

GLOSSARY OF JAPANESE BALLISTICS TERMS

FOREWORD

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INTRODUCTION

The material that appears in this glossary was taken from publicly available works. If any user finds an instance where there appears to be an error and wishes to suggest a correction, the editors are eager to review all such comments. Most particularly, suggested new items will be most welcome. This glossary will be reworked periodically and new editions issued when there is sufficient material to warrant an update.

For some foreign abbreviations, there is a preferred English equivalent (e.g., UN for United Nations), and this English version will appear in brackets behind the English translation. FBIS asks all of its translators to use this preferred version and urges other users to do likewise.

- A -

Romanization	Definition
abero no jotai hoteishiki	Abel equation of state; Abelian equation
ajikaen	lead azide
akkai	collapse
akuseputachaji	acceptor charge (in a through-bulkhead-initiator)
amatoru	amatol
anho bakuyaku	ammonium nitrate fuel-oil explosive (ANFO)
anteido	stability; safety
anzen kaijo	arming
anzen kaijo jiku	arming stem
anzen kaijo neji	arming screw
anzen kaijo pin	arming pin
anzen kaijo sayo	arming action
anzen kaijo yoku	arming vane
anzen kyori	safety distance; safe distance
anzenka	disarm
aonsoku	subsonic speed
ap dan	armor-piercing
apc dan	armor-piercing capped
apds dan	armor-piercing discarding-sabot
apdfs dan	armor-piercing discarding -sabot fin-stabilized

atsuenkinshitsukosoko	rolled homogeneous steel armor
atsunyuko	cannelure
atsunyushamen	forcing cone; forcing taper (within cartridge chamber)
atsuryoku chuushin	center of pressure
atsuryoku shisu	pressure index
atsuryoku suiryoku	pressure thrust
atsuryokuso	pressure phase

- B -

baka fugo	Barker code
bakudan	bomb
bakudan anzen kaijo	bomb arming
bakudan kenchoka	bomb pylon; bomb rack; hard point
bakudan kotei	bombing run
bakudan seigensen	bomb line; bomb safety line
bakudan toka	bomb(s) away
bakudanso	bomb bay
bakufu	blast
bakufu inparusu	pressure impulse
bakufu koka	blast effects
bakufu no kaisetsu	blast diffraction
bakufu tenkoki	blast deflector
bakufuha	blast wave
bakufun	priming charge; priming mixture
bakugeki koka hantei	bomb damage assessment
bakugekiki	bomber
bakugo	detonation
bakugo hamen	detonation wave front
bakugo sokudo	detonation velocity; detonation rate
bakugoatsu	detonation pressure
bakugoha seikei	detonation wave shaping
bakuha	1. blasting; 2. demolition; 3. explosion
bakuhatsu	explosion

bakuhatsuha	report wave (muzzle)
bakuhayaku	demolition charge
bakunen	deflagration
bakunenten	deflagration point
bakurai	depth charge
bakushin	ground zero
bakushuku	implosion
bakusoku	detonation velocity; detonation rate
bakuyaku	high explosives
banjo shogekiha	shock disk
bankei	gauge (shotgun, etc.)
barottingu	balloting
baruku sutorengusu	bulk strength (BS)
berudangata raikan	Berdan primer
berutiddo yakkyo	belted cartridge case
besu burido dan	base-bleed projectile
bibashiti	vivacity
bieiyu bonbu	Vieille bomb
bingata yakkyo	bottleneck cartridge case
binsoku kaikogata	frame-type (cluster adapter)
bitobu	receiver
bokusa gata raikan	boxer-type primer
boshudan	population (statistical)
botorunekku gata yakkyo	bottleneck cartridge case
bubun shintetsu	partial penetration
bunpu kansu	distribution function
bunri sodantotsuki tekkodan	armor piercing discarding sabot (APDS)

bunri sodantotsuki	
yokuanteitekkodan	armor-piercing fin-stabilized discarding-sabot (APFSD)
bunri sotendan	separate-loading projectile
bunridan	separate-loading projectile
bunrisotenyaku	separate-loading propellant
bunsan	variance
burizansu	brisance

C-J ten	Chapman-Jouget point
cad	cartridge-actuated device
cft	captive flight test
chakuhatsu bakudan	contact bomb
chakuhatsu shinkan	impact fuze; contact fuze
chakushokuhatsuendan	colored-smoke projectile
chakusoku	impact velocity
chichu dando	underground trajectory
chien fukimodoshishiki	delayed blowback
chihatsu	hangfire
chikkaen	lead azide
chinodan	smart munition; smart bomb
chitai zenshinryoku	creeping force
chitaichi misairu	surface-to-surface missile (SAM)
chitaichi yudoshotai	surface-to-surface missile (SAM)
chobojo tekkodan	long-rod penetrator
choenki shinkan	long-delay fuze
chohi	ricochet
chohidando	ricochet trajectory
chohigenkai	critical angle of ricochet
chohikaku	angle of recovery
chohisokudo	recovery velocity
chohiten	recovery point
chokaku	1. apex angle; 2. included angle (in a shaped charge)

chokikaku	jump angle
choonsoku	supersonic speed
chosei hahenkei	prescored fragmentation
chuenki shinkan	medium-delay fuze
chukan seiseibutsu	intermediate products
chukanen	intermediate flash
chushinhakkakata raikan	centerfire primer
chushinuchiju	centerfire rifle
chutaifukuza sochi	recoil system
chutaikan	recoil cylinder
chutaisochi	recoil brake system
chutoko	extractor groove
chutoshi	extractor
chuzo kinshitsuko soko	cast homogeneous steel armor
cw reda	continuous-wave radar

- D -

D bakuyaku	explosive D; ammonium picrate
daburubesu	double base
daburubesu hasshayaku	double-base propellant
dagekikaku	angle of incidence; striking angle
danchakugosa	deviation
danchakukaku	impact angle
danchakusen	line of impact
danchakuten	impact point; point of impact
dando	trajectory; ballistic
dando no genten	origin of trajectory
dando sessen	tangent to the trajectory
dandofu	ballistic wind
dandogaku	ballistics
dandoheiki	ballistic weapon
dandoheki	calibration
dandokeikaku	angle of inclination
dandokeisu	ballistic coefficient
dandokion	ballistic temperature
dandokisen	base of trajectory
dangan	bullet
dangan no hasai	bullet fragmentation
danganko	cannelure
dankaku	projectile case
dankakurashikiheisaki	stepped-thread breech block
dankeikeisu	form factor; coefficient of form

dankosen	closing plug	
danmenseki	cross-section area	
danseikeisu	modulus of elasticity	
danshin	bullet core	
danshinhishotai	subprojectile	
dantai	rotating band	
dantaientobu	bullet seat	
dantaikobushamen	second shoulder	
dantaioi	grommet	
danteikoryoku	base drag	
danteisen	base plug	
danteishinkan	base-detonating fuze; base fuze	
danto	1. bullet nose; 2. warhead	
dantoshogekiha	projectile shock wave	
dantotenkadanteikibakushinkan	point-initiating (PIBD)	base-detonating
danyaku rotto	ammunition lot	
danyaku rotto bango	ammunition lot number	
danyaku wariateryo	ammunition allowance	
dasshinki	escapement	
dasshinkiko	escapement	
dekahaidoronafutarin	Decalin; decahydronaphthalene	
denbakuyaku	booster	
denbakuyakuto	booster (within a fuse)	
denjiho	electromagnetic launcher (EML)	
denshishikijigenshinkan	electronic time fuze (ETF)	
disupensahoshiki	dispenser method	
doatsu	dynamic pressure	

dobakusen	detonating cord; detonating fuze
dobakuyakuto	lead (within a fuse)
dojikukasokusochi	coaxial accelerator (in a rail gun)
donachaji	donor charge (in a through-bulkhead initiator)
donkakukonseikeisakuyaku	flat cone-shaped charge
doppurakoka	Doppler effect

earozoru	aerosol
EBW denkiraikan	exploding bridge-wire percussion caps
EC kayaku	EC smokeless powder
eikodan	tracer
eikohyojidan	spotter tracer
eikozai	tracer compound
ekitaihasshayakuho	liquid propellant gun
ekitaishuishinyaku	liquid propellant
enchoku chohikaku	vertical angle of recovery
enerugi hoteishiki	energy equation
enfirudoshiki kosen	Enfield rifling
enka	fireworks
enkeikosangosa	circular error probable (CEP)
enkisado bakudan	time-delay bomb
enseihenkeigata hasai	ductile failure
enshinryoku	centrifugal force
enshubakudan	practice bomb
enshudan	target-practice ammunition
ensosanen bakuyaku	chlorate explosive
ensuikeiraina	conical liner
entokeidanbi	cylindrical-tail bullet-square tail
entokeiyakkyo	straight cartridge case

- F -

fizuzon	fizz zone
fm-cw reeda	frequency modulation continuous wave radar
fudogekishin	floating firing pin
fuhatsu	misfire; dud
fukimodoshishiki	blowback
fukkukeburugata	hook cable (cluster adapter)
fukugenmomento	restoring moment
fukugosoko	composite armor
fukushanetsukoka	radiant heat effect
fukuza	counterrecoil
fukuzabane	recoil spring
fukuzakan	counterrecoil cylinder
fukuzasochi	recuperator mechanism
funkako	(primer) flash hole
funoso	negative phase
furenzokuroddokei	discrete rod (penetrator)
fureshetto	flechette
furiroketto	free rocket
futsubakudan	general-purpose bomb
futsudan	ball ammunition (small arms)
futto ryoiki	fizz zone

gaibakukei	external blast type (fragmentation etc.)
gairyoku	outer forces
gangisha	escape wheel
ganma kansu	Gamma function
gansuibakuyaku	water-gel explosive
gasuatsuhenkakyokusen	pressure/time curve
gasumoreboshiza	gas check seat
gasuriyoshikishoju	gas-operated rifle
gekihakakuritsu	kill probability
gekihatsu	percussion
gekikaku	angle of incidence; striking angle
gekishin	firing pin
gekisoku	striking velocity
genkaichi	limiting value
genkaihadanoryoku	critical fracture stress
genkaishakaku	1. critical angle of elevation; 2. maximum trailing angle
genkaisokudo	velocity limit; critical velocity
genkaiyakukei	critical diameter
genonki	moderator; suppressor
genshibakuhatsu	atomic explosion; nuclear explosion
gensokubakudan	retarded [by drag chute, etc.,] bomb
gensoyaku	reduced charge
gensui momento	damping moment
genten	origin (of trajectory)

geruka gasorin	thickened gasoline
gotai dando kaiseki	rigid-body trajectory analysis
guredo sutorengusu	grade strength (GS)
gyakko	sear
gyakkoban	sear slide
gyaku no kukinagare	reverse air flow
gyorai	torpedo

hahen	fragmentation; fragment(s)
hahen bakudan	fragmentation bomb
hahen dando	fragment trajectory
hahen koka	fragmentation effect
hahen mitsudo	fragmentation density
hahen no koryokuhani	damage pattern (fragments)
hahen no sanpikai	fragment distribution pattern
hahen no shosoku	initial fragment velocity
haiburitto suishinyaku	hybrid propellant
haienki	bore evacuator
hakaijoken	failure criteria
hakkakin	primer anvil
hakugekiho	mortar
hakugekiho entai	mortar pit
hakugekiho hensaban	mortar deflection board
hakuri	fragmentation; spalling
hakurigenzo	spalling
hakurisuruhahen	spall
handoriyoshikishoju	recoil-operated rifle
handouke	receiver
hanjidokaki	semiautomatic weapon
hankeihokohasai	radial fracture
hankiyugataseikeisakuyakudan	hemispherical charge
hannoseiseigasu	fumes
hansuhitchukai	50 percent dispersion

hantekkobakudan	semi-armor piercing bomb
haretsu kyori	range of burst
haretsudaka	height of burst
haretsuten	burst point
hasai	fragmentation
hasshakaku	quadrant angle of departure
hasshamen	plane of departure
hasshasen	line of departure
hasshasokudo	rate of fire; cyclic rate
hasshayaku	propellant
hasshayakugasuhinetsu	specific heat of explosion
hatsuensbakudan	smoke bomb
hatsuendan	smoke projectile
hauza no bakuhashiki	Hauser's equation of blasting
hc dan	hemispherical charge
hc hatsuendan	hexachloroethane smoke projectile
heat dan	high-explosive anti-tank projectile
heikin danchakuten	mean point of impact
heikin gasu atsu	average gas pressure
heikin gosa	mean error
heikin hankei	mean radius
heikin zettai gosa	mean absolute error (MAE)
heikinchi	mean; average
heisaki	breech
heisakishitsu	breech recess
heisha kosoku	close sheaf
hekisogen	hexogen

hengosoyaku	adjustable-charge propellant
henryu	drift
henryukeisu	drift factor
hensadandokeisan	deflection ballistic table
hep dan	high explosive plastic; squash-head explosive (Brit.)
heriuchiju	rimfire rifle
hibiware	heat check
hidanseikaiseki	inelastic analysis
hidorajin	hydrazine
hidorajin shosanen	hydrazine nitrate
hidorokishiru ammonium naitoreto	hydroxyl ammonium nitrate (HAN)
hikigane	trigger
hiko	1. bullet jacket; 2. shell case
hinetsu	specific heat
hishotai	missile; projectile
hisuiryoku	specific impulse
hisuiryokubakudan	unpropelled bomb
hitaishokukinagare	asymmetric air flow
hiyudobakudan	unguided bomb; dumb bomb
hizumi sokudoizonsei	strain rate effect
hm _x	High Melting point Explosive
hobikan	breech ring
hogaidandogaku	exterior ballistics
hohei ju	infantry rifle
hoji	trunnion
hojokoteikaku	complementary angle of sight

hoko	bore
hoko kosan gosa	error probable deflection (EPD)
hoko sokudo	muzzle velocity
hokobakufu	muzzle blast
hokoseitai	muzzle brake
honaitekiyoin	in-bore contribution (to jump angle)
hopukinson koka	Hopkinson effect
hoshin hito	gun-barrel thermal jacket
hoshin shindo	barrel oscillation
hoshinjiku kijunsen	tube reference line
hoshinmagari	barrel droop; barrel bending
hotto supottosetsu	hot-spot theory
hvap dan	hypervelocity armor-piercing shell
hyojunhensa	standard deviation
hyojunshosoku	standard muzzle velocity
hyomenkokako soko	surface-hardened steel armor

ichiekishikiekitaihasshayaku	mono propellant
ichijien	primary flash
idosoyakuho	traveling-charge gun
igunaita	igniter
ikkatsu chunyuhoshikiho	bulk-loaded liquid propellant gun (BLPG)
inisheta	initiator
iryoku	1. power; 2. yield (of an explosive)
isopuropiru naitoreto	isopropyl nitrate
itteichi	constant

jairosukopikkantei	gyroscopic stability
jakumenyaku	collodion cotton (CC)
jetto	jet
jetto no enshin	jet elongation
jetto no hadan	jet breakup
jetto no seisei	jet formation
jetto no shintetsu	jet penetration
jetto ryushika	jet break-up
jetto segmento	jet segment
jibaku	1. cook off; 2. self destruction (of and AAA shell etc., to prevent friendly damage); 3. suicide bombing
jidokaki	automatic weapon
jigen bakudan	time bomb
jigen shinkan	time fuze
jikan kijun hasshinki	time-base oscillator
jikin hoshin	autofrettage tube
jinin sassho	casualties
jinitotororuen	dinitrotoluene; DNT
jurai	land mine
jisho	event
jisoho	self-propelled artillery
jitan hahendan	self-forging fragment (SFF); explosively formed penetrator
jitsubakudan	service bomb; live bomb
jitsudan	service ammunition

jiyu hishodando	free-flight ballistics
jiyukozasokudo	velocity of free recoil
jizoku hasshasokudo	sustained rate of fire
jizoku jikan	duration
johatsunetsu	heat of vaporization
jokiheisoku	vapor lock
josoyaku	normal charge
jubi kiko	breech mechanism
juganju	firing-port weapon; gun-port weapon
juji	trunnion
juko	bore; muzzle
jukokei	caliber
jukosochi	muzzle device
junan na shikosei dobakusen	flexible liner shaped charge (FLSC)
junbaku	sympathetic detonation
junsui fukimodoshishiki	simple blowback
juryoku	gravitational force
jushin	gun barrel
jusho	gun stock
jutenbutsu	filler

kabenjokantetsu	petalling
kabo	ballistic cap; false ogive
kadoshiki jigenshinkan	powder train time fuze (PTTF)
kaen bakudan	fire bomb
kaen tenkayaku	flash charge
kagaku bakudan	chemical (reaction) bomb, (e.g. , incendiary, smoke, flash, etc.)
kagaku enerugi dan	chemical-energy projectile
kagaku sayo	chemical action
kagaku zai bakudan	chemical-agent bomb
kagokayakurui	explosive compound (simple; unitary)
kahenkoza	variable recoil
kaho no kosei	gun construction
kahodanyaku	artillery ammunition
kahofunshutsuhoshiki	downward-ejection method
kahohasshayaku	gun propellant
kaiganho	coastal defense gun; barbette gun
kaisha kosoku	open sheaf
kakan	primer
kakkoho	smoothbore gun
kakohin	pyrotechnics
kakohin bakudan	pyrotechnic bomb
kakozai	pyrotechnics
kakubakudan	atomic bomb; nuclear weapon
kakuhekigata kibakukan	through-bulkhead initiator (TBI)

kakurashikiheisaki	interrupted-screw breech block
kakuritsuhensu	random variable
kakuritsukyokusenho	probit design
kakuritsumitsudokansu	probability density function
kakusokudo	angular velocity
kando	sensitivity
kanketsufunsha	chuffing; chugging (intermittent oscillatory burning)
kannen	all-burnt; complete combustion
kannenten	complete combustion point
kanoho	gun (artillery); cannon
kansaiho	ship-borne gun
kansankyori	scaled distance
kanseikayakurui	moderated explosives used in propellants
kanseiryoku	inertial forces
kansetsu shojun	indirect laying (of fire)
kanshosochi	buffer
kansoku shageki	observation fire; observed fire
kantetsu	perforation (complete penetration with residual velocity greater than zero)
kantsu	complete penetration
kanzenshintetsu	complete penetration
karikion	virtual temperature
karishahyo	provisional firing table
karitto	carlit
kasanka chisso	nitrogen peroxide; N ₂ O ₂
kasanka suisō	hydrogen peroxide; H ₂ O ₂

kasoyaku	special charge (special high-pressure propellant charge)
kasozai	plasticizer
kassorohakaibakudan	runway-penetrating bomb
katauchiju	shoulder, arms
katodando	intermediate ballistics; transition ballistics
kayaku	1. explosives; 2. low explosives
kayakuhayaku	blasting explosive
kayakukeiretsu	explosive train
kayakurui	explosives (types)
kayakusadosochi	propellant-actuated device (PAD)
kayakuteisu	propellant constant
keigasuju	light-gas gun
keigokinsoko	nonferrous armor
keijokansu	form function
keikajikan	time of flight
keisankoatsu	computed pressure (CP)
keisansaidaikoatsu	computed maximum pressure (CMP)
keitaiho	portable weapon
kenbu	(cartridge) shoulder
keninho	towed artillery
kibaku	initiation
kibakuanzen	detonator safety
kibakuto	detonator; igniter
kibakuyaku	initiating explosive; priming charge
kien	extractor rim; extractor flange
kiju	carbine

kikaishikijigenshinkan	mechanical time fuze (MTF)
kikaitekiyoin	mechanical contribution (to jump angle)
kikanju	machine gun
kinsetsushinkan	proximity fuse
kinsokukan	obdurating ring
kinzokufunryu	ejecta
kirai	mine
kisenbu	rifling origin (within forcing cone)
kitaibakuyaku	fuel-air explosive (FAE)
kiteisaidaikoatsu	rated maximum pressure (RMP)
koboriumu	covolume
kodendososhi	photo-conductive detection element
kohan no shiken	panel test
kohofunshagasuryu	back blast
kohofunshutsuhoshiki	rearward-ejection method
kohowarikan	rear splitring
kokaku	quadrant elevation
kokanatsuryoku	elastic strength pressure (ESP)
kokanatsuryokusenzu	elastic strength pressure curve
kokei	caliber
koko	descending branch
kokoka	after-effect
ku kyu gyorai	aerial torpedo
kokushokukayaku	black powder
kon raina chokaku	cone liner angle
konai dandogaku	interior ballistics
kongo bakuyaku	explosive mixture

kongo kayakurui	explosive mixture
konpojishon	composition (explosive)
konpojitto	composite
konpojitto daburu besu	composite double base (CDB)
konpojittoka daburu besu	composite modified double base
koriori no chikara	Coriolis force
koryoku	drag
koryokukeisu	drag coefficient
koryokusha	fire for effect; effective fire
kosangosa	probable error
koseinobakuyaku	high explosive (more descriptive than nominative)
koseishiki	constitutive equation
kosen	rifling
kosen no sankei	caliber (land-to-land measurement)
kosen no yamanohaba	land width (of rifling)
kosenhaba	groove width
kosenkei sankei	bore diameter (land-to-land measurement)
kosenkeikaku	rifling angle
kosenshinsa	groove depth
koshaho	anti-aircraft gun
koshakakushageki	high-angle fire
kosoku sareta bakufu	blast confinement
kosokudan	high-velocity ammunition
kosokunensho	deflagration
kotai atsuryoku	setback pressure
kotairyoku	setback force

kotaisuishinyaku	solid propellant
koteiho	fixed artillery
koteikaku	angle of sight
koteikakusen	line of sight
koteikeisanshaku	graphical site table
koteikobakudan	high-drag bomb
koyadan	flechette
koza	recoil
koza busuta	recoil booster
kozacho	recoil distance
kozakoryoku	resistance to recoil
kozaryoku	recoil force
kozasokudo	velocity of recoil
kozataichushinnokatayori	recoil part offset
kuchu haretsu shinkan	aerial burst fuze
kuchuharetsu	air burst
kugeki	cavity
kuho	blank ammunition
kuho	blank ammunition
kukansoko	spaced armor
kukikoryoku	aerodynamic drag
kukimitsudo	air density
kukiryoku	aerodynamic forces
kukiryoku momento	aerodynamic moment
kukiteiko	air resistance
kumiawasetendo	combined rifling; composite rifling
kunrenbakudan	training bomb; practice bomb

kurasuta(shusoku)bakudan	cluster bomb
kurasutatenadaputa	cluster adapter
kuratta	clutter
kuryokutekiyoin	aerodynamic contribution (to jump angle)
kussetsuritsu	refractive index
kutaichi misairu	air-to-surface missile (SAM)
kutaichi yudoshotai	air-to-surface missile (SAM)
kutaiku misairu	air-to-air missile (AAM)
kutaiku yudoshotai	air-to-air missile (AAM)
kyoju	pistol
kyomenyaku	gun cotton (GC)
kyorikoka	distance effect
kyotaibu	cartridge base
kyoyoheikinsaidaikoatsu	permissible mean maximum pressure (PMMP)
kyoyokobetsusaidaikoatsu	permissible individual maximum pressure (PIMP)
kyuinso	suction phase
kyukeihasshayaku	ball powder

- L -

lova

low-vulnerability explosive

- M -

magunasu koka	magnus effect
magunasu momento	magnus moment
magunasuryoku	magnus force
mahha disuku	Mach disk
mahha hansha	Mach reflection
mahha kan	Mach stem
mametsu	abrasion
mamo	wear; abrasion
masatsukoryoku	friction drag; skin friction drag
meichukuiki	beaten zone
metofodoshiki kosen	Metford rifling
minenso hasshayaku	unburned powder
misu disutansu	miss distance
mizune sharudinkoka	Misznay-Schardin effect
mizunei sharudankoka	Misznay-Schardin effect
modo	brisance
mojurusoyaku	modular charge
mokuhydaka	height of target
mokuhyoshikokata	target direction (cluster adapter)
momento	moment
monro koka	Munroe effect
moptokoka	Mohaupt effect
moseikayakurui	extremely rapid explosive (used in blasting)
mott no shiki	Mott's equation

muenkishinkan	1. inertia fuze; 2. nondelay fuze
muhandoho	recoilless rifle
mujigenno	dimensionless
mukayaku danyaku	inert ammunition
mukayaku shinkan	inert fuze
muyakkyo shoju	caseless-ammunition rifle
muyakkyoka	caseless ammunition

- N -

naibakukei	internal blast type (shaped charges etc.)
naihokan	inner split ring
naisoho koshiki	interpolation formula
napamu	napalm
nenchakuryudan	high explosive plastic (HEP)
nendo	viscosity
nensei	dynamic viscosity
nensho	combustion
nenshoshuryo	burnout
nenshosokudo	(propellant) burn rate
netsudendodo	thermal conductivity
netsudentatsu	heat transmission
netsukoritsu	thermal efficiency
niekishiki ekitaihasshayaku	bi-propellant
nijien	secondary flash
nikobunpu	binomial distribution
nikuatsufukin raina	progressive liner
nimaigaihoshiki	clam-shell dispenser method
nininomadenokeikajikan	time of flight to any point
nitoramin	nitramine
nitoroguanijin	nitroguanidine; Picrite
nitoroguriserin	nitroglycerine
nitorosamin	nitrosamine
noiman koka	Neumann effect

nonneru	None ¹
nyushadando	incidence trajectory
nyushakaku	angle of incidence
nyushasokudo	incidence velocity
nyushaten	incidence point; point of incidence

O&S	orientation & stabilization
ofu ruto jirai	off-route land mine
okurekaku	angle of lag
okurigai	wad (in a shot shell)
okutogen	O c t o g e n ; cyclotetramethylenetrinitramine
okutoru	Octol
omomitsukekeisu	weight factor
onatsu	impulse noise overpressure
onatsu reberu	overpressure value
onkyo kirai	acoustic mine
onpa parusu reeda	Xondar wind sensor
onsoku	sound speed; sound velocity
orin	white phosphorus
osha	return fire

- P -

P-sakuyakukoka	P-charge effect
pad	propellant-actuated device
parusu reda	pulse radar
pbx	plastic-bonded explosive
pensuritto	pentaerythritol tetranitrate (PETN)
pentoraito	Pentalite
pikuatsu	peak pressure
pikuratoru	picratol
porigonshiki kosen	polygon rifling
purasuchikkubakuyaku	plastic explosive (PBX)
purazuma kai	plasma blob

- R -

raikan	blasting cap; percussion cap; primer
raikanshitsu	primer pocket
raikantai	primer cap
raiko	mercury fulminate
raina	liner
rainanohokai	liner collapse
rakukaku	angle of fall
rakusen	line of fall
rakusoku	terminal velocity
rakuten	point of fall
ranguriho	Langlie method of determining ballistic limit
reakuchibusoko	reactive armor
reda	radar
reda robu	radar lobe
redayukohanshamenseki	radar cross-section (RCS)
reinorusu su	Reynolds number
renzoku roddokei	continuous rod (kinetic energy weapon projectile)
resaru no hoteishiki	Resal equation
rijikukaku	yaw
rijikukaku sokudo	yawing velocity
rijikumen	plane of yaw
rimudo yakkyo	rimmed cartridge case
rimufaiakata raikan	rim-fire primer
rimuresu yakkyo	rimless cartridge case

rinkire	rupture
risaru eria	lethal area
robu	lobe
roketto bakudan	rocket bomb
rokettodan	rocket
rokettohojosuishindan	rocket-assisted projectile
rotoko	crater
ryudan	stray bullet
ryudan	high explosive (HE) (shell)
ryudanho	howitzer
ryushisokudo	particle velocity

s&a	safe & arm
sadram	sense and destroy armor
saidaidandodaka	maximum ordinate
saidaishatei	maximum range
saidaitanchikyori	maximum detectable distance
saidoshiken	closed-pit test
saikoten	summit
saikurikkureeto	cyclic rate
saikurotoru	Cyclotol
saiseichunyuhoshikiho	regenerative liquid propellant gun (RLPG)
saishotanchishingo	minimum detectable signal
sakkashinkan	contact fuze
sakuyaku	1. high explosive; 2. bursting charge
sakuyakuto	burster
sameto	thermate (thermite plus oxidizer)
samokappuru	thermocouple
sandanju	shotgun
sanjimoto no shuseishitsutendando	three-dimensional modified point mass trajectory
sanjuten	triple point
sankazai	oxidizer
sankei	land-to-land bore diameter
sanpi kai	1. dispersion zone; 2. distribution pattern

sanputeishaku	dispersion ladder
sanso baransu	oxygen balance
sasenshiki heisaki	sliding-wedge breech block
sasutena	sustainer
sei no so	positive phase
seiantei	static stability
seiatsu	hydrostatic pressure
seibisei	maintainability
seibutsu sayo	biological action; bacteriological effect
seibutsubakudan	biological (warfare) bomb
seien gosa	circular error
seikata soyaku	shaped charge
seikeihahenkei	preformed fragmentation
seikeisakuyakudan	shaped-charge projectile
seiki bunpu	normal distribution
seiki bunpu ruisseki kyokusen	cumulative normal distribution curve
seisei enerugi	energy of formation
seiseinetsu	heat of formation
seisha	salvo fire
seitaiki	muzzle brake; compensator
sekigaisenshinkan	infrared fuze
sekirin	red phosphorus
sekisosoko	laminated armor
sekkeikoatsukyokusen	design-pressure curve
sekkeisaidaikoatsu	design maximum pressure (DMP)
semirimudoyakkyo	semi-rimmed cartridge case
senbikeidanbi	boat-tail bullet

sendo	spin
sendoanteidan	spin-stabilized projectile
senkobakudan	flash bomb
senkoshogekiha	precursor shock wave
senkozai	photoflash composition
sennenshohosokuteisu	linear combustion law constant
senonsoku	transonic
senshaho	tank gun
senshi	breech lock
sentafaiakata raikan	centerfire primer
senten	twist (of rifling)
sentoatsuryoku	peak overpressure
sentodangan	spitzer bullet; conical bullet
sessenryoku	tangential force
sff dan	self-forging fragment
shaheikaku	angle of clearance
shahyo	firing table; range table
shahyokeisanshaku	graphical firing table (GFT)
shakaku	quadrant angle of elevation; firing angle
shakyori	range of target; range of fire
shakyorikosangosa	error probable range (EPR)
shamen	plane of elevation
shasen	line of elevation
shasha	oblique fire
shatei	range
shiatsu	dead pressure
shibozokushoan	aliphatic ammonium nitrate (AAN)

shika	seeker
shikakejirai	boobytrap mine
shiken atsuryoku	proof pressure
shikensu	sequence
shikkuna	(napalm) thickener
shikosei bakuyaku	shaped charge
shikuronaito	c y c l o n i t e ; R D X ; cyclotrimethylenetrinitramine; trinitrotrimethylenetriamine
shikurotetoramechiren-tetoranitoramin	cyclotetramethylene tetranitramine; Octogen
shikurotorimechiren-torinitoramin	cyclotrimethylene trinitramine; c y c l o n i t e ; R D X ; trinitrotrimethylenetriamine
shingodan	signal projectile
shingosokankinsetsushinkan	signal interval proximity fuze
shingoto	signal projectile
shingurubeesuhasshayaku	single-base propellant
shinkan	fuse
shinkansado	fuse-activated
shinraikukan	confidence interval
shintetsu	1. penetration; 2. perforation (i.e., complete penetration with residual velocity)
shintetsubakukan	perforating bomb (penetrating bomb)
shintetsudando	penetration ballistics
shintetsufukasa	penetration depth
shintetsugenkai	ballistic limit
shintetsukoka	penetration effect
shisenbu	commencement of rifling

shishosan pentaerisuritto	pentaerythritol tetranitrate; (PETN)
shitsutendandokaishi	point mass trajectory analysis
shoan	ammonium nitrate
shoanbakuyaku	ammonium nitrate explosive
shobi	(gun) butt
shobi bihan	butt plate
shoenki	flash suppressor
shogeki	1. impact; 2. impulse
shogekihaha	shock wave
shogekihamen	shockwave front
shogekihanodenpasokudo	shock velocity
shogekihasen	shockwave front
shogekion	impulse noise; impulse tone
shogekiryō	impulse (blast)
shogekiteisu	ballistic constant
shoibakudan	incendiary bomb
shoikoka	incendiary effect
shoiryudan	high explosive incendiary (HEI)
shoizai	incendiary composition
shoju	rifle
shojungu	(gun) sight
shojunsen	line of sight
shojutekidan	rifle grenade
shokaki	small arms
shokakidanyaku	small arms ammunition
shokirijikukaku	primary yaw
shoko	ascending branch

shoku	gas erosion (within a barrel)
shokuhatsushinkan	contact fuze
shomeidan	illumination projectile
shomeizai	illuminating composition
shoonki	silencer
shosan ammonium	ammonium nitrate
shosan esuteru	nitric acid ester
shosoku	1. initial velocity; 2. muzzle velocity
shosokukubun	velocity zoning
shubu	(cartridge) neck
shudokaki	manually operated firearm
shumatsudandogaku	terminal ballistics
shumatsukoka	terminal effect
shuneishinkan	super-sensitive fuze (SS)
shunpatsu shinkan	instantaneous fuze; super quick fuze (SQ)
shuseikaku	angle of lead
shushi	ejector
shusoku bakudan	cluster bomb
sodanshi	ammo clip
sodanto	sabot
sodanto	sabot
sodantotsukiyokuantei-	armor-piercing fin-stabilized
sogekiju	sniper rifle
sokkan	gas-check pad
soko	armor
sokohan no keisha	obliquity (of armor)

sokuatsu	side-pressure; lateral pressure
sokudoreberuchushushutsuho	sampling-of-levels method
sonjoshogekipa	barrel shock
sonku	wear; abrasion (within a barrel)
sonshokansu	damage function
sonshokijun	lethality criterion
sonsoku	remaining velocity
sotai baruku sutorengusu	relative bulk strength (RBS)
sotai ueito sutorengusu	relative weight strength (RWS)
soten	chambering
sotenmitsudo	loading density
suiatsu shinkan	hydrostatic fuze
suichokuhaneokirukaku	vertical jump angle
suichokukosangosa	error probable vertical (EPV)
suichokuryoku	normal force
suichokusasen	vertical sliding wedge
suiheihaneokirukaku	lateral jump angle
suiheianetobukaku	horizontal angle of recovery
suiheikosangosa	error probable horizontal (EPH)
suiheisasen	horizontal sliding wedge
suidoshiken	closed-pit test
suiryoku	thrust
suiryoku momento	thrust moment
suiryokubakudan	propelled bomb
suiryokukeisu	thrust coefficient
suishindando	propulsion ballistics
suishinyaku	rocket propellant

sukuibu	squib
supin gensui momento	spin-damping moment
suragu	slug
suraido	slide (part of breech mechanism)
surari bakuyaku	slurry explosive
sureshiorudoreberu	threshold level
sutandoofu kyori	standoff distance
suteppudokon	stepped cone (in a shaped charge)
sutorengusu	strength
sutoreto yakkyo	straight cartridge case

- T -

tagaini haihan	mutually exclusive
taisensha bakudan	antitank bomb
taisensha ryudan	high-explosive antitank HEAT
taisenshaho	antitank gun
taisho	1. target; 2. objective
taisokodan	antiarmor projectile
taju dageki koka	multiple punch effect
takeda riron	Takeda's theory
tani	groove
tanikei	groove-to-groove bore diameter
tanjunfukimodoshishiki	simple blowback
tankeicho	ogival length
tankeihankei	ogival radius
tankikanju	submachine gun
tankoyaku	single-perforated propellant
tanmennensho	unilateral burn
tannikuhoshin	monobloc tube
tansho ju	carbine
tantaibakudan	single bombs; (ant. cluster bombs)
tantaibakuyaku	homogeneous explosive
TBI	through-bulkhead initiator
teiatsuho	low-pressure gun
teibu	cartridge head
teihandoho	low-recoil gun
teihen	deflection

teikoza	constant recoil
teishakakushageki	low-angle fire
teishinshamen	centering slope; centering taper
teisokaze	low-level wind
teisokubakugo	low-velocity detonation (LVD)
teisokunensho	burning
teitaiten	stagnation point
teiteikobakudan	low-drag bomb
teizeijakuseidanyaku	low-vulnerability ammunition (LOVA)
tekidan	grenade
tekidanhashhaki	grenade launcher
tekidanju	grenade launcher
temochikaki	sidearms; handgun
tenbakujikan	reaction time
tendo	(rifling) twist
tenka	ignition
tenkayaku	initiating explosive; initiating charge
tento momento	overturning moment
terumitto	thermite
tetoriru	1. tetranitromethylaniline; 2. trinitrophenylmethylnitromine; Tetryl
tetotororu	Tetratol; Tetrytol
tetsukokan	discarding-sabot projectile (APFSDS)
toatsuryokusen	overpressure contour line
tokabakudan	aerial bomb
tokakaku	angle of drop
tokan	jacket

tokushubakudan	special-purpose bomb
tokushuyoto	special-use (projectile)
toraitonaru	tritonal
torietanoru	
ammoniumunaitoretu	triethanol ammonium nitrate (TEAN)
torimechirentorinitoroamin	trimethylene trinitroamine; cyclonite; RDX; cyclotrimethylene trinitramine
torinitotororuen	TNT; trinitrotoluene
toripuru besu hasshayaku	triple base propellant
torishineto	lead styphnate; lead trinitroresorcinate
toritonaru	Tritonal
torupekksu	torpex
toseitendo	constant-twist rifling
totsugekiju	assault rifle

- U -

uchigekisokudo	striking velocity
uchinuki	plugging
undo enerugidan	kinetic-energy projectile
undo suiryoku	momentum thrust
usunikubakudan	light-case bomb

- Y -

yakkyo	cartridge case
yakuryu	grain (of propellant)
yakushitsu	(cartridge) chamber
yakushitsuyoseki	chamber volume
yakushitsuzenbushamen	first shoulder
yasenho	field gun
yodanki	ammunition hoist
yodomiten	stagnation point
yoka	(gun] cradle
yokohokosokudo	transverse velocity
yoku	scoring (within a gun barrel)
yokuanteidan	fin-stabilized projectile
yoryoku	lift
yoshingane	trigger guard
yosojisho	elementary event
yotobakudan	specific application bomb
yudodan	guided missile
yukainetsu	heat of fusion
yuko hidan chiiki	effective beaten zone
yukoshatei	effective range
yutei	bolt
yuto	obdurator spindle

- Z -

zahyo	coordinates
zairaikatabakudan	conventional bomb
zakutsu hasai	brittle fracture
zandan mainasu	ammo minus
zandan nashi	ammo zero
zandan purasu	ammo plus
zansoku	residual velocity
zeijakudan	frangible bullet
zeimenyaku	friable cotton (FC)
zendan toka	all-bomb release
zenhowarikan	front split ring
zenjisho	universal event
zenkushogekipa	precursor (shock wave)
zenshinryoku	setforward force
zenzotendo	progressive rifling
zohakoryoku	wave drag
zosoyaku	super charge (propellant charge)