MILITARY STANDARD

NOMENCLATURE AND DEFINITIONS IN THE AMMUNITION AREA

TO ALL ACTIVITIES:

1. The following pages of MIL-STD-444 have been revised and supersede the pages listed:

New page	*Date*	*Superseded page*	*Date*
ii	9 July 1964	ii	22 August 1963
5	9 July 1964	5	6 February 1959
6	9 July 1964	6	6 February 1959
7	9 July 1964	7	6 February 1959

2. The following is a cumulative list of earlier changes:

New page	*Date*	*Superseded page*	*Superseded page*
8	22 August 1963	8	6 February 1959
9	22 August 1963	9	6 February 1959
14	22 August 1963	14	6 February 1959
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104	22 August 1963	104	6 February 1959
118	22 August 1963	116	6 February 1959
139	22 August 1963	139	6 February 1959
149	22 August 1963	149	6 February 1959

3. Retain this notice and insert before table of contents.

4. Holder of MIL-STD-444 will verify that page changes indicated above have been entered and will destroy the previous notice. Activities which stock these notices for issue are warned that each notice, together with its appended revised pages, is in effect a separate publication to be retained until the military standard is completely revised or canceled.

DEPARTMENT OF DEFENSE

WASHINGTON 25, D.C.

Nomenclature and Definitions in the Ammunition Area — 9 JULY 1964

MIL-STD-444

1. This standard has been approved by the Department of Defense and is mandatory for use by the Departments of the Army, the Navy, and the Air Force, effective 6 February 1959.

2. Recommended corrections, additions, or deletions should be addressed to the Commanding Officer, Picatinny Arsenal, Dover, N. J. 07801, ATTN: SMUPA-DC7.

ammunition, small arms

See: small arms ammunition.

ammunition data card

Identification card prepared for each individual lot manufactured, giving the type and composition of the ammunition and identifying its components by lot number and manufacturer. When necessary, may also include instructions for holding ammunition and other technical information.

Ammunition Identification Code (AIC)

Superseded code symbol formerly assigned to each item of Army ammunition for identification and supply purposes, e.g., P5HBA. First two characters referred to the pertinent ordnance catalog, and the remaining three characters to the weapon group, type and model, and packaging. The Department of Defense Ammunition Code (which see) is now normally employed for the purposes indicated.

ammunition lot

A quantity of rounds or components, each of which is manufactured by one manufacturer under uniform conditions, and which is expected to function in a uniform manner. The lot is designated and identified by assignment of an ammunition lot number and preparation of an ammunition data card.

See also: ammunition data card; ammunition lot number; lot

ammunition lot number

Code number that identifies a particular ammunition lot. The number is assigned to each lot when it is manufactured.

anchor, underwater mine

An item designed in various shapes to moor an underwater mine at a predetermined depth. It may contain various releasing and securing devices which can be manually fixed for use in any given depth of water.

angle of entry

Acute angle betweten the tangent at the point of impact of a bomb or projectile and the perpendicular to the surface of the ground or target at the point of impact. It is the complement of the angle of impact (which see). Also called angle of obliquity and angle of incidence.

angle of impact

The acute angle between the tangent to the trajectory at the point of impact of a projectile and the plane tangent to the surface of the ground or target at the point of impact. The complement of the angle of entry (which see).

angle of incidence

See: angle of entry.

angle of obliquity

See: angle of entry.

antiaircraft (AA)

Of ammunition rockets, bullets, projectiles, or the like used, or designed to be used against airborne aircraft.

anti-armor

Of ammunition, bombs, bullets, projectiles, or the like, designed to defeat armor and other resistant targets.

antilift device

A device arranged to detonate the land mine to which it is attached, or to detonate another mine or charge nearby, if the mine is disturbed. The device causes detonation through a secondary fuze called an antitank mine activator.

antipersonnel (apers)

Of projectiles, bombs, mines, or the like, designed to kill, wound, or obstruct personnel.

antiremoval device

A device attached to a land mine to protect it against removal. Usually attached to the mine either on the bottom or on the side, designed to function when a pull is exerted on the mine at the time of removal, or when pressure is released from the device when the mine is lifted from its position. Detonation is by a secondary fuze called an antitank mine activator.

antiricochet device

Device intended for attachment to bombs to prevent ricochet, with consequent loss of effectiveness and possible danger to the dropping plane. The device usually consists of a parachute unit, *fuze adapter and fuze*, and is attached to the tail end of the bomb. The bomb is slowed by the parachute, enabling the dropping plane to pass beyond the danger area before the bomb is detonated.

antitank (AT)

Used, or designed to be used, against tanks.

antiwithdrawal device

A device intended to function an item of ammunition if attempt is made to remove a fuze from the ammunition. May be an integral part of the *fuze, or a separate unit.*

See also: fuze, antiwithdrawal.

anvil

The rigid metal part against which the explosive charge in a percussion primer is compressed by the blow of the firing pin.

apical angle

In general the angle formed at the apex or tip of anything. As applied to projectiles, the angle between the tangents to the curve outlining the contour of the projectile at its tip, or for semi-apical angle, the angle between the axis and the one of the tangents. For a projectile having a conical tip, the cone apex angle.

applique armor

Material or attachment which can be installed on a tank to give it additional protection against kinetic or nonkinetic energy ammunition.

arbor, depth charge

An item designed to provide a means of launching and supporting of a depth charge in a depth charge gun.

arm

To make ammunition ready for detonation, as by removal of safety devices or alignment of the explosive elements in the explosive train of the fuze.

arm, mooring

An arm designed to properly position an underwater mine in relation to the underwater mine anchor.

arming

As applied to fuzes; the changing from a safe condition to a state of readiness for functioning. Generally a fuze is caused to arm by such means as acceleration, rotation, clock mechanism, chemical action, electrical action, or air travel, or by a combination of these.

arming delay, bomb fuze

A mechanical pyrotechnic or electrical device designed for attachment to a fuze to delay the start of fuze arming.

arming device

Device for arming (which see) of a fuze under controlled conditions.

arming device, rocket warhead

An item designed to arm and control the initiation of the explosive train of the warhead of a high explosive rocket (as modified). It may or may not contain a detonator.

arming device, torpedo

An item designed to perform the electrical switching and mechanical alignment necessary to detonate a torpedo warhead after the warhead has been actuated by the exploder mechanism.

arming device, underwater mine

A device designed to arm an underwater mine upon the application of a predetermined amount of hydrostatic pressure.

arming distance

See: arming range

arming plug, antitank mine

A device assembled to an antitank mine after fuzing which can be set to either a 'safe' position or an 'armed' position. In the latter position, sufficient pressure will cause the fuze to function.

arming range

The distance from a weapon or launching point at which a fuze is expected to become armed.

arming resistance

The resistance to the displacement of certain fuze components which must be overcome in order to arm a fuze. Arming resistance may be produced by the action of an elastic machine element, such as one or more arming springs, a split resistance ring, a spring plate, etc., or by the resistance to permanent deformation of a member, such as a shear pin. Arming resistance should be as great as possible to promote safe handling of fuzes and fuzed ammunitoin, yet should also be appreciably less than the force of setback or centrifugal action on the involved fuze components, to insure positive arming of the fuze during or after firing.

See: setback force; shear pin

arming wire assembly

An item consisting of one or more lengths of wire attached to swivel loop to prevent accidental arming of a fuze.

armor

Protective covering especially metal plates used on ships, tanks, motor vehicles, etc.

See also: Applique Armor; spaced armor; spiked armor

armor-defeating

See: anti-armor

armor-piercing (AP)

Of kinetic energy ammunition, that is bombs, bullets, projectiles or the like, consisting of hard material designed to pierce armor:

See: hypervelocity armor-piercing

cf: Chemical energy ammunition

armor-piercing capped (APC)

Of armor piercing projectiles, having an armor-piercing cap over the nose.

See: cap, armor-piercing

arsine (SA)

One of the blood gases. A war gas. Arsenic trihydride.

artillery ammunition

Ammunition for cannon above 30 millimeters (1.181 inches) in caliber.

astronautics

The art and science of flying through space, or sending vehicles or missiles through space.

azon (azimuth only)

A glide bomb used in World War II, having movable control surfaces in the tail adjusted by radio signals to control the bomb in azimuth only. Hence, azon bomb, azon missile.

See: bomb, glide; razon

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backblast
Rearward blast of gases to the rear of recoilless weapons, rocket launchers and rocket assisted takeoff units.

backblast area
Cone shaped area in rear of a recoilless weapon, rocket launcher or rocket assisted takeoff unit which is dangerous to personnel.

bag, cartridge
See: bag, propellant

bag, powder
See: bag, propellant

bag, propellant
Fabric container that holds the propelling charge for separate loading or semifixed ammunition. Usually made of cartridge cloth, a special fabric that is consumed without leaving a burning residue.

bagloading
The loading of propellant into bags to form propelling charges for semifixed or separate loading ammunition.

ball *Ammo nomen*
1. Indicates a bullet for general use as distinguished from bullets for special uses such as armor-piercing, incendiary, high explosive, etc. 2. Indicates a small arms propellant which is oblate spheroidal in shape, generally double base propellant.

BALL, CELLULOSE-NITRATE
An item to simulate gunfire, for training purposes.
BALL, CELLULOSE-NITRATE: powder filled.

ball ammunition
Nonarmor-piercing small arms ammunition in which the projectile is solid. It is intended for use against personnel, light material targets or for training purposes.

ballistic
Pertaining to ballistics (which see) or the motion of missiles.

ballistic coefficient
The numerical measure of the ability of a missile to overcome air resistance. It is dependent upon the mass, the diameter and the form factor (which see).

ballistic equivalence
Substitution of a single perforated grain with web of 1.23 to 1.28 times the web of a seven-perforated grain for preliminary interior ballistic calculations is sometimes desirable. Since the assumed grain gives about the same calculated results as the multiperforated grain, they are said to have ballistic equivalence.

ballistic limit
The minimum velocity at which a particular armor-piercing projectile is expected to consistently completely penetrate armor plate of given thickness and physical properties at a specified angle of obliquity. Because of the expense of firing tests and the impossibility of controlling striking velocity precisely, plus the existence of a zone of mixed results in which a projectile may completely penetrate or only partially penetrate under apparently identical conditions, statistical approaches are necessary, based upon limited firings. Certain approaches lead to approximation of the V_{50} Point, that is, the velocity at which complete penetration and incomplete penetration are equally likely to occur. Other methods attempt to approximate the V_0 Point, that is, the maximum velocity at which no complete penetration will occur. Other methods attempt to approximate the V_{100} Point, that is, the minimum velocity at which all projectiles will completely penetrate.

ballistic missile
Specifically, any missile guided especially in the ascending part of its trajectory,

but generally becoming a free falling body in the latter stages of its flight through the atmosphere. This missile contains guiding devices, such as preset mechanisms, but it is distinguished from a guided missile in that it becomes a free falling body, subject to ballistic reactions as it descends through the atmosphere. Currently the term has a strong connotation of a missile designed to travel outside, or in the outer reaches of, the atmosphere before plunging toward its target. The German V–2, Polaris, Pershing and Thor are considered ballistic missiles. cf: guided missile.

ballistic mortar

A heavy, short barrelled mortar, pendulum mounted, for determining the relative power of explosives. A small sample of a test explosive is placed in the detonation chamber and a projectile is located forward of the charge. Upon detonation the projectile is driven into a sand bank and the mortar swings through an arc. A marker records the maximum height to which the mortar rises on its arc. The weight of the test explosive required to produce the same rise as 10 grams of TNT is determined, and the rating is the percentage resulting from dividing 10 by the determined weight and multiplying by 100. This figure is called the TNT value.

ballistic pendulum

First reasonably accurate ballistic measuring instrument for determining projectile velocity; described by Benjamin Robins before the Royal Society of England in 1743. A bullet was fired into a wood pendulum, and its velocity determined by equating the expressions for the momentum of the bullet before striking the pendulum and the momentum of the pendulum after receiving the bullet.

ballistic table

Compilation of ballistic data from which trajectory elements such as angle of fall, range to summit, time of flight, ordinate at any time, etc., can be obtained.

See also: firing table

ballistic wave

An audible disturbance caused by the compression of air ahead of a missile in flight.

ballistic weapon

Any missile weapon, as a bomb, rocket, projectile, or bullet, affected by ballistic conditions.

ballistics

Branch of applied mechanics which deals with the motion and behavior characteristics of missiles, that is, projectiles, bombs, rockets, guided missiles, etc., and of accompanying phenomena. It can be conveniently divided into three branches: *interior ballistics*, which deals with the motion of the projectile in the bore of the weapon; *exterior ballistics*, which deals with the motion of the projectile while in flight; and *terminal ballistics*, which is concerned with the effect and action of the projectile when it impacts or bursts.

ballistic of penetration

That part of terminal ballistics which treats of the motion of a projectile as it forces its way into targets of solid or semisolid substances such as earth, concrete, or steel.

See also: ballistics

ballistite

Often capitalized. A smokeless propellant containing nitrocellulose and nitroglycerin, used in some rocket, mortar, and small arms ammunition.

balloting

A tossing or bounding movement of a projectile within the limits of the bore diameter, while moving through the bore under the influence of the propellant gases. The projectile normally contacts the bore at the rotating band and

blood gas

War gas which, when absorbed into the body, primarily by breathing, affects body functions through action on the oxygen-carrying properties of the blood and interferes with normal transfer of oxygen from lungs via the blood to body tissues. Examples: CHEMICAL AGENT, HYDROGEN CYANIDE; arsine; CHEMICAL AGENT, CYANOGEN CHLORIDE.

blow

(Sometimes with 'up'). Explosion.

boattail

1. Having a tapered-in base; boat-tailed. 2. The base of a projectile when shaped like the frustum of a cone.

See: base of projectile.

body

1. Principal part of any object. 2. That part of a fuze that houses the working parts. 3. The cylindrical portion of a projectile between the front bourrelet and the rotating band.

BODY, PRACTICE HAND GRENADE

An inert metal part, simulating in contour and weight the body of a service hand grenade. The body is designed to accommodate an igniter type of FUZE, HAND GRENADE and a small black powder charge to give indication of functioning. Designed for repeated use in training exercises by replacing fuze and black powder charge.

BODY, PRACTICE HAND GRENADE: M21 and MK2

bomb

1. In a broad sense, an explosive or other lethal agent together with its container or holder, which is planted or thrown by hand, dropped from an aircraft, or projected by some other slow-speed device (as by lobbing it from a mortar), and used to destroy, damage, injure, or kill. 2. Anything similar to this object in appearance, operation, or effect, as a leaflet bomb, smoke bomb, photoflash bomb, a bomb-like container or chamber, etc. 3. In specific senses: *a*. An aerial bomb; *b*. A nuclear bomb. Often called "an A-Bomb or an H-Bomb." In sense 1, 'bomb' includes grenades, aerial bombs, infernal machines, mortar projectiles, etc., but does not include cannon projectiles, torpedoes, aircraft rockets, or mines. Guided missiles, ballistic missiles, explosive robot planes and similar devices are, however, sometimes popularly referred to as 'bombs' or 'flying bombs.' In sense 3–a, the word 'bomb' is often modified by a designating attributive, as in armor-piercing bomb, chemical bomb, conventional bomb, etc. The various types of bombs are separately listed and defined. The term is used in this publication in sense 3–a unless otherwise indicated.

See: bomb, aerial.

bomb, aerial

A bomb designed to be dropped from an aircraft, carrying either a high explosive or another agent, and normally detonated on contact or by a timing device. Usually shortened by merely 'bomb.' Examples: BOMB, FRAGMENTATION; BOMB, GENERAL PURPOSE.

bomb, antitank

A bomb designed or intended to be used against tanks or other armored vehicles.

BOMB, ARMOR-PIERCING

A missile, designed for dropping from aircraft, which is capable of penetrating the heaviest deck armor without breaking up. Also effective against reinforced concrete structures. Usually contains an explosive charge of Explosive D, weighing about 15 percent of the total weight of the bomb.

BOMB, ARMOR-PIERCING: 1,600-lb, Explosive D, AN-MARK 1 MOD 1

bomb, atomic (A-bomb)
Meaning formerly limited to a bomb in which the explosive consists of a nuclear-fissionable, radioactive material, as uranium 235 or plutonium 239. Now accepted as synonymous with the term bomb, fission (which see). Also see bomb, nuclear.

bomb, blast
See: bomb, light case.

bomb, butterfly
A small fragmentation or antipersonnel bomb equipped with folding wings which rotate and arm the fuze as the bomb descends. Designed to be dropped in clusters, they are frequently fitted with antidisturbance or delay fuzes.

bomb, buzz
The V–1 robot plane of World War II, so named for the buzzlike noise of its pulse-jet engine. *Colloquial.*
See also: bomb, flying.

bomb, chemical agent
A bomb having a chemical agent for its main charge. Examples: BOMB, GAS; BOMB, INCENDIARY; BOMB, SMOKE.

bomb, cobalt
A theoretical atomic or hydrogen bomb encased in a cobalt, the cobalt of which would be transformed into deadly radioactive dust upon detonation.
Cf: bomb, nuclear.

bomb, conventional
Any nonatomic bomb designed primarily for explosive effect, as distinguished from a chemical bomb, leaflet bomb, incendiary bomb, or other special purpose bomb.

bomb, deep penetration
A bomb designed for deep penetration of the target before exploding.

bomb, delayed action
A bomb having a delay fuze. The delay action may vary from a fraction of a second to several days after impact, depending on the type of fuzing. Bombs or other projectiles having short delay fuzes are used to penetrate targets before exploding; bombs having medium delay fuzes are used for the safety of the plane in low altitude bombing, so that the plane may move away from the point of impact before detonation; bombs having long delay fuzes are normally used to deny territory to the enemy for a period of time, or to allow successive waves of planes to drop their bombs before any of them detonate.
Cf: bomb, time

bomb, demolition
See: BOMB, GENERAL PURPOSE.

BOMB, DEPTH (DB)
An explosive item designed to be dropped from an aircraft for use against underwater targets. When empty or inert loaded it may be used for training purposes.
Cf: CHARGE, DEPTH
BOMB, DEPTH: 350-lb, HBX, AN-MARK 54 MOD 1

bomb, drill
Any uncharged aerial bomb designed or adapted to train ground crews in assembling, fuzing, or other handling of bombs.

bomb, dynamite
An aerial bomb or other explosive device prepared for dynamite sticks.

bomb, explosive
Any bomb having an explosive as its main charge, as distinguished from a chemical bomb, or the like.

BOMB, FIRE
An item designed to be dropped from an aircraft to destroy or reduce the utility of a target by the effects of combustion. It is designed so as to contain a thickened fuel which spreads on impact to burn or envelope in flames personnel

and material tragets, such as vehicles and tents.
BOMB, FIRE: 750-lb, M116A2
BOMB, FIRE: 750-lb, MARK 77 MOD 0

bomb, fission
A bomb that depends upon nuclear fission for release of energy.
Cf: bomb, nuclear; bomb, atomic bomb, flame
See: BOMB, FIRE

bomb, flash
See: BOMB, PHOTOFLASH

bomb, flying
Popularly, any explosive robot plane, guided missile, or the like; specifically, the German V-1 explosive robot plane of World War II.

BOMB, FRAGMENTATION
An item designed to be dropped from aircraft to produce many small, high velocity fragments when detonated. Effective against personnel and light targets such as automotive materiel and aircraft on the ground.
BOMB, FRAGMENTATION: 4-lb, M83, w/bomb fuze, M129
BOMB, FRAGMENTATION: 90-lb, COMP B, M82
BOMB, FRAGMENTATION: 220-lb, COMP B, AN-M88

bomb, fusion
A bomb that depends upon nuclear fusion for release of energy.
Cf: bomb, nuclear; bomb, hydrogen

BOMB, GAS
An item which contains a chemical agent (war gas) and designed to be dropped from an aircraft.
BOMB, GAS: 115-lb, persistent H, M70

BOMB, GENERAL PURPOSE
An item designed to be dropped from an aircraft to destroy or reduce the utility of a target by explosive effect. The bomb is designed to be used against both material targets and personnel. When empty, or inert loaded, the bomb may be used for training purposes.
BOMB, GENERAL PURPOSE: 100-lb, amatol, M30, w/fin
BOMB, GENERAL PURPOSE: 1000-lb, COMP B, AN-M65
BOMB, GENERAL PURPOSE: 10,000-lb, TNT, T56 series, w/plumbing
BOMB, GENERAL PURPOSE: 10,000-lb tritonal, T56 series, w/o plumbing

bomb, glide
A bomb, fitted with airfoils to provide lift, carried and released in the direction of a target by an airplane. A glide bomb may be remotely controlled. Certain glide bombs, as the Henschel 293, are initially propelled by a rocket engine; other glide bombs depend for thrust entirely upon the force of gravity.
See also: azon, razon.

bomb, guided
An aerial bomb guided, during its drop, in range or azimuth, or in both.

bomb, heavy case
Any high explosive bomb in which the weight of the container is relatively large in proportion to the weight of the bursting charge.

bomb, high capacity
A general purpose bomb designed to produce maximum blast, with a charge weight ratio of more than 70 percent. *British.* Also called 'blast bomb' and 'light case bomb.'

bomb, high explosive
Any aerial bomb charged with a high explosive; specifically, any such bomb chiefly dependent upon only its explosion, or blast effect, to create damage. 'High explosive bomb,' in its broader

sense, is a generic term encompassing armor-piercing bombs, general purpose bombs, light case bombs, and semi-armor-piercing bombs. A high explosive bomb is distinguished from a chemical bomb or an atomic bomb, and in its specific sense, from a fragmentation bomb.

bomb, hydrogen
A fusion bomb in which an isotope of hydrogen is made to fuse under intense heat, with a resultant loss of weight and release of energy. Also called the 'H-bomb.'
Cf: bomb, fusion; bomb, nuclear.

BOMB, INCENDIARY
An item designed to be dropped from an aircraft to destroy or reduce the utility of a target by the effects of combustion. It contains an incendiary mixture and is designed to penetrate and destroy relatively noncombustible targets such as buildings and fortifications. When empty or inert loaded it may be used for training purposes.
BOMB, INCENDIARY:' 4-lb, TH3, AN-M50A3

BOMB, INCENDIARY, INSTRUCTIONAL
A cylindrical metallic item filled with an incendiary mixture, which when ignited is used for instructing personnel in extinguishing fires.
BOMB, INCENDIARY, INSTRUCTIONAL: TH3, M2

BOMB, LEAFLET
A light case bomb (made of sheet metal or laminated plastic) designed to be filled with leaflets, provided with fuze to cause opening before impact, and released from an aircraft, for distribution of the leaflets.
BOMB, LEAFLET: 500-lb, empty, M105A1 (bomb cluster adapter, M16A1, modified)

bomb, light case
A type of general purpose bomb having a thin, light, metal casing, giving a high charge weight ratio and designed to accomplish damage primarily by blast. Also called a 'blast bomb.' A light case bomb usually contains a charge of from 70 to 80 percent of the total weight.
See also: BOMB, GENERAL PURPOSE

bomb, magnesium
1. An incendiary bomb in which the burning agent is magnesium.
2. A magnesium flare for use from aircraft.
See also: BOMB, INCENDIARY; flare, magnesium.

bomb, magnesium flare
A magnesium flare for use from aircraft.
See also: FLARE, AIRCRAFT; flare, magnesium

bomb, miniature practice
Miniature bomb, light and inexpensive, used for training of bombers. Fitted with blank cartridge to produce smoke puff upon impact.
See: BOMB, PRACTICE

bomb, napalm
A BOMB, FIRE filled with napalm, a thickened petroleum oil. The napalm bomb is primarily an antipersonnel weapon and is often distinguished from the BOMB, INCENDIARY, which is used primarily against installations or materiel.

bomb, nuclear
A bomb that releases explosive energy either through nuclear fission or nuclear fusion. This term is applied either to the atomic bomb or the hydrogen bomb.
See: bomb, atomic; bomb, hydrogen
Cf: bomb, fission; bomb fusion bomb, oil
See: BOMB, FIRE; bomb, napalm

bomb, open
In intelligence usage, and undisguised or

CHARGE, PROPELLING, 105 MILLIMETER DUMMY: M3, for dummy cartridge, M14

CHARGE, PROPELLING, 120 MILLIMETER
A charge, propelling (which see) for use in 120-millimeter weapons.
CHARGE, PROPELLING, 120 MILLIMETER, M15A2

CHARGE, PROPELLING, 120 MILLIMETER DUMMY
A charge, propelling, dummy (which see) for 120-millimeter weapons.
CHARGE, PROPELLING, 120 MILLIMETER DUMMY: M13

CHARGE, PROPELLING, 115 MILLIMETER
A charge, propelling (which see) for use in 155-millimeter weapons.
CHARGE, PROPELLING, 155 MILLIMETER: M19

CHARGE, PROPELLING, 155 MILLIMETER DUMMY
A charge, prcpelling, dummy (which see) for 155-millimeter weapons.
CHARGE, PROPELLING, 155 MILLIMETER DUMMY: M100

CHARGE, PROPELLING, 240 MILLIMETER
A charge, propelling (which see) for use in 240-millimeter weapons.
CHARGE, PROPELLING, 240 MILLIMETER: M23, for 360-lb proj

CHARGE, PROPELLING, 240 MILLIMETER DUMMY
A charge, propelling, dummy (which see) for 240-millimeter weapons.
CHARGE, PROPELLING, 240 MILLIMETER DUMMY: M12

CHARGE, PROPELLING, 280 MILLIMETER
A charge, propelling (which see) for use in 280-millimeter weapons.
CHARGE, PROPELLING, 280 MILLIMETER: M38
CHARGE, PROPELLING, 280 MILLIMETER: T44, dualgran, for 600-lb proj

CHARGE, PROPELLING, 280 MILLIMETER DUMMY
A charge, propelling, dummy (which see) for 280-millimeter weapons.
CHARGE, PROPELLING, 280 MILLIMETER DUMMY: T76

charge, reduced (red chg)
Propelling charge intended to produce a velocity below the normal. The term 'reduced charge' is sometimes used as an identifying designation when more than one type of propelling charge is available for a weapon.

charge, satchel
Number of blocks of explosive taped to a board fitted with a rope or wire loop for carrying and attaching. The minimum weight of the charge is usually about 15 pounds.

charge, shaped (SC)
An explosive charge with a shaped cavity. Sometimes called 'cavity charge.' Called 'hollow charge' in Great Britain. Use of the term shaped charge generally implies the presence of a lined cavity.
Cf: Munroe effect; Mohaupt effect

CHARGE, SIGNAL, EJECTION
An explosive item designed to eject a signal from a MINE, UNDERWATER when used for training.
CHARGE, SIGNAL, EJECTION: MARK 3 MOD 0

charge, single section
Propelling charge in separate loading ammunition that is loaded into a single propellant bag. A single section charge cannot be reduced or increased for change of range, as can a multisection charge.
See also: charge, propelling

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fuse
An igniting or explosive device in the form of a cord, consisting of a flexible fabric tube and core of low or high explosive. Used in blasting and demolition work, and in certain munitions. Fuse with black powder or other low explosive core is called FUSE, BLASTING, TIME. Fuse with PETN or other high explosive core is called CORD, DETONATING.
Cf: fuse

fuse, Bickford
A safety fuse, having a core of black powder enclosed within a tube of woven threads surrounded by various layers of textile, waterproof material, sheathing, etc. Burns at specific rates.
See also: fuse; FUSE, BLASTING, TIME

fuse, blasting
Short for "FUSE, BLASTING, TIME."

FUSE, BLASTING, TIME
A flexible water resistant fabric covered cord containing a black powder core, which burns at a known rate from one end to the other, providing a time delay proportional to the length of fuse. Used for igniting a blasting cap or an explosive charge.

FUSE, BLASTING, TIME: M700

FUSE, BLASTING, TIME: Commercial

fusee
(Pronounced 'fu-zee.') An igniter squib for a rocket motor.
See: FUSEE, WARNING, RAILROAD

FUSEE, WARNING, RAILROAD
A pyrotechnic device used as a safety signal on railroads, normally consisting of a tube or cartridge with a spike point base. When placed in an erect position and ignited, the cartridge burns with a white or colored light for a definite period of time.

FUSEE, WARNING, RAILROAD: red, 5-min.

fusion, nuclear
The fusing or uniting of the atomic nuclei of an isotope, as those of deuterium, to form other nuclei under the influence of intense heat.
See also: bomb, hydrogen

fuze
1. A device with explosive components designed to initiate a train of fire or detonation in an item of ammunition by an action such as hydrostatic pressure, electrical energy, chemical action, impact, mechanical time, or a combination of these. Excludes FUSE (as modified). 2. A non explosive device designed to initiate an explosion in an item of ammunition by an action such as continuous or pulsating electromagnetic waves, acceleration or deceleration forces, or piezoelectric action. Excludes SWITCH (as modified). (Use a functional modifier, such as radar or impact.) (3) To equip an item of ammunition with a fuze.
Cf: fuse

fuze, air nose
A point detonating rocket fuze which uses vanes in the air stream to arm itself.

fuze, air pressure
A conclusion fuze or a barometric fuze.
See: fuze, barometric; fuze, concussion

fuze, all way
An impact fuze designed to function regardless of the direction of target impact. Also called 'allways' fuze.

fuze, antidisturbance
Fuze designed to become armed after impact, or after being emplaced, so that any further movement or disturbance will result in detonation.
Cf: fuze, antiwithdrawal

fuze, antihandling
See: fuze, antidisturbance

fuze, antiwithdrawal
A fuze incorporating an antiwithdrawal device (which see).

fuze, auxiliary detonating (ADF)
An additional fuze used to augment the

plosion below the surface of the earth. Mining effect may be contrasted with the blast effect produced by an explosion on or above the surface of the earth.
Cf: blast effect

minol
High explosive mixture containing 40 percent TNT, 40 percent ammonium nitrate, and 20 percent powdered aluminum. Produces large blast effect. Suitable for melt loading (which see).

misfire
Failure of an item of ammunition to fire after initiating action is taken.
Cf: hangfire; see also: fire (sense 1)

missile (msl)
1. Any object that is, or is designed to be, thrown, dropped, projected, or propelled, for the purpose of making it strike a traget. 2. A guided missile (which see). 3. A ballistic missile (which see).

missile, antiaircraft
A guided or a ballistic missile intended to be launched from the surface against an airborne target.
See: ballistic missile; guided missile

MISSILE, FREE FALLING, ANTIPERSONNEL
A nonexplosive missile designed to be dropped from aircraft, for effect against personnel.

MISSILE FREE FALLING, TIRE-PUNCTURING
A nonexplosive missile designed to be dropped from aircraft, on roads and airfield runways, to cause damage to tires of vehicles or aircraft, by contact.

Al[illegible]zhay-Schardin effect
[illegible]e acceleration of a solid endplate (usually metal) from the fact of an explosive charge under detonation, such that the endplate remains a solid and functions as a missile.

Mohaupt effect
The effect of a metal liner introduced in a shaped charge to increase penetration. Generally incorporated in HEAT ammunition.
See also: Munroe effect

monopropellant
A liquid chemical compound, or liquid mixture of compatible chemical compounds, which is stable and can be handled, stored, and fed into the combustion chamber of the missile from one storage tank. The liquid must then be capable, under proper ignition conditions, of supporting its own combustion at a rate to develop a useful thrust.
Cf: bipropellant; multipropellant

MOORING AND SAFETY DEVICE, UNDERWATER MINE
An item designed to provide a safe-when-adrift feature in an underwater mine. It is assembled to an underwater mine case and contains a spring loaded shackle to which the mooring is secured. When properly moored, tension of the mooring chain or cable operates the underwater mine extender; when this tension is released the item releases the extender and allows it to retract, rendering the underwater mine safe.
MOORING AND SAFETY DEVICE, UNDERWATER MINE: MARK 1 MOD 0

mortar
A gun, sense 1 (which see) with a short barrel and low muzzle velocity. These values are below those of a howitzer. It is designed for high angle fire against targets which cannot be reached by flat trajectories. It is usually of simple construction and designed for lightness and mobility.

motor, rocket

See also: CHEMICAL AGENT, INCENDIARY OIL; THICKENER, INCENDIARY OIL

NATO *Ammo nomen*
The initial letters of North Atlantic Treaty Organization. Indicates that ammunition is for use in NATO weapons, as for example, the 7.62-millimeter lightweight rifle or machine gun.

NAVOL TANK, TORPEDO
A tank forming part of a torpedo assemblage, provided for the storage of solution of hydrogen peroxide in water. Decomposition of the hydrogen peroxide furnishes the oxygen required to effect combustion of the fuel, alcohol.
NAVOL TANK, TORPEDO: for torpedo, MARK 16 MOD 6

neck, case
Cylindrical portion of cartridge case between mouth and shoulder.

nerve gas
Chemical agent (war gas) which is absorbed into the body by breathing, by ingestion, or through the skin, and affects the nervous and respiratory systems and various body functions. Examples: soman; tabun; CHEMICAL AGENT, ISOPROPYL METHYLPHOSPHONOFLUORIDATE (sarin). (See separate entries.)

Neumann effect
Term sometimes used by Europeans for the more common British-American term of Munroe effect (which see).
See also: charge, shaped

neutral burning
See: neutral granulation

neutral granulation
Propellant granulation in which the surface area of a grain remains constant during burning. The burning of a propellant with neutral granulation is termed 'neutral burning.'
Cf: degressive granulation; progressive granulation

NH propellant
A propellant which, by reason of its formulation or method of manufacture, does not absorb moisture from the air.
See: nonhygroscopic

NITRIC ACID, GUIDED MISSILE
A chemical manufactured specifically for use in guided missiles which must contain a minimum by weight of 0.5 percent hydrofluoric acid inhibiter and 13 percent nitrogen dioxide. Excludes NITRIC ACID, ACS; NITRIC ACID, ANALYZED REAGENT; NITRIC ACID, FUMING, ACS; NITRIC ACID, FUMING, TECHNICAL; NITRIC ACID, REAGENT and NITRIC ACID, TECHNICAL.
NITRIC ACID, GUIDED MISSILE: special purpose, for Nike

nitrocellulose (NC)
Cellulose nitrate. An explosive used in the manufacture of smokeless propellants. Formed by the action of a mixture of nitric and sulfuric acids on cotton or some other form of cellulose. Guncotton is a nitrocellulose that has a very high nitrogen content.

nitrocellulose propellant
A single base propellant whose main constituent is nitrocellulose, with only minor percentages of additives, for stabilizing, etc.
See: propellant

nitrocotton
See: guncotton

nitrogen mustard gas (HN)
See: CHEMICAL AGENT, NITROGEN MUSTARD GAS

nitroglycerin (NG)
Nitrated ester of glycerol in which the OH radicals are replaced by NO_2. A color-

propelling a projectile. Restricted to small arms propellants, for which the grain size is small. In larger grain form it is called simply 'propellant.'
See also: powder, propellant
PROPELLANT POWDER: pistol, P-caliber .30 carbine
PROPELLANT POWDER: pistol, P-4768, caliber .45
PROPELLANT POWDER: pyro DG, caliber .30

propellant tag
Linen tag attached to a propellant bag, carrying information about the propellant charge, such as the name of the loading plant, the date of loading, and the caliber and model of the gun for which it was made. Formerly called 'powder tag.'

propellent
Driving forward, able or tending to propel, as in 'a propellent gas.' Should not be used as a noun in place of propellant (which see).

propelling charge explosive train
See: explosive train

PTXI
Explosive consisting of RDX, tetryl and TNT.

PTX2
Explosive consisting of RDX, PETN and TNT.

PUNK, STICK
A preformed material in cylindrical form, which when ignited smolders without flame, to provide means for igniting safety fuse.

pyrocellulose
Nitrocellulose having a lower nitration than guncotton, used in smokeless propellants. Contains approximately 12.6 percent nitrogen. Also called 'pyrocotton.'

pyrocotton
See: pyrocellulose

pyropropellant
Single base propellant consisting principally of nitrocellulose.
See: propellant

pyrotechnic outfit
See: SIGNAL KIT, PYROTECHNIC PISTOL

pyrotechnic signal
Signal (which see) designed for military use to produce a colored light or smoke, for the purpose of transmitting information.

pyrotechnics
Items used for both military and nonmilitary purposes, such as producing a bright light for illumination, or colored lights or smoke for signaling, and which are consumed in the process.

pyroxylin
Nitrocellulose containing less than 12.5 percent nitrogen

quantity-distance tables
The regulations pertaining to the amounts and kinds of explosives that can be stored and the proximity of such storage to buildings, highways, railways, magazines, or other installations.

quickmatch
Fast burning fuse made from a cord impregnated with black powder.

quickness
General term, expressing the mass rate of gas evolution of a propellant in a quantitive sense. Basically a function of the propellant geometry.

quickness, relative
Ratio of the quickness of a test propellant to the quickness of a standard propellant, measured at the same initial temperature and loading density in the same closed chamber.

radial band presure

and also to its ammunition. The gun bore may be tapered throughout its length or only in the muzzle section. The projectile which starts out as a light weight projectile of the larger caliber may be projected at hypervelocity in the form of a smaller caliber projectile of normal or heavy weight. The smaller caliber maintains a higher velocity than would the larger caliber (for equal weight projectiles) because of lowered air resistance. For this reason the tapered bore is sometimes used for antitank weapons. Sometimes referred to as 'squeeze bore' or 'Gerlich gun,' after its originator.

target charge
See: charge, target

target projectile
See: projectile, target practice

tear gas
A substance, usually liquid, which, when atomized and of a certain concentration, causes temporary but intense eye irritation and a blinding flow of tears in anyone exposed to it. Also called a 'lacrimator.' Chloroacetophenone is a common tear gas.
See also: CHEMICAL AGENTS, CHLOROACETOPHENONE; lacrimator

teller mine
Large land mine employed by the Germans during World War II. It was an antitank mine weighing about 15 pounds, shaped like a large plate ('teller') and was frequently booby trapped.

terminal velocity
1. The constant velocity of a falling body attained when the resistance of air or other ambient fluid has become equal to the force of gravity acting upon the body. Sometimes called 'limiting velocity.'

test, high pressure (HPT) *Ammo nomen*
Indicates, in cartridge nomenclature, that item is intended to produce a high pressure in the weapon and is to be used for test purposes.
See: cartridge, test, high pressure

test, low pressure (LPT) *Ammo nomen*
Indicates, in cartridge nomenclature, that item is intended to produce a low pressure in the weapon and is to be used for test purposes.
See: cartridge, test, low pressure

test ammunition
In a general sense, any ammunition used, or intended to be used, for test purposes. Specifically, ammunition prepared for testing firearms.
See also: cartridge, test, high pressure; cartridge, test, low pressure

tetryl
2, 4, 6-trinitrophenylmethylnitramine. A crystalline explosive of high sensitivity and brisance, used especially as a detonator or booster, and sometimes as a bursting charge in small caliber missiles.

tetrytol
A high explosive mixture of tetryl and TNT in any of several proportions which permit melt loading (which see).

thermate (TH)
See: CHEMICAL AGENT, THERMATE

Thermit
Trademarked term of CHEMICAL AGENT, THERMITE.

thermite (TH)
See: CHEMICAL AGENT, THERMITE

thermometer, propellant temperature
See: INDICATOR: propellant temperature

thickened fuel
Gasoline or a blend of gasoline and light fuel oil with THICKENER, INCENDIARY OIL added; used as an incendiary

in a propellant charge of semifixed rounds, corresponding to the intended zone of fire, e.g., zone charge 5 consists of 5 increments of propellant.
See also: increment

Copies of specifications, standards, drawings, and publications required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.

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Custodians:
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