

GURPS

Fourth Edition

HIGH-TECH™

PULP GUNS, VOLUME 2



Written by HANS-CHRISTIAN VORTISCH

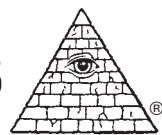
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STEVE JACKSON GAMES

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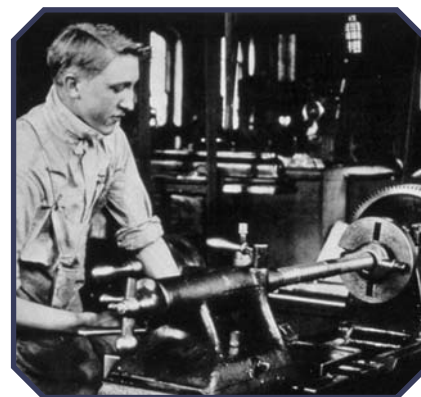
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Rules and statistics in this book are specifically for the **GURPS Basic Set, Fourth Edition**. Page references that begin with B refer to that book, not this one.

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INTRODUCTION

As explained in *High-Tech: Pulp Guns, Volume 1*, the “pulp era” is used here as a term for the period between WWI and WWII, the Roaring Twenties and Thrilling Thirties. This was the age of fiction about larger-than-life detectives, investigators, gangsters, vigilantes, and explorers. “Pulp guns” are the firearms that were available and used at the time, both historically and in literature and movies.

High-Tech: Pulp Guns, Volume 1 is a catalog primarily covering small arms in civilian use. The handguns, shotguns and submachine guns described there were available to and used by citizens, police, and gangsters. *High-Tech: Pulp Guns, Volume 2* has a more military bent, detailing infantry rifles, machine guns, cannon, grenades, and even flamethrowers! However, not only were many of those weapons also available commercially, the book likewise covers many hunting and gallery rifles, flare pistols, and similar civilian arms.

So the contents of this book are ideal for outfitting detectives, police officers, and gangsters; for adventurers, explorers, and big-game hunters; for evil fiends and brutal henchmen; for soldiers and revolutionaries; but also for ordinary people. This book is especially suited as a companion to *GURPS Cliffhangers*, but is also appropriate for *GURPS Cops*, *GURPS Covert Ops*, *GURPS Espionage*, *GURPS Horror*, *GURPS Lands Out of Time*, *GURPS Mysteries*, or *GURPS Supers* campaigns set in that timeframe. Furthermore, it can be used for military adventures, particularly in combination with *GURPS WWII* and all of its supplements.

GURPS HIGH-TECH AND THIS BOOK

Some of the firearms in this book already appear in *GURPS High-Tech*, but their details are repeated here for completeness, with much additional period information. All the others are new to *GURPS Fourth Edition*, but are presented so as to be compatible with the rules published in *High-Tech*.

PUBLICATION HISTORY

Several entries herein are based on descriptions from *GURPS High-Tech, Fourth Edition* (2007), written by Shawn Fisher and Hans-Christian Vortisch, as well as earlier editions written by Michael Hurst. A few more were developed from material in the *Pyramid* articles “Secret Weapons” (2001), “The Long Arm of the Law” (2001), and “Frank Hamer, Texas Ranger” (2005), also by Hans-Christian Vortisch.



ABOUT THE AUTHOR

Hans-Christian “Grey Tiger” Vortisch, M.A., began writing for *GURPS* as a freelancer in 2001. He was author or co-author of *GURPS Covert Ops*, *GURPS High-Tech, Fourth Edition*, *GURPS Modern Firepower*, *GURPS Special Ops, Third Edition*, *GURPS WWII: Motor Pool*, and several e23 publications on martial topics. He wrote additional material for numerous other *GURPS* books; authored,

translated, edited, or contributed to several German *Call of Cthulhu* products; and published many articles in American, British, and German gaming magazines. Hans has been an avid gamer since 1983. His non-gaming interests include science fiction, history, cinema, and punk rock. He lives in Swingin’ Berlin.

Photo Acknowledgments

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PULP-ERA ORDNANCE

And here they came! Seth let rip with the BAR on full auto, the shots echoing like rolling thunder through the cavern. Four dark shadows dropped near the rectangular opening that led further down into the mountain. "I'm out," Seth yelled. He depressed the magazine release, let the empty magazine fall from the smoking rifle, and pulled the last fresh one from the left breast pocket of his sharply tailored Dunrite bulletproof vest.

Meanwhile, Eszter had started laying down cover fire with her Winchester .351 self-loader. With the slim Maxim silencer, the

rhythmic clack-clack, pause, clack-clack, pause, would have been difficult to hear even without his ears ringing like crazy. By contrast, it was impossible to ignore the banshee howls that now emerged from the bowels of the earth.

Seth wanted to cover his ears, but one hand cradled the hefty rifle and the other held the magazine with the black-cased hollow-point incendiaries. He rocked the box into the well, let fly the operating handle, and swung the BAR up again. It was now or never . . .

WEAPON DESCRIPTIONS

Weapon descriptions here follow the pattern laid out in *High-Tech*, p. 79. They appear in order of historical appearance and availability in the text and the tables.

Note that all costs are given in generic **GURPS** \$ (see *Tech Level and Starting Wealth*, p. B27). To convert these to historical U.S. dollars, use a rough divisor of 11 for the 1920s and 14 for the 1930s.

Example: The Remington Model 8 is listed with Cost \$800 in the *Rifles Table*, p. 14. In the 1930s, the "historical" price would be $800 / 14 = 57$ U.S. dollars; Remington's actual list price was 58 U.S. dollars in 1930 and 60 U.S. dollars in 1936.

Many weapons list cost modifiers for decorated specimens (see *Styling* on p. 10 of *High-Tech*). These always refer to standard factory options. Theoretically, any gun could be individually styled even more extravagantly; for decorations like this, the sky is the limit. Multiply cost by 20 for a +4 reaction bonus, by 50 for a +5, and so on.

Example: The Remington 8 rifle (p. 8) could be ordered with standardized scroll and animal scene engraving, finely checkered English walnut stocks, and an individual gold name plate (the *Model 8F Premier Grade*) for six times the cost, $\$800 \times 6 = \$4,800$. This is more than five but not 10 times the normal cost, and gives a +2 reaction bonus. Instead of ordering the factory options, the rifle could be given a more individualized treatment; shelling out \$8,000 gives a +3 reaction bonus.



RIFLES

Many Alaskan hunters use the .35 Remington [Model 8] auto for the big bear, as they like that fast, machine gun-like action of the automatic, and what the rifle lacks in actual killing power they make up by repeated hits.

– Elmer Keith, *Big Game Rifles* (1936)

During the pulp era, rifles and carbines of various patterns were the standard weapons of all militaries. Civilian models were in wide use for hunting and target shooting. There were numerous designs, ranging from simple single-shot weapons to many different manual and self-loading repeaters and even full automatic rifles. Note that, during the pulp era, even anti-tank rifles effectively had LC2!

Lebel Mle 1886, 8×50mmR Lebel (France, 1886-1919)

The *Fusil d'Infanterie Lebel Modèle 1886* ("Lebel infantry rifle model 1886"), made by French arsenals to Nicolas Lebel's design, was the first smokeless-powder, medium-caliber military rifle. Some four million were produced. The Lebel was widely distributed – the French Foreign Legion (*GURPS Cliffhangers*, p. 45) and colonial army used it in their conquests in Asia and Africa. It was also exported to southern and eastern Europe during WWI and the 1920s. In the pulp era, it was used by nations such as Greece (*M1886*), Romania (*md. 1886*), and Yugoslavia (*M86*), in addition to France, if usually with reserve troops only. Thousands were supplied to the Republicans during the Spanish Civil War. There were many variants, often used side-by-side (see below). From 1936, the French military gradually replaced all Lebel's in front-line service.

The original Mle 1886 was a bolt-action weapon with a tubular underbarrel magazine. It held a round in the chamber and another in the cartridge carrier between magazine and chamber, for a total of 10 when fully loaded. During the pulp era, an AP round was available (Dmg 4d+2(2) pi-). French soldiers were issued 15 paper packs holding eight rounds each, to be carried in the three pouches of their leather load-bearing equipment (*High-Tech*, p. 54). The great length of this design – even before attaching the 1.1-lb. socket bayonet (Reach 1, 2*) – is obvious in Stephen Sommers' *The Mummy*, set in 1923, where the French Legionnaires are still issued it. Fitted with a 1.2-lb. 3x scope (+1 Acc, rugged, expensive, \$500), the original Mle 1886 served as a sniper rifle from 1916 to WWII.

Redesigned by a commission headed by Adolph Berthier, the *Lebel-Berthier Modèle 1907/15* (1915-1918) used a three-round charger clip: Wt. 8.5/0.2, Shots 3(3). Infantrymen were issued 28 clips with this. It can be seen in the WWI drama *The Road to Glory*. The improved *Lebel-Berthier Modèle 1916* (1916-1919) increased the clip capacity: Wt. 8.6/0.3, Shots 5(3). The Mle 1916 was the most common rifle with the French military during the pulp era. The French Foreign Legion used it with a leather bandoleer (*High-Tech*, p. 54) holding five clips and a bayonet. The later Lebel variants were also used elsewhere – for example, large numbers saw service during the Spanish Civil War.

Mannlicher-Carcano Mod 91, 6.5×52mm Mannlicher-Carcano (Italy, 1892-1937)

The *Fucile di Fanteria Modello 1891* (“infantry rifle model 1891”) was the bolt-action rifle that served the Italian military in WWI and later conflicts like the Abyssinian War and even WWII (*GURPS WWII: Grim Legions*, p. 27). It employed a modified Mauser action and a 6-round Mannlicher *en bloc* clip (*High-Tech*, p. 245). Italian soldiers were issued 16 clips and carried them in leather load-bearing gear (*High-Tech*, p. 54). More than 4 million rifles were made. The Mod 91 was typically provided with a 1-lb. sword bayonet (Reach 1, 2*).

There were several shorter versions, which were all preferred by troops during the pulp era. The original *Moschetto di Cavalleria Mod 91* (1893-1924) was a cavalry carbine; Dmg 5d pi, Acc 4, Range 850/2,900, Wt. 7.3/0.3, Bulk -5, Cost \$800. It featured an integral bayonet that folded under the 17.8” barrel. The almost identical *Moschetto per Truppe Speciali (TS) Mod 91* (1897-1924) was issued to drivers, artillery crews, and other specialists; same stats. Still another, newer carbine was the *Moschetto Mod 91/24* (1924-1938), which lacked the integral bayonet; Dmg 5d pi, Acc 4, Range 850/2,900, Wt. 6.8/0.3, Bulk -5, Cost \$750.

Winchester Model 92, .44-40 Winchester (USA, 1892-1941)

Originally called the *Model 1892*, this John Browning design was the typical Winchester lever-action carbine of the final “Wild West” years, but was still made and in widespread use during the pulp era in both the U.S. and the rest of the world. Some were even used by military forces in China and South America during that time. Explorer Robert Peary took this Winchester model with him on his Polar Expedition in 1909. Some 21,000 were issued by the Royal Navy during WWI.

The Model 92 was offered in a number of calibers, including .32-20 Winchester (Dmg 2d+1 pi-) and .38-40 Winchester (Dmg 3d-2 pi+) – a police officer's .32-20 killed gangster

Charles “Pretty Boy” Floyd in 1934. For an extra \$100 and an additional 0.25 lb., it was available as a take-down rifle that broke down into two parts (Holdout -3). It was also made in carbine length, with a shorter 20” barrel and magazine; Dmg 3d-1 pi+, Range 270/3,000, Wt. 6.3/0.5, Shots 12+1(2i), Bulk -4, Cost \$400. More than a million Model 92s were made, the majority in rifle length and .44-40 caliber.

The .44-40 carbine was copied in Spain as the *FAO Mod 1923 Tigre* (1923-1936); Cost \$350. This was the standard long arm of the Spanish police until after WWII, and was also exported. In South America, it was adopted by the Argentinean police, among others.

Winchester Model 94, .30-30 Winchester (USA, 1895-2006)

The Browning-designed Model 94 (called the *Model 1894* until 1919) was a lever-action rifle with tube magazine, like earlier Winchesters, but chambered for a more modern cartridge. It was an extremely popular hunting weapon, but no major power adopted the Model 94 as a standard military rifle. It did see wide use in such conflicts as the Mexican Revolution of 1910 – it is estimated that half of Pancho Villa's guerrillas were armed with this weapon. During WWI, it was used by various combatants; French mountain troops had some early in the war, as did boarding parties of the Royal Navy. In the inter-war years, many police departments acquired it, especially in the U.S. South and Southwest. It was also issued by the Massachusetts State Police, and would be the longarm taken along by troopers investigating “The Dunwich Horror” in 1928. It was the standard rifle of most American prison systems, and the gun most likely to be found in closets or trucks across North (and South) America. During the pulp era, any small-town grocery or hardware store in the U.S. was liable to have a few boxes of .30-30 ammo. By 1927, one million had been made.

Although the majority were made for the famous .30-30 Winchester cartridge, it was also offered in .25-35 Winchester (Dmg 5d-1 pi), .32 Winchester Special (Dmg 6d pi), and .38-55 Winchester (Dmg 5d pi). A take-down model was made (increasing cost by \$100 and weight by 0.25 lb.); this broke down into two parts (Holdout -3). A 0.75-lb. Maxim baffle sound suppressor (-2 to Hearing, plus another -1 for being a lever-action weapon, -1 Bulk, \$500) was offered in 1921-1925. In the 1930s, improved-visibility sights (*High-Tech*, p. 156) were available.

The *Model 94 Carbine* (1895-2006) had a shorter 20” barrel; Dmg 5d+1 pi, Range 700/3,000, Wt. 6.6/0.3, Shots 7+1(2i), Bulk -4, Cost \$400.

Assembling a Take-Down Gun

Many of the rifles described here can be broken down into two or more parts for storage or concealment, or come in special “take-down” variants designed for this. In all such cases, reassembly requires 20 seconds and an IQ-based Guns (Rifle) or Armoury (Small Arms) roll.

Winchester Model 86 Extra Lightweight, .45-70 Springfield (USA, 1897-1931)

The *Model 86 Extra Lightweight* was a lightened large-caliber lever-action short rifle for the 20th century, based on the original *Model 1886* designed by John Browning, which wasn't made any longer in the pulp era. It had a 22" barrel and was primarily made for the relatively powerful .45-70 Springfield round. To reduce weight, the underbarrel tube magazine was only half as long as normal. The *Model 86 Extra Lightweight* was popular with some serious American hunters at the time, but costly to produce and, by the end of WWI, inferior to the new wave of bolt-action rifles which many veterans of the Great War preferred.

Savage Model 99A, .303 Savage (USA, 1899-1936)

The *Savage Model 1899*, renamed the *Model 99A* in 1920, was a sturdy lever-action rifle with integral rotary magazine. During the pulp era, it was also available in .22 Savage High-Power (Dmg 5d+2 pi), .250 Savage (Dmg 5d+1 pi), .300 Savage (Dmg 6d+2 pi), and .30-30 Winchester (Dmg 6d pi). In .303 Savage, explorer Frank Kleinschmidt took it to the Arctic in 1914, while archaeologist Roy Chapman Andrews (*GURPS Cliffhangers*, p. 69) preferred it in .250 Savage. A 0.75-lb. Maxim baffle sound suppressor for these rifles (-2 to Hearing, plus another -1 for being a lever-action weapon, -1 Bulk, \$500) was offered commercially in 1921-1925.

The *Savage Model 99B* (1920-1936) was a take-down model; Wt. 7.8/0.25, Cost \$800. The Dillinger-Nelson gang used this, as did other American criminals who liked that they could carry the rifle disassembled in a suitcase. The *Savage Model 99F Featherweight* (1920-1940) was also a take-down model, but lighter; Wt. 6.8/0.25, Cost \$800.

The *Savage Model 99K* (1926-1940) was a deluxe take-down version with factory engraving, choice wood, hand-fitted action, and target sights. Treat as decorated (+1 to reactions, p. 4) and fine (accurate); Acc 6, Wt. 7.8/0.25, Cost \$1,400.

Mauser Gew98, 7.92×57mm Mauser (Germany, 1900-1918)

The *Gewehr 98* ("rifle model 1898") was the standard rifle of the German military during WWI. Many consider it to be the finest bolt-action design ever – it was also the basis of many sporting weapons (see *Mauser Modell 10E*, p. 13, and *H&H Best Quality Magazine Rifle*, p. 10). More than five million of these rifles were made before the end of WWI. During the pulp era, the basic Gew98 was in second-line service with the German, Czechoslovakian (vz. 98/22), Polish (wz. 98), and Yugoslavian (*M98*) militaries, as well as being a front-line weapon in China, Persia, and elsewhere. The Swiss Papal Guard adopted it in 1911 to replace their Remington Gew68 Rolling Block rifles (*High-Tech*, p. 109). There is a cache of Gew98 rifles on the S.S. *Ventura* in Peter Jackson's *King Kong*, no doubt acquired as cheap surplus (p. 24). Note that it was LC2 in Germany in 1919-1932!

The Gew98 accepted a 1-lb. knife bayonet (Reach 1, 2*) and used five-round charger clips. Standard issue for the German infantry was 24 clips, carried in six pouches on

leather load-bearing equipment (*High-Tech*, p. 54). From 1915, a 1.1-lb. 4× scope (+2 Acc, rugged, expensive, \$1,000) was issued to snipers.

Rifles similar to the Gew98 but in different calibers (and often built under license) were widely adopted abroad, including in 6.5×55mm Mauser (Dmg 6d pi) by Sweden (*m/96* – see *GURPS WWII: Frozen Hell*, pp. 32-33); in 7×57mm Mauser (Dmg 6d+2 pi) by Brazil (*M908*), Chile (*Mod 1912*), Colombia (*Mod 1907*), Costa Rica (*Mod 1910*), Guatemala (*Mod 1910*), Mexico (*Mod 1902* and *Mod 1910*), Serbia (*M10C*), Spain (*Mod 1916*), and Venezuela (*Mod 1910*); in 7.65×53mm Mauser (Dmg 6d+2 pi) by Argentina (*Mod 1909* and *Mod 1912*), Bolivia (*Mod 1907*), Paraguay (*Mod 1907* and *Mod 1927*), Peru (*Mod 1909*), and Turkey; and in 8×52mmR Mauser (Dmg 7d pi) by Siam (*Baep 45*). All of these were still in service during the pulp era, although during the 1930s they were generally being superseded by shorter weapons (often similar to the Mauser Kar98k, below).

In the 1920s, many old '98 actions were mated with new stocks and 30" barrels and converted to cheap 12G 2.75" shotguns for export to Africa and the Americas: Dmg 1d+1 pi, Acc 3, Range 40/800, Wt. 6.2/0.2, RoF 1×9, Shots 1+1(2i), ST 10†, Bulk -6, Rcl 1/6, Cost \$250.

The *Karabiner 98a* (1908-1918) was a carbine for cavalry, cyclists, artillery, etc.; Dmg 7d-1 pi, Range 900/3,900, Wt. 8.9/0.3, ST 10†, Bulk -5, Cost \$400. Some 1.5 million were made, and the Kar98a was in widespread use with the German military and police during the pulp era.

The *Karabiner 98b* (1923-1933) was the standard German military longarm during the 1920s and early 1930s – by 1926, all remaining Gew98 rifles had been converted to this configuration. It was not actually a carbine, but rather a full-size Gew98 with a new bolt handle that turned into a depression in the stock rather than standing out vertically, which made the Kar98b more comfortable to carry (same stats).

Superseding all earlier variants, the *Karabiner 98 kurz* (1935-1946) short rifle with 23.6" barrel was the German infantry rifle from the mid 1930s: Dmg 7d pi, Range 1,000/4,400, Wt. 9.5/0.3, ST 10†, Bulk -5, Cost \$400. The early inter-war weapons used heavy walnut stocks, rather than the cheaper laminated stocks of WWII. One of the 12 clips issued per man was supposed to be loaded with AP (Dmg 5d-1(2) pi-), for emergency use against tanks – in the late 1930s, this might even be APHC (Dmg 7d-1(2) pi-). The German military alone acquired almost three million such rifles prior to the war. The Kar98k can be seen in action with the *Afrikakorps* troops in both *Raiders of the Lost Ark* and *Indiana Jones and the Last Crusade*.

The commercial equivalent of the Kar98k was exported in large numbers as the *Standard-Modell* from 1933; millions of rifles of similar shape and performance had already been made by licensees like FN in Belgium, ZB in Czechoslovakia, and ATZ in Yugoslavia from 1924 on. Users prior to WWII included Abyssinia, China (24 *Shi*, made from 1935 and better known as the *Chung Cheng Shi* or "Generalissimo Type"), Czechoslovakia (vz. 24), Greece (*M1930*), Persia (*M1309*), Poland (wz. 29 – see *GURPS WWII: Doomed White Eagle*, p. 29), Romania (*md. 1924* – see *GURPS WWII: Michael's Army*, p. 24), and Yugoslavia (*M24*). These were all in 7.92×57mm Mauser. Other militaries acquired short rifles of similar dimensions, but chambered for other calibers, including 7.65×53mm Mauser (Dmg 6d+2 pi) for Belgium (*Mle 35*), Ecuador (*Mod 1934*), and Peru (*Mod 1932*).



Winchester Model 03, .22 Winchester Auto (USA, 1903-1932)

A popular semiautomatic sporting gun in North America, with over 126,000 made, but only useful for small game. The Model 03 had a tubular magazine in the buttstock. A 0.5-lb. Maxim baffle sound suppressor (-2 to Hearing, -1 Bulk, \$200) was offered commercially in 1909-1925. The Winchester *Model 63* (1933-1958) was the same weapon in .22 LR; same stats. Some 175,000 were made.

H&H Royal Double-Express, .600 Nitro Express (U.K., 1903-1974)

This Holland and Holland piece was the world's most powerful hunting rifle during the pulp era. The only weapons chambered for the .600 Nitro Express were break-open, double-barreled rifles in the English style . . . and the Royal Double-Express was normally only sold at the gun makers in London and in the most exclusive sporting goods stores of the world's major cities. Custom-made on demand, with the usual wait for delivery being a year or more, it was *very* expensive. In Africa, used guns were sometimes available at bargain prices – frequently because the last owner had made one mistake too many with an elephant or rhino.

Dilettante Teddy Roosevelt (*GURPS Who's Who 2*, pp. 96-97) preferred a Royal double in .500/450 Magnum Nitro Express (1898-1940); Dmg 8d pi+, Range 600/3,600, Wt. 14.2/0.24, ST 12†, Bulk -6, Rcl 5. However, in the early 1900s, the British authorities outlawed all .450-caliber weapons and ammunition in India and the Sudan (making them LC2), even though the .500/450 cartridge could not be used in the .450 Martini-Henry rifles (*High-Tech*, pp. 109-110) popular with rebels and bandits. Therefore, from 1907, a more popular caliber was .470 Nitro Express: Dmg 8d+2 pi+, Range 640/4,000, Wt. 14.2/0.24, ST 12†, Bulk -6, Rcl 5.

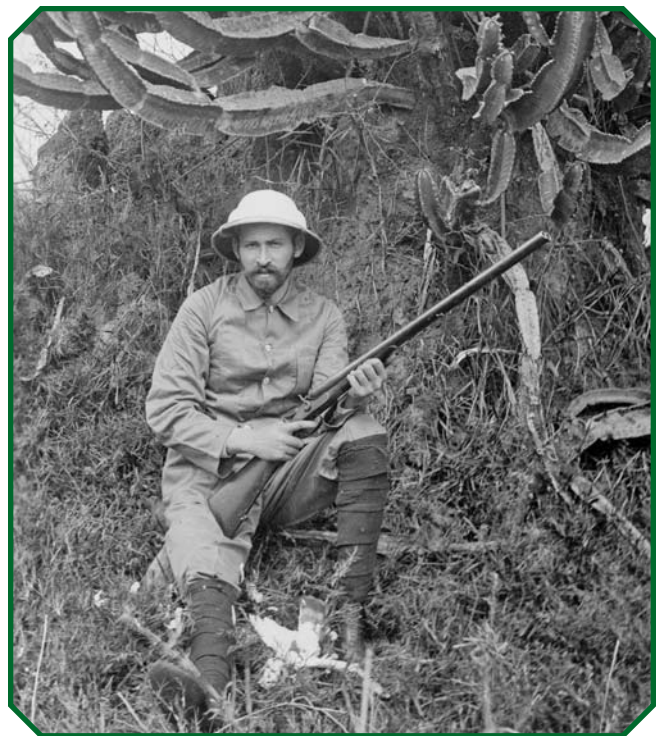
All these rifles were of the finest quality and lavishly decorated, usually gaining +4 to reactions (see p. 4). Even the cheapest version, the so-called *No.2 Dominion* pattern (Cost \$11,000), still merits a +3 bonus. The (original!) owner of a custom-made H&H rifle should consider buying a Weapon Bond (*High-Tech*, p. 250). In addition, they easily disassembled into two halves for storage in a rifle case – or under a coat (Holdout -4).

I do not believe there exists a better weapon [than the Royal Double-Express] for heavy game.

– Theodore Roosevelt,
African Game Trails
(1910)

Winchester Model 95, .405 Winchester (USA, 1904-1931)

The Model 95 – originally called the *Model 1895* – was the only Winchester lever-action obtainable for powerful modern rifle cartridges. Designed by John Browning, it had an exceptionally strong action and an integral box magazine. As a



hunting weapon, the most famous chambering available was the .405 Winchester – but this was also the scarcest. Teddy Roosevelt (*GURPS Who's Who 2*, pp. 96-97) owned three of these and used them on his hunting trips, including in Africa in 1909, where he bagged lions and even Cape buffaloes with them. He called this his “big medicine gun.” The adventuring cinematographers Martin and Osa Johnson also swore by it. In Harry Hoyt's *The Lost World*, reporter Edward Malone takes potshots at an Allosaurus with a Model 95.

A total of 130,000 commercial Model 95s were made; available chamberings in addition to the rare .405 Winchester included .30-06 Springfield (Dmg 7d+1 pi), .303 British (Dmg 6d+2 pi), .38-72 Winchester (Dam 4d+2 pi), and .40-72 Winchester (Dam 4d+2 pi+). Three in four actually chambered the .30-40 Krag (Dmg 6d+1 pi). Many individual Arizona and Texas Rangers used the rifle, and the Principality of Monaco (*GURPS Cliffhangers*, p. 48) adopted it in .30-06 for its guards as the *Mle 1920*.

For \$100 and 0.25 lb. more, the Model 95 could be bought as a take-down rifle, which broke into two halves (Holdout -3). A 0.75-lb. Maxim baffle sound suppressor (-2 to Hearing, plus another -1 for having a manual action, -1 Bulk, \$500) was offered in 1921-1925.

Somewhat surprisingly, the most numerous variant was the *Vintovka Vinchesterya obr. 1915g* (1915-1916). This was a long-barreled military model for the Russian army in 7.62×54mmR Mosin-Nagant; Dmg 6d pi, Range 800/3,500, Wt. 9.3/0.3, Bulk -5, Cost \$700. It could be loaded with standard 5-round charger clips and accepted a 1.1-lb. sword bayonet (Reach 1, 2*). Almost 300,000 were delivered to Russia during WWI and heavily used during the Russian Civil War; during the 1920s, these were mostly removed from active service, but still appeared in Russian (and Finnish) hands during the Winter War (*GURPS WWII: Frozen Hell*, p. 33). Thousands were supplied as surplus to the Republican faction in the Spanish Civil War.

Mannlicher-Schönauer Modell 1903, 6.5×54mm Mannlicher (Austria, 1904-1972)

This bolt-action, charger clip-loaded rifle made by Steyr and using the Mannlicher action was one of the most desirable small-caliber hunting weapons of the early 20th century. It was a favorite of archaeologist Roy Chapman Andrews (*GURPS Cliffhangers*, p. 69), author/adventurer Ernest Hemingway (*GURPS Who's Who 2*, pp. 118-119), and archaeologist/soldier T.E. Lawrence. Several famous hunters even used it on elephants – a deadly gamble for all but the best shots! As a downside, the 6.5×54mm Mannlicher cartridge, while accurate and low-recoiling, had a tendency to rupture the case, which would jam the rifle (p. B407). Whenever ammo is *not* bought at full price (*High-Tech*, p. 175), reduce Malf. to 16.

The rifle had a relatively short 18" barrel and a distinctive wooden forearm extending all the way to the muzzle, the so-called *Stutzen* ("capped rifle") layout. The buttstock had compartments for two spare cartridges and a cleaning rod. It was also available in 8×56mmR Mannlicher (Dmg 6d+2 pi, from 1908), 9×56mm Mannlicher-Schönauer (Dmg 7d-2 pi, from 1905), and other chamberings. Many were fitted with a 1-lb. 4× scope (+2 Acc, rugged, expensive, \$1,000). (This gun features in the post-apocalypse film *A Boy and his Dog*.)

Winchester Model 06, .22 LR (USA, 1906-1932)

Another Browning design, this was a pump-action rifle with underbarrel tube magazine, able to fire .22 Short (Dmg 1d pi, Shots 15+1), .22 Long (Dmg 1d+1 pi, Shots 12+1), or .22 LR cartridges without adjustment. Accurate, reliable, and inexpensive, it became the universal gun used in American shooting galleries, firing the .22 Short. Almost 850,000 were made. Its successor, the *Model 61* (1932-1958), was very similar and has the same stats.

Both guns could be taken apart in the middle (Holdout -3). A 0.3-lb. Maxim baffle sound suppressor (-2 to Hearing, plus another -1 for being a pump-action weapon, -1 Bulk) was offered for this weapon in 1909-1925.

Remington Model 8, .35 Remington (USA, 1906-1936)

This Browning invention was the earliest successful self-loading rifle. Marketed by Remington as "the rapid-fire rifle . . . big enough for the biggest game," it was used mainly as a hunting weapon. While the calibers for which it was chambered were best for deer or elk, company ad copy stressed its effect on bears, including grizzlies. Several of Pancho Villa's bodyguards were armed with it during the Mexican Revolution. The Model 8 – and the virtually identical *Model 81 Woodsmaster* (1936-1950) – was also a popular choice with American law enforcers (notably the FBI and Texas Rangers) during the 1930s. It was advertised as being "more powerful than a [sub]machine gun and much less expensive." Captain Frank Hamer's posse used Model 8 rifles, among others, to kill Bonnie and Clyde in 1934. Counting both models, some 136,000 were made.

The Model 8 broke down into two parts for easy stowage (Holdout -3). Better-styled specimens with fancier stocks, factory engraving, and a silver or gold name plate cost up to six times as much (+2 reactions, see p. 4).

Alternative chamberings included .25 Remington (Dmg 5d-1 pi) and .30 Remington (Dmg 5d pi), but the majority were made in .35-caliber. The FBI's guns were in .30-caliber. The

user could load the fixed internal magazine using five-round charger clips (three Ready maneuvers) or with individual cartridges (two Ready maneuvers per round). A detachable "police only" curved extended magazine for 15 rounds became available for guns in .30- or .35-caliber from the Peace Officer Equipment Co. in 1929 as an aftermarket modification; Wt. 9.5/1.6, Shots 15+1(3), Cost \$1,350/\$29. This was rare, but liked by some lawmen.

Springfield M1903, .30-06 Springfield (USA, 1906-1943)

In 1906, the U.S. Army started issuing the M1903 – essentially a copy of the Mauser '98 (p. 6), but exceptional for its well-fitted action, excellent sights, and highly developed cartridge. Two million were made. During the pulp era, the rifle was not only used by the U.S. military and most National Guard forces, but also issued by the U.S. Coast Guard, some police agencies (including that of New York City), and the FBI (although the latter preferred self-loading and full-automatic weapons). Nicaragua was likewise supplied with this weapon. Second-hand and never-issued rifles were cheaply available as surplus (p. 24); the S.S. *Ventura* carries a batch in Merian Cooper's *King Kong*.

The M1903 took a 1.1-lb. sword bayonet (Reach 1, 2*) and used five-round charger clips. A U.S. infantryman or marine was issued 20 clips, carried in canvas web gear (*High-Tech*, p. 54); cavalry carried only 18 clips, adding two magazines for their Colt M1911 pistols (*High-Tech: Pulp Guns, Volume 1*, p. 17). From WWI on, some troops received a 2.3-lb. 5.2× scope (+2 Acc, rugged, \$500) for sniper use. A 0.75-lb. Maxim baffle sound suppressor (-2 to Hearing, plus another -1 for being a bolt-action weapon, -1 Bulk) was offered in 1909-1925, but not popular.

The Springfield action was also used in sporting rifles, generally lighter and better looking, for sale to civilian hunters and target shooters. The National Rifle Association offered one such model to its members in 1924-1938; Wt. 8.3/0.3, Cost \$1,000. Some 5,000 were made. Similar guns were available from gunsmiths like Pachmayr, Sedgley, or Griffin and Howe, as well as mail order gun stores, using new or rebuilt military weapons. These sporters generally couldn't mount a bayonet, but often received a scope or improved-visibility sights (*High-Tech*, p. 156).



Arisaka Meiji 38 Shiki Shoujuu, 6.5×50mmSR (Japan, 1907-1941)

The *Arisaka Meiji 38 Shiki Shoujuu* ("Arisaka infantry rifle type of the 38th year of the Meiji reign" – Western year 1905) was loosely based on the Mauser '98 bolt-action (p. 6). It was the standard Japanese rifle until 1939. More than three million were made. It was widely exported in the 1910s and 1920s; during WWI, the United Kingdom bought 150,000 as the *Pattern 07* (as used by T.E. Lawrence's troops during the Arab Revolt), and Russia acquired over half a million. The latter saw heavy use during the Russian, Finnish, and Estonian civil wars. Mexico got a few as the *Mod 1915* in 7×57mm Mauser (Dmg 6d+2 pi).

The Arisaka 38 Shiki used five-round charger clips; 24 clips would be carried in three pouches on Japanese web gear (*High-Tech*, p. 54). The rifle took a 0.9-lb. sword bayonet (Reach 1, 2*) for use with Jukenjutsu techniques (*GURPS Martial Arts*, p. 197). A 1.1-lb. 2.5× scope (+1 Acc, rugged, expensive, \$500) transformed it into a sniper rifle. There was a special "flashless" sniper round which had almost no muzzle flash at all; this subtracts -1 from any Vision or Observation rolls to try and locate the sniper.

The *Arisaka Meiji Shiki 44 Kiheijuu* (1912-1942) or "Arisaka cavalry carbine type of the 44th year of the Meiji reign" (Western year 1911) was a shortened version with 18.5" barrel and integral folding bayonet; Dmg 5d+2 pi, Acc 4, Range 600/2,500, Wt. 9.2/0.25, ST 10†, Bulk -5, Cost \$700.

Enfield SMLE Mk III, .303 British (U.K., 1907-1943)

The Short Magazine, Lee-Enfield Mark III served the British Army during both World Wars. It was widely distributed to nations in the British Commonwealth, such as Canada, Egypt, Iraq, Kenya, and South Africa, and also produced in Australia and in India. Portugal adopted it as the *M/917*. Seven million were made. Enfields can be seen carried by Captain Phillip Blumburt's troops in *Indiana Jones and the Temple of Doom* and by Corky in *Tales of the Gold Monkey*.

The SMLE Mk III (re-designated the *No.1 Mk III* in 1926) was one of the fastest bolt-action rifles to operate. "Old Smelly" had a magazine topped up with single cartridges or five-round charger clips (0.3 lb.). The magazine was detachable (1 lb.) but normally not used thus – each rifle came with only one. (If a spare magazine was available, reloading took only three Ready maneuvers.) British infantry were issued 20 or 30 clips carried in pouches on web gear (*High-Tech*, p. 54). The gun took a 1.3-lb. sword bayonet (Reach 1, 2*).

The *Lee-Enfield Carbine (LEC) Mk I* (1896-1899) was a shorter weapon with 20.75" barrel; Dmg 6d pi, Acc 4, Range 800/3,400, Wt. 7.8/0.35, Shots 6+1(2i), ST 9†, Bulk -5, Rcl 3, Cost \$650. By WWI, it had been fully replaced by the SMLE, but many of these surplus carbines continued in service throughout the pulp era with Colonial police forces, including the Royal Canadian Mounted Police and Shanghai Municipal Police. It was typically issued with a 50-round leather bandoleer (*High-Tech*, p. 54). The LEC Mk I couldn't mount a bayonet. A similar weapon was the *Lee-Enfield Royal Irish Constabulary (RIC) Carbine* (1905-1906), used by the police in Ireland; same stats. This *could* mount a bayonet.

Lee-Enfield pattern rifles were made by various British manufacturers in addition to the Royal Small Arms Factory at Enfield. The famous Birmingham gunsmith W.W. Greener

*You might as well shoot the
Springfield, . . . you're used to it.
We'll leave the Mannlicher in
the car with the Memsahib.
Your gun-bearer can carry your
heavy gun.*

– Ernest Hemingway,
*"The Short Happy Life
of Francis Macomber"*
(1936)

offered the standard SMLE rifle in match quality – treat as fine (accurate); Acc 6, Cost \$1,300. BSA also made sporting rifles using the Lee-Enfield action, but lighter and with more refined furnishings (+1 to reactions, p. 4), for example the *No.2 Sporting Pattern* (1902-1914); Wt. 7.8/0.3, Shots 5+1(3), Cost \$1,300. A sporting version is used, with a scope, by Egyptologist Evie O'Connell in *The Mummy Returns*.

Winchester Model 07, .351 Winchester (USA, 1907-1957)

This sporting weapon, originally introduced as the *Model 1907*, was one of the earliest effective self-loading rifles. It was mainly a hunting weapon for use on small- to medium-sized animals like coyotes or mountain lions. However, some American police forces acquired it, as did larger companies for their security personnel. FBI agent Clarence Hurt was armed with such a rifle when he took part in the 1936 arrest of Alvin "Creepy" Karpis, the last Public Enemy Number One. Other users were criminals during the 1930s, including Bonnie and Clyde and the Dillinger-Nelson gang. About 58,500 were made. The Model 07 could easily be taken apart into two halves (Holdout -3).

Better-styled specimens with fancy walnut stocks and engraving were available for twice the cost (+1 to reactions, p. 4). An extended 10-round magazine (\$27, 0.6 lb.) was available from 1911. With this and a brass catcher (*High-Tech*, p. 161), hundreds were pressed into service by the British, French, and Russian air forces in the early years of WWI, before aircraft machine guns for biplane observers became commonplace. (Most of the French rifles were handed down to the Serbs in 1916.) Nineteen were even used by the fledgling U.S. Army Air Corps in 1916 against the Mexicans.

France also acquired the *Model 17* (1917-1918), a selective-fire version for issue to trench raiders; Wt. 8/0.6, RoF 10, Shots 10+1(3), Cost \$450/\$27, LC2. This had a mount for a 0.6-lb. knife bayonet. Some 2,200 were made, but removed from service after WWI. They might show up as surplus.

The slightly larger *Model 10* (1910-1935) was chambered for the .401 Winchester; Dmg 4d+2 pi+, Wt. 8.5/0.3, Shots 4+1(3), ST 8†, Rcl 2. It fired a more powerful round that, according to company advertisements, "hits like Thor's hammer." Bonnie and Clyde had one. Some 20,000 were made.

Both the Model 07 and the Model 10 could be fitted with a 0.75-lb. Maxim baffle sound suppressor (-2 to Hearing, -1 Bulk), which was available in 1924-1925. And both patterns were sometimes converted by gunsmiths such as "Hymie" Lebman (*High-Tech: Pulp Guns, Volume 1*, p. 5) to selective-fire weapons. This conversion was favored by Homer Van Meter, John Dillinger's closest associate. Conversion is an *average* task and changes RoF to 10 (*High-Tech*, p. 79). Such a converted gun would especially benefit from a 0.5-lb. Cutts compensator (*High-Tech: Pulp Guns, Volume 1*, p. 30), which was offered from 1930. Tracer rounds (*High-Tech*, p. 175) were used in either caliber by the military during WWI, and might turn up as surplus afterwards.

Rigby Best Quality Double, .470 NE (U.K., 1907-)

John Rigby and Co. of London was one of the premier manufacturers of big-game double rifles to take down elephant, rhinoceros, or buffalo. Their Best Quality Double featured a hammerless sidelock action with automatic ejectors. Like most English double rifles, it was only available to order and was executed in the highest quality, with choice materials and extensive engraving (+4 to reactions – see p. 4). Multiply cost by 0.85 for Second Quality and 0.7 for Third Quality; these have the same stats, but are slightly less luxurious (+3 to reactions). The (original!) owner of any Rigby rifle should consider buying a Weapon Bond (*High-Tech*, p. 250). These weapons easily disassemble into two halves for storage in a rifle case – or under a coat (Holdout -4).

Other calibers were available as well, including the .22 Savage High-Power (Dmg 5d+2 pi), .275 Rigby Magnum (Dmg 6d+1 pi, from 1927), and .350 Rigby Magnum (Dmg 7d+2 pi).

*Now here's a useful tool – .470,
telescopic sight, double ejector,
point-blank up to three-fifty. That's
the rifle I used against the Peruvian
slave-drivers . . .*

– Arthur Conan Doyle, *The
Lost World* (1912)

SIG-Mondragon Mod 1908, 7×57mm Mauser (Switzerland, 1911)

Designed by General Manuel Mondragon for the Mexican army and made by SIG of Switzerland, this was one of the first semiautomatic military rifles, feeding from an 8-round charger clip. Mexico ordered 4,000, the first 400 reaching the country in 1911. They turned out to be unreliable without high-quality ammo, and the Mexicans canceled the order. Whenever ammo is *not* bought at full price (*High-Tech*, p. 175), reduce Malf. to 16. The 400 rifles already delivered were used nonetheless; in 1923, revolutionary Pancho Villa was executed with such weapons.

SIG sold off the rest commercially. Explorers, mercenaries, or other interested parties could buy them prior to WWI complete with 20-round magazine and bipod; Wt. 10.6/1.6, Shots

20+1(3), ST 10B†, Cost \$1,300/\$30. In the end, most were snapped up by the Germans in 1915. Fitted with a 30-round drum magazine, they were to serve as the *Flieger-Selbstladekarabiner 15* ("aviators' self-loading carbine model 1915") on early combat aircraft until aviation machine guns became available; Wt. 11.9/2.9, Shots 30+1(5), ST 10†, Bulk -6, Cost \$1,200/\$258. Most ended up being used by infantry.

Stevens Number 14 1/2 Little Scout, .22 LR (USA, 1911-1941)

This single-shot rolling block breechloader was a very cheap rifle, typical of the sort given to youths learning to shoot. Such guns were used to bag the occasional squirrel or rabbit, or to get rid of rats and other pests. The gun would break apart into two halves (Holdout -3). A 0.3-lb. Maxim baffle sound suppressor (-2 to Hearing, plus another -1 for being a single shot weapon, -1 Bulk) was offered in 1911-1925.

H&H Best Quality Magazine Rifle, .375 H&H Magnum (U.K., 1912-)

In addition to their famous double-barrel guns (p. 7), Holland and Holland also built a variety of custom-made rifles using the action of the Mauser Gew98 (p. 6), which was well-regarded among hunters. In fact, the basic action and barrel were *built* by Mauser and shipped as parts to England to be processed further.

These guns could chamber any one of several powerful cartridges, including the .240 Nitro Express (Dmg 6d-1 pi, from 1923), .275 H&H Magnum (Dmg 7d+1 pi), and .300 H&H Magnum (Dmg 8d-1 pi, from 1925). Best Quality guns were always decorated (+2 reactions, p. 4), and were normally fitted with a 1.2-lb. 4× scope (+2 Acc, rugged, expensive, \$1,000).

Sestrorests AVF-16, 6.5×50mmSR Arisaka (Russia, 1916-1925)

The *Avtomaticheskaya Vintovka Fedorova obrazets 1916 goda* ("Fedorov's automatic rifle model of the year 1916") was an early (and rather unreliable) selective-fire rifle. It used the Japanese service cartridge, since that was better suited to an automatic weapon than the 7.62×54mmR Mosin-Nagant then in use in Russia. It featured a wooden foregrip and a detachable magazine. On trial issue during WWI, the AVF-16 was adopted by the Soviet military after the Russian Revolution. About 3,550 were made, but the model was removed from service by 1928. Some found their way to the Republicans in the Spanish Civil War, and a few were used during the Russo-Finnish Winter War.

Enfield M1917, .30-06 Springfield (USA, 1917-1919)

When the USA entered WWI in 1917, they found that only insufficient numbers of the Springfield M1903 rifle (p. 8) were available. As production couldn't be increased in time, it was decided to use the manufacturing capabilities of Remington and Winchester, which were already producing the Enfield Pattern 14 rifle for the British (another copy of the Mauser '98 system, p. 6). Modified for the U.S. service cartridge, the Enfield was adopted as the *M1917*, and some 2.5 million were made, far more than American arsenals produced of the Springfield. While slightly more accurate than the M1903, it was not as well-liked by American troops, and after the war, the small peacetime military went back to exclusive use of the M1903. Huge numbers of M1917 rifles were put into storage in

1920, and many were sold as surplus. Such rifles were in use with the security forces of American coal mines, for example. The Enfield can be seen used by the New York National Guard in Peter Jackson's *King Kong*.

The M1917 took a 1.1-lb. sword bayonet (Reach 1, 2*) and used five-round charger clips. A U.S. infantryman was issued 20 clips, carried in canvas web gear (*High-Tech*, p. 54).

The original Enfield *P/14 Mk I* (1915-1917) was chambered for the .303 British cartridge (Dmg 6d+2 pi). Some 1.1 million were made for the British military, almost all in the U.S. The British Army re-designated it the *No.3 Mk I* in 1926.

Mauser Tank-Gewehr 18, 13×92mmSR Mauser (Germany, 1918)

Caught unprepared by the British invention of the tank in WWI, the Germans introduced a huge, single-shot bolt-action rifle to combat armored vehicles. (It would also give good results against *Lost World* creatures!) Some 15,800 were made. After the war, the German military wasn't allowed to retain it (local LCO). Most were either surrendered to the Allies or destroyed (although the army still had more than 1,000 in secret storage in 1932). A large number given to Belgium were sold in the 1920s to Arabia and China, where they were used until WWII. Some of these could easily have fallen into the hands of gun smugglers or mercenaries. The rifle was also copied in Sweden as the *m/21* (1921); same stats.

The 5.5'-long weapon fired an APHC bullet capable of penetrating all tanks of its time. The gunner carried 12 cartridges in a pouch; his assistant at least a further 40. The T-Gew18 was fired prone from its integral bipod. Its fearsome recoil broke the collarbone of many a German soldier (an 18 on the attack roll for a firer with less than minimum ST does 1d-4 cr damage). Many shooters reported headaches and nausea after only a few shots.

Browning M1918 BAR, .30-06 Springfield (USA, 1918-1924)

The Browning Automatic Rifle (BAR) was a heavy, full-automatic rifle designed to be fired from the hip or shoulder on the assault. It was adopted as the *M1918* by the U.S. military, replacing the French-made CSRG M1915 and M1918 (p. 20), as well as the Savage-Lewis MK VI (p. 19). Some 100,000 were produced, but came too late for major service during WWI.

Between the wars, the commercial *Model 1919* (1919-1924) was made by Colt and sold worldwide, to customers as diverse as the Indian Prince Dedjamatch of Madras (1919) and the Fox Film Co. (1927); same stats.

Several American police and prison security forces adopted the BAR in the 1930s, including the U.S. Border Guards, and it saw use with gangsters such as Bonnie and Clyde. The latter stole about a *dozen* of the guns from police stations and National Guard armories during their career! A burst from it was a lot more likely to disable a car than a burst from a Tommy gun (*High-Tech*, p. 122, and *High-Tech: Pulp Guns, Volume 1*, pp. 28-30). Clyde Barrow liked to cut off barrel, sights, and butt: Dmg 6d+2 pi, Acc 3, Wt. 15.2, ST 12†, Bulk -4, Rcl 3. This allowed him to conceal the weapon under a coat (Holdout -4) and also made shooting from inside an automobile easier.

Unmodified BARs can be seen in *Bonnie and Clyde: The True Story*, and in both John Milius' and Rupert Wainwright's

Dillinger films. In *The Sand Pebbles*, set in 1926, sailor Jake Holman uses an M1918 extensively from a U.S. Navy gunboat in China. It is also depicted, rather out of place, in use during the Spanish Civil War, being employed by dynamiter Robert Jordan in Sam Wood's *For Whom the Bell Tolls*.

The M1918 used detachable 20-round magazines. The U.S. Army issued it with 8-10 magazines carried by the gunner in web gear pouches (*High-Tech*, p. 54). Other members of the squad would carry one or two canvas bandoleers holding six magazines (*High-Tech*, p. 54). (And Bonnie and Clyde traveled with 100 loaded magazines in the back seat of their stolen Ford Model 730.) A wooden box with 10 magazines weighed 21 lbs. An extended 40-round magazine (-1 Bulk, \$35, 3 lbs.) was introduced in 1918 for antiaircraft fire, but was scarcely used and was declared obsolete in 1927. AP (Dmg 5d(2) pi-) and tracer (Dmg 7d+1 pi inc) ammo was available from the start – and was often used by gangsters! Detachable improved-visibility sights (*High-Tech*, p. 156) were available for night use.

After WWI, the U.S. Army found that a true light machine gun was needed, rather than an automatic rifle, and thus the *M1922* (1922) was designed, with a much heavier barrel (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*), a bipod, and a folding butt rest: Wt. 21.6, ST 11B†, Cost \$3,300. It was adopted by the U.S. Cavalry and used until the eve of WWII, but only 500 were made.

The Colt *R75* (1925-1942) was a commercial variant of the M1922 with pistol grip, heavier barrel (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*), and bipod; Wt. 21.4, ST 11B†, Cost \$3,300. Some 5,000 were made for police departments, state police agencies, civilian sale, and export.

The Colt *R80 Monitor* (1931-1942) was another commercial version, with pistol grip, short 18" barrel, and integral 0.7-lb. Cutts compensator (*High-Tech: Pulp Guns, Volume 1*, p. 30, included in stats): Dmg 6d+2 pi, Acc 4, Wt. 17.3, ST 11†, Bulk -5, Cost \$3,600. It was usually sold with six magazines and a web belt (*High-Tech*, p. 54) to carry them. Of the 125 made, 90 went to the FBI, and one was acquired by Frank Hamer. Another Monitor was employed by "Baby Face" Nelson's partner John Paul Chase to shoot two FBI agents in 1934.

During the 1920s and 1930s, variants comparable to the M1922 and R75 were acquired by Sweden (*m/21* – see *GURPS WWII: Frozen Hell*, p. 33) in 6.5×55mm Mauser (Dmg 6d pi); by Chile (*Mod 1925*) and El Salvador (*Mod 1931*) in 7×57mm Mauser (Dmg 6d+2 pi); by Belgium (*Mle 30*) in 7.65×53mm Mauser (Dmg 6d+2 pi); by Cuba (*Mod 1932*), the Dominican Republic (*Mod 1933*), and Haiti (*Mod 1933*) in .30-06; and by China (*19 Shi*) and Poland (*wz. 28* – see *GURPS WWII: Doomed White Eagle*, p. 30) in 7.92×57mm Mauser (Dmg 7d pi). It was licensed-produced in Belgium, Poland, and Sweden.



Exotic Rifle and MG Ammo

Aside from normal solid bullets, few of the *Projectile Options* listed in *High-Tech* (pp. 166-175) were available during the pulp era: Hollow-points or soft-nosed bullets with similar effect (*High-Tech*, p. 166) were common in hunting rifle calibers from .22 LR to .600 NE, while military rifles and machine guns could fire AP (*High-Tech*, p. 167) as well as incendiary and tracer bullets (*High-Tech*, p. 175). The U.S. military even briefly used a round that combined hollow-point and incendiary/tracer effects, the .30-06 M1917. This was replaced in 1918 because of the legal issues of expanding bullets in war service (*High-Tech*, p. 166), but adventurers might hand-load something similar or even scrounge a case in some National Guard armory. Note that most of these early incendiary bullets burned out after half their 1/2D Range, losing their inc effect.

Incendiary and tracer bullets had also been loaded in .351 Winchester, .401 Winchester, and .45-90 Winchester civilian cartridges during WWI, but were available only as scarce surplus post-war. Also used in the war but quickly removed from service in peacetime were SAPHE projec-

tiles (*High-Tech*, p. 169) in some MG calibers, including .303 British, 7.92×57mm Mauser, and .450 Martini-Henry.

Several militaries had wooden bullets in service. Most were hollow and would disintegrate upon leaving the muzzle, rendering them safe for practice use, not unlike blank cartridges. However, a massive hardwood projectile could be fired like a normal solid bullet (see *Exotic Bullets* in *High-Tech*, p. 168). Investigators of the supernatural might try wooden bullets against creatures with Unkillable (Hindrance, Wood) (p. B95) or Vulnerability (Wood) (p. B161), such as vampires . . . One example of a mass-produced cartridge (rather than a hand-loaded one) firing a solid wooden bullet was adopted by the U.S. Army as the .30-06 M1921, for launching rifle grenades; this could be obtained through military channels or on the black market at half CPS!

During the 1930s, as many countries armed up again, specialized types like APHC or SAPHE were introduced on a larger scale, especially for tank and aircraft machine guns.

Greener Light Harpoon Gun Mk II, .38 Special (U.K., 1922-1998)

Based on the Martini-Henry Mk I single-shot rifle (*High-Tech*, pp. 109-110), this was an 8.25-lb. harpoon gun for hunting large fish and walruses, firing a 1-lb. barbed harpoon from the muzzle using a .38 blank cartridge. This or a similar weapon could be found on many fishing boats, but also on private yachts. It would be an excellent choice for anyone intending to deal with medium-sized marine life – including H.P. Lovecraft's Deep Ones (see *GURPS Cthulhupunk*, p. 115). The harpoon (\$175 each) was attached to a 35-yard 1/4" line (3.25 lbs.) supporting 300 lbs. The line was on a 0.6-lb. spool that attached below the barrel. The disassembled gun was sold with three harpoons, 100 blank cartridges, two line spools, and six coils of line in a wooden case (2' long, DR 2, \$2,000 and 35 lbs. complete). In a pinch, it could also fire a normal .38 Special cartridge; Dmg 2d+1 pi, Acc 2, Range 110/1,200, Wt. 8.3/0.033, RoF 1(3), ST 8†, Bulk -4, Rcl 2. (This weapon can be seen in action in the film *Jaws*.)

Mauser Modell 10E, 9.3×62mm Mauser (Germany, 1922-1944)

Based on the Gew98 military rifle (p. 6), the *Modell 10E* (*englische Ausführung*, "English pattern") was the premier export version of the Mauser sporting rifle. It was modeled on the pre-war "Type A," which had originally been designed for export to the British Isles. These rifles had English-pattern deluxe half-stocks and sights, and rhino- or buffalo-horn fore-ends (+1 to reactions, see p. 4).

Perhaps the most popular caliber was the 9.3×62mm Mauser, originally developed for settlers in the German colonies. By sheer numbers, Mausers in this caliber were the premier African hunting rifles – rather than the more famous British weapons. English-style rifles, be they doubles

or magazine repeaters, and their often proprietary (and therefore rare) ammunition, were far too expensive for everyday use in Africa. Great White Hunters on safari might tote a Holland and Holland (pp. 7, 10) or Rigby (p. 10), but farmers and professional hunters from the Cape to Cairo preferred the relatively inexpensive Mausers. Thousands were used. A further advantage was that, unlike the .303 British, 7.92×57mm Mauser, 8×50mmR Lebel, or other standard military cartridges, the 9.3×62mm Mauser was a civilian type, and thus unrestricted. The .303 British, for example, was banned for civilian use in India and the Sudan.

The Modell 10E was likewise available in .318 Nitro Express (Dmg 7d+2 pi, Wt. 8.6/0.3), 10.75×68mm Mauser (Dmg 7d+1 pi+, Wt. 8.7/0.4), and .404 Nitro Express (Dmg 8d-1 pi+, Wt. 8.8/0.5). For export to the American market, it was offered in .250 Savage (Dmg 5d+1 pi, Wt. 7/0.2) and .30-06 Springfield (Dmg 7d+1 pi, Wt. 7.1/0.3).

The far more common *Modell 40B* (1922-1944) was primarily intended for the European sporting market, but was also exported worldwide. It differed in the style of the stock and sights. Of the 126,000 Mauser sporting rifles produced, most were of the B-series. A typical caliber for a German hunter was 8×60mm Mauser; Dmg 7d pi, Wt. 7.7/0.3, Cost \$800. Others included 7×57mm Mauser (Dmg 6d+2 pi), 9×57mm Mauser (Dmg 7d+1 pi), and 9.3×62mm Mauser – but not the 7.92×57mm Mauser, which was strictly a military chambering and even forbidden (LC2) in Germany in 1919-1932.



The *Modell 162K* (1922-1944) was a compact version of the Modell 40B, with a short action and barrel, typically in 8×51mm Mauser; Dmg 6d pi, Wt. 6.3/0.2, Bulk -5, Cost \$900. The K-series was also available in 6.5×54mm Mauser (Dmg 6d-1 pi). Some 4,000 were made.

All Mauser sporting rifles could be obtained with a 1-lb. 2.75× scope (+1 Acc, rugged, expensive, \$500) or 1.5-lb. 4× scope (+2 Acc, rugged, expensive, \$1,000) from the factory.

Mannlicher-Schönauer Grosswildbüchse, 12.7×70mmRB Schüler (Austria, 1923-1942)

This was a big game rifle using the Mannlicher bolt-action. Until after WWII, it was the most powerful magazine sporting rifle in the world. Similar guns with Mauser actions were soon made in Britain, where the cartridge was renamed the .500 Jeffrey. It had an integral magazine as well as improved-visibility sights (*High-Tech*, p. 156) for night use.

Savage Model 23A, .22 LR (USA, 1923-1942)

The Savage Model 23A was a bolt-action weapon with a detachable 5-round box magazine. It was intended as a sporting weapon for use on small game. More than 88,000 were made. A 0.3-lb. Maxim baffle sound suppressor (-2 to Hearing, plus another -1 for being a bolt-action weapon, -1 Bulk) was available in 1923-1925.

The *Model 23B* (1923-1942) was the same gun in .25-20 Winchester (Dmg 2d+2 pi-); the *Model 23C* (1923-1942) took .32-20 Winchester (Dmg 2d+1 pi-). These were intended for hunting varmints like coyotes or wolves. Both cost \$250. Silencers were also available.

Winchester Model 54 Sporter, .270 Winchester (USA, 1925-1936)

This was the first high-powered bolt-action rifle developed by Winchester, based on the Mauser Gew98 (p. 6) and Springfield M1903 (p. 8). It was chambered for a proprietary cartridge that would soon become popular with hunters for all bigger North American game, but it was also available in .30-06 Springfield (Dmg 7d+1 pi). From 1928, The Model 54 was additionally offered in .30-30 Winchester (Dmg 6d pi); from 1930, in 7×57mm Mauser (Dmg 6d+2 pi), 7.65×53mm Mauser (Dmg 6d+2 pi), and 9×57mm Mauser (Dmg 7d+1 pi); and from 1933, in .22 Hornet (Dmg 4d-1 pi). Improved-visibility sights (*High-Tech*, p. 156) were available as an option. More than 50,000 were made in all.

That figure includes the rare *Model 54 Sniper* (1928-1936), a fine (accurate) variant in .30-06 with target sights and a longer, heavier 26" barrel; Dmg 7d+1 pi, Acc 6, Wt. 12/0.3, Cost \$2,700.

Savage Model 45 Super, .30-06 Springfield (USA, 1928-1940)

This was a conventional bolt-action weapon with a detachable box magazine and a nice checkered walnut stock. It was also available in .250 Savage (Dmg 5d+1 pi), .30-30 Winchester (Dmg 6d pi), and .300 Savage (Dmg 6d+2 pi), but didn't sell well, only 5,900 being made. In Merian Cooper's *King Kong*, cinematographer Carl Denham shoots a stegosaurus with a Model 45 Super.

ZB ZH29, 7.92×57mm Mauser (Czechoslovakia, 1929-1938)

The ZH29, designed by Emanuel Holec, was an early semi-automatic rifle, a few hundred of which were acquired for Chinese Republican forces from 1929 on (as the *18 Shi*), and for the Abyssinian *Kebur Zebagna* (Imperial Guard) in 1934. Probably less than 1,000 were made. It used 5-round (\$26, 0.4 lb.), 10-round (as in table), or 20-round (\$31, 1.8 lbs.) detachable box magazines, the latter being the same as was used by the ZB26 light machine gun (p. 23). It was also offered in 7×57mm Mauser (Dmg 6d+2 pi) and .30-06 Springfield (Dmg 7d+1 pi), but these apparently couldn't find any buyers.

Remington Model 34, .22 LR (USA, 1932-1936)

This was a bolt-action weapon with an underbarrel tubular magazine, able to fire .22 Short (Dmg 1d pi-, Shots 22+1), .22 Long (Dmg 1d+1 pi-, Shots 17+1), or .22 LR cartridges without adjustment. It could be taken apart into two halves (Holdout -3). Over 160,000 were made.

Steyr-Solothurn S18-100, 20×105mmB Solothurn (Austria/Switzerland, 1932-1938)

This 5.8'-long antitank cannon could be fired from its forward bipod and rear monopod arrangement. Such guns were bought in very small numbers during the 1930s by Bolivia (*Mod 1934*), Estonia (*M/1936* – it was also copied there from 1938), and Hungary (*36M*). At the time, the S18-100 was one of the most powerful available antitank weapons that was still man-portable – but the Bolivians used it mainly against Paraguayan field fortifications made of *quebracho* trees during the Chaco War. The Hungarians employed it in the Slovak-Hungarian War in 1939. A couple of hundred were built at most.

It fed from a 10-round magazine inserted from the left side. In addition to AP (in the table), it fired SAPHE (Dmg 5d×3 pi++ with 1d+2 [1d] cr ex follow-up), which was effective against personnel. A 2-lb. 2.75× scope (+1 Acc, rugged, expensive, \$500) was standard. The S18-100 broke up into 50-lb. and 49-lb. loads for backpack transport.

... Morgan uncased the big-game rifle on which he relied despite his colleague's warnings that no material weapon would be of help.

– H.P. Lovecraft, "The Dunwich Horror" (1928)

Rifles Table

See pp. B268-271 for an explanation of the statistics.

GUNS (RIFLE) (DX-4 or most other Guns at -2)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
6	Lebel Mle 1886, 8x50mmR	6d+2 pi	5	1,000/4,200	10/0.5	1	8+2(3i)	10†	-6	4	\$600	3	
6	Mannlicher-Carcano Mod 91, 6.5x52mm	5d+2 pi	5	750/3,200	8.9/0.3	1	6(3)	9†	-6	3	\$800	3	
6	Winchester Model 92, .44-40	3d+1 pi	3	300/2,200	7.6/0.6	2	15+1(2i)	9†	-5	2	\$420	3	
6	Winchester Model 94, .30-30	6d pi	5	900/3,700	7.2/0.3	2	5+1(2i)	9†	-5	3	\$450	3	
6	Winchester Model 86, .45-70	5d pi+	3	470/3,000	7.6/0.3	2	4+1(2i)	10†	-5	4	\$650	3	
6	Savage Model 99A, .303 Savage	6d+2 pi	5	1,000/4,200	8.3/0.27	2	5+1(2i)	9†	-5	3	\$700	3	
6	Mauser Gew98, 7.92x57mm	7d+1 pi	5	1,100/4,600	9.5/0.3	1	5(3)	11†	-5	4	\$900	3	
6	Winchester Model 03, .22 Winchester Auto	1d+2 pi-	3	75/1,500	5.9/0.1	3	10(2i)	8†	-5	2	\$450	3	
6	H&H Royal Double-Express, .600 NE	5d+2 pi++	5	800/4,600	16.4/0.4	1	2(3i)	14†	-7	7	\$19,500	3	[1, 2, 3]
6	Winchester Model 95, .405 Winchester	7d-1 pi+	4	800/3,400	8.2/0.2	1	3+1(2i)	11†	-5	5	\$650	3	
6	Mannlicher-Schönauer Modell 1903, 6.5x54mm	5d+2 pi	5	600/3,200	6.9/0.3	1	5+1(3)	10†	-5	3	\$800	3	
6	Winchester Model 06, .22 LR	1d+2 pi-	3	75/1,500	5/0.1	2	12+1(2i)	7†	-5	2	\$225	3	
6	Remington Model 8, .35 Remington	5d+2 pi	5	800/3,500	7.9/0.3	3	5(3)	9†	-5	3	\$800	3	
6	Springfield M1903, .30-06	7d+1 pi	5	1,100/4,500	8.8/0.3	1	5+1(3)	9†	-5	3	\$900	3	
6	Arisaka Meiji 38 Shiki, 6.5x50mmSR	6d+1 pi	5	600/3,200	9.4/0.25	1	5(3)	10†	-6	3	\$700	3	
6	Enfield SMLE Mk III, .303	6d+2 pi	5	800/3,300	9.2/0.6	1	10(5)	10†	-5	3	\$700	3	
6	Winchester Model 07, .351 Winchester	4d pi	4	350/3,800	7.8/0.3	3	5+1(3)	8†	-5	2	\$750/\$26	3	
6	Rigby Best Quality Double, .470 NE	8d+2 pi+	4	640/4,000	11.2/0.24	1	2(3i)	14†	-6	5	\$17,000	3	[3]
6	SIG-Mondragon Mod 1908, 7x57mm	6d+2 pi	5	900/3,600	10/0.6	3	8(3)	10†	-5	3	\$1,200/\$27	3	
6	Stevens Number 14 1/2 Little Scout, .22 LR	1d+2 pi-	3	75/1,500	2.75/0.0077	1	1(3)	6†	-4	2	\$70	3	
6	H&H Best Quality Magazine, .375 H&H Magnum	8d pi	5	1,100/4,600	10.3/0.35	1	4+1(2i)	11†	-6	5	\$4,700	3	[3]
6	Sestrorests AVF-16, 6.5x50mmSR	6d+1 pi	5	600/3,200	10.8/1.7	10	25(3)	10†	-5	3	\$1,500/\$31	2	
6	Enfield M1917, .30-06	7d+1 pi	5	1,100/4,500	9.3/0.3	1	5+1(3)	9†	-6	3	\$800	3	
6	Mauser T-Gew18, 13x92mmSR	5d+2(2) pi	5	2,100/8,800	40/0.26	1	1(3i)	16B†	-8	6	\$10,000	1	[1, 4]
6	Browning M1918 BAR, .30-06	7d+1 pi	5	1,100/4,500	17.1/1.6	9	20(3)	10†	-6	2	\$2,700/\$31	2	
6	Greener Light Harpoon Gun, .38 Special	6d imp	2	35/120	13.1/1.6	1	1(45)	11†	-6	4	\$1,250	3	[1, 5]
6	Mauser Modell 10E, 9.3x62mm	7d+2 pi	5	1,000/4,200	7.5/0.35	1	5(3)	10†	-6	5	\$1,800	3	[3]
6	Mannlicher-Schönauer Grosswildbüchse, 12.7x70mmRB	5d+2 pi+	4	900/3,600	11.7/0.7	1	5+1(3)	12†	-6	7	\$1,300	3	

Rifles Table (Continued)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
6	Savage Model 23A, .22 LR	1d+2 pi-	3	75/1,500	6.1/0.1	1	5+1(3)	8†	-5	2	\$200/\$25	3	
6	Winchester Model 54, .270 Winchester	7d pi	5	900/3,600	7.8/0.3	1	5+1(2i)	9†	-6	3	\$675	3	
6	Savage Model 45 Super, .30-06	7d+1 pi	5	1,100/4,500	7.7/0.3	1	4+1(3)	9†	-5	3	\$615	3	[3]
6	ZB ZH29, 7.92×57mm	7d+1 pi	5	1,100/4,600	11.7/1.8	3	20+1(3)	11†	-5	3	\$1,000/\$31	3	
6	Remington Model 34, .22 LR	1d+2 pi-	3	75/1,500	5.4/0.12	1	15+1(2i)	8†	-5	2	\$210	3	
6	Steyr-Solothurn S18-100, 20×105mmB	5d×2(2) pi++	5+1	1,500/6,400	99/10.8	1	10+1(5)	17B†	-9	3	\$20,000/\$57	1	[1, 4]
6	Kokura 97 Shiki Jidouhou, 20×125mm	6d×2(2) pi++ inc	5	2,000/7,700	114/8	1	7+1(5)	18B†	-10	3	\$22,000/\$51	1	[1, 4]

Notes:

[1] Lacks sling swivels (*High-Tech*, p. 154).

[2] Fine (accurate).

[3] Always decorated (see *Styling* on p. 10 in *High-Tech*).

[4] Effective LC2 during Pulp era.

[5] Fires a harpoon; see description on p. 12 for details.

Kokura 97 Shiki Jidouhou, 20×125mm (Japan, 1937-1940)

The 97 *Shiki Jidouhou* (“self-loading gun type of the year 2597” – Western year 1937) was a light antitank cannon in rifle format, over 6.6’ long. It was mounted on a massive bipod and a monopod below the buttstock. The weapon was virtually unknown before WWII, but proved effective against Chinese armored vehicles in the Sino-Japanese War; it might likewise serve well against fantastic *kaiju* creatures infesting the Pacific region (see *GURPS Cthulhupunk*, pp. 101-102, or *GURPS WWII: Weird War II*, pp. 100-105).

The 97 Shiki fed from a top-mounted 7-round detachable box magazine. The table lists the standard AP-T round; an alternate loading was SAPHE-T, with Dmg 6d×3 pi++ inc and 1d+2 [1d] cr ex follow-up. Some were fitted with an optional 30-lb. gun shield (DR 15).

MACHINE GUNS AND AUTOCANNON

You could not run a coal company without machine guns.
– Richard Mellon, testimony before Congress (1925)

Machine guns had drastically revealed their terrible effectiveness during the Great War, and were widely used by all military forces of the time. In addition, many countries still had no specific laws governing their possession and use during the pulp era, so companies and private citizens in many places could own them (*High-Tech: Pulp Guns, Volume 1*, pp. 4-5). In pulp era campaigns, all machine guns have effective LC2! Some police forces also had machine guns, but their use against civilians was beginning to be shunned.

Madsen M/03, 8×58mmR Krag (Denmark, 1903-1924)

The Danish Madsen was the most widespread (though not the most *numerous*) light machine gun in the world during the first half of the 20th century, having been supplied to 34 nations despite its complexity and high price. The Danish

army’s first model was the *Maskingevær M/03* (“machine gun model 1903”); this was later modified to the almost identical *M/03/24* (1924-1930).

In the pulp era, Madsens were for example used by the Dutch East Indies (*M.15*) in 6.5×53mmR Mannlicher (Dmg 6d pi); by Norway (*m/22*) and Sweden (*m/14*) in 6.5×55mm Mauser (Dmg 6d pi); by Brazil (*M908*, *M925*, and *M932*), Honduras (*Mod 1937*), Mexico (*Mod 1911* and *Mod 1934*), and Uruguay (*Mod 1937*), in 7×57mm Mauser (Dmg 6d+2 pi); by Finland (*KK/20*) in 7.62×54mmR Mosin-Nagant (Dmg 7d pi); by Argentina (*Mod 1910*, *Mod 1926*, and *Mod 1931*), Bolivia (*Mod 1925*), Paraguay (*Mod 1926*), and Peru (*Mod 1929*) in 7.65×53mm Mauser (Dmg 6d+2 pi); by Portugal (*M/930*), in .303 British (6d+2 pi); by Abyssinia, China, Hungary (*24M*), and Turkey, in 7.92×57mm Mauser (Dmg 7d pi); by Bulgaria, in 8×50mmR Mannlicher (Dmg 6d+2 pi); and by Siam (*Baep 68*), in 8×52mmR Mauser (Dmg 7d pi). In less-developed parts of the world, national armies, guerrillas, political movements, and bandit gangs were all likely to have Madsens.

The M/03 took 30-round box magazines, inserted from the top. Export models sometimes used 24-, 25-, 32-, 40-, or 48-round magazines instead. Treat its barrel as heavy (see *Sustained Fire* on pp. 85-86 of *High-Tech*). In the 1930s, the Danish army regularly mounted the M/03 on a pintle (p. B467) on the sidecars of Nimbus motorcycles, and also on that of the experimental Landsverk L210 armored bike (*GURPS WWII: Motor Pool*, p. 42).

From the late 1920s on, Madsen machine guns were available with a belt feed for fixed installation in vehicles (p. B467); EWt. 24.4, RoF 16!, ST 16M, Bulk -6, Cost \$4,000. These lacked bipod and stock. For example, Argentina used the *Mod 1933* in 11.35×62mm Madsen (Dmg 8d+1 pi+) on the Curtiss Model 750 Hawk fighter plane (*GURPS WWII: Motor Pool*, p. 104); Brazil mounted two linked *M937* guns in 7×57mm Mauser (Dmg 6d+2 pi) in the bow of the FIAT-Ansaldo CV33 tankette (*GURPS WWII: Grim Legions*, p. 31); and Ireland employed the *Madsen Mk I* in .303 British (Dmg 6d+2 pi) as a turret gun in the Landsverk L180 armored car (*GURPS WWII: Motor Pool*, p. 41).

The natives mainly had understanding for our armament. We remembered with pleasure and satisfaction the deep respect with which the crowd had marveled at our machine guns.

– *George Haardt and Louis Auduin-Dubreuil,
Across the Sahara by Motor Car (1924)*

Maxim MG08, 7.92×57mm Mauser (Germany, 1908-1918)

The *Maschinengewehr 08* (“machine gun model 1908”) was the standard medium machine gun of the German military during the Great War, some 32,000 being made. It was based on the older Maxim MG94, MG99, and MG01 (all developed from the *Maxim Mk I*, see *High-Tech*, p. 129). The MG08 was kept in limited army service until WWII, and was used by the German police – mainly mounted in the turrets (p. B467) of their *Schupo-Sonderwagen 21* armored cars. It was also a standard armament of wartime Zeppelins, including the *L23* and *L59* (*GURPS All-Star Jam 2004*, pp. 91-93).

The MG08 fed from a 250-round cloth belt (16 lbs., or 19.5 lbs. in can). It could fire AP ammo (Dmg 5d(2) pi-). Its water jacket held 7 pints. The MG08 had a small sliding knob to adjust RoF from 1 to 10; it was normally set for RoF 8. The gun used an 88-lb. sled mount (\$1,900; see *Pulling and Dragging*, p. B353), or much less commonly, a 71-lb. tripod (\$2,850). Each MG08 was issued with a 2-lb. 2.5× scope (+1 Acc, rugged, \$250).

Post-WWI, many of these guns were surrendered as war reparations, for example to the Netherlands (*M.25*), Poland (*wz. 08* – see *GURPS WWII: Doomed White Eagle*, p. 30), and Yugoslavia (*M8M*) – even Australia took a sizable number, which were re-chambered for .303 British and held in reserve until the 1930s. In 1933, war trophy Maxim guns were rounded up from American Legion halls in Indiana to bolster road blocks during the hunt for John Dillinger.

Commercial equivalents, such as the famous *MG09* (same stats except for EWt. 47 and ST 18M), were sold worldwide, including to China (first acquired in 1911 and then copied there from 1935 as *24 Shi*), Persia, and Turkey. Brazil (*M905*), Chile (*Mod 1902*), Costa Rica (*Mod 1910*), and Serbia (*M09*) acquired it in 7×57mm Mauser (Dmg 6d+2 pi); Switzerland (*Mg 11*), in 7.5×55mm GP11 (Dmg 7d pi); Finland (*KK/09-21* and *KK/32-33*), in 7.62×54mmR Mosin-Nagant (Dmg 7d pi – see *GURPS WWII: Frozen Hell*, p. 34); Belgium (*Mle 12*), in 7.65×53mm Mauser (Dmg 6d+2 pi); and Bulgaria, in 8×50mmR Mannlicher (Dmg 6d+1 pi).

The *MG08/15* (1916-1918) was a lightened version with a shoulder stock and a bipod, intended for assault troops (use Guns (LMG) skill): Wt. 45.8/5.1, Shots 50(5), ST 13B†, Bulk -7, Cost \$4,400. The only widely used light machine gun with water cooling, its slim water jacket held 5 pints. It was a *heavy* LMG, barely serviceable by one man; Maxim gunners were picked for strength and endurance, and *still* had to take turns carrying the piece if they were to keep up with the riflemen.

The MG08/15 fed from a 3.2-lb. 50-round belt coiled inside a drum (5.1 lbs. total) attached to the gun, but could also use the 250-round belt. It could also mount the same scope and had the same RoF adjuster as the MG08. About 130,000 were produced. The Germans kept this weapon in use throughout the pulp era. It features prominently used by the Turks in the WWI film *Gallipoli*.

The *MG08/18* (1918) was a lightened version of the MG08/15, replacing the water jacket with an air-cooled barrel; Wt. 38.2/5.1, Shots 50(5), ST 12B†, Bulk -7, Cost \$4,000. This was used by the German military in the 1920s.

The air-cooled *LMG14 Parabellum* (1915-1918), developed from the Maxim, was a flexible MG for aircraft and Zeppelins (*GURPS All-Star Jam 2004*, pp. 91-92), as seen in the movie *Sky Pirates*: EWt. 23, RoF 11!, Bulk -7, Cost \$5,000. It fed from a 100-round belt in a can or coiled on a spool, usually with tracer ammo (Dmg 7d+1 pi inc). It often mounted a 2-lb. 3× scope (+1 Acc, rugged, \$250). Few were still available in the 1920s, as Germany was not allowed to field more than a token number of armed aircraft after WWI.

TOZ PM-1910, 7.62×54mmR Mosin-Nagant (Russia, 1910-1943)

Based on the original Maxim (*High-Tech*, p. 129) and replacing the earlier PM-1905, the *Pulemet Maksima obrazets 1910 goda* (“Maxim’s machine gun model of the year 1910”) was a water-cooled medium machine gun modified for service with the Russian army. During the pulp era, it was in widespread use with the Soviets. They also supplied it generously to the Republicans in the Spanish Civil War, and the Finnish army used many hundreds of captured guns during the Finnish Civil War and the Winter War (*GURPS WWII: Frozen Hell*, p. 33).

The PM-1910 fed from a 250-round non-disintegrating cloth belt (22.7 lbs., or 27.1 lbs. in can). Its water jacket held 8 pints. The gun was usually fitted to the 79-lb. Sokolov cart mount, which had two small steel wheels and could be drawn by man, machine, or animal (\$2,000; see *Pulling and Dragging*, p. B353). This was often fitted with an optional 20-lb. gun shield (DR 20).

The *Pulemet Vozdushny-1* (1926-1940) or “aviation machine gun number one” was a fixed (p. B467) aircraft variant that replaced the *Pulemet Vickers obr. 1915g* (Vickers Class E, p. 17) in Soviet service; EWt. 32, RoF 15! (RoF 12! if synchronized). Officially adopted in 1928, some 20,000 were made starting in 1926. The PV-1 was installed in aircraft such as the Tupolev I-8 fighter and Polikarpov I-15 fighter, and saw extensive service in China, Finland, and Spain.

Steyr-Schwarzlose M.07/12, 8×50mmR Mannlicher (Austria, 1912-1918)

Designed by Andreas Schwarzlose, this medium machine gun was invented in 1905 and introduced in its original form by the Austro-Hungarian army in 1907 to replace the Maxim M.89/04 (a variant of the *Maxim Mk I – High-Tech*, p. 129) and Skoda M.93. The improved *Maschinengewehr Modell 07/12* was heavily used in the Great War. More than 43,000 were made. After WWI, many surrendered weapons were distributed among the Eastern and Southern European allies, including to Greece (*M1907/12*) and Italy (*Mod 07/12* – see **GURPS WWII: Grim Legions**, p. 27), and used unmodified by these even in WWII. The Jewish *Haganah* acquired some in 1921, which were used in their fight for independence in Palestine.

The M.07/12 fed from a 250-round non-disintegrating cloth belt (18.2 lbs., or 22.6 lbs. in box). Its water jacket held 6.3 pints. The gun was mounted on a 41-lb. tripod (\$2,850). Some were fitted with an 88-lb. gun shield (DR 20). It had a powerful recoil spring; great care had to be used in disassembly or the spring could actually injure the disassembler. Any failed Gunner (MG) or Armoury (Small Arms) roll in this connection causes 1d cr damage to the armourer.

The Schwarzlose was also either made or re-chambered for other calibers, including 6.5×53mmR Mannlicher (Dmg 6d pi) for the Netherlands (*M.08/15 No.1*) and Romania (*md. 1907/12* – see **GURPS WWII: Michael's Army**, pp. 24-25); 6.5×55mm Mauser (Dmg 6d pi) for Sweden (*m/14*); 7.92×57mm Mauser (Dmg 7d+1 pi) for Czechoslovakia (*vz. 07/12/27*), Poland (*wz. 07/24*), Romania (*md. 1907/12*), and Yugoslavia (*M7/12/28*); 7.92×57mmR Mauser (Dmg 7d+1 pi) for the Netherlands (*M.08/15 No.2*); and 8×56mmR Mannlicher for Austria (still called the M.07/12), Bulgaria (*M1912*), and Hungary (*07/31M*). Schwarzlose guns were installed in armored fighting vehicles such as Austrian and Bulgarian FIAT-Ansaldo CV33 tankettes (**GURPS WWII: Grim Legions**, p. 31) and Czechoslovakian Skoda OA vz. 27 armored cars.

Vickers Mk I, .303 British (U.K., 1912-1945)

The Vickers Mk I was a lighter, more reliable version of the Maxim Mk I (**High-Tech**, p. 129), developed for the British Army. It saw extensive service in both World Wars and in many minor conflicts in between. The Vickers was also made in Australia, India, and the U.S., and was widely supplied to British colonies and allies, for example to Canada, China, Egypt (*Mark ET*), Hong Kong, Iraq (*Mark IK*), Italy (*Mod 12*), the Netherlands (*M.18 No.1*), New Zealand, Portugal (*M/917*), the Shanghai International Settlement, and South Africa.

The Vickers used 250-round non-disintegrating belts (16 lbs., or 22 lbs. in wooden box). AP ammunition was used against tanks (Dmg 5d-1(2) pi-). Its water jacket held 9 pints. The gun mounted on a 51-lb. tripod (\$2,700). Many were installed on combat vehicles, such as the Vickers-Clyno motorcycle with sidecar, the Rolls-Royce Pattern 20 (**GURPS WWII: Motor Pool**, p. 37) and Vickers-Crossley Pattern 25 armored cars, and the widely exported Vickers-Armstrong Mark E light tank (**GURPS WWII: Frozen Hell**, p. 36).

The gun was sold commercially as the Vickers *Class C*, usually in foreign chamberings. The Dutch East Indies (*M.23*) adopted it in 6.5×53mmR Mannlicher (Dmg 6d pi); El Salvador (*Mod 1914*), in 7×57mm Mauser (Dmg 6d+2 pi); Argentina (*Mod 1923*) and Bolivia (*Mod 1926*), in 7.65×53mm Mauser

(Dmg 6d+2 pi); Russia (*Pulemet Vikkers obr. 1915g*), in 7.62×54mmR Mosin-Nagant (Dmg 7d pi); Abyssinia, in 7.92×57mm Mauser (Dmg 7d+1 pi); the Netherlands (*M.18 No.2*) in 7.92×57mmR Mauser (Dmg 7d+1 pi); and Siam (*Baep 77*), in 8×52mmR Mauser (Dmg 7d pi). The American military had used it briefly as the Colt-Vickers *M1915* in .30-06 (Dmg 7d+1 pi), but this was replaced in the U.S. Army by the Browning M1917 (p. 21) by the early 1920s. The U.S. Marines had to use it longer, deploying with the M1915 to Shanghai and Tientsin in the 1920s. Two Vickers guns are used in the assassination attempt on gangster Tom Powers in *The Public Enemy*.

The Vickers was soon adapted for service on fighter aircraft. The *Vickers Mk II* (1917-1927) was air-cooled and had a higher rate of fire: EWt. 22, RoF 14! (RoF 10! if synchronized). It typically fired tracer and/or incendiary ammo (Dmg 6d+2 pi inc), but sometimes also SAPHE (Dmg 6d+2 pi with 1d-3 [1d-3] cr ex follow-up). This gun was installed fixed (p. B467) in many British combat aircraft, such as the de Havilland D.H.4 fighter/bomber (**High-Tech**, p. 233) and Sopwith Camel F.1 fighter (**GURPS Cliffhangers**, p. 94).

The aircraft model was exported as the Vickers *Class E*. Brazil (*M930*), Chile (*Mod 1925*), and Venezuela (*Mod 1928*) acquired it in 7×57mm Mauser (Dmg 6d+2 pi); Russia (*Pulemet Vikkers obr. 1915g*), in 7.62×54mmR Mosin-Nagant (Dmg 7d pi); Argentina (*Mod 1925*), Bolivia (*Mod 1928*), and Peru, in 7.65×53mm Mauser (Dmg 6d+2 pi); France (*Vickers d'Avion Type Français*), Japan (*Bi Shiki Koutei Kikanjuu* – “fixed machine gun type Bi,” the Bi syllable standing for the first two letters of Vickers in Japanese), and Mexico (*Mod 1927*), in .303 British; Turkey, in 7.92×57mm Mauser (Dmg 7d pi); and Denmark (*M/25*), in 8×58mmR Krag (Dmg 7d pi). Examples of foreign mounts include the French Breguet Bre 14B-2 fighter/bomber (**High-Tech**, p. 233), Japanese Nakajima-Gloster A1N2 carrier fighter, and Russian Tupolev I-4 fighter.

Japan copied the aircraft version for the army in 7.7×58mmSR Arisaka as the Kokura 89 *Shiki Koutei Kikanjuu* (1933-1944); EWt. 26, RoF 15! (RoF 12! if synchronized). This was used in China during the 1930s, for example in the Nakajima Ki-27 fighter (**GURPS WWII: Motor Pool**, p. 95).



Colt Model 1914, .30-06 (USA, 1914-1917)

An improved version of the Colt Model 1895 developed by John Browning (*High-Tech*, p. 130), this air-cooled medium machine gun was built in considerable numbers during WWI. Some 16,800 were made in all. It was acquired in .30-caliber by Cuba (*Mod 1917*) and the U.S. Navy (*MK III*); in 6.5×52mm Mannlicher-Carcano (Dmg 6d pi) by Italy (*Mod 14*); in 7×57mm Mauser (Dmg 6d+2 pi) by Mexico (*Mod 1914*) and Spain (*Mod 1915*); in 7.62×54mmR Mosin-Nagant (Dmg 7d pi) by Russia (*Pulemet Kolt obr. 1915g*); in 7.65×53mm Mauser (Dmg 6d+2 pi) by Belgium (*Mle 1915*); and in .303 British (Dmg 6d+2 pi) by Canada (*Colt Automatic Mk I*).

However, many of these countries replaced it with other designs soon after or even during the war. In the 1920s, it was acquired by the New York Police Department for the Firearms Battalion (the forerunner of the Emergency Service Division, see *GURPS SWAT*, p. 5), mounted on the sidecar of Indian Big Chief motorcycles. In the 1930s, Colt sold off the last guns in stock at a considerable price reduction.

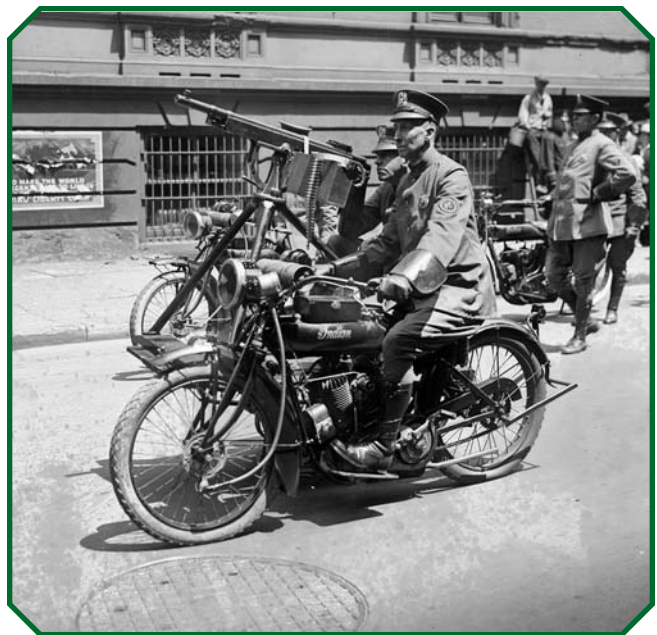
The Model 1914 fed from 250-round non-disintegrating belts (15.3 lbs., or 20.3 lbs. in wooden box). The gun mounted on a 53-lb. tripod (\$2,550).

The Marlin *M1917* (1917-1918) was a modification of the Model 1914 that replaced the gas lever with a conventional piston; EWt. 25, Cost \$9,000. The M1917 was adopted by the U.S. military for installation in armored vehicles; it was the original armament of the Maxwell M1917 "6-ton" light tank (*High-Tech*, p. 234). However, it was already from 1919 being replaced by the Browning M1919 (p. 25) – only 2,646 were made and hardly used. A 55-lb. tripod was available (\$2,550). Two Marlin guns were stolen by the Brady gang in 1937 from American Legion memorials and restored to working condition; one was used by the outlaws to ambush a police cruiser after a bank robbery the same year.

FIAT-Revelli Mod 14, 6.5×52mm Mannlicher-Carcano (Italy, 1914-1930)

The *Mitragliatrice Modello 1914* ("machine gun model 1914") was a water-cooled medium machine gun adopted by the Italian military prior to WWI. Designed by Bethel Abiel Revelli and primarily made by the car company FIAT, it replaced the Maxim Mod 06 (a variant of the *Maxim Mk I*, *High-Tech*, p. 129), St. Étienne Mod 07, Vickers Mod 12 (p.), and Colt Mod 14 (p. 17). During WWI (and afterwards), this decision was much regretted by Italian troops, who were said to pray *Pater noster qui es in coelis: dona nobis Maxim sclopetum* ("Our Father who art in Heaven: give us a Maxim gun"). The reasons for this mainly lay in the weapon's unreliable feed mechanism. Instead of a belt or box magazine, a cage-like contraption was inserted in the left side of the receiver. This was filled with ten 5-round clips, which was not only inconvenient and slow to top up, but also led to frequent feeding jams.

A 5-round clip weighed 0.25 lb., a filled 50-round cage weighed 3 lbs., and a wooden box with eight cages weighed 30 lbs. The gun's water jacket held 9 pints. It mounted on a 50-lb. tripod (\$2,700). The Mod 14 was in use with the Italians throughout the pulp era, including in the war with Abyssinia. Many were still at hand in WWII (*GURPS WWII: Grim Legions*, p. 27). Some were also installed in vehicles, such as the FIAT-Ansaldo CV29 tankette or the FIAT CA21 light tank (a variant of the *Renault FT-17* – see *High-Tech*, p. 234, and *GURPS WWII: Motor Pool*, p. 46).



The Breda-SAFAT *Mod 28* (1928-1943) was a heavily modified development for aircraft use, but still employed the same action. Air-cooled and fitted with a belt feed, it was chambered for the .303 British used by the Italian air force; Dmg 6d+2 pi, Range 800/3,300, EWt. 27.5, RoF 13!, ST 16M, Bulk -6, Rcl 2, Cost \$5,000. It was used as a fixed gun (p. B467) on many Italian aircraft employed in the Abyssinian War and Spanish Civil War, such as the FIAT CR.32 fighter.

Hotchkiss Mle 1914, 8×50mmR Lebel (France, 1914-1930)

In 1897, Hotchkiss introduced an air-cooled medium machine gun with distinctive, disc-shaped cooling fins around its massive barrel. This weapon evolved into the *Mitrailleuse Modèle 1914* ("machine gun model 1914") and remained the standard French MMG until WWII (*GURPS WWII: Return to Honor*, p. 38). In WWI, the U.S. Army used it, too; American soldiers nicknamed it and all its variants the "Woodpecker." The Mle 1914 was exported to Brazil (*M914*) and Spain (*Mod 1914*) in 7×57mm Mauser (Dmg 6d+2 pi); to Peru (*Mod 1919*) in 7.65×53mm Mauser (Dmg 6d+2 pi); and to China, Greece (*M1914*), and Poland (wz. 25 – see *GURPS WWII: Doomed White Eagle*, p. 30) in 7.92×57mm Mauser (Dmg 7d+1 pi).

The Hotchkiss Mle 1914 used 24-round metal strips inserted from the side (1.5 lbs., or 26.4 lbs. for 12 strips in can) – or alternatively, 30-round strips (1.9 lbs., or 15 lbs. for six strips in can). Each gun was also issued two crude 251-round belts (18.7 lbs.) made up of short 3-round strips. Both AP (Dmg 4d+2(2) pi-) and tracer (Dmg 6d+2 pi inc) ammo were available. A spare barrel weighed 23.3 lbs. (treat as extra-heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*). The Mle 1914 could be mounted on a tall, 53-lb. tripod (\$2,850), usually equipped with a metal seat for the gunner. It was the standard turret armament (p. B467) of several armored vehicles, including the Renault FT-17 light tank (*High-Tech*, p. 234, and *GURPS WWII: Motor Pool*, p. 46) and the Schneider AMC-29 armored halftrack.

Developed from the original Hotchkiss Mle 1897, the Koishikawa 92 *Shiki Juukikanjuu* (1932-1945), or "heavy

machine gun type of the year 2592," (Western year 1932) was the standard MMG of the Japanese army during the Sino-Japanese War and WWII, about 45,000 being made. This was chambered for the 7.7×58mmSR Arisaka: Dmg 6d+2 pi, Range 1,100/4,600, EWt. 60.7/2, RoF 7!, Shots 30(5), ST 20M, Bulk -7, Cost \$4,500. An AP-T round was available (Dmg 4d+2(2) pi-inc). Its 61.5-lb. tripod (\$3,000) had sockets for carrying poles, allowing a three-man team to move the assembled weapon. It usually sported a 2-lb. 6× scope (+2 Acc, rugged, \$500). The ammo came in cans holding 18 of the 30-round strips (44.3 lbs.) or 25 strips (66 lbs.) each.

BSA Lewis Mk I, .303 British (U.K., 1914-1930)

Designed by American Isaac Lewis and unveiled in 1911, this machine gun was light enough for one man to carry and operate. The first guns were made in Belgium, but the British soon adopted the weapon as the *Lewis Mk I*. It had a distinctive silhouette, with a fat aluminum cooling jacket around the barrel and a flat, 47-round pan-drum above the receiver. Lewis gunners were issued eight drums, carried in four pouches on web gear (*High-Tech*, p. 54). During the 1920s and 1930s, the British Army in the Middle East also used it pintle-mounted (p. B467) on desert patrol vehicles such as Ford Model T and Model A cars (*GURPS Cliffhangers*, p. 94). The Lewis was widely used during the pulp era, including with the Portuguese army (*M/917*) and, from 1921, with the Japanese *Rikusentai* naval infantry (as the *R Shiki Kikanjuu* or "machine gun type R," the odd designation stemming from the fact that Lewis is pronounced *Ruizu* in Japanese).

The Savage-Lewis *M1917* (1917-1918) was an American-made model in .30-06: Dmg 7d+1 pi, Wt. 32.4/4.2. Some 9,300 were made. The U.S. Army acquired few and quickly dumped them in favor of the *M1918 BAR* (p. 11), but, as the *MK VI*, the weapon was retained by the U.S. Navy, Marines, and Coast Guard through the 1930s. The *MK VI* can be seen in action aboard a U.S. Navy gunboat in China in 1926 in the film *The Sand Pebbles*. It would be the LMG used by government forces in the 1928 raid on Innsmouth (MA). Surplus guns were also exported, for example to the defense force of the Shanghai International Settlement.

A dedicated aircraft version, the *Lewis Mk II* (1915-1918), lacked the barrel jacket and replaced the shoulder stock with a D-shaped handle: EWt. 18.5, ST 15M, Bulk -6, Cost \$7,500. From 1916, it was used with a 97-round drum (-1 Bulk, \$277, 8.9 lbs.). It was usually loaded with tracer and/or incendiary ammo (Dmg 6d+2 pi inc). *SAPHE* was also available (Dmg 6d+2 pi with 1d-3 [1d-3] cr ex follow-up). The weapon was employed as a flexible observer's gun (p. B467), for example on the *AVRO 504K* fighter, *Breguet Bre 14B-2* fighter/bomber (*High-Tech*, p. 233), and *de Havilland D.H.4* fighter/bomber (*High-Tech*, p. 233).

Another aircraft version, the improved *Lewis Mk III* (1918-1930), was widely used during the 1920s and 1930s; EWt. 18.5, RoF 11!, ST 15M, Bulk -6, Cost \$7,500.

Lewis aircraft guns were taken along by several French civilian expeditions through Africa in the 1920s, pintle-mounted on Citroen-Kégresse B2 or P4 halftrack vehicles. Famous archaeologist/soldier T.E. Lawrence fired the aircraft model as a hand-held weapon during WWI: Acc 4, Wt. 27.4/8.9, ST 13†, Bulk -6, Rcl 3. The same technique is used by Patrick

O'Malley in *High Road to China* and by Ardeth Bay in Stephen Sommers' *The Mummy*.

The Savage-Lewis *M1918* (1918) was a U.S.-made aircraft version in .30-06: Dmg 7d+1 pi, EWt. 22.9/8.9, Shots 97(5), ST 15M, Bulk -6, Cost \$7,500. This was installed, with a 100-round brass catcher (*High-Tech*, p. 161), in flexible mounts on planes like the *Curtiss F8C-3* fighter/bomber (as seen in both Merian Cooper's and Peter Jackson's *King Kong*) or the *Dayton-Wright DH-4* fighter/bomber (*High-Tech*, p. 233). More than 34,000 were made.

The *Yokosuka 92 Shiki Kikanjuu* (1932-1945) was a ground version in service with the Japanese navy, still chambered for the .303 British, but employed as a medium machine gun; EWt. 30.5/4.5, ST 16M, Bulk -6, Cost \$7,000. It was mounted on virtually every Japanese navy boat and minor vessel, and also employed on a 25.3-lb. tripod (\$2,400) by *Rikusentai* landing forces. The *92 Shiki* lacked both bipod and shoulder stock.

FIAT-Villar Perosa Mod 15, 9×19mm Glisenti (Italy, 1915-1918)

The *Pistola Mitragliatrice Modello 1915* ("machine pistol model 1915") was an extraordinary double-barreled gun with two receivers linked side-by-side, which fed from two 25-round magazines inserted from the top. Controlled from rear spade grips like a heavy machine gun, the barrels could be fired individually (RoF 25!) or in unison (RoF 50!). The weapon was first employed as flexible vehicle armament, primarily as an observer's gun on aircraft like the *Macchi L.3* flying boat or *Voisin III* light bomber. (A similar prop gun is shown, somewhat anachronistically, on a small biplane in *Indiana Jones and the Last Crusade*.) It was also used on ground vehicles, for example motorcycle sidecars. However, *la Permacchia* ("the fart") lacked range and punch, as it fired a weak pistol cartridge. From 1916, it was mainly used as an infantry weapon, especially for the desperate mountain warfare in the Dolomite Alps. Its light weight compared to the *FIAT-Revelli Mod 14* (p. 18) was a distinct advantage there. Five variants were made:

Armament consisted of one Vickers Mk I (water-cooled) per [armored] car, one Lewis (air-cooled) [per] vehicle, one rifle per man, one . . . Webley per man, one Very pistol per vehicle, one grenade-adapted rifle per half-section and a Stokes [3"] trench mortar per section.

– Frank Carvin,
"Rolls-Royce Armoured
Cars, Iraq, 1935"

- The vehicle version was fitted to a pintle mount (p. B467); EWt. 13.6/1x2, ST 13M, Bulk -5, Cost \$2,400. Use Gunner (MG).

- Equipped with a bipod, it served adequately in the light machine gun role at short range. This is the version listed in the table. Use Guns (LMG).

- For trench warfare, it was fitted to a ball mount in a heavy gun shield (DR 15), included in the weight, which protected the prone gunner; EWt. 62/1x2, ST 20M, Bulk -7, Cost \$3,000. Use Gunner (MG).

- The *Mod 15/16* was used by *Arditi* stormtroopers, allowing real mobile use; Wt. 20/1x2, ST 10M, Bulk -6, Cost \$2,600. A pintle-mounted gun was fixed to a tray (included in the weight) that was carried by the gunner in front of his torso, supported by a neck harness, allowing fire to wherever the body was turned. This, however, was at best a stop-gap solution. Use Guns (LMG).

- The *Mod 15/17* was also only used by the *Arditi*. The basic twin gun was fitted to a bulky wooden rifle stock, finally allowing it to be fired from the shoulder or hip; Wt. 18/1x2, RoF 50!(3x2), ST 10†, Bulk -6, Cost \$2,600. Use Guns (SMG). The triggers were linked, always firing both barrels simultaneously. No portable gun at the time could hail down so much lead in such a short period. However, the awkward stock, low-capacity magazines, and weak cartridge eventually doomed it. After WWI, it was quickly replaced in service by better submachine guns like the Beretta Mod 18 (*High-Tech: Pulp Guns, Volume I*, p. 28) – which actually used many of the same components.

In addition to the developing company, the Villar Perosa was manufactured by FIAT, as well as by GEC of Toronto. Up to 15,000 were made. The Canadians supplied all the guns they made to Italy, but also tinkered with a variant in .455 Webley Auto (Dmg 2d+1 pi+). This was offered as aircraft armament to the Royal Flying Corps, who didn't buy it.

Thousands were captured by the Austrians and Germans, who used some in action, both on the ground and on aircraft. The Austrians even copied it as the *Sturm pistole Modell 18* (1918) in 9x23mm Steyr; Dmg 3d-1 pi, Acc 3, Range 180/2,000, EWt. 18.7/1x2, RoF 15!x2, Shots 25x2(3x2), ST 15M, Bulk -6, Rcl 2, Cost \$2,600/\$28. Use Gunner (MG). Optimized for mountainous warfare in the Alps, the M.18 didn't have a bipod; it was screwed onto a wooden backpack frame, which had to be set down on the ground before firing from the prone position. Few of these guns saw service in WWI, and they then faded from the scene. They would be well-suited for carry by explorers of Antarctic mountain ranges . . .

CSRG Mle 1915 Chauchat, 8x50mmR Lebel (France, 1916-1918)

The *Fusil Mitrailleur Modèle 1915* ("machine rifle model 1915") was commonly called the "Chauchat" after the man in charge of the committee that had selected it. Quickly adopted by the French military when the Great War began, it was probably the most hated gun of its time, at least by the people who had to use it. The design was bad and the manufacture by the bicycle maker Gladiator was worse. Despite this, more than 244,000 were made.

The Chauchat was the standard light machine gun for the French army until 1929, and was employed by the Greek (*M1915*, nicknamed the "Gladiator"), Romanian (*md. 1915*), and Yugoslavian (*M15*) armies from WWI until WWII, at least in reserve units. Some 16,000 were acquired by the U.S. Army

during WWI, but about half of these were thrown away as unserviceable! The rest were removed from American service in 1919. U.S. soldiers (and volunteers in the International Brigades in the Spanish Civil War) called it "Sho-Sho," usually with some pejorative adjective attached. Chauchats could be easily found as surplus on the international weapons market (p. 24).

It was an ugly angular gun, not helped by the shape of the French service cartridge, which needed a crescent-shaped magazine to hold a mere 20 rounds. When mounted in the action, the magazine curved round enough to touch the fore-end of the gun. The bulky shape also made carrying spare magazines a real pain. French gunners carried four magazines in the pouches of their leather web gear (*High-Tech*, p. 54), and up to 12 more in an angular backpack. AP (Dmg 4d+1(2) pi-) and tracer (Dmg 6d pi inc) ammo were available. Due to several unfortunate design decisions and the shoddy production, the Chauchat was infamously unreliable, and few stoppages (p. B407) could be corrected by *Immediate Action* (*High-Tech*, p. 81). Instead, the gun had to be disassembled, cleared, and put back together, which requires 30 seconds and an IQ-based Guns (LMG)-4 or Armoury (Small Arms) roll. The weight in the table includes the flash hider adopted in 1918; the earlier wartime version had Wt. 21.6/2.1. The weapon had a rather thin barrel and insufficient cooling arrangements; treat it as *light* (see *Sustained Fire* on pp. 85-86 of *High-Tech*).

The CSRG *M1918* (1918) was developed for the U.S. Army, chambered for the .30-06 cartridge; Dmg 7d-1 pi, Wt. 20.4/1.4, RoF 5, Shots 16(3). It had an almost straight box magazine which stuck far enough down to make it hard to take up a good, braced prone position, but held only 16 rounds. Some 19,200 were made, but apparently none of them were ever used in combat. This model was likewise replaced by the Browning Automatic Rifle M1918 (p. 11) in 1919.

Hotchkiss Mk I, .303 British (Great Britain, 1916-1918)

The British cavalry wanted a lighter gun with a greater sustained fire rate than the Lewis Mk I (p. 19). They adopted a version of the French *Hotchkiss Portative* ("portable Hotchkiss"), which used the same action as the Hotchkiss medium machine gun (pp. 18-19). It was a light machine gun that could be easily carried on horse; while cavalry saw little use during WWI, it was employed successfully in the 1920s in Palestine. More than 35,000 were acquired, and the gun was still in British service in the 1930s.



It used 9-round (0.6 lb.) or 30-round strips (1.9 lbs.); the former were easier to transport, 12 being carried in a bandoleer slung across the gunner's chest (*High-Tech*, p. 54). The longer strips were carried 10 to a wooden box (28 lbs.), or four each in two leather wallets slung from a saddle. It had an integral small tripod and a folding shoulder stock.

A minor variant without buttstock, the *Hotchkiss Mk II* (1917-1918), was one of the first tank machine guns; EWt. 26/3.2, ST 16M, Bulk -6, Rcl 2, Cost \$4,300. This fed from a 50-round belt (3.2 lbs.) rather than from strips. It normally fired AP ammo (Dmg 5d-1(2) pi-). It was installed in semi-fixed ball mounts (treat as a fixed mount with limited elevation and traverse; see p. B467) in almost all early British armored fighting vehicles, including the Foster Mk IV heavy tank, British Locomotive Mk VIII heavy tank, and Peerless Pattern 21 armored car. It can be seen in action in the film *Michael Collins*.

The original French version, the *Hotchkiss Portative*, was adopted as the *Fusil Mitrailleur Modèle 1908* (1908-1922) in 8x50mmR Lebel by the French army, albeit only in small numbers; Dmg 6d+1 pi, Wt. 29.4/1.9, Shots 30(5), Bulk -7. This was used by cavalry and cycle troops.

Like the British, the U.S. Army adopted a version of the Hotchkiss Portative prior to WWI. This was called the *Benét-Mercié M1909* (1910) "machine rifle" and was chambered for the .30-06; Dmg 7d+1 pi, Wt. 32/2, RoF 6, Shots 30(5), Bulk -7. It was often issued with a 2.3-lb. 5.2x scope (+2 Acc, rugged, \$500), and in 1915 was even trialed in combat with a 0.75-lb. Maxim baffle sound suppressor (-2 to Hearing, -1 Bulk). About 1,100 were acquired (most license-made in the U.S.); they were used in 1913-1916 along the Mexican border, including against Pancho Villa and his band of guerrillas. As a result of Villa's famous attack on Columbus (NM), in 1916, the weapon received a bad reputation as the "Daylight Gun." Allegedly, the gunners of the four M1909 guns present didn't fire a shot because it was too difficult to feed and use in the dark! Unfavorable press accounts notwithstanding, the weapons actually fired some 20,000 shots without much difficulty after the original shock of the nighttime assault had been overcome. Nevertheless, none were used in Europe, and all were put into reserve stocks by 1919 (to resurface as British Home Guard guns in WWII).

Browning M1917, .30-06 Springfield (USA, 1917-1918)

This water-cooled medium machine gun was the first in a long line of recoil-operated Browning MGs. In WWI and the inter-war years, the U.S. military used the M1917 mainly as a battalion weapon in infantry units. In the late 1920s, the U.S. Marines mounted M1917s on pintles (p. B467) on the dashes of Chevrolet touring cars for mail protection duty. Some 43,000 were made.

The M1917 fed from 250-round non-disintegrating belts (15.3 lbs., or 20.3 lbs. in wooden box). Tracer (Dmg 7d+1 pi inc) and AP (Dmg 5d(2) pi-) ammo was often used. Its water jacket held 8 pints. The gun mounted on a 61-lb. tripod (\$2,700). Several of the export models listed below could mount a German-made 7.3-lb. 5x scope (+2 Acc, rugged, \$500).

Post-war, the gun was offered commercially as the *Model 1919* (1919-1924), *Model 1924* (1924-1930), and *MG38* (1930-1943). These all differed in little more than the markings (use the same stats). Brazil (*M924*), Mexico (*Mod 1919* and *Mod*

In those days a single Chinese division might have five kinds of light machine guns: the French Hotchkiss, the American Browning, the German [sic] Solothurn . . . , and both Czech and Chinese-made Brnos.

– Edgar Snow,
The Battle for Asia
(1941)

1926), and El Salvador (*Mod 1939*) acquired water-cooled Brownings in 7x57mm Mauser (Dmg 6d+2 pi), while Argentina (*Mod 1928*), Bolivia (*Mod 1924*), Paraguay (*Mod 1928*), and Peru (*Mod 1922*) adopted it in 7.65x53mm Mauser (Dmg 6d+2 pi); Cuba (*Mod 1929*) bought it in .30-06; and Siam (*Baep 66*) got it in 8x52mmR Mauser (Dmg 7d pi). It was also made under license in Sweden, as the *m/29* in 6.5x55mm Mauser (Dmg 6d pi), and in Norway, as the *m/29L* in 7.92x57mm Mauser (Dmg 7d pi). Both China (*San Shi* – "Triple Tenth," adopted October 10th, 1921, the tenth anniversary of the Republic) and Poland (*wz. 30* – see *GURPS WWII: Doomed White Eagle*, p. 30) copied it in 7.92x57mm Mauser. Individual guns were also sold to private citizens and companies, such as the 10 that went to the Lundale Coal Co. (1921). In *Miller's Crossing*, Johnny Caspar's gangsters use one to redecorate an Irish club.

Nambu Taishou 11 Shiki Kikanjuu, 6.5x50mmSR Arisaka (Japan, 1923-1941)

The *Taishou 11 Shiki Kikanjuu* ("machine gun type of the 11th year of the Taishou-reign" – Western year 1922) was a bipod-mounted light machine gun developed from the French Hotchkiss medium machine gun (pp. 18-19). The weapon was employed by the Japanese in the various incidents that eventually led to the Sino-Japanese War, and was still in use during WWII. Some 29,000 were made.

The Nambu had a unique hopper magazine: six 5-round charger clips (0.25 lb.) for the Arisaka rifle (p. 9) were dropped into the hopper and held down by a spring-loaded arm. One at a time, the clips were fed into the action. This had the advantage of using the same ammo as the riflemen and being able to be topped up at any time, but was susceptible to dirt and was a lot more fuss than a box magazine or belt, especially since the gun needed greased cartridges for positive extraction (it featured a built-in oil pump). It has Malf. 16 under all but the most favorable conditions. From 1932, an AP-T round was available (Dmg 4d+1(2) pi- inc). A metal box held 24 clips (8 lbs.). Treat the barrel as extra-heavy (see *Sustained Fire* on pp. 85-86 of *High-Tech*).



A removable Nambu 11 Shiki deployed from a gun port (*High-Tech*, p. 228) formed the standard armament of several Japanese armored vehicles, including the Sumida 91 Shiki armored car (*GURPS WWII: Motor Pool*, p. 39). However, the Nambu also served as the basis for a dedicated tank weapon, the Nagoya 91 Shiki Shasai Kikanjuu (1932-1936); EWt. 22.3/2.5, Shots 50(20), ST 15M, Bulk -6, Cost \$4,500. This was installed in the turret (p. B467) of many Japanese armored vehicles during the 1930s, such as the Ishikawajima 92 Shiki tankette and Mitsubishi 95 Shiki “Kei-Go” light tank. It usually mounted a 2-lb. 1.5× scope (+0 Acc!). More than 2,000 were made.

Oerlikon Typ L, 20×100mmRB (Switzerland, 1924-1938)

During WWI, the German military adopted the *Becker-Kanone* in 20×70mmRB, the first modern autocannon. After their defeat, Germany was forbidden this arm, and most of the Becker guns were destroyed. In 1921, the patents were sold to the German-owned Seebach Maschinenbau AG of Switzerland, who improved the gun and chambered it for a more powerful cartridge, the 20×100mmRB. The resultant SEMAG MG23 (1923-1924) was intended as an anti-aircraft gun and as an infantry weapon for use against MG nests and tanks. It didn't sell well and the company failed in 1924, all its assets being bought by Oerlikon.

Oerlikon built the SEMAG gun from 1924, soon renaming it the *Typ L* (*leicht*, or light), to differentiate it from the further improved *Typ S* (*schwer*, or heavy) – see *High-Tech*, p. 132. Original and Oerlikon-made SEMAG guns were adopted by many nations, including Bolivia (*Mod 1927*), China (*15 Shi*), Colombia (*Mod 1933*), Finland (*ItK/23*), Mexico (*Mod 1924*), Paraguay (captured from Bolivia), and Peru (*Mod 1927*), albeit in small numbers only. A few were also used by Switzerland. Abyssinia acquired 16 *Typ L* cannon in 1929, the native crews being trained in Switzerland. Emperor Haile Selassie I himself

was reportedly a good gunner who shot down an Italian aircraft during the Abyssinian War.

The *Typ L* fed from a 20-round box magazine (-1 Bulk, \$69, 13.2 lbs.) or a more compact 15-round drum (\$283, 11.7 lbs.) inserted from the top. It fired SAPHE-T (in table) and AP-T (Dmg 5d×2(2) pi++ inc). It was typically mounted on a two-wheeled carriage (500 lbs. with gun) that converted to a tripod in firing position, but it could also be installed on aircraft such as the Dornier Do J Wal flying boat (*High-Tech*, p. 235).

Browning M1921, .50 Browning (USA, 1925-1930)

This was basically a scaled-up Browning M1917 machine gun (p. 21). It was developed for use against low-flying aircraft, and, to a lesser extent, armored vehicles – the powerful .50 Browning cartridge was based on that of the Mauser T-Gew18 antitank rifle (p. 11). Short of an actual (and typically much heavier and bulkier) cannon, this would be one of the most effective infantry weapons of the era for use against big critters of all sorts.

Despite the official designation, it was originally adopted by the U.S. Army and Navy in 1923, and not actually introduced until 1925; the U.S. Coast Guard received it first in 1929. Its primary use was as an anti-aircraft gun on both land and ships, but only some 1,000 were acquired, including the M1921A1 (below). Colt sold identical versions known as the *Model 1924* (1924-1932) and *MG52* (1932-1943) on the commercial market (use the same stats). Some of the few export customers were the Dutch East Indies (*M.30*) and Guatemala (*Mod 1924*).

The M1921 used a 110-round non-disintegrating fabric belt (28.4 lbs., 37.2 lbs. in wooden box). Solid ammo was available (as in the table), but the usual load was tracer (Dmg 6d×2 pi+ inc) or AP (Dmg 8d+1(2) pi). Its water jacket held 16 pints. It was issued with a 64-pint water chest/condenser can, which featured a manual pump to allow an assistant to circulate water through the jacket. The four-legged ground mount weighed 88 lbs. (\$3,300), the complex anti-aircraft mount 403 lbs. (\$6,600).

The *M1921A1* (1930-1933) was a slightly improved model with a larger water jacket holding 20 pints; EWt. 97, Cost \$16,500.

The *M2* (1933-1945) was the perfected water-cooled variant with a longer barrel and 20-pint jacket; Dmg 7d×2 pi+, Range 1,800/7,600, EWt. 121, RoF 10, ST 23M, Bulk -9, Cost \$16,500. It could be set up to feed from either side. It was normally mounted on a 493-lb. anti-aircraft tripod (\$6,900), which featured an integral gun shield (DR 18).

There were also several air-cooled .50-caliber Browning guns, originally intended only for aircraft (where water jackets were impractical and the airflow would sufficiently cool the barrels). The relatively short-barreled *M1921* (1923-1933) was first issued by the U.S. Army Air Corps in 1923; Dmg 5d×2 pi+, Range 1,400/5,700, EWt. 60, RoF 8!, ST 19M, Bulk -7, Cost \$15,000. It employed a disintegrating belt, usually with a capacity of 200 rounds (58.4 lbs.). If used on the ground, the relatively thin barrel would quickly overheat (treat as light; see *Sustained Fire* on pp. 85-86 of *High-Tech*). Most pulp-era U.S. combat aircraft, including the Curtiss P-1 fighter, Boeing P-12 fighter, and Boeing F2B-1 carrier fighter, could replace the left of their fixed twin .30-caliber Browning guns (pp. 25-27) with such a .50-caliber gun – but few were actually bought and installed.

The *M2* (1933-1945) was an improved aircraft version capable of feeding from either side: Dmg 6d×2 pi+, Range

1,700/7,100, EWt. 64, RoF 13!, ST 20M, Bulk -8, Cost \$15,000. It armed practically all U.S. combat aircraft during the late 1930s, such as the Boeing P-26 fighter (*GURPS Cliffhangers*, p. 94) and Curtiss P-36 fighter (*GURPS WWII: Motor Pool*, p. 104). It was exported as the Colt MG53, but until WWII sales were few. The manually aimed flexible version of the M2 had EWt. 65 and usually used 50-round disintegrating belts (15.1 lbs., 17.5 lbs. in can). This was mounted on the Consolidated PBY-3 flying boat (*GURPS WWII*, p. 116) and Goodyear K-Class blimp (*GURPS WWII: Motor Pool*, p. 106), among others.

Finally, in 1933, an air-cooled ground version was introduced, the M2 (1933-1938); Dmg 6d+2 pi+, Range 1,700/7,100, EWt. 78, ST 21M, Bulk -8, Cost \$15,000. This was the forerunner of the famous M2HB (*High-Tech*, p. 133), from which it differed mainly in the shorter barrel (treat as heavy; see *Sustained Fire* on pp. 85-86 in *High-Tech*). A spare barrel weighed 18 lbs.

ZB ZB26, 7.92×57mm Mauser (Czechoslovakia, 1927-1941)

The ZB26 was one of the most successful light machine guns ever. Developed by *Zbrojovka Brno*, the arsenal at Brno, it was adopted by Czechoslovakia's military as the *Lehki Kulomet vzor 1926* ("light machine gun model 1926") and exported in large numbers. Customers included China (*16 Shi* – copied in at least three arsenals), Ecuador (*Mod 1930*) Lithuania, Persia (*M1313*), and Yugoslavia (*M29*). Brazil (*M930*) bought it in 7×57mm Mauser (Dmg 6d+2 pi). Some 150,000 were made.

The ZB26 was a conventional air-cooled weapon, fired from a bipod. It used 20-round detachable box magazines, inserted from the top. A spare barrel weighed 5.5 lbs. (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*). The LK vz. 26 was also installed in armored fighting vehicles, for example the Czechoslovakian Tatra OA vz. 30 armored car and CKD-Praga TC vz. 33 tankette.

The slightly improved ZB30 (1930-1941) was even more popular: Wt. 23/1.8. The largest customer, with over 17,000, was Yugoslavia (*M37*), but it was also acquired by Abyssinia, Afghanistan, and Turkey. Romania built the weapon under license (*md. 1930* – see *GURPS WWII: Michael's Army*, p. 25), and used it both in the infantry role and as vehicle armament for the CKD-Praga R-1 tankette. Bolivia (*Mod 1932*) and Peru (*Mod 1932*) bought the ZB30 in 7.65×53mm Mauser (Dmg 6d+2 pi), and Bulgaria acquired it in 8×50mmR Mannlicher (Dmg 6d+1 pi).

The Japanese copied the ZB26 for installation in armored vehicles, as the Nambu 97 *Shiki Shasai Kikanjuu* (1937-1945) in 7.7×58mmSR Arisaka; Dmg 4d+2(2) pi-inc, EWt. 24.5/2.5, RoF 8!, Shots 30(3), ST 16M, Bulk -7, Cost \$4,500/\$33. It fired AP-T ammo as standard and was fitted with a 2-lb. 1.5× scope (+0 Acc!). This gun was mounted in the turret (p. B467) of the Mitsubishi 97 *Shiki* "Chi-Ha" medium tank and similar designs. More than 18,000 were made.

SIG KE7, 7.92×57mm Mauser (Switzerland, 1928-1935)

The KE7 was developed by Pál Király and Gotthard End. Made by the Schweizerische Industrie-Gesellschaft for export,

this light machine gun was an elegant and simple design. It would be a particularly good choice for affluent mercenaries. The KE7 featured a progressive trigger (*High-Tech*, pp. 82-83) and a bipod, and used detachable magazines inserted from below. Although really a LMG, it could also be mounted on a 26.4-lb. tripod (\$1,800) for the sustained fire role.

At least 5,000 were made, and sizable numbers were delivered to China and used there in the Tuchun Wars and against the Japanese. It was also copied in China from 1938 onwards. In China, the KE7 was usually simply called the *ch'i la li* (a transliteration of Király's name). The standard model was sold to Abyssinia and Persia, while a minor variant was bought in small numbers by Chile, Colombia, and Peru in 7×57mm Mauser (Dmg 6d+2 pi). The weapon was also offered in 7.65×53mm Mauser (Dmg 6d+2 pi) and .303 British (Dmg 6d+2 pi).

Vickers-Berthier Mk I, .303 British (Great Britain, 1928-1933)

This light machine gun was designed by the Frenchman André Berthier, who sold the patents to Britain's Vickers. It featured a finned air-cooled barrel (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*) and a bipod and butt monopod, as well as a curved magazine inserted from the top, resembling the later Enfield Bren Mk I gun (*High-Tech*, p. 133) in overall shape.

Offered on the commercial market as the Vickers *Class L*, it couldn't find many buyers. In the 1920s, the best customer was Bolivia, which acquired 700 as the *Mod 1926* in 7.63×53mm Mauser (Dmg 6d+2 pi). These saw heavy use during the Chaco War. Many were captured by Paraguay, which first used them against the Bolivians and then in turn supplied some to the Republicans during the Spanish Civil War. Portugal acquired a small number as the *M/931* in the original .303 caliber.

The gun was further modified into the *Vickers-Berthier Mk III* (1933-1942); same stats. This was adopted by the Indian army and also made in India, at the Ishopore arsenal. Some 30,000 were made.

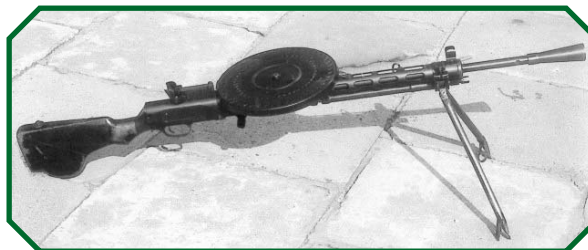
ZiD DP, 7.62×54mmR Mosin-Nagant (Russia, 1928-1946)

The *Ruchnoi Pulemet Degtyareva Pekhotnyi* ("Degtyarev's handheld infantry machine gun") was a simple light machine gun with an excellent reputation for reliability and ease of maintenance. The flat, pan-drum magazine on top of the

receiver earned it the nickname "Russian guitar." The DP replaced the Madsen (p. 15) and various lightened Maxim patterns in front-line service with the Soviet army, who used it from the late 1920s. Some 120,000 were

eventually made. More than 5,100 were delivered to Spain, making it the most important LMG of the Republic.

The air-cooled DP included a bipod and took 47-round magazines. A steel can held three drums for transport (22 lbs.). A spare barrel weighed 4.4 lbs. (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*).



The *Degtyareva Tankovyi* (1929-1946) was a tank variant installed in hull and turret mounts (p. B467) in many Soviet vehicles, such as the FAI armored car, BA-27 armored car, T-18 light tank (a variant of the *Renault FT-17* in *High-Tech*, p. 234, and *GURPS WWII: Motor Pool*, p. 46), T-26 light tank (*GURPS WWII: Frozen Hell*, p. 37), and T-35 heavy tank (*GURPS WWII: Motor Pool*, p. 67). In addition, it was mounted as a flexible pintle gun (p. B467) on the NKL-26 and RF-8-GAZ-98 attack aerosleds (*GURPS WWII: Motor Pool*, p. 32). The DT featured a retractable stock, a heavier barrel (treat as extra-heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*), and a 63-round drum: EWt. 23.1/5, Shots 63(5), ST 15M, Bulk -6, Cost \$3,500/\$268. It accepted a bipod to allow use away from the vehicle: Wt. 30/5, Shots 63(5), ST 12B†, Bulk -7*. Magazines for the DT and DP weren't interchangeable. Some 40,000 were made.

The *Degtyareva Aviatsonniy* (1929-1936) was an aircraft model that also used the 63-round drum: EWt. 18.5/5, Shots 63(5), ST 15M, Bulk -6, Cost \$3,500/\$268. Replacing the *Pulemet Levis obr. 1915g* (Lewis Mk II, p. 19), the DA served as a flexible mount gun (p. B467) in 1930s Soviet aircraft, for example the early Tupolev TB-3 heavy bomber (*GURPS WWII: Motor Pool*, p. 101). There was also the DA-2 (1930-1936), nothing more than two DA guns mated side-by-side, controlled from a single trigger; EWt. 39.6/5x2, RoF 20!, Shots 63x2(5x2),

ST 18M, Bulk -8, Cost \$7,500/\$268. The DA-2 was installed on ring mounts such as on the Beriev MDR-2 flying boat.

Steyr-Solothurn S2-200, 7.92x57mm Mauser (Austria/Switzerland, 1929-1935)

This was a light machine gun developed by the German designer Louis Stange of Rheinmetall. Most of the components were made by Steyr in Austria and then shipped to Solothurn in Switzerland for final assembly and as a “neutral” sales point; both companies were controlled by Rheinmetall. It was a modern design with an air-cooled barrel, bipod, and magazine feed.

Its trigger was pivoted in the middle; a pull on the top gave semi-auto fire while a pull on the bottom gave full-auto (*High-Tech*, pp. 82-83). The magazine well was on the left side of the receiver and accepted a 25-round box magazine. A spare barrel weighed 3.6 lbs. (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*). Changing the barrel requires an asbestos glove and an IQ-based Guns (LMG) or Armoury (Small Arms) roll. In the original caliber, some 50 were sold to China; El Salvador bought a small number as the *Mod 1932* in 7x57mm Mauser (Dmg 6d+2 pi).

In 1930, the S2-200 was adopted as the *M.30* by the Austrian army, chambered for the 8x56mmR Mannlicher; Dmg 7d pi, Wt. 22.4/2.6. Some 3,000 were made. When Germany annexed Austria in 1938, this gun became the *MG30(ö)* – see *GURPS WWII: Iron Cross*, p. 64. A couple of thousand were acquired by Hungary as the *31M*, to replace the Madsen 24M (p. 15).

The German Rheinmetall *MG15* (1932-1942) for aircraft use employed the same action; Dmg 7d-1 pi, EWt. 18/9.4, RoF 16!, ST 14M, Bulk -6, Cost \$4,500/\$271. It had a pistol grip and trigger but no shoulder stock. The MG15 fed from 75-round twin saddle drums (\$271, 9.4 lbs.) and was fitted with a brass catcher for 225 cases (*High-Tech*, p. 161). Typical ammo was API-T (Dmg 5d-1(2) pi- inc). The weapon was adopted by the Luftwaffe to replace the obsolete LMG14 Parabellum (p. 16), almost 18,000 being made. It was installed in flexible mounts (p. B467) in many 1930s aircraft, including the Heinkel He 59 float plane (*GURPS WWII: Their Finest Hour*, pp. 51-52), Junkers Ju 52/3m transport (*GURPS WWII: Iron Cross*, p. 86), Junkers Ju 87 dive bomber (*GURPS WWII*, p. 114), Dornier Do 17 light bomber (*GURPS WWII: Their Finest Hour*, pp. 50-51), and Heinkel He 111 medium bomber (*GURPS WWII: Their Finest Hour*, pp. 52-54). A few installations mounted twin MG15s instead, with a *single* double-drum feeding both weapons (75 rounds per gun, \$293, 15.4 lbs.). This rare twin-gun installation can be seen in the tail gunner cupola of the otherwise fictional flying wing transport in *Raiders of the Lost Ark*.

The Rheinmetall *MG17* (1934-1942) was an aircraft machine gun for fixed installations (p. B467); Dmg 7d-1 pi, EWt. 27.7, RoF 20! (RoF 16! if synchronized), ST 16M, Bulk -7, Cost \$5,000. It used disintegrating belts, usually with an API-T load (Dmg 5d-1(2) pi- inc) – an extra-powerful API-T+P round (Dmg 5d+1(2) pi- inc) wasn't introduced until 1941. Replacing the Maxim LMG08/15 (*High-Tech*, p. 130) as the standard German fixed aircraft gun, the MG17 was mounted in the Messerschmitt Bf 109 fighter (*GURPS WWII*, p. 111), Heinkel He 112 fighter (*GURPS WWII: Michael's Army*, pp. 30-31), Junkers Ju 87 dive bomber (*GURPS WWII*, p. 114), and many others.

Military Surplus

*They're wagin' war in Europe in real old Sherman style;
They're shooting folks in China and maneuvering a pile;
The rebels down in Paraguay are kicking up their heels,
And the moving picture feller, he is busy making reels.*

– *Bannerman Military Goods Catalogue*, “*Business is Rushing*” (1927)

In the 1920s and early 1930s, military surplus materiel was available in great quantities and for low prices from retailers like Bannerman in New York (*High-Tech: Pulp Guns, Volume 1*, p. 5). Second-hand WWI weapons in as-new condition could be had for around half price, while more obsolete stuff would sell for a fifth or less of the list price.

This applies to rifles, handguns, and similar small arms. Many outmoded patterns were available, such as the Martini-Henry Mk I (*High-Tech*, pp. 109-110), various Remington Rolling Block models (*High-Tech*, p. 109), or the Springfield M1873 (*High-Tech*, p. 110), but also relatively new designs like the Mauser Gew98 (p. 6), Springfield M1903 (p. 8), and Enfield M1917 (pp. 10-11).

Machine guns, grenades, flamethrowers, and similar heavy weapons were more difficult to obtain . . . but ways could always be found (see *Buying Equipment* on pp. 7-9 in *High-Tech*). For example, Bannerman offered – “to responsible parties only” – small numbers of second-hand but recently made machine guns like the Colt Model 1914 (p. 18) and Vickers M1915 (p. 17), and also a range of antique Gatling guns including the 1” M1866, the M1877 Bulldog, and the M1903 (*High-Tech*, p. 127) – each complete with 10-20,000 rounds or so.

Breda Mod 30, 6.5×52mm Mannlicher-Carcano (Italy, 1930-1943)

The *Fucile Mitragliatore Modello 30* ("machine rifle model 1930") was the standard Italian weapon of this type during the 1930s and 1940s (*GURPS WWII: Grim Legions*, p. 27). Due to a variety of defects, it wasn't well-liked by the troops, but it soldiered on throughout WWII. Some 30,000 were made. Small numbers were also built in 7×57mm Mauser (Dmg 6d+2 pi) and 7.92×57mm Mauser (Dmg 7d pi) for export.

The Mod 30 used an unusual feed device, a vertical 20-round magazine permanently attached to the right side of the receiver. This hinged to the front, allowing it to be filled in one go from a 20-round cardboard container (1 lb.) or charger clip (1.2 lbs.). This made reloading slow and the magazine susceptible to damage and jams. It shared the same action with the FIAT-Revelli Mod 14 (p. 18), and had an integral oil pump which squirted lubricant into the chamber between shots. This kept the cartridge cases from rupturing on extraction, but usually eventually clogged the action with accumulated sand and dirt. If the oil is depleted (after 4,000 shots or so), reduce Malf. to 15! The Mod 30 lacked both sling swivels and carrying handles, making it awkward to carry; at least the protruding magazine doubled as a handhold. It was one of the first air-cooled light machine guns with a quick-change barrel; a spare barrel weighed 4 lbs. (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*).

Simson-Dreyse MG13, 7.92×57mm Mauser (Germany, 1930-1935)

The Dreyse *Maschinengewehr Modell 13* (MG13) was introduced by the German army in 1930, to replace the obsolete Maxim MG08/15 and MG08/18 (p. 16). Manufactured by Simson and Co., the only producer then allowed by the Versailles Treaty to make war matériel of this kind, it was a light, air-cooled weapon with a folding buttstock and a bipod. Only a few thousand were made, and while it remained the standard light machine gun of the German military throughout the 1930s, it had been largely replaced by the Rheinmetall MG34 (*High-Tech*, pp. 132-133) by the start of WWII. The latter first came into production in 1936, but wasn't in general service until 1938. German volunteers of the Condor Legion used the MG13 in the Spanish Civil War. Some surplus MG13s were sold to Portugal, which adopted the weapon as the *M/938*.

Its trigger was pivoted in the middle; a pull on the top gave semi-auto while a pull on the bottom gave full-auto (*High-Tech*, pp. 82-83). The magazine well was on the left side of the receiver and could either take a 25-round box magazine (in table) or a 75-round double-drum magazine. It normal fired a tracer mix (Dmg 7d+1 pi inc), but at least one magazine always contained AP-T (Dmg 5d(2) pi- inc) for emergency use against tanks. The box was usually used for assault, the drums for anti-aircraft fire. Eight magazines were transported in a metal can (22.5 lbs.). A spare barrel weighed 4.4 lbs. (treat as heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*). A case holding two barrels weighed 12.5 lbs.; changing the barrel required an asbestos glove.

The *MG13 kurz* (1930-1935) lacked the stock and bipod and had a shorter barrel for turret installation (p. B467) in armored fighting vehicles; Dmg 7d-1 pi, Acc 5+1, EWt. 23/2.3, ST 15M, Bulk -6. It could only use the box magazines and normally fired AP-T ammo (Dmg 5d-1(2) pi- inc). It was used with a 2.5× sight (+1 Acc). The main carriers were early patterns of the

Horch *leichter Panzerspähwagen* armored car (*GURPS WWII: Iron Cross*, p. 75) and the Henschel *Panzerkampfwagen I* light tank (*GURPS WWII: Iron Cross*, p. 77). Both vehicles were supplied to China in 1935; the Panzer I was also used in Spain by the Germans aiding the Nationalists.

Browning M1919A4, .30-06 Springfield (USA, 1934-1953)

This gun used the action of the Browning M1917 (p. 21), but had a shorter barrel and no water jacket. While the M1919A4 was developed from a tank MG and was itself installed in a number of tanks, it was light enough for fast-moving troops to transport easily. It became the standard American platoon-level machine gun in the 1930s. More than half a million were eventually made, most during WWII.

The M1919A4 used 250-round non-disintegrating belts (15.3 lbs., or 18.8 lbs. in can). A spare barrel weighed 7.4 lbs. (treat as extra-heavy; see *Sustained Fire* on pp. 85-86 of *High-Tech*); changing it required an asbestos glove. The weapon usually fired AP (Dmg 5d(2) pi-) or tracer ammo (Dmg 7d+1 pi inc). It could be mounted on a 14-lb. tripod (\$2,550), but was soon also found on various vehicles, for example the Indiana M1 scout car and the RIA M2A1 light tank.

The original *M1919* (1919-1920) was installed in early armored vehicles such as the Maxwell M1917 "6-ton" light tank (*High-Tech*, p. 234) and RIA MK VIII "Liberty" heavy tank: Dmg 7d-1 pi, EWt. 33, ST 17M, Bulk -7, Cost \$7,000. This used 100-round belts (6.1 lbs., 9 lbs. in can) and a 500-round brass catcher (*High-Tech*, p. 161).

The *M1919A2* (1931-1934) was the U.S. Cavalry version, with a short 18.6" barrel, distinctive slotted barrel sleeve, and light 14-lb. tripod (\$1,700): Dmg 7d-1 pi, EWt. 35, ST 17M, Bulk -7, Cost \$7,000. It was employed by the U.S. Army in the early 1930s, both carried on pack animals and pintle-mounted (p. B467) on vehicles such as scout cars (as seen in Peter Jackson's *King Kong*) or the Cunningham M1 armored car.

The Colt *MG38BT* (1932-1943) was an export version of the M1919 tank gun, with a heavy, shortened barrel; Dmg 7d-1 pi, EWt. 35, ST 17M, Bulk -7, Cost \$7,500. Few of these were sold; a dozen armed the Disston Tractor light tanks bought by Afghanistan in 1937.

The *M1918M1* (1919-1924) and *M1919* (1924-1931) were air-cooled fixed aircraft versions (p. B467) adopted by the U.S. Army and Navy; EWt. 30, RoF 18! (RoF 11! if synchronized), ST 16M, Bulk -6, Cost \$7,000. They were installed in various 1920s combat aircraft, including the Curtiss P-1 fighter and Boeing F2B-1 carrier fighter.

The M2 (1931-1945) was the last and most successful .30-caliber aircraft version, lightened and with a higher rate of fire: EWt. 21.5, RoF 20! (RoF 12! if synchronized), ST 15M, Bulk -6, Cost \$7,500. It was installed in many U.S. military aircraft, such as the Curtiss P-6 Hawk fighter, Boeing P-12 fighter, Boeing P-26 fighter (*GURPS Cliffhangers*, p. 94), Curtiss P-36 Hawk fighter (*GURPS WWII: Motor Pool*, p. 104), Boeing F4B-1 carrier fighter (*GURPS Cliffhangers*, p. 94), Curtiss F8C-3 fighter/bomber (see both Merian Cooper's and Peter Jackson's *King Kong*), Curtiss F9C-2 Sparrowhawk carrier fighter (*GURPS All-Star Jam 2004*, p. 97), Grumman FF-1 carrier reconnaissance plane (*GURPS Cliffhangers*, p. 94), Consolidated PBV-1 flying boat (*GURPS WWII*, p. 116), and Martin B-10 bomber (*GURPS Cliffhangers*, p. 94). Some 193,000 were made.

Machine Guns and Autocannon Table

See pp. B268-271 for an explanation of the statistics. For MMGs, HMGs, and autocannon, Empty Weight (EWt.) and Cost assume neither ammo nor mount (e.g., a tripod), but ammo weight follows the slash as usual; see the weapon description for details. For LMGs and GPMGs, Weight includes ammunition.

GUNNER (MACHINE GUN) (DX-4 or other Gunner at -4)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
6	Maxim MG08, 7.92x57mm	7d+1 pi	6	1,000/4,400	59.4/16	8!	250(5)	19M	-8	2	\$7,000	1	[1]
6	TOZ PM-1910, 7.62x54mmR	7d pi	6	1,000/4,400	52.5/22.7	10!	250(5)	19M	-8	2	\$5,500	1	[1]
6	Steyr-Schwarzlose M.07/12, 8x50mmR	6d+2 pi	5	1,000/4,200	49.3/18.2	6!	250(5)	19M	-8	2	\$4,000	1	[1]
6	Vickers Mk I, .303	6d+2 pi	6	800/3,300	40/16	10!	250(5)	18M	-7	2	\$5,500	1	[1]
6	Colt Model 1914, .30-06	7d+1 pi	5	1,100/4,500	36/15.3	10!	250(5)	17M	-7	2	\$7,500	1	[1, 2]
6	FIAT-Revelli Mod 14, 6.5x52mm	6d pi	5	900/3,600	46.5/3	8	50(5)	18M	-7	2	\$5,000	1	[1, 3]
6	Hotchkiss Mle 1914, 8x50mmR	6d+2 pi	5	1,000/4,200	57.1/1.9	8!	30(5)	19M	-8	2	\$5,000	1	[1]
6	Browning M1917, .30-06	7d+1 pi	5	1,100/4,500	36.8/15.3	10!	250(5)	17M	-7	2	\$7,000	1	[1]
6	Oerlikon Typ L, 20x100mmRB follow-up	6d+2 pi++ 1d+2 [1d] cr ex	5	1,700/6,400	99/15	6	20(5)	22M	-9	2	\$18,000/\$74	1	[1]
6	Browning M1921, .50	6d+2 pi+	5	1,700/7,100	96/28.4	8	110(5)	22M	-8	2	\$16,500	1	[1]
6	Browning M1919A4, .30-06	7d+1 pi	5	1,100/4,500	30.9/15.3	10!	250(5)	17M	-6	2	\$7,500	1	[1]
6	TOZ ShKAS, 7.62x54mmR	5d(2) pi- inc	5	1,000/4,200	21.6/9.1	30!	100(5)	15M	-6	2	\$4,000	1	[1]
6	Rheinmetall FLAK30, 20x138mmB follow-up	6d+3 pi++ inc 2d-1 [1d] cr ex	5	1,200/2,200	141/20	4	20(5)	24M	-10	2	\$40,500/\$91	1	[1]
6+2	Rigsby Electric Gun, 20mm follow-up	5d+3 pi++ 1d+2 [1d] cr ex	5	750/3,200	150/10	3	50(5)	24M	-10	2	\$50,000	1	
6	Ikaria-Oerlikon MG-FF, 20x80mmRB follow-up	6d+2 pi++ inc 1d+1 [1d] cr ex	4	800/4,800	61.6/44.7	9!	60(5)	15M	-8	3	\$10,000/\$383	1	[1]

GUNS (LMG) (DX-4 or most other Guns at -2)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
6	Madsen M/03, 8x58mmR	7d pi	5	1,000/4,200	25.4/2.9	7!	30(3)	11B†	-7	2	\$4,500/\$35	1	[1]
6	BSA Lewis Mk I, .303	6d+2 pi	5	800/3,300	32.8/4.5	9!	47(5)	12B†	-7	2	\$5,000/\$260	1	[1]
6	FIAT-Lewis Perosa Mod 15, 9x19mm	2d+1 pi	3	160/1,700	16.3/1x2	25!x2	25x2(3x2)	10B†	-5	2	\$2,500/\$28	1	[1, 4]
6	CSRG Mle 1915, 8x50mmR	6d pi	5	900/3,800	23/2.1	4	20(3)	11B†	-7	2	\$2,000/\$31	1	[1, 3]
6	Hotchkiss Mk I, .303 British	6d+2 pi	5	800/3,300	29.9/1.9	8	30(3)	12B†	-7*	2	\$4,500	1	[1]
6	Nambu Taishou 11 Shiki Kikanjuu, 6.5x50mmSR	5d+2 pi	5	600/3,200	23.9/1.5	8!	30(12)	11B†	-7	2	\$4,000	1	[1, 2]
6	ZB ZB26, 7.92x57mm	7d pi	5	1,100/4,400	21.2/1.8	8	20(3)	11B†	-7	2	\$4,100/\$31	1	[1]
6	SIG KE7, 7.92x57mm	7d pi	5	1,100/4,400	19.5/2.3	9	25(3)	10B†	-7	2	\$6,000/\$32	1	[1]
6	Vickers-Berthier Mk III, .303	6d+2 pi	5	800/3,300	24.4/2.4	10	30(3)	11B†	-7	2	\$5,000/\$33	1	[1]
6	ZiD DP, 7.62x54mmR	7d pi	5	1,000/4,200	26.2/6.2	9	47(5)	11B†	-7	2	\$3,000/\$260	1	[1]
6	Steyr-Solothurn S2-200, 7.92x57mm	7d pi	5	1,100/4,400	19.2/2.3	13	25(3)	10B†	-6	2	\$4,500/\$32	1	[1]
6	Breda Mod 30, 6.5x52mm	6d pi	5	750/3,200	23.6/1	8!	20(5)	11B†	-7	2	\$4,000	1	[1, 2]
6	Simson-Dreyse MG13, 7.92x57mm	7d pi	5	1,100/4,400	26.5/2.3	9	25(3)	11B†	-7*	2	\$4,500/\$32	1	[1]

Notes:

[1] Effective LC2 during Pulp era.

[2] Unreliable. Malfunctions on 16+ (see p. B407).

[3] Very unreliable. Malfunctions on 15+ (see p. B407).

[4] Double-barreled weapon using two triggers and two magazines.

See pp. 19-20.

The Colt *MG40* (1930-1943) export version of the M2 was available in several calibers. For example, China acquired it in .30-06 for the Curtiss Model 75M Hawk fighter (*GURPS WWII: Motor Pool*, p. 104) and Curtiss BT-32 Condor II transport/bomber (*GURPS Cliffhangers*, p. 94); Colombia in



7×57mm Mauser (Dmg 6d+2 pi) for the Curtiss Model 37F Falcon fighter; Bolivia in 7.65×53mm Mauser (Dmg 6d+2 pi) for the Curtiss Model 35 Hawk II fighter; Britain (*Browning Mk I*) in .303 British for the Gloster Gladiator II fighter (**GURPS WWII: Frozen Hell**, p. 41); and Turkey in 7.92×57mm Mauser (Dmg 7d pi) for the Curtiss Model 68B Hawk III fighter.

TOZ ShKAS, 7.62×54mmR Mosin-Nagant (Russia, 1934-1945)

The *Shpitalniy-Komaritskiy Aviatsionny Skorostrelniy* (“Shpitalniy’s and Komaritskiy’s rapid-fire aviation gun”) was a purpose-designed aircraft machine gun with an impressive rate of fire, intended to replace both the PV-1 (p. 16) and DA (p. 24). The ShKAS was installed in several pulp-era Soviet airplanes, and was also exported with them, for example to China and Spain. Some 73,000 were made up to 1940 alone.

It fired from a long disintegrating belt, the capacity of which depended on the installation. This normally carried an API-T load (as in the table), sometimes mixed with APHCI (Dmg 7d+1(2) pi- inc) and SAPHEI (Dmg 7d+1 pi inc with 1d-1 [1d-3] cr ex follow-up).

The variant in the table is the *Krylyevoi* fixed wing model (p. B467), used in fighters like the Polikarpov I-16 (**GURPS WWII: Motor Pool**, p. 101). There was also a manually aimed *Turelniy* variant (1934-1945) with EWt. 23.1. This turret pattern (p. B467) was for example installed in the Ilyushin DB-3 bomber (**GURPS WWII: Motor Pool**, p. 100). The third model was the fixed and synchronized *Sinnkhronniy* fuselage gun (1936-1945), which had EWt. 24.4 and RoF 21!.

Rheinmetall 2cm FLAK30, 20×138mmB Solothurn (Germany, 1935-1939)

Developed via the experimental Solothurn S5-100, the *2cm Fliegerabwehrkanone Modell 1930* (“2cm antiaircraft gun model 1930”) was the standard German light air defense weapon late in the pulp era, and was found on trailer mounts, trucks, halftracks, trains, etc. Some 8,000 were made. It was also exported, if in small numbers, customers during the 1930s including China, the Dutch East Indies, and Finland.

The FLAK30 used 20-round detachable box magazines (20 lbs., 55 lbs. for two in a metal can). In addition to the SAPHEI-SD-T round in the table, it fired AP-T (Dmg 6d×3(2) pi++ inc, Range 1,200/5,200) and APEX-T (Dmg 6d×3(2) pi++ with 1d+1 [1d] cr ex follow-up, Range 1,200/5,200). The gunner could select single shots or automatic fire by pressing two foot pedals. It was mounted on a fully traversable ground mount (906 lbs.) and could be fitted with a 246-lb gun shield (DR 15) for ground-to-ground use. The FLAK30 was transported on a two-wheeled trailer (1,650 lbs. with gun, 1,896 lbs. with gun shield).

The Rheinmetall *2cm Maschinengewehr Construction 1930* (1934-1939) or MG C/30 was practically the same gun, mounted by the German navy on ships and submarines such as the *U-Boot Typ VII* (**GURPS WWII: Iron Cross**, p. 91).

The Rheinmetall *2cm Kampfwagenkanone Modell 1930* (1935-1939) was intended for installation in turrets (p. B467) on armored combat vehicles. The KwK30 had a slightly

The Electric Machine Gun

Electricity replaces gunpowder in silent, smokeless machine gun recently perfected for defense against hostile aircraft.

– *Modern Mechanics and Inventions*,
“Electric Machine Gun is Silent” (1936)

Various rail and coil guns were invented and patented during the 1930s. Although none of them ever reached production, presumably because they never really worked as advertised, such devices would be excellent inventions for a Gadgeteer or evil mastermind.

Rigsby Electric Gun, 20mm (USA, 1936)

In the mid-1930s, Virgil Rigsby of San Augustine (TX) patented a large electromagnetic gun using magnetic coils to propel SAPHE shells. At least one prototype was built, which was claimed to achieve RoF 3 while its firing sound was only that of a .22-caliber rifle (**High-Tech**, p. 158). The Rigsby was a massive, bulky weapon fitted to a pintle mount and fed from a 50-round belt. It required a prodigious amount of energy; 34 kW per shot.

shorter barrel and used handier 10-round magazines; Acc 5+1, EWt. 139/10, Shots 10(5), Cost \$40,000/\$58. It was used with a 2.5× sight (+1 Acc). Mounts included the Horch *leichter Panzerspähwagen* armored car (**GURPS WWII: Iron Cross**, p. 75) and MAN *Panzerkampfwagen II* light tank (**GURPS WWII: Iron Cross**, p. 78).

Ikaria-Oerlikon MG-FF, 20×80mmRB Oerlikon (Germany, 1937-1940)

Based on a Swiss Oerlikon design which was itself developed from the German Becker gun of WWI, the *Maschinengewehr Flügelfest* (“machine gun, wing-mounted”) was an autocannon for fixed installation in aircraft wings (p. B467). It was fitted to several German combat aircraft of the time, especially the Messerschmitt Bf 109E-3 and E-4 fighters (**GURPS WWII**, p. 111) – but also the fictional flying wing transport in *Raiders of the Lost Ark*.

The MG-FF fed from 60-round drum magazine (-1 Bulk, 44.7 lbs.). It normally fired a SAPHEI-T round (as in the table). Fitted with a shoulder stock and trigger, it could also be installed in a flexible, manually aimed mount (p. B467); EWt. 58, ST 19M, Bulk -9, Cost \$10,500. Such installations typically employed smaller magazines that could be more easily handled, both 15-round boxes (\$58, 12.8 lbs.) and 30-round drums (\$316, 22.4 lbs.) being available.

CANNON

They've got a tank. Six-pound gun.

– *Dr. Indiana Jones in The Last Crusade* (set in 1938)

Direct and indirect fire artillery was of course widely used by militaries during the pulp era, but cannon are seldom employed by pulp heroes, and they are therefore given only brief treatment here. More artillery pieces and vehicle cannon can be found on pp. 138-141 of **High-Tech**, and in the **GURPS WWII** series. For additional fire support weapons, see *Mortars* on pp. 145-146 of **High-Tech** – gangster John Dillinger was (unfoundedly) rumored to have tried to buy mortars from a U.S. Army depot in 1933. They wouldn't have helped robbing banks . . .

Cannon Table

See pp. B268-271 for an explanation of the statistics. Empty Weight (EWt.) and Cost assume neither ammo nor mount, but ammo weight follows the slash as usual.

ARTILLERY (CANNON) (IQ-5) for indirect fire; GUNNER (CANNON) (DX-4 or other Gunner at -4) for direct fire

TL	Weapon	Damage	Acc	Range	EWt.	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
6	Hotchkiss 6-pdr Mk II, 57×305mmR <i>follow-up</i>	6d×6(0.5) pi++ 6d [3d] cr ex	4+1	1,000/6,200	849/9	1	1(3)	42M	-13	3	\$20,000	1	
6	APX Mle 1916TRP, 37×94mmR <i>follow-up</i>	5d×2(0.5) pi++ 2d [2d] cr ex	4+1	400/2,600	88/1.4	1	1(3)	24M	-10	3	\$10,000	1	

Hotchkiss 6-pdr 7-cwt Q.F. Mk II, 57×306mmR (U.K., 1916-1920)

The original Hotchkiss 6-pounder quick-firing gun was adopted in 1884 by the Royal Navy for use on cruisers, submarines, and river monitors. It fired a projectile of roughly 6 lbs. weight and the gun itself weighed around 7 hundredweights, or 784 lbs. The Q.F. Mk II was a shortened version for installation in British and American WWI tanks. It was still in use during the pulp era, for example on the RIA MK VIII "Liberty" heavy tank that the U.S. Army kept in limited service until 1932. The gun was manually aimed and fired via a pistol grip and trigger. A 2× scope (+1 Acc) was used for target acquisition. The same weapon is mounted in the sponsons of the fictional heavy tank of the Hatay army in *Indiana Jones and the Last Crusade*.

In addition to HE shells as in the table, it fired AP ammo (Dmg 6d×4(2) pi++), available from 1918.

APX Mle 1916TRP, 37×94mmR Hotchkiss (France, 1916-1918)

The *Canon d'Infanterie Modèle 1916 Tir Rapide, Puteaux* ("infantry gun model 1916, quick-fire, designed at Puteaux arsenal") was a very light infantry support gun. It was primarily intended to attack small pockets of enemy infantry, such as MG nests, but was also capable of destroying some vehicles, including light tanks. It was a standard weapon of the French military during the Great War and the following decades, more than 1,000 still being in service in 1940. The U.S. Army and Marine Corps adopted it as the *1-pounder M1916*. Some of these guns were still around to see service in WWII, when they received the well-earned nickname "Toy Gun." Post-WWI, the French supplied many to allied nations, for example the Yugoslavian military (*M16*).

The Mle 1916TRP had a crew of seven men, including the gun commander, gunner, loader, three ammo handlers, and team driver. The weapon was easily disassembled for transportation on pack animals: the gun weighed 88 lbs., and the heavy tripod mount broke into two parts, one weighing 88 lbs., the other 62 lbs. The mount could be fitted with two wheels (72 lbs.), for a total weight of 310 lbs. when pulled by a horse, men, or a vehicle (see *Pulling and Dragging*, p. B353). A further option was a small 43-lb. gun shield (DR 15) and a 2× scope (+1 Acc).

In addition to the standard HE shells (as in the table), it fired AP rounds (Dmg 5d×2(2) pi++). Other ammunition in that caliber was rarely used, but potentially available, including canister (Dmg 2d pi++, Acc 3, Range 80/1,600, RoF 1×24, Rcl 1), SAPHE (Dmg 5d×2 pi++ with 2d [2d] cr ex follow-up, from 1924), and API (Dmg 5d×2(2) pi++ inc, from 1935). Sixteen rounds were stored in a wooden box (30 lbs.). Each gun was issued with one caisson which normally held 96 AP and 96 HE.

GRENADE LAUNCHERS

This powerful gas weapon can be used at both short and long ranges . . . Unexcelled for dispersing mobs, routing barricaded criminals, protecting public and private property, breaking up prison riots, guarding payrolls, etc.

– Federal Laboratories advertisement (1930)

Tear gas had been developed during WWI, and became available to law enforcement agencies in the early 1920s. The first hand-held dispensers were flare guns, which developed into the modern grenade launcher. All these weapons have effective LC4 in the pulp era!

Grenade Launchers Table

See pp. B268-271 for an explanation of the statistics.

GUNS (GRENAD LAUNCHER) (DX-4 or most other Guns at -4)

TL	Weapon	Damage	Acc	Range	Weight	RoF	Shots	ST	Bulk	Rcl	Cost	LC	Notes
6	Webley Number 1 Mk I, 37×122mmR	1d+1(0.5) cr	1	10/200	8.3/0.37	1	1(3)	8†	-4	2	\$500	3	[1]
6	Remington MK III, 10G 2"	Spec.	1	10/120	2.9/0.1	1	1(3)	8	-3	2	\$200	3	[1]
6	Walther Leuchtpistole, 26.5×103mmR	Spec.	1	10/330	3.1/0.2	1	1(3)	9	-3	2	\$500	3	[1, 2]
6	Federal Model 201-Z Gas Gun, 37×122mmR <i>follow-up</i>	1d+1(0.5) cr 1d cr ex (3-yard tear gas cloud)	1	30/150	8/0.37	1	1(3)	8†	-4	2	\$700	3	[1]
6	Manville Machine Gas Projector, 1" <i>follow-up</i>	1d-1(0.5) cr 1d-2 cr ex (2-yard tear gas cloud)	0	25/100	18.9/3.6	3	18(3i)	10†	-6	2	\$1,800	3	[3]

Notes:

[1] First Range figure is *minimum* range, not 1/2D.

[2] Lanyard ring (*High-Tech*, p. 154).

[3] Sling swivels (*High-Tech*, p. 154).

Webley & Scott Number 1 Mk I, 37×122mmR (U.K., 1914-1918)

This was a break-open flare gun with a pistol grip and wooden shoulder stock, adopted by the Royal Flying Corps and British Army. The ammunition it fired, today better known as the 37×122mmR, was then called the 1.5" Flare. Some 27,000 were made.

During the 1920s, surplus but refurbished and chrome-plated flare guns were sold in the USA and abroad as the *Federal 1.5" Gas Riot Gun* (1928-1933). These have the exact same stats, but normally fire tear gas shells instead of flares. Gangster Wilbur "Tri-State Terror" Underhill was shot in the gut by the FBI with a tear gas gun in 1933.

Remington MK III, 10G 2" (USA, 1915-1918)

This was a break-open pistol with a gleaming brass receiver and 9" barrel, adopted by the U.S. Navy and Marines for illumination and signaling, firing red, green, or white flares. It could not fire a standard 10-gauge shotshell, as its chamber was too short. Many thousands were made and were still in use in the 1930s.

Walther Leuchtpistole, 26.5×103mmR (Germany, 1926-1934)

The *Leuchtpistole* ("flare pistol") was a smooth-bore, break-open pistol used widely by the German military (who adopted it in 1928 to replace the similar Hebel M94) and merchant marine. Hundreds of thousands were acquired or copied by other armies, and many nations introduced similar devices. A flare gun was the only major item of equipment carried by adventurer Karl Friedrich Koenig when he flew around the world in a Klemm L 20 sports plane in 1928/1929.

The more than 40 different signal cartridges available in 26.5×103mmR caliber included illumination (100-yard radius lasting 30 seconds), colored flares, signal smoke, and whistling rounds (to indicate a gas attack). Muzzle blast tear gas rounds were also available (see the box). A belt pouch (*High-Tech*, p. 54) held 15 cartridges.

In 1934, the Leuchtpistole was lightened by shortening the barrel from 9" to 6" and replacing the steel frame with one made of aluminum; Wt. 1.8/0.2, Bulk -2, Cost \$480.

The German navy also used the Walther *SLD* (1936-1945), a double-barreled, stainless-steel pistol: Wt. 6.3/0.4, RoF 2, Shots 2(3i), Bulk -3, Cost \$650. Both barrels could be fired simultaneously at no penalty.

Federal Model 201-Z Gas Riot Gun, 37×122mmR (USA, 1933-1970)

Made for Federal Laboratories by the Hunter Arms Co., this was a simple single-shot, smooth-bore, break-open weapon that fired a 1.5" cartridge (a round better known today as the 37×122mmR). It was widely sold to police and prison agencies, sometimes in a cased set with a Thompson submachine gun (*High Tech: Pulp Guns 1*, pp. 28-30), or with a load-bearing vest (*High-Tech*, p. 54) holding 12 shells.

Manville Machine Gas Projector, 1" Manville (USA, 1937-1943)

The Manville Machine Gas Projector in 1" caliber was an enlarged version of the earlier Manville M12 shotgun (*High-Tech: Pulp Guns, Volume 1*, p. 26). Almost entirely made of aluminum, it had a spring-loaded 18-shot revolver cylinder, a pistol foregrip, no shoulder stock, and no sights. This was a rare weapon, only a few being used by police and prison security forces in Indiana and adjacent states. (It can be seen in use in John Irvin's film *The Dogs of War*, set in 1980.)

Only tear gas rounds were made for it, one variant with Dmg 1d-3(0.5) cr and Range 7/30, the other with Dmg 1d-1(0.5) cr and Range 25/100. In either case, the grenade would explode after a short delay (on the next turn) and release a CN tear gas cloud with a 2-yard radius, lasting 20 seconds. A fictional HE grenade, created by a Gadeteer or an inventive gunsmith, might have Dmg 1d-1(0.5) cr with 2d+1 [1d+1] cr ex follow-up, and Range 25/100.

Grenade Launcher Ammo

A modern police department today is really a miniature army, . . . bristling with submachine guns, riot guns, high-powered rifles, and side-arms, to grenades and guns which lay down a barrage of gas.

– *Modern Mechanix and Inventions*,
"Outshooting the Guns of Gangland" (1936)

During the pulp era, virtually none of the many *Grenade Launcher Ammo* options in *High-Tech* (p. 143) were available, except for numerous minor variants of illumination and tear gas (*High-Tech*, p. 171). Signal and illumination flares might be used to ward off creatures that shun the light, including nocturnal animals and even H.P. Lovecraft's "Haunter of the Dark," though. There were also two other special rounds:

Early Liquid (TL6)

In 1930, Federal Laboratories introduced a tear gas cartridge for 37×122mmR launchers that fired a 2.7-fl.oz. glass vial. This is similar to Liquid (*High-Tech*, p. 171), but with a glass container as the projectile. After a 6-second delay, the detonator (Dmg 1d cr ex) blows up the vial and releases a liquid tear gas agent over a 3-yard radius. It has the advantage of being flame- and heatless, eliminating any danger of accidentally starting a fire (unlike regular burning-type tear gas shells). Resourceful reloaders could find a way to fill a (new) vial with some other fluid – acid (p. B428), alcohol, holy water, spit venom (use cobra venom as a contact agent, p. B439), and so on. Also see *Exotic Bullets* (*High-Tech*, p. 168). Halve Range. Double CPS.

Muzzle Blast Tear Gas (TL6)

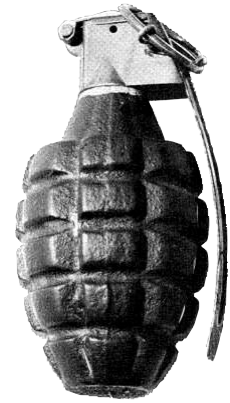
The earliest tear gas rounds lacked a projectile, instead spreading a tear gas agent (in powder or liquid form) from the muzzle like a one-shot spray (*High-Tech: Pulp Guns, Volume 1*, p. 10). Treat these as tear gas sprays (*High-Tech*, p. 180) with Range 1-10. The tear gas agent might be replaced with another powder such as silver dust, a magical elixir (*GURPS Magic*, pp. 213-220) such as *Phobos* or *Thanatos*, H.P. Lovecraft's *Powder of Ibn-Ghazi*, or whatever. Double CPS.

Hand Grenades Table

See pp. B268-271 for an explanation of the statistics.

THROWING (DX-3 or Dropping-4)

TL	Weapon	Damage	Weight	Fuse	Bulk	Cost	LC	Notes
6	Stielhandgranate	5d cr ex	1.3	4-5	-3	\$20	1	[1, 2]
6	Mills Number 36M Mk I	5d-1 [2d] cr ex	1.7	7	-2	\$20	1	[1, 3]
6	MK II KJ	1d-2 cr ex	1.4	5	-2	\$45	2	[3, 4]
	<i>follow-up</i>	Spec. (5 yd.)						
6	MK II WP	1d-2 [1d(0.2)] burn ex	1.2	5	-2	\$50	1	[3, 5]
6	MK II	4d+1 [2d] cr ex	1.3	5	-2	\$20	1	[1, 3]



Notes:

- [1] Effectively LC2 during the pulp era.
- [2] Takes *two* Ready maneuvers to unscrew the cap and pull the cord.
- [3] Takes a Ready maneuver to pull the pin or string.
- [4] Fills a 5-yard radius with tear gas (*High-Tech*, p. 171). Cloud lasts about 30 seconds under normal conditions.
- [5] Fills a 5-yard radius with smoke; see p. B439. Cloud lasts about 60 seconds under normal conditions.

To reload, the weapon must be disassembled by unscrewing two knobs (15 seconds), then take three Ready maneuvers to put each round in its chamber (total 54 seconds), plus another 15 seconds to put the gun together, and 10 seconds to wind the spring.

HAND GRENADES

In *Chicagoese*, “pineapple” is a euphemism for an ugly, black, egg-shaped object known elsewhere as a hand grenade. Since the first of the year they have been utilized 21 times by racketeers angry for one reason or another with fellow racketeers, politicians, bootleggers, gamblers.

– *Chicago Tribune*, “Go to Hell” (1928)

During the pulp era, hand grenades were widely used by all militaries, and were also issued to the police in some countries. Civilians might get their hands on a couple; in the period, most grenades had effective LC2!

Stielhandgranate (Germany, 1915-1928)

During WWI, the Germans adopted a style of concussion grenade that remained standard throughout the pulp era: the *Stielhandgranate* (“stick hand grenade”). Americans nicknamed it the “Potato Masher” for its appearance. German military influence manifested itself during the 1930s in similar or identical patterns in Bolivia, China, Finland, Venezuela, and elsewhere. During the pulp era, it was also a standard police weapon in Germany, and not just in riot units – in the early 1920s, a Berlin detective arrested several criminals by threatening them with a police-issue stick hand grenade . . . (such a display of force might add +2 to Intimidation rolls).

The long wooden handle gave good leverage for a throw, compensating for the extra weight (+2 ST to figure distance; see p. B355). It also made the grenade awkward to carry and hide; German soldiers stuck it in their belts or even their boots, and improvised carriers from sandbags. To activate the grenade before throwing, the user twisted the end cap off the handle and pulled sharply on the string inside (two Ready maneuvers). A wooden box holding 25 weighed 55 lbs.

From the late 1920s, the German army replaced the WWI patterns with the *StiHGr24* (1928-1945), filled with TNT rather

than black powder: Dmg 7d cr ex, Wt. 1.4. A wooden box holding 15 weighed 31 lbs.

Mills Number 36M Mk I (U.K., 1918-1972)

The *Number 36 Mesopotamia Mark I* fragmentation grenade (so-called because it was moisture-sealed for use in Iraq) was the standard hand grenade in the British and all Commonwealth armies, and widely exported (Poland adopted it as the wz. 24). The “Mills bomb” was the first grenade with a deeply serrated cast-iron body, but its fragmentation was very uneven. Much of the cast iron would splinter, too small to cause serious injury, while an occasional large piece might travel hundreds of yards with enough force to kill. If the GM wishes, anything within 200 yards of the explosion could plausibly suffer a 2d fragmentation attack! A wooden box holding 12 weighed 25 lbs.

AMC MK II KJ (USA, 1918-1919)

This was a smooth barrel-shaped grenade filled with pressurized stannic chloride (KJ), which was released as a white irritant smoke (treat as tear gas, p. B439, and *High-Tech*, p. 171) as soon as the detonator exploded the case. It was intended to clear bunkers and trenches. More than 1.5 million were made. A wooden box holding 24 weighed 46 lbs.

And what do you think the [Fire] Marshal will say to these new gas bombs? According to you one of them is powerful enough to knock out an elephant.

– *Captain Englehorn in King Kong* (1933)

The improved *MK V CN* (1922-1932) was filled with chloroacetophenone (CN) powder; Wt. 0.6, Cost \$40, LC3. The fuse action ignited the powder (rather than detonating the grenade), releasing the CN smoke through small tape-covered holes in the grenade body. The filler burned for 30 seconds and created a 7-yard-radius cloud that lasted about 60 seconds. The grenade got hot enough (about 2,200°F) from the burning powder inside to sear unprotected flesh (1d-2 burn) and set fire to dry vegetation, paper, and similar flammables (p. B433).

This grenade was used by the U.S. Army and various National Guard units throughout the 1930s. After the war, many MK II KJ grenades were sold as scrap metal, bought by riot gas companies like Federal Laboratories and LECCO, and refilled and sold to police agencies both in the U.S. and abroad. Use the same stats as for the MK V CN. These and similar grenades were widely used by American police and prison agencies during the 1920s and 1930s, and also by the Shanghai Municipal Police.

AMC MK II WP (USA, 1918-1943)

This smooth, barrel-shaped grenade scattered white phosphorus particles when it exploded. These fragments ignited instantly on contact with air and burned anyone they hit (at around 5,000°F). The burning WP also almost instantaneously created a cloud of thick, white smoke. The 5-yard-radius cloud dispersed quickly when the WP stopped burning after about a minute. Water won't extinguish WP, but if a WP warhead burst *underwater*, the fragments wouldn't disperse properly and there would be no smoke. This relatively seldom-seen grenade was officially only used as a smoke-screen device by the U.S. military, but knowledge of the effect of burning phosphorous on living targets wasn't lost on the users . . .

AMC MK II (USA, 1920-1942)

After WWI, the U.S. military copied the contemporary French-issue grenade, the *Grenade Défensive F1 Mle 1916*, which they had used during the war. The MK II had a deeply serrated oval body similar to that of the Mills bomb. The nickname "Pineapple Grenade" was obvious; during the 1920s and 1930s it was also used by gangsters, leading to the nickname "Chicago Pineapple." See John Milius' *Dillinger* for a demonstration; In Brian De Palma's *The Untouchables*, the roles are reversed when Treasury agent Eliot Ness uses a MK II on one of Al Capone's men. The grenade was also exported, for example to Bolivia, which used it in the Chaco War. A wooden box holding 25 weighed 55 lbs.

FLAMETHROWERS

We had . . . a pair of military flamethrowers of the sort used in the World War, in case it proved partly material and susceptible of mechanical destruction . . .

– H.P. Lovecraft, "The Shunned House" (1924)

Flamethrowers had proven terribly effective during trench fighting in WWI, but were quickly removed from service in peacetime. Only a few militaries had some of these devices during the pulp era, confined to special chemical warfare or combat engineering units. However, pulp adventurers battling the usual supernatural evils will always find good use for them, and therefore might want to track some down . . . Unlike firearms, flamethrowers were entirely

uncontrolled items (effective LC4) in most countries, including in the USA and the United Kingdom, in the inter-war period. Note that they add +4 to Intimidation rolls!

Schilt Number 3 (France, 1917-1918)

Designed by a Captain Schilt, this *Lance-Flamme* ("flamethrower") was the standard backpack flamethrower used during WWI and afterwards by the French military. More than 1,150 were produced. Small numbers were also employed by the British and U.S. forces. The latter didn't employ many flame weapons and quickly phased them completely out of service in the early 1920s. (In fact the U.S. military establishment of the 1920s and 1930s was violently opposed to flamethrowers and completely denied their usefulness.)

The Schilt Number 3 had a 3.6-gallon flame oil tank and used carbon dioxide to discharge it in up to eight 1-second bursts. The chemical ignition system at the muzzle, once ignited, would burn for 8 minutes. Once it burned out, the flamethrower could no longer fire even if it had fuel left in the tank, until the ignition tube was replenished (which took 10 seconds). The ignition flame on the end of the 4' flame gun (called a "lance") could be used in melee as well, using Spear-1 skill (Dmg 1d+3 burn, Reach 1, 2*).

The Flamethrower-SMG

Although this unique weapon first appeared in WWII, it is included here because of its obvious applications for pulp hunters of the supernatural. The technology for its construction certainly already existed during the 1920s and 1930s, allowing earlier introduction by a Gadgeteer or in an alternate history.

Kuusinen LH/44 (Finland, 1944)

Designed by a Sergeant Kuusinen, the *Liekinheitin malli 44* ("flamethrower model 1944") consisted of a back-mounted tank holding unthickened fuel and a flame gun mounted below a Tikkakoski KP/31 submachine gun (**High-Tech**, pp. 122, 124, and **High-Tech: Pulp Guns, Volume 1**, pp. 30-31), which gave the gunner the choice between flames and bullets; use the flamethrower's Bulk for the combination. Less than a dozen of these saw combat trials in 1944 (**GURPS WWII: Frozen Hell**, p. 34); the design was never adopted or mass-produced.

The LH/44 consisted of a 47-lb. backpack assembly, which held 2.6 gallons of flame oil and the nitrogen to propel it, and the 5.5-lb. flame gun and hose mounted below the SMG (the latter adds 11.1 lbs. empty plus whatever magazine is used). It used a single acetylene flame for ignition. Once ignited this couldn't be switched off until burned out after 8 minutes, so that the operator could effectively use the weapon only for one engagement – but then for a large number of short bursts. The ignition flame under the muzzle of the 2.8' submachine gun could be used in melee as well, using Spear-1 skill (Dmg 1d-1 burn, Reach 1). In action, the weapon proved unreliable (Malf. 16) and clumsy to use.

Flamethrowers Table

See pp. B268-271 for an explanation of the statistics.

LIQUID PROJECTOR (FLAMETHROWER) (DX-4 or other Liquid Projector-4)

TL	Weapon	Damage	Range	Weight	RoF	Shots	ST	Bulk	Cost	LC	Notes
6	Schilt Number 3	3d burn	20/30	65	Jet	8×1s	11†	-8	\$1,500	1	[1, 2]
6	HAG WEX17	3d burn	20/30	55	Jet	18×1s	10†	-8	\$2,000	1	[1, 2]
6	Kuusinen LH/44	3d burn	10/15	63.6	Jet	25×1s	11†	-8	\$2,000	1	[1, 3]

Notes:

[1] Effectively LC4 during the pulp era.

[2] Takes two Ready maneuvers to prepare for firing.

[3] Weight includes an *empty* KP/31 – add the weight of the magazine actually used (*High-Tech*, pp. 122, 124, and *High-Tech: Pulp Guns, Volume 1*, p. 31).

HAG WEX17 (Germany, 1917-1918)

The most advanced portable flamethrower of WWI was the *Wechselapparat Modell 1917* (“interchangeable apparatus model 1917”), so called because its fuel tank and other components could be quickly exchanged. It was produced by the Hanseatische Apparatebau-Gesellschaft, and it is estimated that over a thousand were made. From 1920, the German military was forbidden to possess flame weapons of any kind, and surrendered many hundreds. A considerable number were stored in secret, however, and might pop up in the hands of German forces even in the early 1930s. In WWII, the British based their own design, the famous *Life-Buoy No.2 Mk I (GURPS WWII*, p. 99) on it.



The WEX17 had a doughnut-shaped 2.9-gallon flame oil tank with a sphere inside the ring which held the nitrogen to discharge it. *Blauöl* (“blue oil”), the standard German fuel, also produced thick, black smoke for cover.

The hotter-burning *Gelböl* (“yellow oil”) generated only little smoke and was used for “sneak attacks” seeking to avoid the otherwise inevitable artillery counterstrike (Dmg 3d+3 burn, Range 10/25). The chemical ignition system at the muzzle of the flame-gun, once ignited, would burn for 90 seconds. Each operator was issued three igniters in a belt pouch (exchanging one took four seconds). The ignition flame on the end of the 3.6’ flame gun could be used in melee, using *Spear-1* skill (Dmg 1d+3 burn, Reach 1, 2*).

AMMUNITION TABLES

... he was about to start home with four fine new dogs, and several cases of ammunition for his big-game repeating rifle.

– H.P. Lovecraft, “*The Whisperer in Darkness*” (1931)

See *High-Tech*, pp. 176-177, for all calibers and cartridges not listed here.

Rifles and Machine Guns

Name	WPS	CPS
.22 Hornet (5.6×35mmR)	0.015	\$0.5
.22 Winchester Automatic (5.6×35mmR)	0.015	\$0.5
.22 Savage High-Power (5.6×52mmR)	0.042	\$1
.240 Nitro Express (6.2×63mmB)	0.055	\$1
.250 Savage (6.5×49mm)	0.04	\$0.8
.25 Remington (6.5×52mm)	0.042	\$0.8
.25-35 Winchester (6.5×52mmR)	0.042	\$0.8
6.5×54mm Mauser	0.044	\$0.8
6.5×54mm Mannlicher-Schönauer	0.053	\$0.8
.270 Winchester (7×65mm)	0.056	\$1
.275 Rigby Magnum (7.2×63mmR)	0.053	\$1.2

Rifles and Machine Guns (Continued)

Name	WPS	CPS
.275 H&H Magnum (7.2×64mmB)	0.066	\$1.2
.300 Savage (7.62×47mm)	0.053	\$1
.303 Savage (7.62×51mm)	0.054	\$1
.300 H&H Magnum (7.62×72mmB)	0.074	\$1.5
8×51mm Mauser	0.05	\$0.9
8×60mm Mauser	0.054	\$1
.32 Winchester Special (8.1×52mmR)	0.047	\$1
.318 Nitro Express (8.38×60mm)	0.068	\$1.2
.350 Rigby Magnum (8.7×70mmR)	0.075	\$3
.351 Winchester (8.9×29mmSR)	0.041	\$0.8
9×19mm Glisenti	0.029	\$0.3
9×56mm Mannlicher-Schönauer	0.068	\$1.2
9×57mm Mauser	0.065	\$1
9.3×62mm Mauser	0.072	\$1.2
.38-55 Winchester (9.6×54mmR)	0.057	\$0.9
.38-72 Winchester (9.6×66mmR)	0.065	\$1

Rifles and Machine Guns (Continued)

Name	WPS	CPS
.401 Winchester (10.3×38mmSR)	0.049	\$1
.40-72 Winchester (10.3×66mmR)	0.072	\$1
.405 Winchester (10.43×66mmR)	0.066	\$1
.404 Nitro Express (10.75×73mm)	0.11	\$1.5
11.35×62mm Madsen	0.1	\$1.5
.500/450 Magnum Nitro Express (11.53×83mmR)	0.12	\$2
12.7×70mmRB Schüler (.500 Jeffrey)	0.14	\$2

Autocannon and Cannon

Name	WPS	CPS
20×80mmRB Oerlikon	0.44	\$8
20×100mmRB	0.49	\$10
20×105mmB Solothurn	0.64	\$10
20×125mm	0.73	\$10
57×306mmR (6-pounder)	9.7	\$45

Grenade Launchers

Name	WPS	CPS
1" Manville (25.4×97mmR)	0.2	\$1

HIT THE BOOKS

To find additional info on as well as illustrations of the firearms used during the pulp era, first turn to the bibliographies found in *High-Tech* (pp. 247-248) and *GURPS Cliffhangers* (pp. 122-125). Many of the weapons found in *High-Tech: Pulp Guns, Volume 1* and *High-Tech: Pulp Guns, Volume 2* can be located in the encyclopedic works listed there.

You may also want to pick up a period catalog from a particular manufacturer or, probably more useful, a large retailer such as Abercrombie & Fitch, Iver Johnson, Sears, Roebuck, A.F. Stoeger, etc. Many of the colorful quotes in *High-Tech: Pulp Guns, Volume 1* and *High-Tech: Pulp Guns, Volume 2* stem from such sales material. Catalogs always list period prices and many other details, and are well-illustrated as a rule. They often also feature ammunition, accessories, clothing, camping and exploration gear, and so on. Relatively cheap reprints are available from several publishers.



If you want to do more serious research, the following books are just *some* of those that might be useful:

Ballou, James. *Rock in a Hard Place* (Collector Grade, 2000). Extensively illustrated tome about the Browning Automatic Rifle and its variants.

Goldsmith, Dolf. *The Browning Machine Gun I* (Collector Grade, 2005). First of *three* volumes on the Browning medium machine guns, concentrating on the types in use with the U.S. military, including the M1917 and M1919A4. The earlier Colt Model 1914 is also covered.

Henwood, John. *The Great Remington 8 and Model 81 Autoloading Rifles* (Collector Grade, 2003). Detailed treatise on that rifle family.

Helmer, William. *The Gun that Made the Twenties Roar* (The Gun Room Press, 1969). Very well-written account of the Tommy gun's history.

Musgrave, Daniel, and Nelson, Thomas. *The World's Machine Pistols and Submachine Guns* (Ironside International, 1980). Follow-up to Nelson's *The World's Submachine Guns* (1963), especially noteworthy for its coverage of the many pulp-era machine pistols.

Hill, Tracie (et al). *Thompson: The American Legend* (Collector Grade, 1996). Profusely illustrated and very detailed book on the Tommy gun, going so far as to list the serial numbers of the entire 15,000-gun production run, with their known buyers.

Swearingen, Thomas. *The World's Fighting Shotguns* (Chesa, 1978). Lots of details about sawed-off and riot shotguns.

War Office. *Textbook of Small Arms* (London, 1929). An official manual on small arms available in the 1920s, highly technical but useful. Available as reprint.

Zhuk, Aleksandr. *The Illustrated Encyclopedia of Handguns* (Greenhill, 1995). Depicts practically all handguns available during the pulp era, including *hundreds* of copies and variants.

MOVIES AND TELEVISION

To see the guns in action, check the filmographies in *High-Tech* (p. 248) and *GURPS Cliffhangers* (p. 126). These list many of the visual references mentioned in *High-Tech: Pulp Guns, Volume 1* and *High-Tech: Pulp Guns, Volume 2*. The others can easily be found using their titles and directors.

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