

Rifle Ammunition

Covers the stats of full power rifle ammunition.

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.338 Thunder

Overview

The **.338 Thunder** is a rifle cartridge based on the .308 Winchester case necked up to take .338 caliber projectiles. It was created by AMJ Precision in 2022 and intended as a special purpose big bore cartridge with reasonable recoil for lightweight self loading rifles. Unlike most necked up calibers of its kind it only sacrifices a single round of capacity in a standard 20 round magazine, providing 19 rounds of .338 Caliber ammunition in an AR-10 Platform.

Stats

Note: 343.2 m/s is the subsonic barrier - anything below that is considered subsonic. Subsonic ammunition removes the bullet crack down range making the round better suited to stealth.

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration
Ball	19.55	780	
Match	23	580	0.6
Subsonic	53.25	120	2
Armor Piercing	41	465	19.4
AP Reactive	33 + 1	597	15.9
AP Incendiary	36 + 2	470	12.3

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

.30-06 Springfield

Overview

The **.30-06 Springfield** cartridge (pronounced "thirty-aught-six") or 7.62×63mm was introduced to the United States Army in 1906 and later standardized; it remained in use until the late-1970s. The ".30" refers to the caliber of the bullet in inches. The "06" refers to the year the cartridge was adopted, 1906. With the help of modern ammunition development and manufacturing process's the .30-06 has been able to be revived into limited service by certain special operations units. Thanks to the size of the projectile and the case size the .30-06 is able to be loaded with heavier projectiles and more powder than 7.62x51 can be.

T99 Anti-aircraft Munition

T99 Anti-aircraft munitions were designed to be mixed with traditional tracers to assist with marking aircraft. It packs a small explosive in the tip that makes a highly visible explosion.

T100 HEIAP

T100 High Explosive Incendiary Armor Piercing Munition is a modern evolution of the T99 Munition. The T100 was designed by the [Commonwealth Joint Task Force Weapons Research & Development Group](#) to serve as an option for long range light anti-vehicle tasks sporting a duplex munition with a high explosive tip followed by an incendiary armor piercing projectile.

D.U.D.S.

.30-06 Depleted Uranium Discarding Sabot was an experimental armor piercing munition developed for the .30-06 in the 1960's however it was quickly discarded due to the radiation emitted from the munition. Due to the highly dense depleted uranium sabot the ammunition is extremely heavy, as such it has to be paired with a powerful accelerant. However [CJTF-WRDG](#) has begun producing the ammunition again, use at your own discretion.

Stats

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
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M2 Ball	30	810	2	7
Lapua Mega 200gr	28	800	2	15
Lapua Naturalis 170gr	33	895	5	6
Norma Big Bear 240gr	44	750	7	5
TTSX Hollow Point	40	810	0.922	3
M14A1 API	16	795	6	280
T99 Explosive Round	5 +1 Explosive Damage	500	3	1
T100 HEIAP	10 +1 Explosive Damage	990	3	45
Accelerator	32	1110	3	3
D.U.D.S.	29	991	28.1	610

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

7.62x54R

Overview

The **7.62×54mmR(immed)** is a rimmed rifle cartridge developed by the Russian Empire and introduced as a service cartridge in 1891. Originally designed for the bolt-action Mosin-Nagant rifle, it was used during the late Tsarist era and throughout the Soviet period to the present day. The cartridge remains one of the few standard-issue rimmed cartridges still in military use and is the longest serving rifle cartridge ever.

HP - Hollowpoint hunting load.

SPBT - Soft point boat tail match. Designed for long range accuracy shooting.

T46M - Cartridge with a 9.6 gram lead core tracer bullet with a bimetallic jacket, in a bimetallic case; intended for target designation and fire adjustment in battle (Trace color: Green).

7N14 SNB - A 7.62x54mm R SNB gzh (GRAU Index - 7N14) cartridge with a 9.8 gram armor-piercing bullet with a pointed heat-strengthened steel core over a lead base with a bimetallic jacket, in a bimetallic case. This SNB cartridge (SNíperskiy s Bronebóynoy púley - "Sniper with Armor-piercing bullet") was developed in the mid-1990s as a modernization of the 7.62x54mm R PS gzh cartridge to improve its penetration capabilities when fired from a sniper or designated marksman rifles, managing of piercing specialized ballistic body protections as well as providing a significant stopping power effect.

7N37 BS - A 7.62x54mm R BS gs (GRAU Index - 7N37) cartridge with a 12.2 gram armor-piercing bullet with a pointed tungsten carbide core over a lead base with a bimetallic jacket, in a steel case. This BS bullet (Bronebóynaya Spetsiál'naya - "Armor-piercing Special") was developed by TsNIITochMash in the 2010s to greatly increase the penetration capabilities of designated marksman rifles such as the SVD and its variants, being able of piercing through the most modern specialized ballistic body protections, in addition to being capable of piercing light covers and light armored vehicles despite having a relatively low muzzle velocity compared to other cartridges. However, due to its design, it has a significant bounce probability off various surfaces.

MAI AP - Modern Arms International LE / Export-only exposed tungsten sabot round. USA Made, very rare.

MAI API - Modern Arms International LE / Export-only exposed tungsten sabot with incendiary tip. USA Made, exceedingly rare.

Spotter - Soft point cartridge with 10 gram pyrotechnic charge beneath a white tracer element. Used for spotting targets from aircraft mounted machineguns.

7N60 RSP - A 7.62x54mm R RSP gs (GRAU Index - 7N60) cartridge with a 20 gram armor-piercing bullet with a pointed depleted uranium core over a lead base with a bimetallic jacket, in a steel case. This RSP bullet ("Radioactive Sniper Bullet") was developed by TsNIITochMash in the 2020s to greatly increase the penetration capabilities of designated marksman rifles such as the SVD and its variants against more modernised armor systems.

Stats

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
203gr HP	26.3	827	0.8	5
202gr SPBT Match	24.9	855	2.2	16
148gr SPBT Match	21	903	1.1	22
T46M (Tracer)	20	800	2.1	18
7N14 SNB	21.3	813	4	20
7N37 BS	19.7	785	8.76	83
MAI AP	16.8	984	10.5	100
Spotter	27	698	0.3	0
7N60 RSP	13.8	744	20.4	444
MAI API	14.7	804	18.2	201

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

7.62 NATO

Overview

7.62 NATO (7.62x51 NATO) is the NATO standard medium machine gun and sniper rifle cartridge. It is used in various marksman and sniper rifles as well as mounted and dismounted machine guns such as the FN MAG-58/M240. By modern standards it is antiquated, being outclasses by a lot of cartridges - however where it does edge other cartridges out is by having more weapons chambered in it.

Stats

Note: 343.2 m/s is the subsonic barrier - anything below that is considered subsonic. Subsonic ammunition removes the bullet crack down range making the round better suited to stealth.

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration
M80A1	16	850	4.677
M62 Tracer	15.6	816	4.777
M118LR	17.55	790	2.17
MK316	19.22	810	1.348
M993	14.8	910	7.77
M959 SLAP Tracer	12.8	1014	19.1
SuperNosler	21.55	822	0.56

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

.303 British

Overview

The **.303 British** is a .303-inch (7.7 mm) calibre. It was first developed in Britain as a black powder round put into service in December 1888 for the Lee-Metford rifle. In 1891 the cartridge was adapted to use smokeless powder. It was the standard British and Commonwealth military cartridge from 1889 until the 1950s for rifles and machine guns when it was replaced by the 7.62×51mm NATO.

It is still in common use in civilian shooting and is also frequently seen in the hands of insurgencies around the world.

Stats

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
215gr Hollowpoint	19	520	1.6	4
MkXI Light Ball	10.3	1015	1.65	4
MkI Ball	13.3	815	3.65	4
MkVIIIZ Enhanced Ball	16.2	777	2.72	5
MkVIIY Incendiary Ball	16	754	4.2	5
WEX AP Ball	10.2	914	10.8	95

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

6.8 Caracal (H&K NGSW Entry)

Overview

The **.277 Caracal** or **6.8×51mm Caracal**, is a centerfire rimless bottlenecked rifle cartridge produced by H&K as part of their NGSW program entry. It utilizes a hybrid three-piece cartridge case that has a steel case head, nickel body and a locking washer that mechanically connects the two to support a chamber pressure of 100,000 psi. 6.8 Caracal was the highest pressure entrant into the NGSW program.

The 6.8 Caracal cartridge was the eventual winner of the [NGSW program](#). As the victor of the program Caracal was given German Bundeswehr designations and additional cartridges were developed by request following the completion of the program. They are as follows:

DM11A1 (Weichkern) - A steelcore, FMJ Ball load.

DM21 (Leuchtspur) - DM11A1 tracer variant.

DM51 (Soft Target) - Hollowpoint match load designed for anti-terror and special forces operations against unarmoured targets at range.

DM31A1 - Tungsten core armor piercing load.

DM31A2 - Depleted Uranium armor piercing load, Tracer.

DM31A3 - High Velocity Armor Piercing Tracer

DM80 (Brandstifter) - RAUFOSS like loading. High explosive, incendiary armor piercing.

DM82 (Geschmolzen) - High Velocity Self Propelled Incendiary Load

Stats

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
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DM11	15.4	1000	4.5	16
DM51	18.7	990	0.3	1
DM31A1	15	1084	6	100
DM31A2	14.11	981	27	280
DM31A3	11.6	1550	18.5	320
DM80	16 + 8EDMG	999	8.3	99
DM82	8.6	2050	4.5	10

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

.277 TVCM (GD/Beretta NGSW Entry)

Overview

.277 TrueVelocity is a polymer composite cased cartridge developed by a Texas based company called TrueVelocity. It is one of three entrants into the 6.8 [NGSW program](#). All three 6.8 NGSW entries are extremely high pressure and designed to push extreme velocities out of relatively short barrel lengths. .277 TVCM as its referred to is designed to be chambered in the General Dynamics/Beretta RM-277 NGSW-R entry.

Each 6.8 NGSW entry cartridge has three different loads, keep in mind - while they are all designed to achieve the same task they will not all perform the same and vary entry to entry:

XM1168 - Full Metal Jacket Ball ammo. Also has a tracer variant.

XM1169 - Special Purpose Match ammo designed for long range shooting. Also has a tracer variant.

XM1170 - Special Purpose Armor Piercing ammo with a tungsten penetrator. Also has a tracer variant.

Additional ammunition types have been created as part of the trials and given unique designations, however beyond 1168, 1169 and 1170 none were requested as part of the NGSW program.

XM1171 HAPI - Special Purpose Hard-Armor-Piercing-Incendiary with a hardened steel penetrator supported by a high temperature incendiary charge. Offered by TrueVelocity as a lower cost alternative to XM1170, removing the need to use Tungsten. Also has a tracer variant.

Stats

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
.277 TVCM XM1168 (Ball)	14.2	1067	4.1	19
.277 TVCM XM1169 (Match)	15	1060	3.7	17

.277 TVCM XM1170 (AP)	13.4	1080	6.9	145
.277 TVCM XM1171 (HAPI)	11.5	1255	5.12	280

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

.277 Lone Star Magnum

Overview

.277 Lonestar Magnum is a round designed along side the TX-277 Designed Marksman Rifle. The round along with the rifle was designed as a long range precision rifle for hunting medium to large sized game at ranges in excess of 1km with a single hit. The capabilities of the cartridge and the weapon sparked interest from members of the Commonwealth Joint Task Force and a custom request for select fire variants was submitted to Lone Star Armory.

298gr Solid Brass

298 grain Solid Brass ammunition is hunting cartridge. It does not feature a jacket and was designed to be more environmentally friendly than typical lead projectiles.

152gr MTAC

152gr MTAC (Match/Tactical) is a high velocity long range precision match or tactical use ammunition. It is less suited to hunting but performs well against armor for tactical usage.

272gr MTAC

272gr MTAC (Match/Tactical) is a high velocity long range precision match or tactical use ammunition. The heavier variant of the MTAC is well suited to hunting as well as tactical usage making it a highly versatile round.

250gr RMA

RMA stands for Rocky Mountain Aluminium ammunition. Rocky Mountain is a longrange precision ammunition producer, Lone Star in conjunction with the Commonwealth Joint Task Force contracted RM to produce an aluminium based LR Precision round specifically designed for counter-sniping purposes.

307gr Tungsten AP

Designed and manufactured by Norma Ammunition specifically for the Commonwealth Joint Task Force, the 307gr Tungsten AP round is designed to penetrate most modern body armor's at ranges exceeding 600 meters with ease.

312gr Subsonics

Heavy 312gr Slug with poor ballistics.

Stats

Note: 343.2 m/s is the subsonic barrier - anything below that is considered subsonic. Subsonic ammunition removes the bullet crack down range making the round better suited to stealth.

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
298gr Solid Brass	17.95	708	4	8
152gr MTAC	16.8	990	6	7
272gr MTAC	17.4	897	4.66	8
250gr RMA	17	993	3.2	8
307gr Tungsten AP	18	750	10	145
312gr Subsonics	19.25	150	1	3

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

.277 Fury (SIG NGSW Entry)

Overview

The **.277 FURY** or **6.8×51mm SIG**, is a centerfire rimless bottlenecked rifle cartridge announced by SIG Sauer in late 2019 as part of their [NGSW program](#) entry. It utilizes a hybrid three-piece cartridge case that has a steel case head, brass body and a locking washer that mechanically connects the two to support a chamber pressure of 80,000 psi (551.6 MPa). .277 Fury as its referred to is designed to be chambered in the SIG MCX Spear NGSW-R entry.

.277 FURY is the second highest pressure entrant into the NGSW program, this is due to the MCX Spear having a 16 inch barrel, giving the projectile much less barrel length to get up to speed. As such the higher velocities are required to push the projectile faster with less barrel.

Each 6.8 NGSW entry cartridge has three different loads, keep in mind - while they are all designed to achieve the same task they will not all perform the same and vary entry to entry:

XM1168 - Full Metal Jacket Ball ammo. Also has a tracer variant.

XM1169 - Special Purpose Match ammo designed for long range shooting. Also has a tracer variant.

XM1170 - Special Purpose Armor Piercing ammo with a tungsten penetrator. Also has a tracer variant.

Additional ammunition types have been created as part of the trials and given unique designations, however beyond 1168, 1169 and 1170 none were requested as part of the NGSW program.

XM1185A1 - Special Purpose High Explosive-Incendiary-Armor Piercing 'Raufoss-like' load proposed for possible use by USSOCOM in sniper or marksman roles. It features a Tungsten penetrator supported by an explosive and incendiary component making it a highly capable barrier penetrator and good for usage against light vehicles and armoured infantry. SIG claims the XM1185A1 can penetrate 10mm of RHA at 45° from a range of 600m.

XM1184A1 - Special Purpose Armor Piercing Ammo with a Depleted Uranium penetrator. Proposed as a "wartime model" equivalent to XM1170 designed purely for penetrating any man portable body armor used by technologically equal countries. Also has a tracer variant.

XM1186 - Special Purpose Depleted Uranium Armor Piercing Fin Stabilised Discarding Sabot round. Proposed for use in emplaced machineguns to defeat VBIEDs at long distances without detonating IED. Also has a tracer variant.

Stats

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration	Armor Piercing
.277 Fury XM1168 (Ball)	15.4	900	3.5	17
.277 Fury XM1169 (Match)	16.2	910	2.8	15
.277 Fury XM1170 (AP)	14.7	984	5.9	120
.277 Fury XM1185A1 (HEIAP)	14	899	8.3	175
.277 Fury XM1184A1 (DU-AP)	11	981	17	290
.277 Fury XM1186 (APFSDS)	10.6	1350	14.5	320

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.

6.5 Creedmoor

Overview

The **6.5mm Creedmoor**, is a centerfire rifle cartridge introduced by Hornady in 2007 as a modification of the 6.5 Carcano and the .30 TC, and is based on the .308 Winchester. The cartridge was designed specifically for long-range target shooting, although it has success in game hunting and more recently it has found itself being adopted by various special operations communities due to its extreme accuracy and good effect on target.

Stats

Note: 343.2 m/s is the subsonic barrier - anything below that is considered subsonic. Subsonic ammunition removes the bullet crack down range making the round better suited to stealth.

Ammunition Type	Damage	Bullet Velocity (m/s)	Barrier Penetration
6.5 Creedmoor 120gr AMAX Match	16.95	940	6.5
6.5 Creedmoor 95gr VMAX	9	1200	7
6.5 Creedmoor 130gr Hunting	19	854	6
6.5 Creedmoor HAPI	12	860	12.43
6.5 Creedmoor AeroShell AP	15	900	22.5

Note: Barrier penetration represents the rounds ability to go through walls and barriers. Armor piercing represents the rounds ability to penetrate body armor plates.