
Dimensions	14-9/16 x 9-39/64 x
	4-5/16 in.
Cube	0.35 cu ft
Drawing number C/R	10535815
Cube	4-5/16 in. 0.35 cu ft

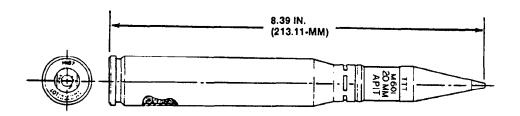
# Packing:

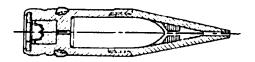
25 cartridges, 20mm linked with M601 armor piercing incendiary-tracer, cartridges in ratio with 3 M599 to 2 M601 in shipping and storage containers M528. Two shipping and storage containers (50 cartridges) in a wirebound box.

# References:

DARCOM 700-3-2 TM 9-1300-206

# CARTRIDGE, 20MM, ARMOR PIERCING INCENDIARY-TRACER, M601





U AR 5994

# **Type Classification:**

STD - AMCTC 4762.

#### Use:

Gun, M139.

# **Description:**

ARMOR PIERCING INCENDIARY-TRACER Cartridge. The tungsten-carbide core is the main part of the projectile, and is the penetrator. The ballistic cap (ogive) contains an incendiary pellet. A tracer tablet is at the base of the projectile. The projectile body is painted black with white markings and with red painted "T's" encircle the ogive (signifying tracer).

## Function:

When fired, the weapon firing pin initiates the primer which ignites the propelling charge. Gases produced by the burning propellant propel the projectile. Upon imact with the target, the nose (ogive) ruptures and the incendiary composition ignites on exposure to the air.

Complete round: UNO serial number UNO proper shipping	0009
name	Ammunition,
	incendiary
DODAC	
Type	API-T
Weight	310 g
Length	8.39 in.
<b>C</b>	(213.112 mm)
Cannon used with	M139
Projectile (111 g):	
Penetrator (core)	Tungsten-carbide
Body	Aluminum alloy
-	22.5 g
Windshield	Aluminum, 9.4 g
Incendiary	XM71 pellet, 0.45 g
Tracer	Tablet, 1.17 g
Fuze	NA
Color	
	marking with "T"
	red bound
Cartridge case	Steel, M187
Propellant (VTL 1375-502):	-, -
Weight (approx)	53 g
Primer (percussion)	

Chamber pressure ----- 49,500 psi

Velocity----- 3610 fps, 78 ft from

muzzle

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4G
Storage code	Class IV
DOM -1. : :1	A .

DOT shipping class ----- A
DOT designation ----- SMALL ARMS

**AMMUNITION** WITH

INCENDIARY PROJECTILE

M528 shipping and storage container:

4-5/16 in.

Cube ------ 0.35 cu ft Drawing number C/R---- 10535805

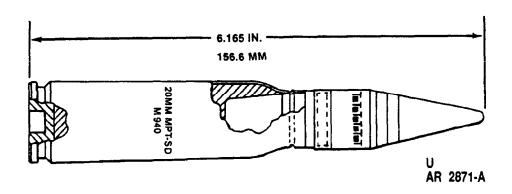
## Packing:

25 cartridges, 20mm linked with M599 high explosive incendiary-tracer cartridges in a ratio of 3 M599 to 2 M601 in shipping and storage container M528. Two containers in a wraparound crate.

# References:

DARCOM 700-3-2 TM 9-1300-206

# CARTRIDGE, 20MM, MULTIPURPOSE TRACE SELF-DESTROYING, M940



# **Type Classification:**

TC STD A - Approved March 13, 1989.

#### Use:

The existing Vulcan Air Defense System (VADS) and Product Improved Vulcan Air Defense System (PIVADS) M246 ammunition is incapable of providing defense against the modern enemy threat at combat ranges greater than 1,600 meters because of inherent performance limitations including poor flight characteristics, self-destroying ranges, and terminal effectiveness. Therefore, the Army decided to pursue acquiring a new round of ammunition for VADS/PIVADS which would exhibit better exterior ballistics and greater lethality than the existing M246 High Explosive Incendiary-Tracer Self-Destroying (HEI-T-SD) ammunition.

#### Description:

MULTIPURPOSE TRACE SELF-DESTROYING Cartridge. The cartridge is an improved fuzeless pyrotechnic initiated 20mm HE cartridge. The projectile consists of a heavy-walled steel body charged with explosive mix and an incendiary mix, and an aluminum nose charged with another incendiary mix. The projectile also has safe and arming (S&A), tracer, and self-destroying which is initiated by heat from combustion of the tracer composition. The lack of fuze permits an enhanced aerodynamic ogive shape which results in a reduction in drag factor and reduced time of flight, thereby extending the effectiveness of the VADS from 1,200 meters to 2,000 meters against aircraft targets. The M940 will replace

the 20mm M246 HEI-T-SD as the primary air defense cartridge for the VADS and any of its improved versions.

#### **Function:**

The projectile consists of a steel body charged with a HE mix, Composition A-4 (MIL-C-440), and an incendiary mix, Type I (equivalent I-68). The projectile has an aluminum nose charged with Type II incendiary (equivalent I-136). The hardened forebody of the projectile provides for defeat of lightweight armor (3/8 RHA at well over 500 m). The incendiaries provide a built-in delay when initiated on the thin skin of an aircraft, and the projectile explodes approximately 1 foot behind the skin. The M940 cartridge, therefore, is primarily intended for air defense but has a secondary roll against light armored vehicles. The M940 contains a chemical S&A intended to reduce the probability of functioning on a 0.04 aluminum plate at 1 meter from the muzzle. When initiated, all projectile fragments go forward.

0321
Cartridges for
weapons, with bursting charge
1305-A710
MPT-SD
264 g
$6.16\bar{5}$ in.
(156.6  mm)
M168

Projectile: Tracer-modified Primer-electric Fuze	M52A3B1
Explosive: Type	Comp A-4 4g
Incendiary: Type Weight Incendiary: Type Weight	1.2 g II
Incendiary: Type Weight	Perchlorate
Propellant: Type	

Chamber pressure (max)	60,500 psi
Velocity	$3350 \pm 45 \text{ fps}, 78 \text{ ft}$
_	from muzzle

# **Shipping and Storage Data:**

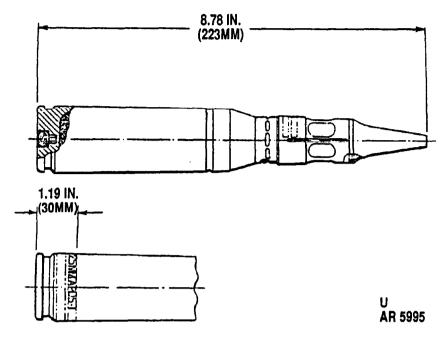
DOD hazard class/division/	
SCG	
DOT shipping class DOT designation	Class A explosive
DOT designation	CARTRIDGE FOR
Do I dobigitation	WEAPONS
<b>T</b>	
Drawing number	
NSN	1305-01-283-2134

# References:

TM 9-1300-206

# CHAPTER 15 25MM CARTRIDGES

# CARTRIDGE, 25MM, ARMOR PIERCING DISCARDING SABOT-TRACER, M791



# Type Classification:

STD - MSR 12796010.

#### Use:

Automatic cannon, 25mm, M242.

#### Description:

ARMOR PIERCING DISCARDING SABOTTRACER Cartridge. The cartridge is a fixed type, percussion primed 25mm ammunition, intended as the armor piercing service round to successfully engage lightly armored vehicles. The cartridge consists of a sabot encapsulated projectile body, crimped to a steel cartridge case containing 98 grams of extruded propellant, M115 percussion primer and booster pellet. The projectile body consists of a solid tungsten alloy penetrator, pressed on aluminum windshield, pressed-in tracer pellets, molded discarding-type nylon sabot, staked aluminum base and pressed-on polythylene nose cap.

# **Function:**

When fired, the weapon firing pin initiates the primer which ignites the propelling charge. Gases produced by the burning propellant propel the projectile from the cannon and ignite the tracer. Setback, centrifugal and air pressure forces cause the sabot to discard upon leaving the gun tube. The penetrator (core) is spin-stabilized and penetrates the target solely by kinetic energy.

#### Tabulated Data:

Complete round: DODAC UNO serial number UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
_	jectile
Type	
Weight	
Length	
Cannon used with	M242
Projectile:	
Penetrator (core)	Tungsten-alloy
Sabot	Nylon, aluminum
	base
Nose cap	Polyethylene
Tracer	
Explosive	NA
Fuze	
Color	Black with white
	markings
Cartridge case	
Propellant:	
Type	Radford AP225
Weight	0.221 lb
Primer percussion	
I	=

## Performance:

Chamber pressure	56,000 psi
Range	15,000 m
Muzzle velocity	1330 mps, 4370 fps
_	• •

# **Shipping and Storage Data:**

Quantity-distance class/	1.40
Storage code	Class IV
DOT shipping class DOT designation	A AMMUNITION
	FOR CANNON WITH SOLID
MCO1 -Limite man 1	PROJECTILE
M621 shipping and storage: Material	Polypropelene plastic
Weight (tactically packed)	•

Weight (empty)	7.94 lb
Dimensions	$13.8 \times 13.8 \times 5.5 \text{ in}.$
Drawing number C/R	12013533

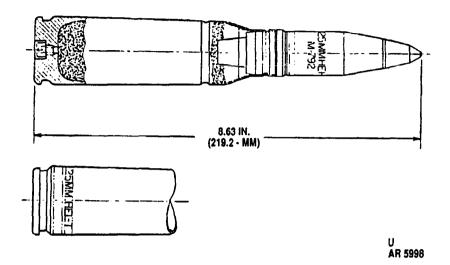
# Packing:

Tactical packing unit 30 linked cartridge in two 15-round belts packed nose-to-nose with two plastic separators in plastic shipping and storage container M621.

# References:

DARCOM 700-3-2 TM 9-1300-206

# CARTRIDGE, 25MM, HIGH EXPLOSIVE INCENDIARY-TRACER, M792 WITH FUZE POINT-DETONATING SELF-DESTROYING M758



#### **Type Classification:**

STD - MSR 12796010.

#### Use:

Automatic cannon, 25mm, M242.

# **Description:**

HIGH EXPLOSIVE INCENDIARY-TRACER Cartridge. The cartridge is a fixed type, percussion primed 25mm munition, intended as the high explosive service round to successfully engage unarmored ground targets. The cartridge consists of a high explosive incendiary (HEI) filled, one piece projectile body that is crimped to a steel cartridge case containing 90 grams of ball propellant, M115 percussion primer and booster pellet. The projectile body consists of a hollow C1045 steel body, screwed on M758 fuze, swaged iron rotating band, 32 grams of H761 HEI mix and pressed-in tracer pellets. Projectile length, including tracer boom, varies by manufacturer from 3.94 to 4.66 inches.

#### **Function:**

When fired, the primer is mechanically initiated by the weapon firing pin. The primer output ignites the booster pellet which, in turn,

ignites the propellant charge. The projectile is launched at a velocity of 1100 meters per second, achieving a maximum effective range of 3000 meters. Upon impact, the fuze functions and the HEI filler detonates dispersing the incendiary mixture. The self-destroying requirement is 6.2 seconds per minute and prior to impact.

Complete round:	
DODAC	1305-A975
UNO serial number	0321
UNO proper shipping	
name	Cartridges for
	weapons, with
	bursting charge
Type	
Weight	
Length	
Projectile:	0.00 III. (210.2 IIIII)
Body	Steel C1045
Tracer	Pollot
Explosive (HEI mix) Fuze	9101, 32 g
Color	
	band and black
<b>a</b>	markings
Cartridge case	Steel, C1030
Propellant:	
<u>Type</u>	
Weight	
Primer percussion	M115

Range ------ 3000 m Muzzle velocity ------ 1100 mps, 3610 fps Self-destruct ----- 6.2 mps

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.2E
Storage code	Class IV
DOT shipping class	
DOT designation	AMMINITION
DO I designation	FOR CANNON
	WITH
	EXPLOSIVE
	PROJECTILE

M621 shipping and storage	container:
Material	Polypropelene
Weight (tactically	
packed)	47.7 lb
Weight (empty)	· 7.94 lb
Dimensions	13.8 x 13.8 x 5.5 in.
Drawing number	12013230

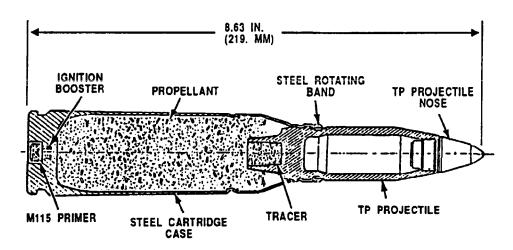
# Packing:

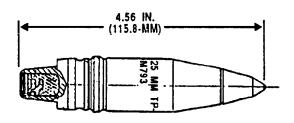
Tactical packing unit 30 linked cartridge in two 15-round belts packed nose-to-nose with two plastic separators in plastic shipping and storage container M621.

# **References:**

DARCOM 700-3-2 TM 9-1300-206

# **CARTRIDGE, 25MM, TARGET PRACTICE-TRACER, M793**





U AR 5999

# Type Classification:

STD - MSR 12796010.

## Use:

Automatic cannon, 25mm, M242.

#### **Description:**

TARGET PRACTICE-TRACER Cartridge. The cartridge is a fixed type, percussion primed 25mm munition, intended as a substitute for the high explosive incendiary with tracer service round for target practice in training, gun testing, and gun system functioning. The cartridge consists of a hollow, two piece projectile body that is crimped to a steel cartridge case containing 90 grams of ball propellant, M115 percussion primer and booster pellet. The projectile body consists of a hollow C1035 steel body screw-on steel nose piece, swaged iron rotating even band and pressed-in tracer pellets.

## Function:

The cartridge functions the same as the M792, except upon impact the projectile is inert.

Complete round:	
DODAC	1305-A976
UNO serial number	
	บออฮ
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
_	jectile
Type	TP-T
Weight	1.11 lb
Length	8 63 in (210 mm)
	0.00 III. (213 IIIII)
Projectile:	
Body	Steel, C1035/12/14
Tracer	Pellet
Explosive	
Fuze	
Color	Blue with white
	markings
Cartridge case	C1020
Cartridge case	C1090
Propellant:	
Type	WC 890
Weight	0.3 lb
ALCIRITO-	35115
Primer percussion	M119

Range ----- 6000 m, 196858E Muzzle velocity ----- 3609 fps, 78 ft from muzzle

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.4C
Storage code	11 B
DOT shipping class	Class B

DOT designation ----- AMMUNITION FOR CANNON WITH EMPTY PROJECTILE

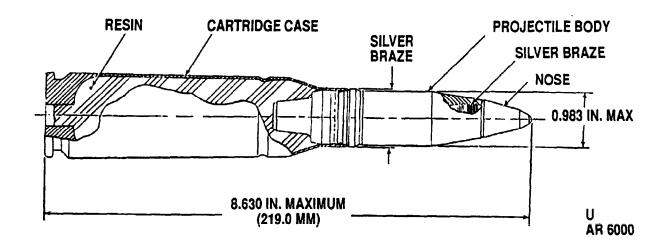
# Packing:

Tactical packing unit 30 linked cartridge in two 15-round belts packed nose-to-nose with two plastic separators in plastic shipping and storage container M621.

# References:

DARCOM 700-3-2 TM 9-1300-206

# CARTRIDGE, 25MM, DUMMY, M794



# Type Classification:

STD - DA Letter December 1981.

# Use:

Automatic cannon, 25mm, M242. The cartridge is used for non-firing system checkout for the 25mm automatic cannon M242 and training of the crew.

#### **Description:**

DUMMY Cartridge. The cartridge is a modified M793 target practice with tracer (TP-T) projectile silver brazed to a modified standard cartridge case and is completely inert. The cartridge case cavity is filled through an enlarged primer hole with an epoxy resin filler to approximate the weight of the M792 high explosive incendiary-tracer and M793 TP-T service cartridges. The threaded nose of the TP-T projectile is silver brazed to the projectile body to improve physical integrity. The external configuration of the M794 metal dummy cartridge (by use of standard components) is the same as that of the M792 HEI-T and M793 TP-T service cartridges.

#### **Tabulated Data:**

Complete round:	
DODAC	1305-A967
Type	Dummy, inert
Type	1.11 lb
Length	8.63 in. (219 mm)

Projectile:	
Body	Steel, C1035
Tracer	4 14 4
Explosive	NA
Fuze	- 1
Color	Silver braze
Cartridge case	Steel, C1030
Propellant:	•
Filler	Epoxy resin
Filler	(polyurethane)
Primer	ŃΑ

#### Performance:

Chamber pressure	NA
Velocity	NA

# Shipping and Storage Data:

Quantity-distance class/

SCG	NA
Storage code	
DOT shipping class	NA
DOT designation	NONEXPLOSIVE
	AMMUNITION
M621 shipping and storage	container:
Material	Polypropelene
	plastic
Length (max)	14.3 in.
Width (max)	13.8 in.
Height (max)	5.7 in.
Packaged weight (30	
linked rounds)	47.7 lb

Wooden box:	
Length	32.5 in.
Width	
Height	12 in.
Weight:	
Packed (40 rounds	
with link)	85.3 lb
Packed (80 rounds	
without link)	119 lb
Drawing number	12013880

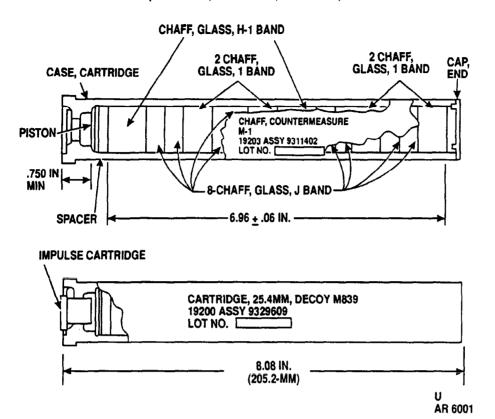
# Packing:

Packing consists of 30 linked cartridges in two 15-round belts in M621 plastic shipping and storage containers, or Packing consists of 50 linked cartridges in a wooden shipping and storage container, or Packing consists of 80 tubed cartridges in a wooden shipping and storage container.

# References:

**DARCOM 700-3-2** 

# CARTRIDGE, 25.4MM, DECOY, M839



# Type Classification:

STD - MSR 02816005.

### Use:

The cartridge is a decoy to provide an effective survivial counter-measure for Army aircraft against radar controlled weapon systems.

## **Description:**

<u>DECOY</u> Cartridge. The cartridge is ammunition item consisting of a plastic outer case nominally 1-inch wide x 1-inch high x 8-inches long, a payload made up of approximately 390,000 strands of aluminum coated glass fibers. The payload is sectioned into several bundles of chaff dipoles. There are three different lengths of bundles in the payload. In addition, the item contains a plastic end cap, plastic piston, felt spacer, and impulse cartridge.

# Function:

The cartridge is fired by electrical initiation of the impulse cartridge M796. The gases generated by the functioned impulse cartridge causes the piston to expel the chaff payload into the

air where it blooms into a radar reflecting cloud that breaks "Lock On" by radar-controlled weapon systems.

Complete round:	
DODAC	1305-A965
UNO serial number	0454
UNO proper shipping	
name	Igniters
Type	Decoy
Weight	0.34 ľb
Length	8.08 in. (205.2 mm)
Body	
Explosive	
Fuze	
Color	Unpainted
Drawing number	9329609
Specification number	
Payload:	1,112 0 00000(121)
Chaff	Aluminum costed
Chan	glass rods
Weight	0.06 lb
	0.20 10
Expelling charge:	Haraulas bulls are
Type	
337a : "Ja à	smokeless powder
Weight	
Impulse cartridge	M796

# **Shipping and Storage Data:**

Quantity-distance class/	1 4S
DOT shipping class	C
DOT designation	SQUIB, CLASS C
	EXPLOSIVE, HANDLE
	CAREFULLY
Packing box: Weight	67 lb
Dimensions	
	12.8 m.

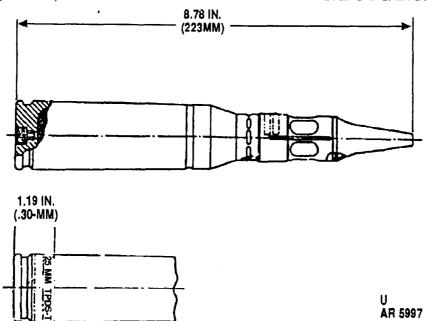
# Packing:

Two PA19 metal containers containing 50 decoy cartridges each (width-size) in wood box.

# References:

TM 9-1300-206

# CARTRIDGE, 25MM, TARGET PRACTICE DISCARDING SABOT-TARGET, M910



# Type Classification:

To be approved.

# Use:

Automatic cannon, 25mm, M242.

# **Description:**

TARGET PRACTICE DISCARDING SABOTTRACER Cartridge. The cartridge is a fixed type, percussion primed 25mm ammunition, intended as a training substitute for armor piercing service ammunition. The cartridge consists of a sabot encapsulated projectile body, crimped to a steel cartridge case containing 97 grams of extruded propellant, M115 percussion primer and booster pellet. The projectile body consists of a solid steel core, pressed-on aluminum windshield, pressed-in tracer pellets, molded discarding-type nylon sabot, staked aluminum base and pressed-on polyethylene nose cap.

#### **Function:**

When fired, the weapon firing pin initiates the primer which ignites the propelling charge. Gases produced by the burning propellant propel the projectile through the barrel and ignite the tracer. Centrifugal and air pressure forces cause the sabot, protective cap, and aluminum base to discard upon leaving the barrel. The high mass flow tracer decreases the base drag,

allowing the spin-stabilized core to match the armor piercing round trajectory to a range of 2000 meters. Upon tracer burnout, the lightweight core loses velocity rapidly and eventually tumbles when its velocity goes below the speed of sound.

Complete round:	
DODAC	1305-A940
UNO serial number	0328
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Type	
Weight	$421 \pm 15  \mathrm{g}$
Length	
Cannon used with	
Projectile:	1,1212
Core	Steel
Sabot	
	base
Nose cap	
Tracer	Magnesium
Explosive	
Fuze	
Color	
COIGI	markings
Cartridge case	
	Steel, C1050
Propellant:	Furms VDD51C4
Type	O O14 IL
Weight	
Primer Percussion	M119

Chamber pressure ----- 56,000 psi Range ----- 8000 m Muzzle velocity ----- 1545 mps, 5070 fps

# **Shipping and Storage Data:**

M621 shipping and storage:

Material------ Polypropylene plastic

Weight (tactically	
packed)	45 lb
Weight (empty)	8 lb
Dimensions	$13.8 \times 13.8 \times 5.5 \text{ in}$
Drawing number (for	
packing M910 in	
M621)	12556515
	12556515

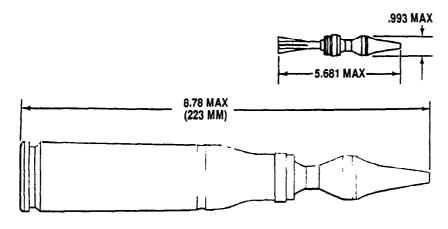
# Packing:

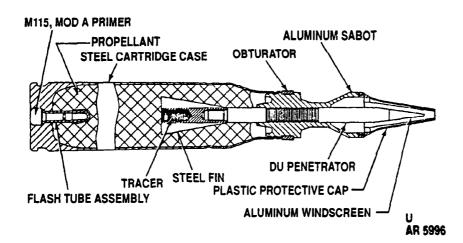
Tactical packing unit 30 linked cartridges in two 15-round belts packed nose-to-nose with two plastic separators in plastic shipping and storage container M621.

# References:

DARCOM 700-3-2 TM 9-1300-206

# CARTRIDGE, 25MM, ARMOR PIERCING FIN STABILIZED DISCARDING SABOT-TRACER, M919





#### **Type Classification:**

STD.

#### <u>Use:</u>

Automatic cannon, 25mm, M242.

#### **Description:**

ARMOR PIERCING FIN STABILIZED DISCARDING SABOT-TRACER Cartridge. The cartridge is a fixed type, percussion primed 25mm ammunition, intended to supersede the M791 for use in combat. The cartridge consists of a subcaliber projectile inside an aluminum sabot, crimped to a steel cartridge case containing 97 grams of extruded propellant, modified M115 percussion primer and flash tube. The subprojectile consists of a depleted uranium penetrator with a pressed-on aluminum wind-

screen and a threaded steel fin with pressed-in tracer pellets. The three piece aluminum sabot utilizes a nylon obturator and a polyethylene nose cap.

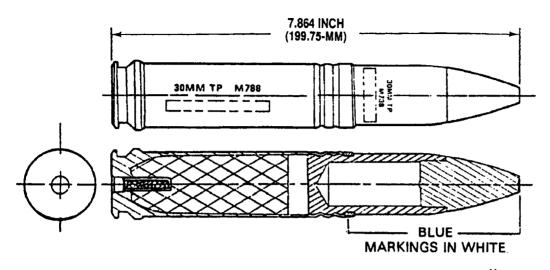
#### **Function:**

When fired, the weapon firing pin initiates the primer which ignites the propelling charge. Gases produced by the burning propellant propel the projectile through the barrel and ignite the tracer. Centrifugal, air, and gas pressure forces cause the obturator, sabot, and nose cap to discard upon leaving the barrel. The low drag subcaliber projectile travels along its trajectory stabilized by the fin and a small amount of spin. The tracer allows visual contact with the fired round as it travels downrange. Upon impact, kinetic energy stored in the subprojectile causes it to punch through an armored target and inflict considerable damage inside, prohibiting any further use of the target.

Tabulated Data:		Weight Primer percussion	98 ± 3 g M115 Mod A
Complete round:		Doufourson	
DODAC		Performance:	
UNO serial number	0328		
UNO proper shipping		Chamber pressure	56,000 psi
name	Cartridges for weapons, inert pro-	Muzzle velocity	1420 mps, 4659 fps
	jectile	Shipping and Storage Da	ıta:
Type	APFSDS-T		<del></del>
Weight		DOD hazard class/SCG	1.2C
Length		Storage code	
Cannon used with	M242	DOT designation	AMMUNITION
Projectile:			FOR CANNON
Core			WITH SOLID
Sabot			PROJECTILES
Nose cap	Polyethylene	UN serial number	0328 and 2912
Tracer			
Explosive	NA	Packing:	
Fuze			
Color		Tactical packing unit 30	linked cartridges in
	obturator	two 15-round belts packed	d nose-to-nose with
Cartridge case	Steet, C1090	two plastic separators in	
Propellant: Type	Haraules HFS9053	storage container M621.	
Type	Hercules HED3000		

# CHAPTER 16 30MM CARTRIDGES

# CARTRIDGE, 30MM, TARGET PRACTICE, M788



U AR 6002

# Type Classification:

STD.

# Use:

Automatic cannon, 30mm, XM230 (U.S.), ADEN MK IV (NATO), DEFA 552/553 (NATO). The cartridge is used in target practice.

# **Description:**

TARGET PRACTICE Cartridge. The cartridge has a blue painted projectile with white markings. The inert/solid projectile is a three piece assembly consisting of steel body with cavity, rotating band, and aluminum nose piece. The cartridge case is aluminum.

## **Function:**

The cartridge consists of an inert, solid projectile without a fuze. No function takes place except penetration of target.

# **Tabulated Data:**

DODAC	1305-B118
UNO serial number	0339
UNO proper shipping	
name	Cartridges for
	weapons, inert pro-
	jectile
Weight	5371 gr

Length	7.864 in.
	(199.75  mm)
Tracer	NA
Primer	Electric PA520
Fuze	NA
Explosive:	*121
Type	NΔ
Weight	NIA
Incendiary:	IVA
	NT A
Type	NA
_ Weight	NA
Propellant:	
Type	WC 855
Weight	MBR. 50 gr
•	

## Performance:

Chamber pressure (avg)	40,600 to 44,950
Velocity	psi (280-310 MPa) 2640 fps (805 mps)

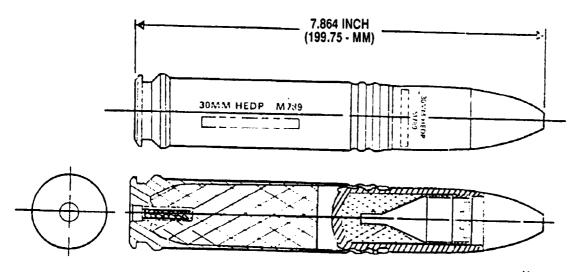
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	
Storage code	Class V
DOT shipping class	В
DOT designation	<b>AMMUNITION</b>
_	FOR CANNON
	WITH SOLID
	<b>PROJECTILES</b>
Drawing number	28114038

# References:

SB 700-20 TM 9-1300-206

# CARTRIDGE, 30MM, HIGH EXPLOSIVE DUAL PURPOSE, M789



U AR 6003

# Type Classification:

STD.

# Use:

Automatic cannon, 30mm, M230 (U.S.).

# **Description:**

HIGH EXPLOSIVE DUAL PURPOSE Cartridge. The cartridge consists of a steel projectile body loaded with HMX explosive and spin compensated shaped charge liner, point detonating (PD) bore safe fuze and aluminum cartridge case.

## **Purpose:**

The projectile fuze arms in flight. Upon impact, the fuze initiates the projectile explosive filler. Detonation of the filler charge collapses the shaped charge liner resulting in the formation of an armor-piercing jet. In addition, main charge detonation produces fragmentation of the projectile body resulting in antipersonnel effects in target vicinity.

## **Tabulated Data:**

DODAC	1305-B129
UNO serial number	0321

UNO proper shipping	
name	our or radion tot
	weapons, with
***	bursting charge
Weight	5371 gr
Length	7.864 in.
_	(199.75  mm)
Tracer	NA
Primer	Electric, PA520
Fuze	PD, M759
Explosive:	,
Type	PBXN-5
Weight	340 gr
Incendiary:	Ü
Type	NA
Weight	NA
Propellant:	
Type	WC 855
Weight	MBR, 50 gr
•	

## Performance:

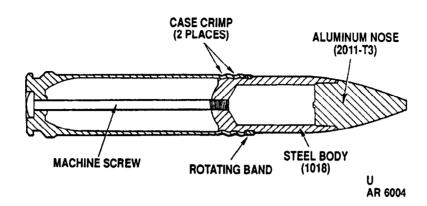
Chamber pressure (avg)	40,000 to 44,950
	psi (280-310 MPa)
Velocity	2640 fps (805 mps)

# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	1.2E(0.4)
Storage code	
DOT shipping class	A
2 0 1 bilipping class	11

DOT designation	AMMUNITION FOR CANNON	References:
Drawing number	WITH SOLID PROJECTILES	SB 700-20 TM 9-1300-206

# CARTRIDGE, 30MM, DUMMY, M848



Type	Class	ification:
------	-------	------------

STD - LCC-A MSR 04826009.

## Use:

Automatic cannon, 30mm, M230. The cartridge is used in drills of the weapon mechanism and to test link/delink functions.

# **Description:**

<u>DUMMY</u> Cartridge. The cartridge is completely inert with modified target practice (TP) projectile and cartridge case. Primer and propellant are replaced with threaded steel bolt attached to the base of the projectile body to maintain same weight and balance as the TP cartridge. The projectile body is steel with an aluminum nose.

## **Tabulated Data:**

DODAC	1305-B134
Weight	5445 or
Length	5445 gr 199.75 mm
Tracer	· NA
	NA
	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	
Weight	NA
Propellant:	
Type	NA
Weight	NA
Projectile:	
Length	104.28 mm
Case	Aluminum

## Performance:

Chamber pressure	NA
	NA

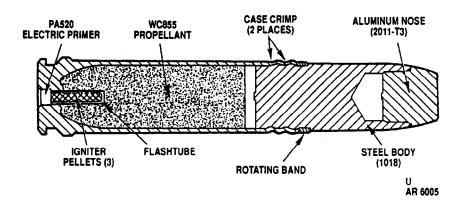
# **Shipping and Storage Data:**

Quantity-distance class/	
SCG	NA
Storage code	NA
DOT shipping class	NA
DOT shipping class	NONEXPLOSIVE
<b>U</b>	AMMUNITION
Drawing number	11825935

## **References:**

**DARCOM 700-3-2** 

# CARTRIDGE, 30MM, TEST, M883



# **Type Classification:**

STD - LCC-A, MSR 06827003.

#### Use:

Automatic cannon, 30mm, M230. The cartridge is used in proof testing the weapon and barrel

## **Description:**

TEST Cartridge. The cartridge is a high pressure test round which provides 120 percent chamber pressure to proof test the weapon and barrel. Case, primer, and propellant are identical to the target practice round. Excess pressure is achieved through a heavier 1018 steel projectile. Ogive is blunt and cartridge case is silvered to distinguish from service rounds.

## **Tabulated Data:**

DODACUNO serial number	
UNO proper shipping	O
name	weapons, with
	bursting charge
Weight	6821 gr
Length	174.35 mm
Tracer	NA
Primer	Electric, PA520
Fuze	NA

Explosive:	
Type	NA
Weight	NA
Incendiary:	
Type	NA
TypeWeight	NA
Propellant:	
Type	WC 855
Weight	772 gr
Projectile:	b
Weight	5031 gr
Length	79.13 mm

#### Performance:

Chamber pressure	NA
Velocity	NA

# **Shipping and Storage Data:**

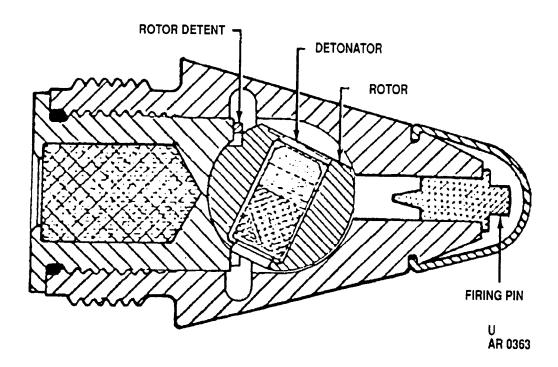
Quantity-distance class/ SCG	Class V B AMMUNITION FOR CANNON WITH SOLID
Drawing number	<b>PROJECTILES</b>

#### References:

DARCOM 700-3-2

# CHAPTER 17 POINT-DETONATING FUZES

# FUZE, POINT-DETONATING: M505A3



# Type Classification:

STD.

## Use:

The fuze is designed for use with the 20mm high explosive incendiary (HEI) and high explosive incendiary with tracer (HEI-T) cartridges against aircraft and light armor.

#### Description:

The point-detonating, single-action nose fuze is intended to function upon impact with the target. The fuze is used with the following HEI cartridges: M56A3/A4, M97A2, M210, M242 and M246.

#### **Function:**

Upon impact, the fuze initiates the HE filler and disperses the incendiary filler. The fuze arms in flight. Its delay is 10 to 35 feet.

# **Tabulated Data:**

Length (max)	1.23 in. (31 mm)
Weight	330 gr
Diameter	0.669 in. (17 mm)
Explosive components:	(21 2222)
Detonator	M47
Booster	T42

## Packing:

For shipping fuzes from the fuze manufacturer to the cartridge LAP facility, the fuzes are packed 200 fuzes per carton, six cartons per wooden box, 1200 fuzes per wooden box.

# Shipping and Storage Data:

Quantity-distance class	1.1
DOT shipping class	C
DOT designation	DETONATING
	FUZES, CLASS C
	EXPLOSIVES
Drawing number	7258863

#### DRORECAD PROBE **FIRING PIN SEAL RING** PISTON SEAL RESTRICTOR PISTON BASE PISTON SPRING SPRING SUPPORT PISTON SPRING RETAINER WASHER UPPER LOCKWEIGHT BODY ASSEMBLY (2) SELF DESTRUCT BALLS (2) **ROTOR WITH** LOCKWEIGHT DETONATOR ASSEMBLY ROLLER WEIGHT ASPHALT' SEAL SETBACK LOWER BODY SPRING SETRACK LEAD CUP WASHER ASSEMBLY SEAL -BASE PAD . AR 6007

# FUZE, POINT-DETONATING, SELF-DESTROYING: M758

# Type Classification:

STD - MSR 12796010.

#### Use:

The fuze is designed for use with the 25mm, high explosive incendiary with tracer, M792 cartridge, fired from the M242 cannon.

#### **Description:**

The point-detonating (PD), self-destroying (SD) M758 fuze is a delayed arming, PD SD type which also features graze impact sensitivity against hard and soft ground media as well as super-quick functioning upon target impact. The fuze consists of an ogive assembly crimped to a base assembly which houses a piston assembly, a piston spring, a body assembly, and a setback spring. The ogive assembly consists of a nylon probe within a steel ogive crimped to a steel probe cap while the base assembly consists of a lead charge within a steel base. The piston spring separates the piston assembly, consisting of an aluminum piston base, a piston seal, a seal ring, a steel restrictor, and a steel firing pin from the body assembly consisting of a nylon upper body, an aluminum lower body, a steel roller weight, a body, a zinc rotor, a detonator, two steel lockweights and lockweight

springs which, in turn, separate from the base assembly by the setback spring.

# Function:

Starting from the safe condition, acceleration forces, associated with projectile launch, cause the body assembly and piston assembly located within the fuze ogive to be simultaneously set back to the rear of the fuze against the setback spring. Air originally in the bottom of the fuze is forced through ports into the chamber above the piston. The high spin forces, which occur almost simultaneously with the setback forces, serve three purposes. The spin effect causes two lockweights to move against their firing pin which keeps the motor in a safe position. Spin also causes two balls to move outward into groove located around the inner part of the ogive, locking the body assembly rearward against the compressed force of the setback spring. Spin also causes a rubber piston seal to flare out against the bore of the ogive, resulting in necessary piston scaling action. As the projectile leaves the muzzle, the acceleration force dissipates and the piston becomes free to move forward under forces exerted by the piston spring. The rate of piston movement forward is controlled by air being forced through a porous metal restrictor. This action provides the required arming delay time to meet the fuze no-arm and all-arm requirements. As the piston approaches the forward position, the firing pin is withdrawn from the

rotor, allowing it to rotate to the armed posi-Centrifugal force acting on the roller weight causes it to move into a groove and lock the rotor in the armed position. The fuze is fully armed when the detonator is in line with the firing pin and lead assembly. The fuze functions under conditions of direct impact, graze impact or self destruct (non-impact). Direct impact with the target causes a super-quick function of the fuze due to the crushing action of the nose probe. The nose probe is driven into the piston assembly, moving it rapidly rear-The firing pin, as part of the piston ward. assembly, is thereby driven into the detonator and the explosive train is initiated. Function at low graze angles can occur in two ways. On soft targets where the projectile tends to enter the target, the nose probe is crushed driving the piston firing pin into the detonator. On low angle or graze impacts on hard targets, deceleration of the projectile and spin decay occurs. Spin decay reduces the centrifugal forces acting on the self-destruct balls and inertial force acts on the body assembly due to projectile deceleration. This, coupled with the stored energy of the setback spring, overrides the force exerted by the self-destruct balls and the body assembly is driven forward rapidly. The detonator contacts the firing pin and begins initiation of the explosive train. If no contact is made with a target, the fuze will cause the projectile to function by self-destruct action after a predetermined flight time. Projectile spin decay reduces the centrifugal force acting on the self-destruct balls. The stored energy in the setback spring overrides the holdback force of the balls and forces the body assembly forward to drive the detonator into the firing pin. Initiation of the explosive train occurs, and the projectile is detonated while still in flight.

# Tabulated Data:

ruze M / 58:	
DODAC	TBA

Length (max)	1.417 in. (36 mm)
Weight (approx)	0.041 lb (18.56 g)
Diameter (max)	0.661 in. (16.8 mm
Center of gravity (from base)	
Explosive components:	DD37/7 1 4 1 1
Detonator	RDX/Lend Axide
Lead charge	NOL 130, 0.038 g HMX, 0.285 g

# Packing:

For shipping fuzes from the fuze manufacturer to the cartridge LAP facility, one packing unit consists of 1000 fuzes individually inserted into foam trays (200 fuzes per tray and five trays per packing unit) which are stacked with chipboard separators and then packed into inner and outer fiberboard boxes.

Length	19 in. (482.6 mm)
Width	
Height	10.1 in. (256.5 mm)
Weight (empty)	11.5 lb (5.23 kg)
Weight (1000 fuzes)	52.6 lb (23.86 kg)

# Shipping and Storage Data:

Quantity-distance class/	
SCG	
Storage code	Class VI
DOT shipping class	A
DOT designation	DETONATING
	FUZES, CLASS A
	EXPLOSIVES
DOCAC	TBA
Drawing number	

#### References:

DARCOM 700-3-2 TM 9-1300-206

# PROBE CAP PROBE **OGIVE** PISTON ASSEMBLY (FIRING RING) (PISTON BASE) 1.43 INCHES (36,32 MILLIMETERS) (PISTON SEAL) **BODY HOLDER BALL (3) BODY AND SPRING ASSEMBLY** (PISTON SPRING) SPRING RETAINER) (SPRING SUPPORT WASHER) (UPPER BODY) (LOCKWEIGHT (2)) (LOCKWEIGHT SPRING (2)) (DETONATOR) (ROLLER WEIGHT) (LOWER BODY) 0.404 INCH (10.26 MILLIMETERS) SETBACK CUT SPITBACK LEAD ASSEMBLY 0.045 INCH 1.065 INCHES (1.14 MILLIMETERS) (27.05 MILLIMETERS) U AR 6008

# **FUZE, POINT-DETONATING:** M759 (XM714E6)

#### **Type Classification:**

STD.

# Use:

The fuze is designed for use with the 30mm high explosive dual purpose (HEDP) cartridges fired from the M230 automatic cannon.

#### **Description:**

Fuze M759 (formally designated as the XM714E6) is a point-detonating type with detonator and spitback charge. It is used with HEDP cartridge M789.

#### Function:

Prior to launch, the fuze detonator is housed in the rotor with the rotor locked in the safe position by the firing pin tip and two lockweights. On setback, the piston assembly (with firing pin) and body assembly (with detonator and rotor) are moved to the most rearward posi-

tion by the firing pin tip and two lockweights. As the fuzed projectile exits the gun muzzle, spin environment causes the lockweights to retract from the rotor and the two steel balls to engage the ogive groove, locking the body assembly in the position it had achieved at setback. In addition, spin causes the piston seal to flare and engage the ogive sidewalls which eliminates the air flow path between the ogive and piston. Movement of the piston assembly (firing pin) to the forward or armed position is delayed due to the regulated flow of trapped air through the restrictor until the projectile has traveled a minimum of 15 meters from the muzzle. After retraction to the firing pin from the rotor (last safety lock), the spin causes the rotor (with detonator) to rotate to the armed state, i.e., stab detonator aligned with firing pin and lead cup assembly. As the rotor achieves the armed position (150 m), the roller weight moves out-board from the rotor and engages the detent from the lower and upper bodies thus locking the rotor in armed state. Upon target impact, the probe nose piece is driven into the ogive forcing the piston assembly (firing pin) aft. The firing pin stabs the detonator, and its explosive initiates the lead cup assembly explosive which, in turn, ignites the main charge.

Tabulated Data:	Spitback lead assembly: PBXN, Type II, C1, 2
Type PD	or 3 0.25 g PBXN-5, Type I, C1
Weight 1.41 oz (40 g) Length 1.88 in. (47.72 mm)	or 3 0.06 g
Diameter 1.06 in. (27.05 mm) Material Aluminum Non-arm range 15 m	Shipping and Storage Data:
All-arm range 150 m	Quantity-distance class/
Explosive components: Detonator NOL No. 130 Priming Mix,	SCG 1.1B DOT shipping class A DOT designation DETONATING
$0.0055  \mathrm{g}$	FUZES, CLASS A
Lead Azide 0.015 g	EXPLOSIVE
RDX Type B 0.016 g	Drawing number 11834312

#### **CHAPTER 18**

# **ACCESSORIES**

#### **GENERAL**

- a. Accessories. Accessories used with small arms ammunition, such as clips and metallic belt links, are described in this chapter. These items are listed and packed as indicated in SC 1305/30-IL and also listed in TM 9-1305-201-20&P.
- b. Magazines for Pistols and Other Small Arms. Magazines for pistols and other small arms do not come preloaded from the ammunition supply point. The magazine for the subma-

chine gun M3 and M3A1 holds 30 rounds of ammunition and this also is not preloaded.

c. Metallic Link Belts. Ammunition for use in machine guns is issued in metallic link belts. Link belts are made of units of cartridges and links. Each link has two loops fitted around a single cartridge and one loop fitted around an adjacent cartridge. Each cartridge in a metallic link belt has two links attached to it, except the end cartridges. Cartridge links are made of steel which is processed to prevent rusting. They are manufactured and tested to assure satisfactory ammunition feeding and functioning under all service conditions.

# ACCESSORIES FOR CARTRIDGES, CALIBER .50

# Links, Closed Loop, M2 and M9:

Caliber .50, M2 and M9 links (fig. 18-7) are manufactured with closed loops. When assembled with the cartridge in belts, the links fit on the cartridge shoulder. The tapered front loops of the links are positioned firmly on the cartridge shoulder to hold the cartridge in proper alignment for feeding into the weapon. The

design required the cartridge to be extracted from the rear and dropped into position for moving into the chamber for firing. Weapons designed for the links require additional space in the rear of the receiver for retraction. M2 and M9 links are used with the M2 machine gun only.

Link, M2 (NSN 1305-00-096-3181(A640)) Link, M9 (NSN 1305-00-078-8463(A641))



CLOSED LOOP

CALIBER .50, M9

U AR 6015

Figure 18-7. Caliber .50, M2 and M9 links (closed loop).

# Link, Open Loop, M15A2:

The caliber .50, M15A2 link (fig. 18-8) is manufactured with partially open loops and has a positioning finger on one side which snaps into the extractor grooves of the cartridge to retain the cartridge in proper feed alignment. The link design permits a portion of bolt to ride through link loop openings and push the car-

tridges forward and out of the link into the chamber for firing. The M15A2 link is used with the M85 machine gun.

#### References:

SC 1305/30IL TM 9-1305-201-20&P



AR 6016

Figure 18-8. Caliber .50, M15A2 link (open loop).

# ACCESSORIES FOR CARTRIDGES, 5.56MM

# Clips:

Cartridges for the 5.56mm M16 rifle are assembled in 10-round clips. The clip (fig. 18-1)

consists of a channel-shaped body containing a spring with narrow tabs at each end. After the clip is filled, the tabs are bent at right angles to the extrator rims of the end cartridges to hold them securely in the clip (NSN 1305-00-052-4377).

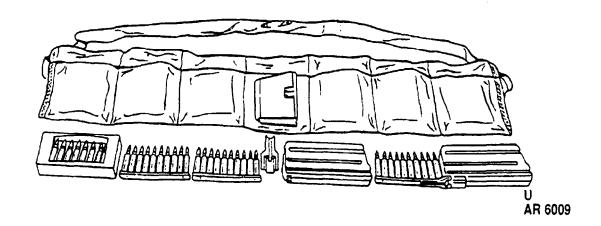


Figure 18-1. Cartridge clips and bandoleer for 5.56mm cartridges.

# Link M27:

The M27 link (fig. 18-2) is a reduced size of the 7.62mm link M13. The body link fits into the extractor groove on the cartridge case. The U.S. Navy uses the link with the Stoner Machine Gun M63. The U.S. Army designated its use for the M249 Machine Gun. The link is used with M855 Ball Cartridges, M856 Tracer, and M200 Blank only.

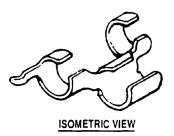
# **Other Accessories:**

Filler, Magazine.

Bandoleer, M3 (NSN 1305-00-924-3088).

## References:

SC 1305/30IL TM 9-1305-201-20&P



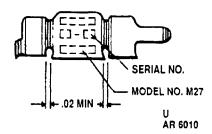


Figure 18-2. M27 link for 5.56mm.

## ACCESSORIES FOR CARTRIDGES, 7.62MM

# Clips:

Cartridges for the 7.62mm M14 rifles are assembled in 5-round clips (fig. 18-3). All cartridges are packed in bandoleers with separate magazine fillers. The clip, which consists of a channel-shaped body containing a spring, facilitates loading of magazines. Loaded clips are fit-

ted into the top of the rifle receiver and the cartridges are pressed into the magazine assembly. A magazine filler, which adapts clips to the magazine, allows individual magazines to be loaded with clipped ammuntion. The clip is 2.36 inches long. The 7.62mm ammunition and clip are shown with the M2 bandoleer in figure 18-4 and with the M4 bandoleer in figure 18-5. The M4 bandoleer is for belted ammunition for machine guns (NSN 1305-00-914-7912).

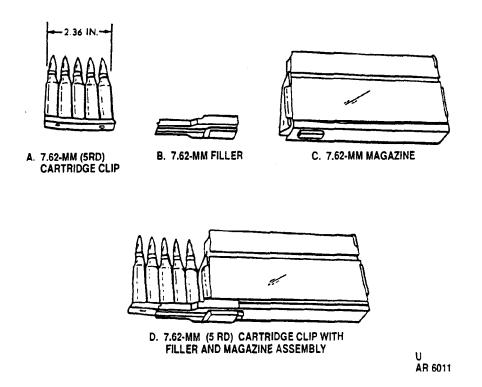


Figure 18-3. Cartridge clip, filler, and magazine assembly for 7.62mm cartridges.

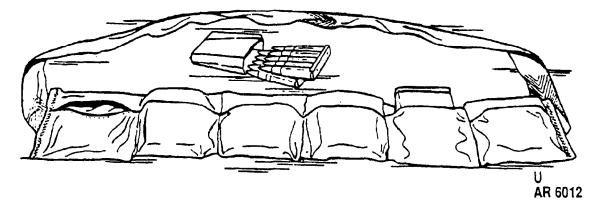


Figure 18-4. M2 bandoleer for 7.62mm cartridges.

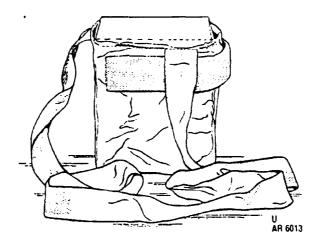


Figure 18-5. M4 bandoleer for 7.62mm cartridges.

# Link M13:

The 7.62mm M13 link (fig. 18-6) is manufactured with partially open loops and has a positioning finger on one side which snaps into the extractor grooves of cartridges to retain the cartridge in proper feed alignment. The link design permits a portion of the bolt to ride through the link opening and push cartridges forward and out of the link into the chamber for firing. Weapons using this type link are designed and manufactured with a short receiver, i.e., M60, M73, M219, M240, and M134 machine guns (NSN 1305-00-752-7815).

# Other Accessories:

Filler, Magazine.
Bandoleer, M2 (NSN 1305-00-984-1125).
Bandoleer, M4 (NSN 1305-00-079-3579).

# References:

SC 1305/30IL TM 9-1305-201-20&P

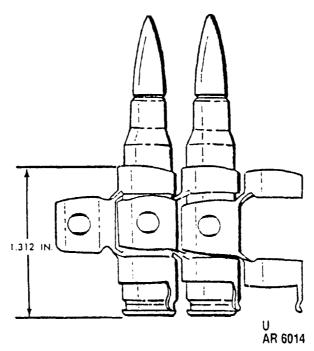


Figure 18-6. Cartridge M13 link for 7.62mm cartridges.

# ACCESSORIES FOR CARTRIDGES, 20MM

# Link M10:

The M10 link (fig. 18-9) is utilized in the M3 and M24 belt-fed automatic guns. The link is of steel and the belt is formed by the placement of cartridges within the links. The link is self-separating when the cartridges are removed during the gun feeding cycle. The metallic link can

be used to make up belts for either right-hand or left-hand feeding of the gun. A cartridge metallic-link filler is used at the end of the belt when it is desired to load belts for either double-loop left-hand feed or double-loop right-hand feed. The purpose of the link-filler is to close the single loop when it is at the end of the belt to prevent snagging in the feed chute (NSN 1305-00-028-4869).

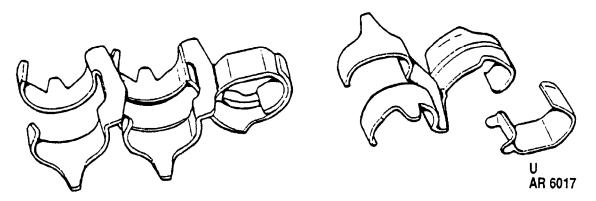


Figure 18-9. M10 link for 20mm cartridges.

## Link M12:

The M12 mteallic link (fig. 18-10) is used in belt-fed gas-operated M39 series automatic aircraft guns. The ammunition belt is formed by

connecting a specified number of links together and then inserting a cartridge for each link. The link is self-separating when cartridges are removed during the gun-feeding cycle. The M12 is an end loading link and is linked for either the right-hand or left-hand feeder (NSN 1305-00-541-0021).

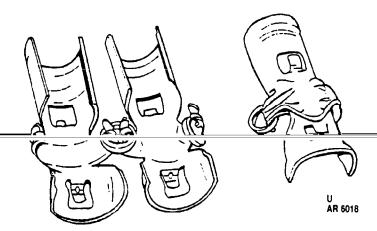


Figure 18-10. M12 link for 20mm cartridges.

# Link M14A2:

The M14A2 link (fig. 18-11) is used primarily for linking 20mm ammunition for belt-fed

M61 automatic guns and loading of ammunition into linkless feed systems used in aircraft and ground defense vehicles. The link is self-separating when cartridges are removed during the feeding cycle (NSN 1305-00-935-9219).

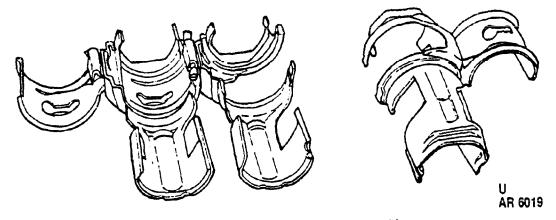


Figure 18-11. M14A2 link for 20mm cartridges.

# **Link M17A2:**

The M17A2 link (fig. 18-12) is used for linking 20mm ammunition for belt-fed M61 auto-

matic weapon system in the B52 G & H aircraft. The link is self-separating when the cartridge is removed from the link during the feeding cycle.

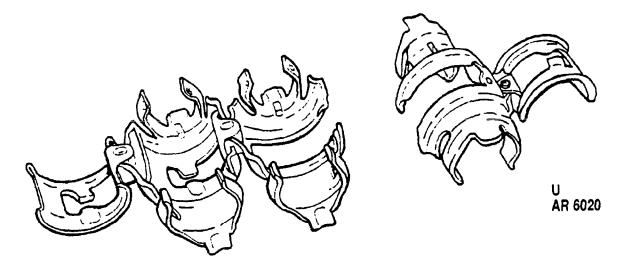


Figure 18-12. M17A2 link for 20mm cartridges.

## Link M24 and M22:

The M24 link (fig. 18-13) is a metallic link for use with the following 20mm cartridges: M206A1 Target-Practice, M599 High-Explosive Incendiary Tracer, and M601 Armor-Piercing Incendiary Tracer. The European (German)

DMI/DMIA link is also used for these cartridges. The DMI/DMIA link is used with the HSH20 seriers. The M22 link is for U.S. Air Force use only. It is used to upload their linkless system. It is reusable and does not disintegrate.

Link, M22 (NSN 1305-00-926-1939).

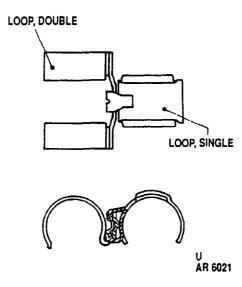


Figure 18-13. M24 link.

# **ACCESSORIES FOR CARTRIDGES, 25MM**

# Link M28:

The M28 link (fig. 18-14) is a two piece assembly intended to hold and link the  $25 \mathrm{mm}$  ammu-

nition for guiding the ammuntion through the weapon system. The assembly consists of hardened steel main and pivot links hooked together and contoured accordingly for its intended purpose. The Swiss Oerlikon link and the M28 are dimensionally identical.

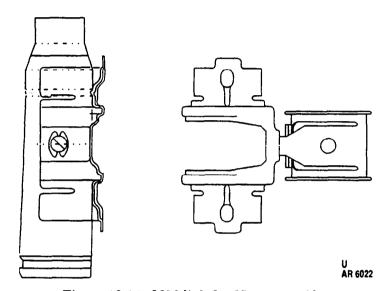


Figure 18-14. M28 link for 25mm cartridges.

# **ACCESSORIES FOR CARTRIDGES, 30MM**

# Link M29:

The M29 link (fig. 18-15) is 1050 steel with type Z (link) phosphate coating. It is used for interoperability with the NATO ADEN/DEFA weapon systems) (NSN 1305-01-078-5505).

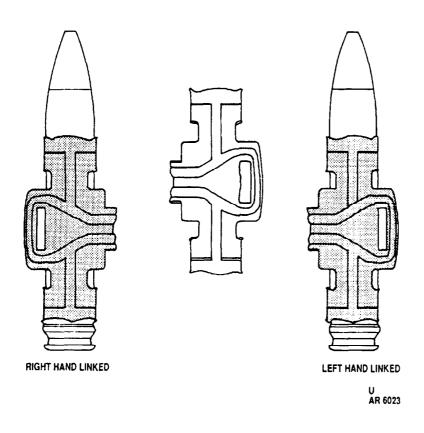


Figure 18-15. M29 link.

TABLE 18-1. SMALL ARMS AMMUNITION

Caliber	Ammunition	Clip	Magazine	Link	Weapon used
5.56mm	M193 Ball M195 Grenade M196 Tracer M197 High Pressure Test M199 Dummy	10 rd	<b>20</b> and 30 rd		M231 Submachine Gun for M196 tracer only. M16/ M16A1 rifle.
	M200 Blank M855 Ball M856 Tracer			M27	Stoner M63 (Navy) and M249 machine guns.
7.62mm	M59, M80 Ball M61 Armor Piercing M62 Tracer M63 Dummy M82 Blank	5 rd	20 rd	M13 open loop for MG	M14 rifle; M60, M73, M219, M240*, and M134 machine guns.
	M60 High Pressure Test M64 Grenade M118 Ball Match M160 Frangible M172 Dummy M852 Ball Match				M14 rifle only. M14 rifle only M219 MG only. M60 MG only.

## NOTE

10 rd clip f/M16A1. 5 rd clip f/M14. 20 rd mag f/M16A1. 30 rd mag f/M16A1. 20 rd mag f/M14.

Cal. 45	Ball, M1911 Blank M9 High Pressure Test M1		7 rd for pistol 30 rd for sub- machine gun.	N/A	Pistol M1911 andM1911A1. Submachine gun M3 and M3A1.
	M2 Ball M33 Ball M2 Armor Piercing M8 Armor Piercing Incendiary	N/A	N/A	**M15A2 open loop with M85 MG.	M85 Machine Gun.
Cal .50	M20 Armor Piercing Incendiary-Tracer M1 Incendiary M23 Incendiary M1 Tracer M10 Tracer M17 Tracer M2 Dummy, High Pressure Test	N/A	N/A	***M2 and M9 closed loops with M2 MG.	M2 Machine Gun only.
	M1 Blank M1A1 Blank	N/A	N/A	***M2 and M9 closed loops with M2 MG.	M2 Machine Gun only.
	M48A2 Spotter- Tracer	N/A	10 and 20 rd	N/A	M8C Spotting Rifle
	Tracer T249E2 Practice T251 High Pressure Test	N/A N/A	10 and 20 rd 10 and 20 rd	N/A N/A	M8C Spotting Rifle M8C Spotting Rifle

<sup>\*</sup> M240 Machine Gun only fires the Ball M80 and the Tracer M62.
\*\* Link M15A2 Open Loop used with M85 Machine Gun only.
\*\*\*Link M2 and M9 Closed Loop used with M2 Machine Gun only.

TABLE 18-1. SMALL ARMS AMMUNITION - Continued

Caliber	Ammunition	Link	Weapon (gun)	
20mm	HEI-T-SD M246/M246A1 HEI M56A3/M56A4 TP-T M220 TP M55A2 Dummy M51A2	M14 series	M167A1 (M168 Cannon)	
20mm	API-T M52E1 API M53 HEI M56A3/M56A4 HEI-T M242 HEI-T-SD M246/M246A1 TP M55A2 TP-T M220 Dummy M51A2  M12 Metallic Link for M39 Cannon. M14A2 for M61 Cannon.		M39, M61	
20mm	API-T M52E1 M17A2 API M53 HEI M56A3/M56A4 HEI-T M242/M242A1 HEI-T-SD M246/M246A1 TP M55A2 TP-T M220 Dummy M51A2		M61	
20mm	API M53 HEI M56A3/M56A4 TP M55A2 Dummy M51A2	M14A2	M195 Linker-Delinker M25	
20mm	HEI-T-SD M246/M246A1 HEI M56A3/M56A4 TP-T M220 TP M55A2 Dummy M51A2	M14A2	168, 197	
20mm	AP-T M95 Incendiary M96 TP M204 HEI M210	M10	М3	
20mm	AP-T M95 Incendiary M96 HEI M97A2 TP M99A1	cendiary M96 EI M97A2		
20mm	HEI-T M599 API-T M601 TP-T M220	M24 or DMI/DMIA	139	
25mm	API-T M791 HEI-T M792 TP-T M793	M28	M242	
30mm	HEDP M789 TP M788 HEI M799	M29	M230 NATO M552/M553	

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