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Guns That Might Have Been

Alternate Firearms for Alternate Histories

by Roland M. Boshnack

When designing an alternate world, the devil is very often in the details. Technology -- and especially 20th-century firearms -- is infinitely mutable. ***GURPS Ultra-Tech 2*** includes some examples of alternate tech progressions, but these often rely on superscience or broad changes in the public's perception and use of certain concepts. Also, the pathways in ***Ultra-Tech 2*** are optimized for futuristic (TL8+) timelines and do not work as well for modern equipment. This article attempts to add another level of detail to alternate worlds, focusing on that most common denominator games set in TL6-7: guns. But how does the GM introduce new, believable firearms into his campaign?

Disguise Them

The simplest method of coming up with new designs is to do what real criminals do to conceal the origin of a firearm: change the appearance and file off the serial number. This is very common in movies. For example, the rifles carried by the SWAT team at the beginning of Jet Li's *The One* are nothing more than gussied-up M-4 carbines.

For the GM, nothing could be easier. Simply take one of the many weapons already detailed for ***GURPS*** and change the designation. Mix up the names of the manufacturers. Add "M-," "Mk.," "X-," etc., to taste and slap a number on the end. Now, instead of a Colt M-16A2, you could have a Heckler & Wesson Mk. 17. While you're at it, describe the weapon differently (if you would describe such things to begin with).

Modify Them

This is a bit more involved, but the results can be quite satisfying. Change the name, as above, and then change the stats around a bit as well. Round ammunition calibers off, or come up with new ones (.223 could become .23, or be replaced with 5mm Colt). Fudge

ranges around. Snap Skill and Accuracy are easy to modify: try swapping the two values, or increase/reduce them by up to 5. It's very easy to change the number of shots a weapon holds (but don't go overboard -- no conventional pistol holds a hundred rounds of .45 ACP). Nobody said that weapons have to be perfect! Increase weight, Strength requirements, even recoil, to obscene levels. Have fun, and if anyone asks questions you just say that it was designed by a committee.

Also, try adding accessories to everything. Hollywood movie makers often place red-dot laser sights on any sort of gun, so add them to yours as well (see ***GURPS High-Tech*** for rules). Forward grips are good for a -1 to Snap Skill, and are another common trend in movies. A scope can add +1 to Accuracy (for a realistic piece) up to +3 (for a huge 8× scope). Folding stocks on rifles give a -1 to Holdout, and the same thing on a pistol gives a +1. Underbarrel grenade launchers can be mounted on any longarm, in theory. An M-203 on an Uzi is stretching things, but could be done.

Invent Them

Finally, for the GM who is dissatisfied with mere ersatz, weapons can be invented and fit into the game in a logical manner. The history of firearms is convoluted. Often weapons will be invented, test out well, and represent definite advances. Unfortunately, these same guns are often rejected for adoption, or worse yet, modified by a committee until they bear little resemblance to the originals. They then disappear from view and are only remembered as "what's-his-name's rifle (or whatever)."

In the past century there have been two important advances that have never realized their full potential due to short-sighted adoption committees. The first is the 7mm (0.276-inch) bullet. Numerous studies have proven that a 7mm bullet is the ideal size for a combat rifle, a theory which has been borne out on the range. Unfortunately, whenever a 7mm design reaches the adoption board it is rejected. The most common excuse given is that the adopting service already has plenty of ammunition is some other caliber, and why change horses midstream? If looked at from the impartial observer angle, this is clearly ridiculous -- what's more important, a few bucks saved or a few lives spared? -- but so it goes.

The second major advance that has yet to come to fruition is the caseless rifle. Granted, the Heckler and Koch G11 is now in limited service, but less than 1,000 are in the hands of soldiers. Germany has a valid reason for the small number of rifles bought, as the G11 was in the process of being adopted just as the country reunited, leaving little money for luxuries like new firearms. The United States, on the other hand, has little excuse. During the Advanced Combat Rifle (ACR) tests Heckler and Koch submitted a modified G11 -- which by this point had all the bugs ironed out -- that offered a huge number of improvements over the M-16A2. However, despite its reliability, simplicity, ruggedness, and low ammunition weight and cost, it was rejected simply because it couldn't deliver a

guaranteed first-round hit.

Other, more minor changes that never saw widespread service include Volcanic-style cartridges (where the powder is contained within the bullet itself), flechette rounds, automatic shotguns, and modular rifle systems (such as the Stoner Model 63 series). Any of these might be encountered by visitors to alternate worlds.

This article does not concern itself with the exact historical data for firearms. Instead, it concentrates on what might have been. For example, the first entry takes the Pederson rifle (a 7mm competitor to the M-1 Garand) and assumes that it had been adopted. What, then, would the service model have looked like? Perhaps it would have looked something like this:

Rifles

Springfield M-1 Pederson, 7mm Pederson, USA, 1932 (Holdout -7)

John Pederson produced the T2E1 rifle when working for Springfield Armory, but the design suffered from frequent failures to eject. This stumped the designer and led (in our timeline) to the rifle's rejection, but in this world something changed: Pederson realized that if grooves (or flutes) were carved into the rifle's chamber the gas pressure would equalize and the spent shell would eject easily. Chief of Staff MacArthur still disliked the weapon, but was forced to approve it after it showed a clear advantage over the Garand rifle in testing. The weapon went through several minor changes, such as the addition of a removable magazine, and was adopted as the M-1 Pederson in 1932, though service issue didn't begin until 1936. It then served through World War II with distinction, and when NATO formed after the war 7mm became the standard round of the alliance.

Heckler & Koch M-20, 4.7mm Caseless, USA, 1990 (Holdout -6)

In real life, the H&K ACR (Advanced Combat Rifle) was a modified G11 and failed (like all the other ACR firearms) because it could not give a 100% first-round hit probability. However, in this alternate world DARPA dropped the requirement for guaranteed first-round accuracy from the tests after an researcher commented that "we're looking for a combat rifle here, not a magic wand!" After the scores were tabulated and the dust had settled, one clear winner emerged. Therefore, the modified H&K G11 that had been submitted became the U.S. M-20 rifle. Its first combat use was in the deserts of Iraq, where the sealed body proved impervious to sand. After this auspicious debut the M-20 was

approved for general adoption. Many soldiers dislike its slab-sided looks, but they soon come to love the weapon's low recoil and excellent reliability.

AAI M-20, 5.56mm Flechette, USA, 1990 (Holdout -7)

Or perhaps the G-11 had suffered from some hidden drawback not related to its ability to punch holes in things at a distance. The U.S. military has always shown a distinct distaste for any firearms not invented in America, so maybe the H&K would have been rejected simply because it was produced in Germany. In this case, the next logical choice would have been the AAI model, which fired a flechette from a standard NATO case. After issues with the gas system were solved, the M-20 went into service just in time for the Persian Gulf War. Interestingly, the flechette cartridge proved to be an unmitigated disaster. The tiny arrow often came apart shortly after leaving the muzzle, and even if it did hit and penetrate it simply passed straight through, meaning that a brain or heart hit was needed to even stop an enemy soldier. The Pentagon, mortified that it had spent millions in yet another boondoggle, modified the rifle into the Duplex-firing M-20A1, in which form it has continued to serve without particular distinction.

Cadillac Gage M-65 System, 5.56mm NATO, USA, 1965 (Holdout varies)

Eugene Stoner was a brilliant engineer but a poor salesman. His Model 63 modular weapon system was a good idea, but just needed the kind of fine-tuning that only general service can provide. However, Stoner simply couldn't get anyone to give his weapons a serious look. In this alternate, after the Navy SEALs bought a handful of M-63 rifles and light machine guns, the Marines decided that they wanted the new rifle as well. After some much-publicized victories wielding the M-63 the U.S. Army Rangers requested some changes to the system to increase the speed of conversions. The improved weapons were standardized as the M-65 system and soon every soldier in the U.S. military carried a version of this weapon.

The fast conversion time has seen the greatest impact with snipers. These soldiers no longer have to choose between carrying two large weapons or carrying just one which is useless in a regular firefight. Now teams insert with M-65s configured as assault rifles and carrying just the spare barrel and (maybe) stock, and can switch over to sniper rifles when the time is right.

Note that acquiring one of these weapons, with a supply of extra modular parts, is a huge boon to world-jumpers. Not only does it fire a very common cartridge, it can act as several dozen different firearms -- all in a package that is easily carried through jumps!

Machine Guns

FN M-250, 15.5mm FN, Belgium, 1991 (Holdout n/a)

Historically, FN ran into financial problems just as the BRG-15 was perfected and it was shelved. Alternately, had the company been better-run, this design would have most likely become the standard Western heavy machine gun design. When submitted to tests in the United States it easily defeated the venerable Browning M-2HB and became the M-250 HMG. Its most noticeable feature is that it has a dual-feed with a large "tuning-fork" selector. This has two advantages. First of all, the effective rate of fire is increased as the weapon can be reloaded while it is firing. Secondly, it can be loaded with two different kinds of ammunition (usually solid and API) and the gunner can easily switch between them depending on the target. Note that the weapon table, below, assumes just one belt of ammunition. For two simply add in the extra ammo's weight.

Vorwerk MG12, 7.92mm Mauser, Germany, 1932 (Holdout n/a)

An unusual twin-barreled machine gun, the Gast-MG was invented during the closing months of World War I to provide a high rate-of-fire weapon for aircraft. Development halted with the end of the war, but on some timelines the design was resurrected by the Nazis for World War II. The original 192-round drums were replaced by standard 75-round saddle drums, but by 1935 these were replaced again with 200-round belts -- which were again replaced by 192-round drums, bringing the design full circle. The Gast-MG is a fascinating weapon (both the historical and alternate versions) as it used the recoil from one barrel to operate the other, resulting not only in rates of fire approaching miniguns but also increasing the reliability of the system.

Submachine Guns

Hotchkiss MAT48, 9mm Parabellum, France, 1948 (Holdout -3 when folded)

The Hotchkiss "Universal" was the last design from the venerable company and was a commercial failure due to its overly complex construction. But with a tweak here, a simplification there, and a handy space-time continuum fold, the design succeeded and was passed to Tulle Armory for construction. Its introduction replaced the historical MAT49. The end result is a conventional submachine gun that can be folded into a tiny package, even smaller than the MAT49.

Game Rules

Most of these firearms need only a stat line for use in ***GURPS,*** and are listed at the end of this article. However, the Stoner 65 system does deserve further examination.

Each Stoner 65 weapon consists of four basic subassemblies -- action, stock, barrel, and magazine -- and can also have several optional parts, such as a scope or bipod. To build a firearm of this series, simply pick the appropriate assemblies from the list below. Make sure you keep a running total of the weapon's weight, holdout modifier, and cost. Note that the Snap Skill, ST, and Recoil stats have been fudged a bit. To get more accurate numbers, use the rules for hand-held weapons as given in ***GURPS Vehicles*** (sidebar, p. 126).

It takes 30 seconds to swap a subassembly, provided that it is ready to be installed. Only a Guns+4 roll is needed to do this correctly, regardless of the number of parts to be swapped, and then only in stressful situations (like being under fire). On a critical success the time is halved (15 seconds). On a regular success the listed time is used. On a regular failure the time is doubled (60 seconds) and on a critical failure one of the parts is damaged and cannot be used until repaired (usually the most expensive piece).

Stoner M-65s use Guns (Rifle) skill when fired at semiautomatic, Guns (Light Auto) when used at fully automatic, and Gunner (Machine Gun) when fired from the tripod. Note that all Stoner 65s have a malfunction rating of "critical."

Barrels (pick one)

- **Short --** Dam. 5d-1, SS 10, Acc 10, 1/2D 450, Max. 3,500, Wt. 2.5, $150, Holdout -2
- **Standard --** Dam. 5d, SS 12, Acc 10, 1/2D 500, Max. 3,800, Wt. 3.5, $200, Holdout -3
- **Long --** Dam. 5d+1, SS 14, Acc 10, 1/2D 800, Max. 3,800, Wt. 5, $300, Holdout -4

Stocks (pick one)

- **No stock --** SS +1, Acc -3, Wt. 0, $0, Holdout 0
- **Folding Stock --** Wt. 2, $100, Holdout -1 (-2 when unfolded)
- **Solid Stock --** Wt. 1.5, $50, Holdout -2
- **Adjustable Stock --** SS+1, Acc +1, Wt. 4, $200, Holdout -3

Actions (pick one)

- **Semiautomatic --** Acc +1, RoF 3~, Wt. 3, ST 9, Rcl. -1, $100, Holdout -1

- **Full Automatic (standard)** -- RoF 10*, Wt. 4, ST 9, Rcl -1, $200, Holdout -1
- **Full Automatic (sustained fire)** -- SS+1, RoF 15*, Wt. 8, ST 13, Rcl -1, $500, Holdout -1

Magazines (pick one)

- **5-round box** -- Awt. 0.4, Shots 5+1
- **30-round box** -- Awt. 1.0, Shots 30+1
- **100-round drum** -- Awt. 3.4, Shots 100+1, Holdout -2
- **50-round belt** -- Awt. 1.0, Shots 50 (Must have sustained fire action), Holdout -1
- **100-round belt** -- Awt. 2.1, Shots 100 (Must have sustained fire action), Holdout -2

Accessories

- **4× Scope** -- Acc +2, Wt. 1, $500
- **Bayonet** -- Treat as Large Knife, Wt. 1, $25
- **Bipod** -- ST -1 when on bipod (ie, ST 13 becomes ST 12B), Wt. 1.5, $150
- **Tripod** -- ST is ignored when on tripod, ST +5 otherwise, Wt. 20, $450, Holdout n/a
- **M-203 Grenade Launcher** -- As per GURPS High-Tech. Must have standard barrel.

For example, let's make a Stoner M-65 Sniper Rifle. It is built from a long barrel, adjustable stock, semiautomatic action, 5-round magazine, 4× scope, and bipod. It therefore has Malf. crit, Dam. 5d+1, SS 15, Acc 12+2, 1/2D 800, Max. 3,800, Wt. 14.5, Awt. 0.4, RoF 3~, Shots 5+1, Cost $1,450, ST 8B, Rcl. -1, Holdout -8. Compared to the H&K PSG1, it is lighter, cheaper, and more accurate -- but at the cost of range, power, and size. Of course, this is counterbalanced by the increased versatility.

Weapons Table

Name	Malf	Type	Damage	SS	Acc	1/2D	Max	Wt	AWt	RoF	Shots	Cost	ST	Rcl	TL
M-1 Pederson, 7mm Ped., Guns(Rfl)	crit	Cr	6d+2	14	11	900	4,400	9	0.6	3~	10+1	$100	11	-2	6
H&K M-20, 4.7mmC, Guns(LtAu)	ver	Cr	5d+1	12	11	600	4,000	4	1.4	10**	2×50	$1,000	10	-1/2	7
AAI M-20, 5.56×45mm, Guns(LtAu)	crit	--	--	12	10	--	--	3.5	--	10**	30+1	$1,000	10	-1	7

Flechette Rounds		Imp	2d			200	1,000		1.4						
Duplex Rounds		Cr	2× 2d+1			500	3,800		1.0						
Vorwerk MG12, 7.92mm Mauser, Gunner(MG)	ver	Cr	7d+1	19	11	800	4,000	41/72	40	22	2× 192	$500	18T	-1	6
FN M-250, 15.5mm FN, Gunner(MG)	ver	--	--	20	16	--	--	86/120	--	10	100	$5,000	30T	-1	7
Solid Rounds		Cr	14d+			1,500	37,000		70						
API Rounds		Cr	14d+(2)			1,500	7,000		70						
APS Rounds		Cr	6d×3(2)			2,200	10,500		47						
APFSDS Rounds		Cr	6d×5(2)		17	2,200	14,400		47						
MAT48, 9×19mm, Guns(LtAu)	crit	Cr	3d-1	10	6	160	1,900	7.5	1.5	11*	32	$250	10	-1	6

References

- Hogg, Ian and John Weeks (2000): *Military Small Arms of the 20th Century, 7th Edition.* Krause, Iola. A great source of information on just about every firearm used by a military force between 1901 and 2000. Notable for some odd omissions, such as the U.S. M-4 Carbine. Particularly useful to the alternate worlds GM for the large number of experimental guns detailed.
- Miller, David (2000): *The Illustrated Book of Guns.* Salamander, San Diego. A "coffee-table" sized hardcover filled with pictures and stats for hundreds of firearms. Now in its second printing, which corrects several errors and omissions. Again, this book includes many experimental and homemade weapons.

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