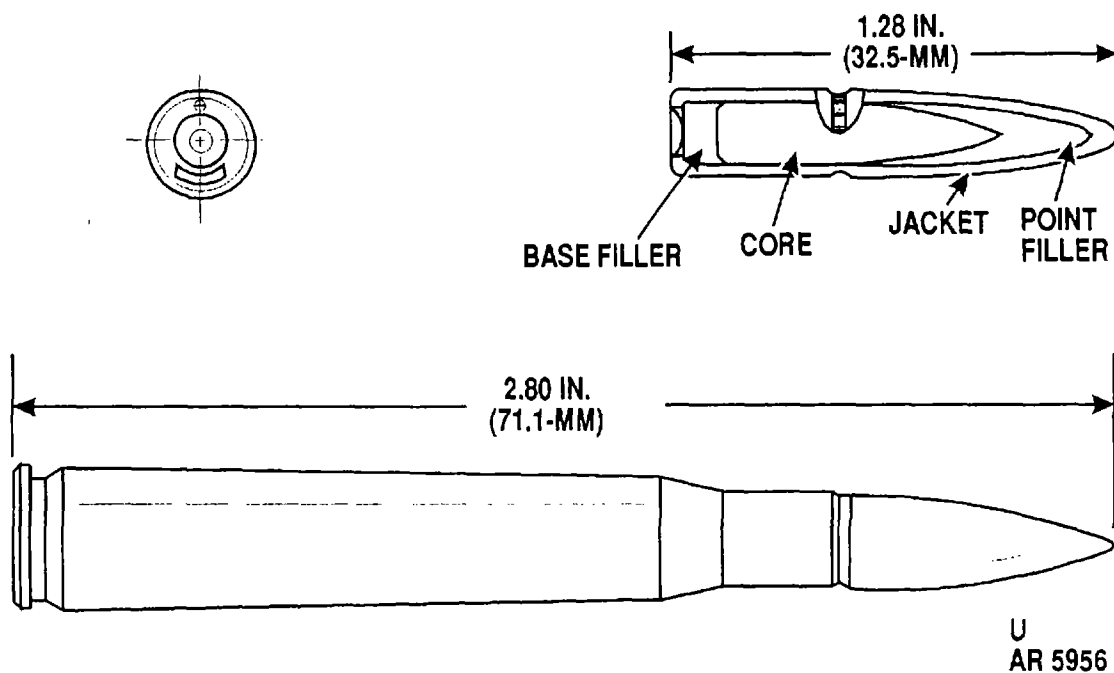


CHAPTER 11
7.62MM CARTRIDGES

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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:

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

Tabulated Data:

DODAC 1305-A143
 UNO serial number 0012
 UNO proper shipping
 name Cartridges for
 weapons, inert pro-
 jectile
 Weight 393 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:
 Weight 150.5 gr

Performance:

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

Shipping and Storage Data:

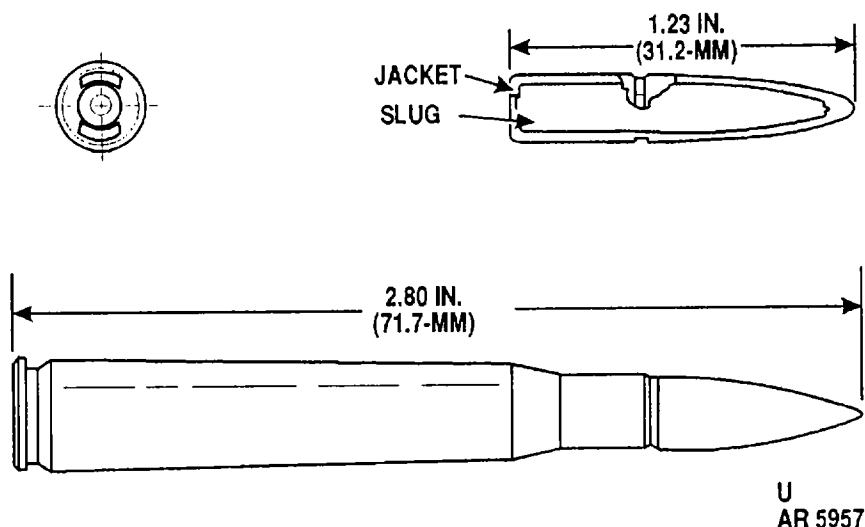
Quantity-distance class/
 SCG 1.4S
 Storage code Class V
 DOT shipping class C
 DOT designation SMALL ARMS
 AMMUNITION
 Drawing number 7553702

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	Cartridges for 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 IMR 4475
Weight 41 gr
Projectile:
Weight 171.5 gr

Performance:

Chamber pressure 67,500 psi
Velocity NA

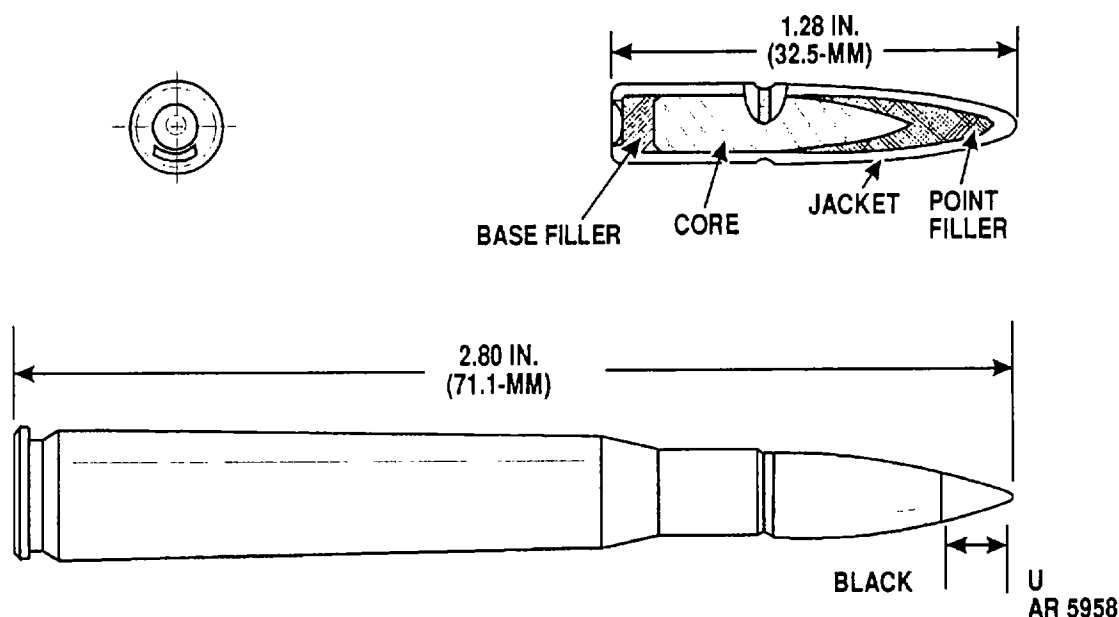
Shipping and Storage Data:

Quantity-distance class/
SCG 1.4S
Storage code Class V
DOT shipping class C
DOT designation SMALL ARMS
AMMUNITION
Drawing number 7553703

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

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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 Cartridges for
 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 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

Shipping and Storage Data:

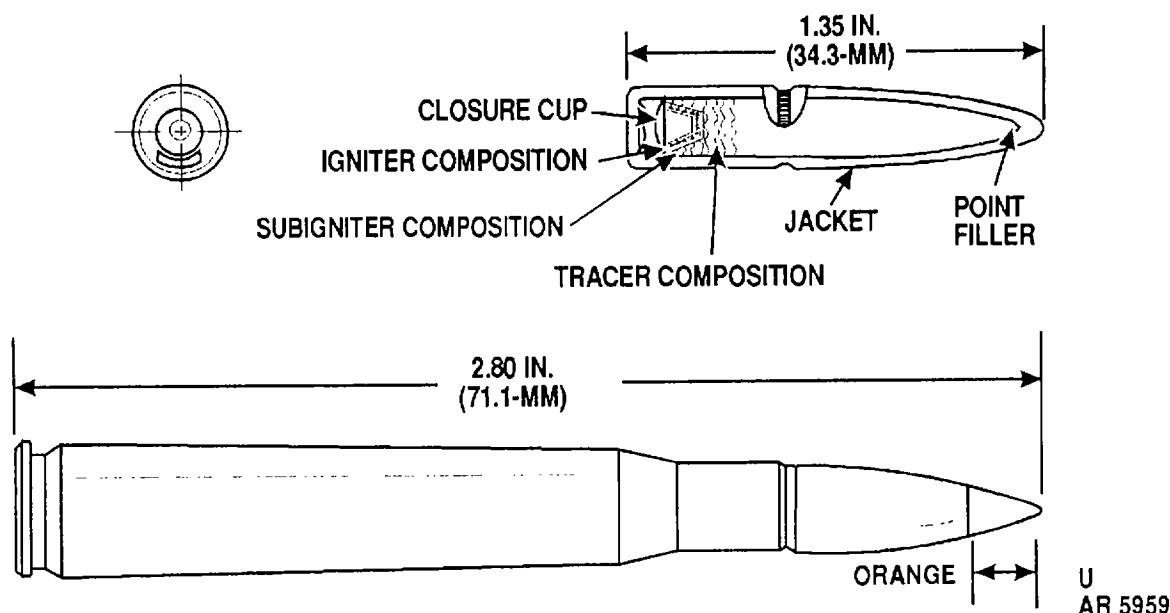
Quantity-distance class/
 SCG 1.4S
 Storage code Class V
 DOT shipping class..... C
 DOT designation SMALL ARMS
 AMMUNITION
 Drawing number 7553704

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.

Tabulated Data:

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

Primer..... Percussion
 Fuze NA
 Explosive:
 Type NA
 Weight NA
 Incendiary:
 Type NA
 Weight..... NA
 Propellant:
 Type WC 846
 Weight 46 gr
 Projectile:
 Weight 142 gr

Performance:

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

Shipping and Storage Data:

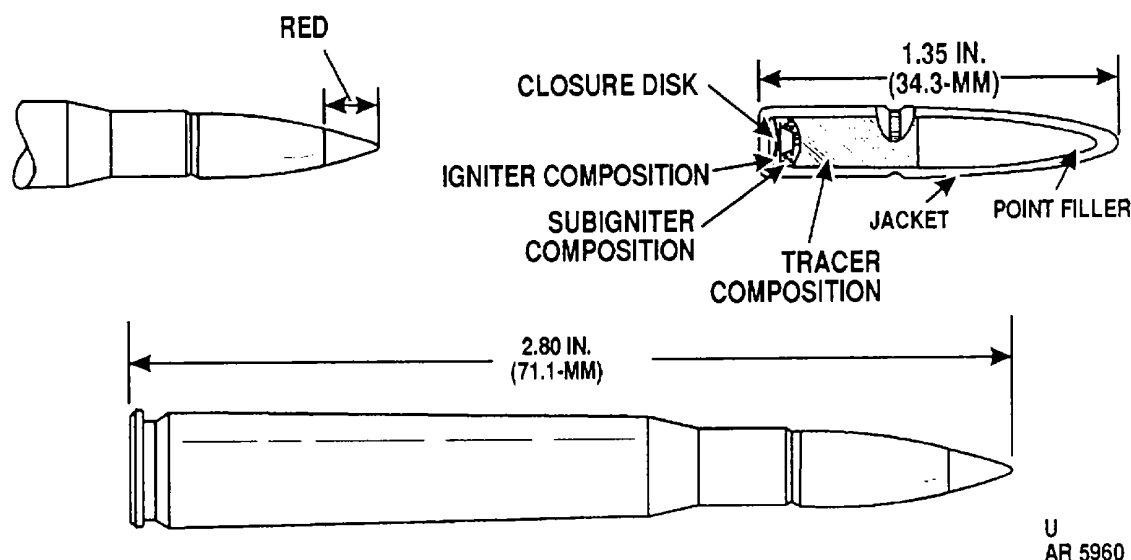
Quantity-distance class/
 SCG 1.4S
 Storage code Class V
 DOT shipping class C
 DOT designation SMALL ARMS
 AMMUNITION
 Drawing number 10522000

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.....	1305-A167
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	R284
Primer	Percussion
Fuze	NA
Explosive: Type	NA
Weight	NA

Incendiary:

Type NA

Weight NA

Propellant:

Type WC 846

Weight 46 gr

Projectile:

Weight 146 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 designation SMALL ARMS

AMMUNITION

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

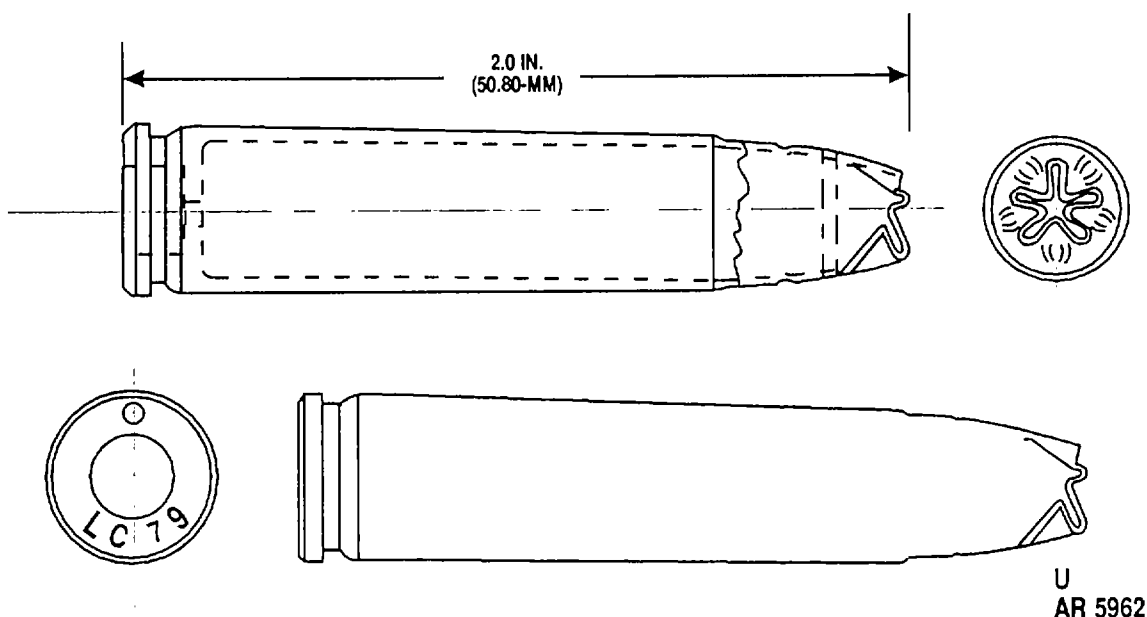
TM 9-1005-298-12

TM 9-1005-313-10

TM 9-1300-206

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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
 UNO serial number 0014

UNO proper shipping

name Cartridges for
 weapons, blank
 Weight 295 gr
 Length 2 in. (50.8 mm)
 Tracer NA
 Primer Percussion
 Fuze NA
 Explosive:
 Type NA
 Weight NA
 Incendiary:
 Type NA
 Weight NA
 Propellant:
 Type WC 8:30
 Weight 45 gr
 Projectile:
 Weight NA

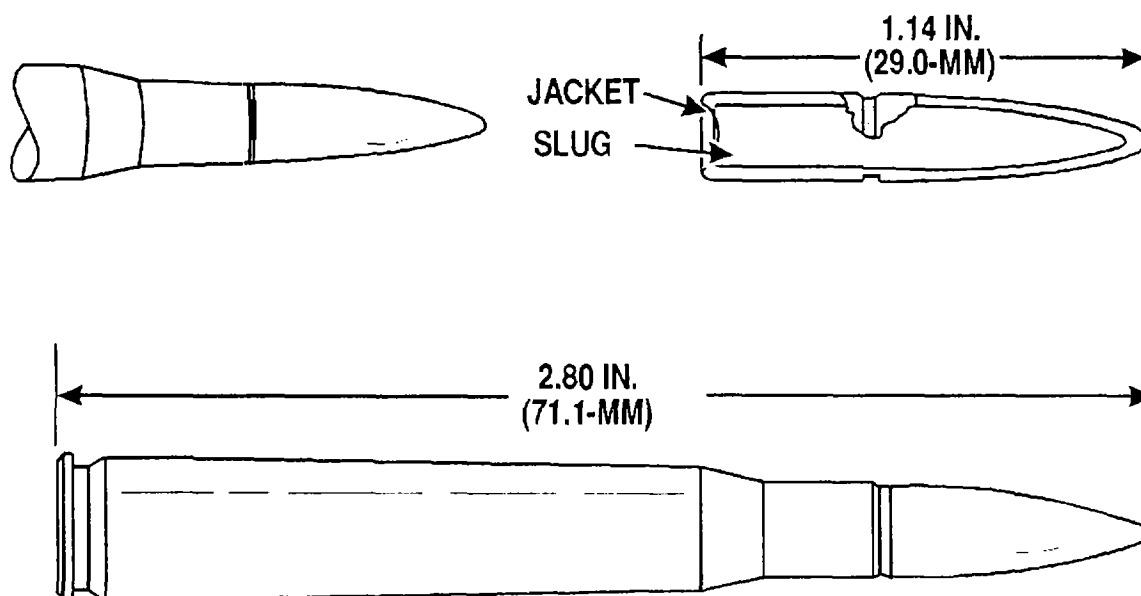
Performance:

Chamber pressure NA
 Velocity 160 fps, 5(. ft from
 muzzle for pro-
 jected grenade

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 7553707

CARTRIDGE, 7.62MM, BAL., 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:

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

Tabulated Data:

DODAC..... 1305-A122
 UNO serial number 0012
 UNO proper shipping
 name Cartridges for
 weapons, inert pro-
 jectile
 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:

Weight 146 gr

Performance:

Chamber pressure 50,000() psi
 Velocity 27501) fps, 78 ft from
 muzzle

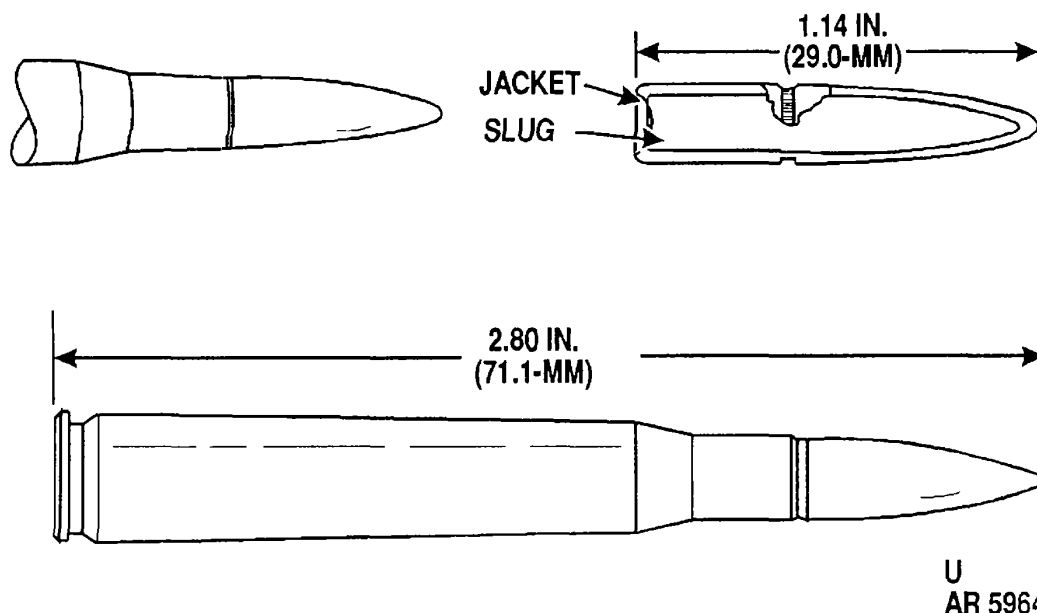
Shipping and Storage Data:

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

DODAC..... 1305-A166
 UNO serial number 0012
 UNO proper shipping
 name Cartridges for
 weapons, inert pro-
 jectile
 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:
 Weight 149 gr

Performance:

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

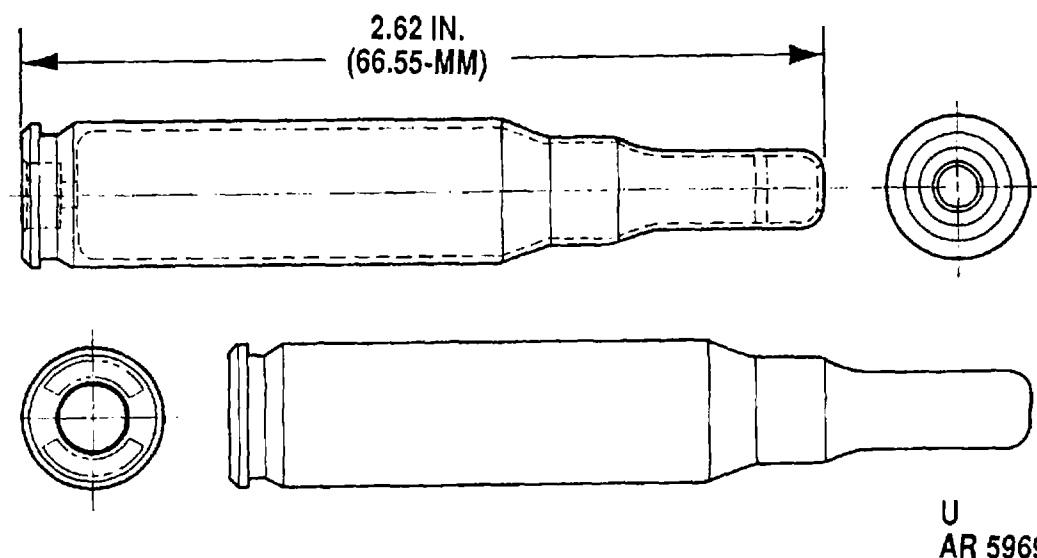
Shipping and Storage Data:

Quantity-distance class/
 SCG 1.4S
 Storage code Class V
 DOT shipping class C
 DOT designation SMALL ARMS
 AMMUNITION
 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 NA
 Primer Percussion
 Fuze NA
 Explosive:
 Type NA

Weight NA
 Incendiary:
 Type NA
 Weight NA
 Propellant:
 Type SR 8231
 Weight 15 gr

Performance:

Chamber pressure NA
 Velocity NA

Shipping and Storage Data:

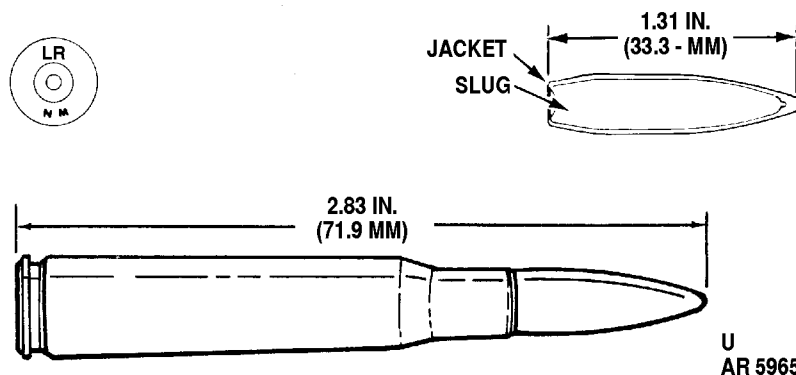
Quantity-distance class/
 SCG 1.4S
 Storage code Class V
 DOT shipping class C
 DOT designation SMALL ARMS
 AMMUNITION
 Drawing number 8597283

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

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CARTRIDGE, 7.62MM, BALL, SPECIAL, M118: LONG RANGE



Type Classification:

STD - MSR.

Use:

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

Description:

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

Tabulated Data:

DODAC	1305-AA11
UNO serial number	0012
UNO proper shipping name	Cartridges for weapons, inert projectile
Weight	390 gr
Length	2.83 in. (71.9 mm)
Tracer	NA
Primer	Percussion
Fuze	NA
Explosive:	
Type	NA
Weight	NA

Incendiary:

Type	NA
Weight	NA

Propellant:

Type	WC 750
Weight	44 gr

Projectile:

Weight	175 gr
--------	--------

Performance:

Chamber pressure	52,000 psi
Velocity	2640 fps

Shipping and Storage Data:

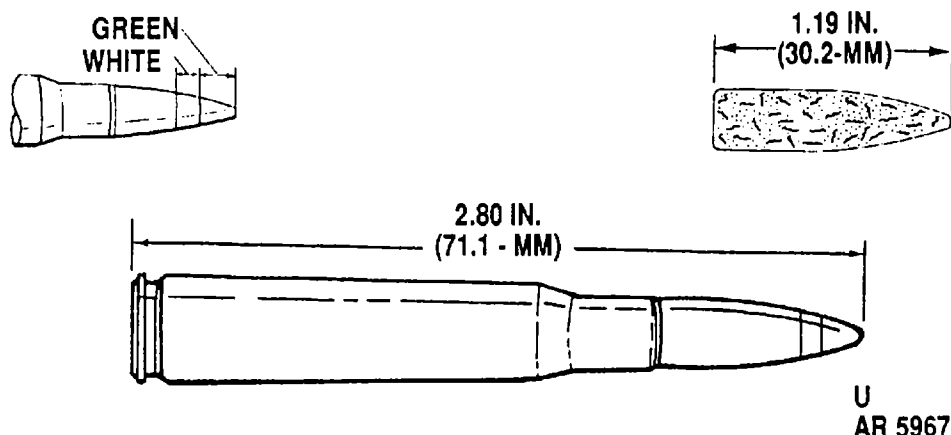
Quantity-distance class/SCG	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS AMMUNITION
Drawing number	8597555

References:

EM 0007
TM 9-1005-223-10
TM 9-1005-223-12P
AR 385-64
DA PAM 385-64

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

Performance:

Chamber pressure NA
 Velocity 1320 fps, 100 yd
 from muzzle

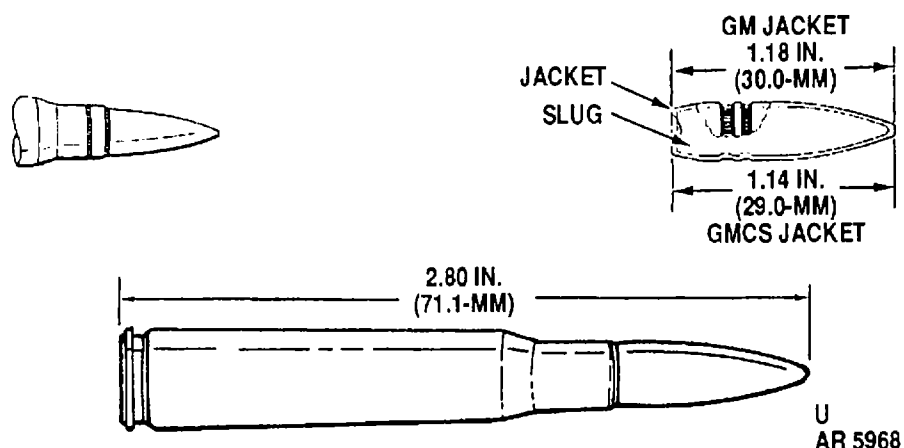
Shipping and Storage Data:

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

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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 NA
 Fuze NA
 Explosive:
 Type NA
 Weight NA
 Incendiary:
 Type NA
 Weight NA

Propellant:

Type NA

Weight NA

Projectile:

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 10522688

References:

SB 700-20

TM 9-1005-223-10

TM 9-1005-223-12P

TM 9-1005-224-10

TM 9-1005-233-10

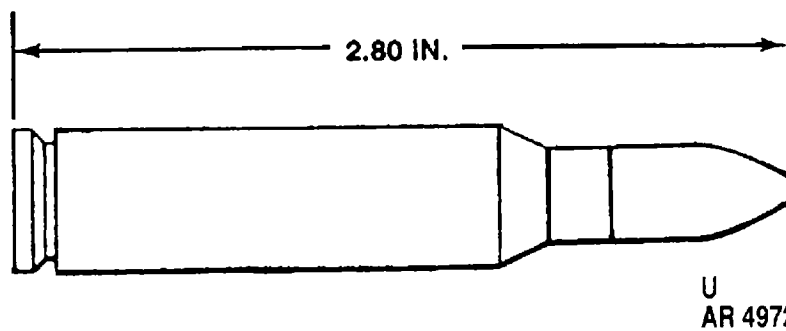
TM 9-1005-298-12

TM 9-1005-313-10

TM 9-1300-206

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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	1305-A163
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
Primer	Percussion
Fuze	NA
Explosive:	
Type	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

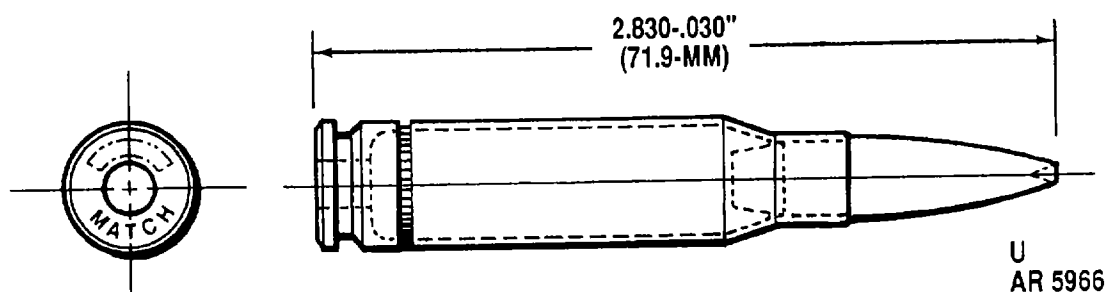
Shipping and Storage Data:

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

References:

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

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CARTRIDGE, 7.62 MM, MATCH, M852**Type Classification:**

STD - MSR 09816009.

Use:

Rifle, 7.62 mm, 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 Cartridges for
 weapons, inert projectile
 Weight 385 gr
 Length..... 2.83 in. (71.9 mm)

Tracer- NA
 Primer Percussion
 Fuze NA
 Explosive:
 Type NA
 Weight NA
 Incendiary:
 Type NA
 Weight NA
 Propellant:
 Type IMR 4895
 Weight 42 gr
 Bullet:
 Type Hollow point
 Weight 168 gr

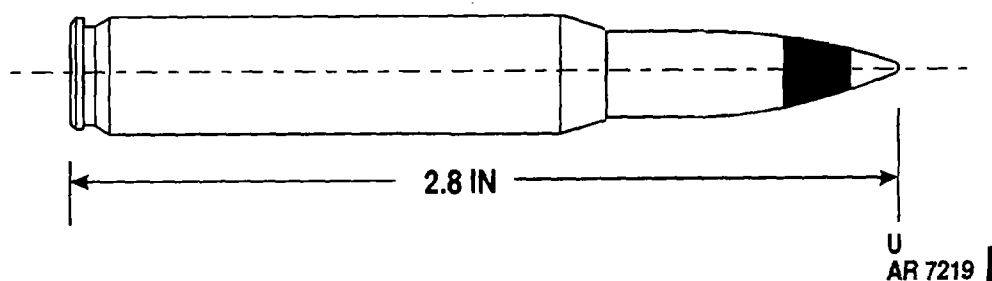
Performance:

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

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..... 9341551

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CARTRIDGE, 7.62 MM, ARMOR PIERCING (AP), M993**Type Classification:**

Std - 16 Feb 96.

Use:

Rifle, 7.62 MM, M24 Sniper Weapon System
Machine Guns, 7.62 mm: M60 and M240.

Description:

7.62 mm Armor Piercing Cartridge. The cartridge is identified by a black stripe circling the tip of the projectile. This item will be linked with M62 Tracer.

Purpose:

The 7.62 mm cartridge provides an enhanced armor penetrating capability for use in standard 7.62 mm weapons.

Tabulated Data:

DODAC	1305-01-398-1450, AA03; 1305-01-398-1449, AA04
Weight	362.6 gr
Length	2.80 in.
Tracer	N/A
Primer	Percussion
Fuze	N/A
Explosive:	
Type	N/A
Weight	N/A

Incendiary:

Type	N/A
Weight	N/A

Propellant:

Type	Bofors NC1290
Weight	45 gr

Projectile:

Weight	126.6 gr
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Performance:

Average chamber pressure at 70°F	55,115 psi
Average velocity at 70°F	2985 fps at 78 ft from muzzle

Shipping and Storage Data:

M993 AP, carton packed	1305-01-398-1450, DODAC AA03
M993 AP and M62 tracer, linked in 24:1 ratio	1305-01-398-1449, DODAC AA04
Quantity-distance class/SCG	1.4C
Storage code	Class C
DOT shipping class	C
DOT designation	SMALL ARMS AMMUNITION
Drawing number	12956134

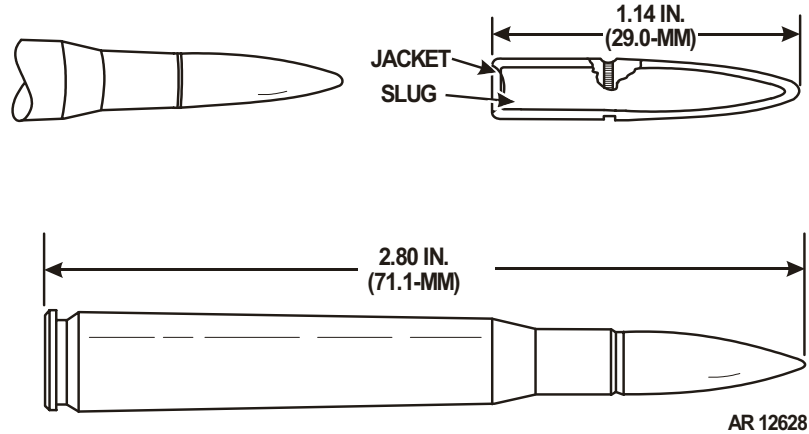
References:

TM 9-1005-224-10
TM 9-1005-306-10
TM 9-1005-313-10
TM 9-1305-201-20&P
TM 9-1305-201-34&P

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CARTRIDGE, 7.62MM, NATO, REFERENCE



TYPE CLASSIFICATION:

USE:

7.62mm Reference Cartridges are used to establish velocity and pressure values by which weapon and ammunition serviceability and performance may be measured against.

DESCRIPTION:

Reference Cartridge is identified by a plain bullet tip.

TABULATED DATA:

DODAC	1305-A150
UNO serial number	0012
UNO proper shipping name	Cartridge for weapons, inert projectiles
Weight	392 gr
Length.....	2.8 in. (71.1mm)
Tracer	N/A
Primer	Percussion
Fuze	N/A

Explosive:

Type	N/A
Weight	N/A

Incendiary:

Type	N/A
Weight	N/A

Propellant:

Type	WC 846
Weight	46 gr
Projectile weight	149 gr

PERFORMANCE:

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

DRAWINGS:

Drawing number	8596190
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SHIPPING AND STORAGE DATA:

Quantity-distance class.....	1.4S
Storage code	Class V
DOT shipping class	C
DOT designation	SMALL ARMS AMMUNITION
NSN	1305-00-782-5831- A150

REFERENCES:

AR 385-64
DA Pam 385-64
SB 700-2
TM 9-1005-223-10
TM 9-1005-223-12&P
TM 9-1005-224-10
TM 9-1005-233-10
TM 9-1005-298-12
TM 9-1005-313-10
TM 9-1305-201-20&P
TM 9-1305-201-34