THE BERETTA M9 PISTOL

LEROY THOMPSON

WEAPON

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Series Editor Martin Pegler

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INTRODUCTION

Innovation in military weapons and equipment is generally viewed as a positive factor that allows the soldier a higher probability of fighting, surviving, and winning. Ironically, however, it is often easier to adopt new multimillion-dollar weapons systems than it is to replace personal weapons or equipment. A simple example might be the US P-38 can opener, which was issued to GIs from World War II through the 1980s. This simple device worked and was small enough that a GI could wear it on the chain with his dog tags. Had the US Army tried to replace the P-38 can opener with something larger and more complex, it would have met stolid resistance from the troops. As it transpired, the P-38 met its demise not through innovation but through obsolescence. When US troops started receiving MREs (Meals Ready to Eat) in the 1980s, the small can opener was no longer necessary.

For the typical soldier, no piece of equipment is more personal than the individual weapon – for infantrymen the rifle and for others, such as crew-served weapons operators, Military Police, or technical personnel, the pistol. During the early days of the Vietnam War when the .30-caliber rifle was replaced by the 5.56mm M16, long-serving troops complained they were being sent to war with a ".22-caliber mouse gun." Veterans of World War I, World War II, and Korea who had used the .30-06 Springfield M1903 or Garand rifles decried the end of "the US Army as we know it" and the sending of their sons and grandsons into combat to be killed by Communist guerrillas armed with a .30-caliber rifle in the form of the SKS or AK-47. Obviously, this reluctance was overcome as the M16 has gone on to become the longest-serving infantry rifle in US history, though there are still calls to return to a larger caliber and many troops in Afghanistan and Iraq are now carrying .30-caliber rifles.

For much of the last century the pistol has held a contradictory position in many armies. REMFs (Rear Echelon Mother F***ers) have

generally attempted to lessen the number of pistols issued because of the weapon's "ineffectiveness." Combat troops, on the other hand, have tried to acquire a pistol in any way possible. It's not that they consider the pistol the optimum weapon, but that the pistol has great propinquity. It can be with the soldier while he goes to the latrine, eats a meal, or relaxes. It can be kept near to hand while asleep, sometimes with a wrist thong. Should the rifle malfunction, the pistol allows the soldier to defend himself. The pistol may also be operated effectively with one hand should the soldier be injured. Nevertheless, in many armies the pistol has been considered expendable for the large majority of troops. One often-heralded replacement is the PDW (Personal Defense Weapon) of which the FN P90 is the current fair-haired example.

Traditionally, in the USA there has been more of a culture of the handgun than in most countries. That has been reflected in the US armed forces, especially during World War I when a handgun was considered a

A US Marine trains with his M9 on the range in Iraq. (USMC)

boon in trench warfare and today in Iraq and Afghanistan where the constant threat of attacks by insurgents, even in "rear areas," makes a companion weapon a virtual necessity. During World War II, the US Army tried to replace the handgun with the M1 Carbine. Many troops that would have previously been issued a handgun found the M1 Carbine a handy replacement, but many supplemented it with a handgun.

From 1873 until 1985, apart from a decade or so at the beginning of the 20th century, the US military's handgun was normally in .45 caliber. In many other armies, the handgun was virtually a symbol of officer status, rather than an effective fighting weapon. Often, it was in the anemic .32 ACP (Automatic Colt Pistol) chambering. Even widely used 9×19mm handguns such as the Luger, P-38, or Browning Hi-Power were marginally effective as manstoppers with their 115–124-grain (7.45g–8.04g) full-metal-jacketed bullets. From 1911 until the 1980s the principal US handgun was the Colt 1911/1911A1 pistol. Some GIs hated the 1911, finding the recoil heavy and the pistol inaccurate – the two were related. But the 230-grain (14.9g) .45 ACP round was a manstopper. Those shot with the .45 auto tended to go down and stay down.

As a result, when the US armed forces decided to replace the 1911 pistol with a 9×19mm pistol, there was substantial resistance. There were, however, some telling arguments. Most of the 1911 pistols in the inventory were at the end of their useful service. The newest had been produced during World War II or in the first months after peace and had seen service in multiple wars. They were worn out. Another argument was that NATO allies used 9×19mm pistols: hence, the US should as well. Training soldiers who had never fired a handgun to fire the .45 auto effectively had always presented something of a problem, but it was felt that the lighter-recoiling 9mm round would allow soldiers to gain greater proficiency with the pistol. A greater influx of female soldiers with smaller hands and, probably, more sensitivity to recoil proved another impetus to selecting a new service pistol. Still another argument in favor of a double-action, high-capacity 9mm pistol was that it would give the individual soldier more available ammunition and could be carried safely with a loaded chamber yet ready for a first double-action shot.

Multiple trials led to the selection of the 9×19mm-caliber Beretta M9 pistol as the US service pistol. Controversy surrounded the trials, with allegations that the outcome was predetermined through nefarious means and that the Beretta was chosen in return for some military concessions from Italy. In any case, the M9 was adopted in 1985 and entered general service in 1990. Since then, many hundreds of thousands of M9s have been acquired and are in use with all branches of the US armed forces.

The debate over .45 versus 9mm has not ended. Many US special operations troops have returned to the use of the .45 automatic pistol. A few years ago, too, there were trials of a sort – certainly, bid specifications were issued – for a new Joint Combat Pistol in .45 ACP caliber. Even so, as the Department of Defense recently gave Beretta an order for hundreds of thousands of M9s, the M9 remains the standard US military pistol and appears likely to continue in service for some time.

DEVELOPMENT

The first military Berettas

BERETTA – THE BACKGROUND

Established in 1523, Beretta is the world's oldest corporation, and has been owned by the same family throughout its history. Prior to World War I, Beretta primarily produced shotguns. Beretta's first military pistol was produced in 1915 for the Italian Army to supplement the M1910 Glisenti and M1912 Brixia pistols then in use. Both pistols were chambered for the 9mm Glisenti cartridge, which was 0.02in (0.51mm) shorter than the 9×19mm Parabellum cartridge and fired a 124-grain (8.04g) jacketed bullet at 1,050fps (320m/s). Although the 9mm Glisenti and 9mm Parabellum cartridges were theoretically interchangeable, because pistols chambered for the 9mm Glisenti round were blowback designs it was generally considered unsafe to fire the Parabellum round in them.

The Beretta M1915 was also a blowback design chambered for the 9mm Glisenti round of which it held seven cartridges. Reportedly, 15,300 M1915s were produced for the Italian Army during World War I, and a few hundred commercial versions were sold as well. Total production is usually given as about 15,670. At least some examples of the M1915 probably saw service in World War II, as the 9mm Glisenti round remained in service. As Beretta's first military pistol and first pistol chambered for a 9mm round, the M1915 is an important landmark towards the development of the M9.

After deliveries of the M1915 had begun, Beretta was given an order for a less expensive, smaller pistol chambered for the 7.65mm Browning (.32 ACP) cartridge. The resulting pistol, designated the M1915/17, was lighter, smaller, and simpler in design, and it held one more round. Many features of the M1915, which had been designed to handle the more powerful 9mm Glisenti cartridge, were eliminated due to the chambering of the lighter

7.65mm round. Serial numbers of the M1915/17 started at the end of the range for the M1915. After an initial military order for 10,000 of the M1915/17, production continued until at least 1921, with somewhere over 56,000 pistols being produced for military and commercial sales. Reportedly, a substantial number of the M1915/17 pistols stayed in the Beretta inventory until sold to Finland during the Winter War of 1939–40.

Beretta was now in the automatic pistol business for good, though many of the pistols produced in the early post-World War I years were small 6.35mm Browning (.25 ACP) pocket pistols for the civilian market. An updated version of the M1915/17, the M1922, was produced during the early 1920s, but of more interest for this book was the M1923 in 9mm Glisenti. As a result, the basic Beretta design was "up-sized" to take the larger and more powerful cartridge. An important innovation on this pistol was the use of an external hammer. Also, since the M1923 was still a blowback design, a recoil-absorbing buffer disk was incorporated. With the military market obviously in mind, the M1923 was designed to take a shoulder stock, though only 20–25 percent were actually cut to take a stock. Sales of the M1923 were not great. Sales to the Italian Army accounted for 3,007, while a number were also sold to Italian colonial forces. The Fascist militia purchased 250, of which 100 had shoulder stocks. Substantial numbers were sold to Bulgaria and the Argentine police as well. Production ran until around 1925, with approximately 10,400 pistols sold. Because of the incorporation of the external hammer and the 9mm Glisenti chambering, the M1923 is of interest for the future development of larger-caliber Beretta service pistols.

Although Beretta had sold a number of pistols to the Italian armed forces, it was with the development of the M1934 and M1935 that the company obtained major military contracts. The M1934 was adopted first by the Italian police and later by the Italian Army in 9mm Corto (.380 ACP) caliber. A blowback design with an external hammer, the M1934 used a seven-round detachable box magazine with a distinctive "tongue" or "hook" at the bottom to offer a finger rest. Although the 9mm Corto chambering was somewhat weak for a military pistol, the M1934 was reliable and, with a length of about 6in (152.4mm) overall and a weight of 26oz (737g), compact and easily carried. Although 9mm Glisenti pistols remained in use during World War II as did some other older models, the M1934 went a long way towards allowing the Italian Army to standardize on one pistol. Captured M1934 pistols proved a popular souvenir with US GIs, who brought them back from World War II. Many had the hook at the bottom of the magazine ground off so the GI

Beretta's first military automatic pistol, the M1915 in 9mm Glisenti caliber. (Pete Cutelli)

could tuck the pistol into a battledress pocket yet still draw it quickly. In addition to the Italian Army, the Romanian Army also purchased M1934s. Finland, which was a co-belligerent with the Axis during World War II, also purchased at least some M1934s. The M1934 continued in production after World War II as a commercial police and self-defense pistol until 1991, with over one million examples being produced. Infamously, a Beretta M1934 pistol was used to assassinate Mahatma Gandhi.

The M1934, the Italian Army's pistol during World War II, was Beretta's most successful military pistol prior to the Model 92/M9. (Pete Cutelli)

The Italian Navy had acquired a few thousand of the Beretta M1931 in 7.65mm Browning caliber, but it was the M1935 which was purchased in substantial quantity by the Italian Navy and Air Force. Basically an M1934 in 7.65mm Browning chambering, the M1935 held eight rounds of the smaller cartridge. As with the M1934, the M1935 remained in production after the war and was sold in large numbers commercially around the world. In April 1943, the Germans took over the Beretta factory and, since they used 7.65mm Browning caliber pistols for support troops, concentrated on producing the M1935. At least some M1934 pistols may have still been produced for the remnants of the Fascist Italian Army, but production during the last two years of the war was almost entirely of the M1935. It is interesting to note that at least some M1935s were sold to Japan. By the time production ceased in 1967, approximately 525,000 had been produced, 204,000 of them during World War II. As with the M1934, the M1935 was a very popular war trophy.

In 1938 Beretta had tested a larger 9×19mm Parabellum pistol that resembled a scaled-up M1934. Romania was interested in this weapon, but with the beginning of World War II this pistol, which was designated the M1938, never went into production and only a small number of prototypes were ever produced.

Beretta's first locked-breech, 9×19mm pistol had to wait for development until the late 1940s. The M951, as this pistol became known, though it was also at times designated the M1951 or the M51, employed a short-recoil, locked-breech design with a falling locking block showing similarities to that used in the Walther P-38. One distinctive feature of the M951 that has been retained on later 9×19mm Beretta pistols, including the M9, is the open top slide. The M951's hammer is exposed and the safety is a cross-bolt on the frame beneath the hammer. Magazine capacity is eight rounds with the magazines incorporating a curved finger rest, though not one as dramatic as on the M1934. A hold-open device locks the slide open after the last round has been fired. Sights are a fairly rudimentary front blade and rear notch. In an attempt to reduce weight, a test run of around 100 M951 pistols with aluminum alloy frames was made. Weight was only 25.4oz (720g), but Beretta engineers decided to use a steel frame in the production pistol, which

The Egyptian Helwan pistol, which was based on Beretta's first pistol in 9×19mm caliber, the M951. The Helwan remained the standard Egyptian military pistol for many years. (Tom Knox)

raised weight to 31.4oz (890g). Early examples also had a butt magazine release that was switched to the lower portion of the grip. The Italian Army did not choose to adopt the M951 and retained the M1934; however, the Italian Navy and the Carabinieri did adopt it.

Until relatively recently, Italian law forbade civilian ownership of pistols in military calibers such as 9×19mm Parabellum. As a result, for the Italian civilian market, Beretta offered the M952, which was exactly the same as the M951 but chambered for the 7.65 Parabellum (.30 Luger) cartridge, which is basically a necked-down 9×19mm – consequently, only the barrel had to be changed to convert an M951 to an M952. Collectors in the USA and elsewhere have often found the Italian 7.65mm Parabellum versions of pistols, normally in 9×19mm caliber, interesting curiosities for their collections.

Among other countries that adopted the M951 were Egypt and Iraq, which produced it on license as the "Helwan" and the "Tariq" respectively. Israel also purchased and used a substantial number of M951 pistols. For civilian sales in the USA, the pistol was known as the M951 "Brigadier." Production of the M951 by Beretta continued until 1980, with somewhere over 100,000 being produced, though it had been superseded in Italian military service.

An interesting variant of the M951 was the M951R, R standing for "Raffica" (burst). This pistol was select-fire and had a folding vertical foregrip and a ten-round extension magazine. Only a limited number of M951R pistols were produced, though the later M93R select-fire model proved more popular.

THE "WONDER NINES" ENTER THE SCENE

The Iraqi Tariq pistol, which was still in use during the two recent wars in Iraq, was based on the Beretta M951. (Author's photo)

The M951's demise was hastened in the early 1970s by the advent of the "Wonder Nines." This term is often applied to the first generation of combat pistols that combined the first-round, double-action trigger pull of the Walther P-38 with the double-column, high-capacity magazine of the Browning Hi-Power. In the postwar years, there had been substantial interest in 9mm double-action pistols, the Smith & Wesson Model 39 of 1954 having been developed with possible US military adoption in mind. Actually, the US Air Force acquired a limited number of Smith & Wesson Model 39s for issuance to general officers. In France, large-capacity magazines had been explored with the MAB P-15. The West German VP70, which took its designation from 1970, the year of its design, offered many features that

USAF personnel participate in an advanced arms training course at Charleston Air Force Base. On the first shot, the double-action/single-action trigger of the M9 and other modern combat pistols cocks and releases the hammer with a single double-action pull. The weapon can thus be carried loaded and uncocked safely with safety off, yet capable of a fast first shot. As the slide automatically re-cocks the hammer during recoil, subsequent shots are single-action. (USAF)

would become common on combat pistols a couple of decades later. Employing a polymer frame, 18-round capacity magazine, and double-action-only trigger, the VP70 was ahead of its time. A variant, the VP70M, took a holster shoulder stock and offered three-round burst capability. The VP70 was never really popular, though, due to its large size and very heavy trigger pull.

The VP70 ceased production in 1989, but other pistols developed around the same time have evolved into some of today's premier combat handguns. The first pistol that incorporated the double-action trigger system with the high-capacity magazine and which achieved substantial popularity was the Smith & Wesson Model 59. The Model 59 evolved from a request by the US Navy SEALs (Sea, Air and Land teams) for Smith & Wesson to develop a stainless-steel pistol based on the Model 39 double action that would take a high-capacity magazine. Although prototypes were made, the pistol was not adopted by the Navy, but in late 1970 it was introduced to the commercial market. Its 14-round magazine required a wide grip that was also rather straight. Although the original Model 59 was discontinued in 1980, improved versions were produced for many years, starting with the 459 and continuing into the 1990s.

The SIG-Sauer P-220, known in Switzerland as the P75 for its year of military adoption, began production in 1975 and has evolved into the wide array of SIG-Sauer combat pistols currently available. The P-220 did not, however, incorporate a double-column magazine. Another model introduced in 1975, the Czech CZ-75, offered a double-column 15-round

The Beretta 93R, which allows three-round burst fire; note the shoulder stock and folding vertical foregrip. (Author's photo)

magazine and double-action first-round capability. Unlike most double-action pistols, however, the CZ-75 incorporated a safety which allowed the pistol to be carried either with the hammer down for a first double-action shot or with the hammer cocked and a safety applied for a first-round single-action shot.

For purposes of this work, the most important "Wonder Nine" introduced in 1975 was the Beretta Model 92, which had actually been designed in the early 1970s by Carlo Beretta, Giuseppe Mazzetti, and Vittorio Valle. The Model 92 retained the open slide, front sight integral to the slide, and P-38-type locking system of the Beretta M951, but used a wider alloy frame to take a 15-round magazine and a double-action/single-action trigger system. The earliest models retained a frame-mounted safety and a magazine release button in the lower part of the grip. Approximately 5,000 examples of the original Model 92 were produced in 1975 and 1976.

Developed along with the Model 92 was the Model 93R, a machine-pistol version. A selector switch allowed the 93R to be fired either in semi-automatic mode or in three-shot burst mode. Cyclic rate on burst mode was 1,100rpm, which made the pistol difficult to control. The Model 93R's barrel was longer and ported, which aided in control, as did a folding foregrip and a skeleton stock that could be affixed. Although the Model 93R can use the standard 15-round Beretta Model 92 magazines, it comes with a 20-round magazine as standard. This magazine has proven popular with counterterrorist units and special operations forces that use versions of the Beretta Model 92 as it allows users to carry one or more spare magazines

The author engages with a 93R during vehicle counterambush training. (Author's photo)

with an extra five rounds each. The Model 93R was produced from the 1970s through the 1990s and saw limited use with some special police units such as Italy's two national counterterrorist units, NOCS and GIS.

Police agencies that had expressed interest in the Model 92 did not like the frame-mounted safety of the type normally used on single-action automatics; therefore, Beretta changed this to a slide-mounted safety/de-cocking lever. This pistol was designated the Model 92S and was adopted by some Italian law-enforcement agencies and military units. There was also an Indonesian military order. Brazil was an early user of the Model 92, adopting the pistol in 1977. For its production, Beretta established a factory in Brazil.

THE SEARCH FOR A NEW US SERVICE PISTOL

This was the basic situation when Beretta became involved in the US tests to choose a new service pistol. In 1978, the US House Appropriations Committee had expressed concern about the approximately 590,000 handguns in US military service, of which only 73 percent were deemed serviceable. Within the 590,000 were more than 25 handgun types with myriad types of ammunition. As a result, the committee recommended that the Department of Defense standardize on one handgun for all services. The Department of Defense had already ordered the creation of a committee, the JSSAP (Joint Service Small Arms Program). Studies

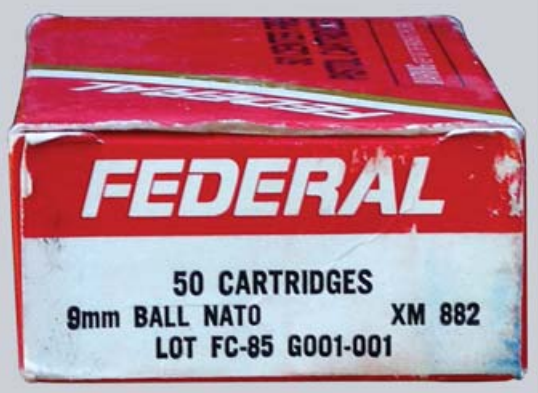
determined that one handgun or one family of handguns in 9×19mm NATO caliber should suffice for all service needs. The US Air Force tests carried out at Eglin Air Force Base and discussed below were engendered in an attempt to choose the pistol best suited for adoption.

To digress for a moment, it should be understood that the US armed forces had been considering a replacement for the 1911 and various other handguns since the early 1950s. At least some impetus during the 1970s came as increasing numbers of female troops came to serve in the various branches. In fact, a 1978 report by the US Army's Human Engineering Laboratory, which had examined the type of handgun most suitable for female soldiers, was given considerable weight in developing test criteria. Various studies also concluded that the 9mm cartridge offered sufficient stopping power for use in combat and would be easier for troops to shoot accurately, as well as being consistent with other NATO handguns. Of course, for the Air Force, which had been using .38 Special revolvers for some time, the caliber issue was less contentious than for the Army, Navy, and Marine Corps, which had been using the .45 ACP round for 70 years.

At the point when the JSSAP tests began, Beretta offered a version of the Model 92S initially designated the 92S-1, though best known as the 92SB. Intended for the JSSAP pistol trials which were conducted by the US Air Force during the late 1970s to select a new handgun in 9×19mm NATO to replace the Colt 1911, the Model 92SB incorporated a firing-pin block and a magazine release button moved to behind the triggerguard in a position similar to that on the Colt 1911. Other changes included an ambidextrous safety, serrated front and back straps, and white inserts in the sights. In addition to the 92SB, the following pistols were tested: Colt SSP, Star M28, Smith & Wesson 459A, FN GP35, FN "Fast Action" Hi-Power, FN DA Hi-Power, HK P9S, and HK VP70.

A new round

Along with the M9 pistol, the "Cartridge, 9mm, Ball, M882" was developed for use in the M9. The M882 round consists of a brass case, a full copper-alloy jacketed lead-core bullet, a two-piece boxer-type primer, and a double-base propellant. Overall length of the cartridge is 1.165in (29.59mm) and bullet length is 0.61in (15.49mm).



Powder is 6.0 grains (0.39g) of HPC-26, which produces an average pressure of 31,175psi (2,149 bar); maximum allowable pressure 36,250psi (2,499 bar). Bullet weight is 112 grains (7.26g), which from the M9's barrel travels at a velocity of 1,263fps at 15ft (385m/s at 4.57m). M882 cartridges undergo a rigorous inspection process that includes examination for defects, measurement of velocity, measurement of chamber pressure, test of accuracy, test of function in the pistol, waterproofness, primer sensitivity, compression force, and oil resistance, among others. Beretta alleged that some of the early-production M882 rounds displayed excessive pressure (up to 50,000psi (3,447 bar), almost 40 percent over NATO standard) and blamed the ammunition for the problems with slides fracturing (see page 26).

LEFT A box of Federal XM882 ammunition, which was designed for use during the XM9 testing program. (Author's photo)

A US Navy rating dry-fires his M9 pistol during tactical handgun marksmanship training at Woolmarket Pistol and Rifle Range during a Navy Expeditionary Combat Skills School training exercise. The school is designed to build basic-level battlefield competence for sailors from the newly formed Navy Expeditionary Combat Command. (USN)

These trials were won by the Model 92SB, but the US Army disagreed with the methods and the results. At least some observers felt that the Army was still disgruntled over the fact that they had been forced to adopt the M16 rifle after the Air Force chose it during the 1960s, and used the pistol trials to exert themselves. To give an idea of the tone of the Army's criticisms, one of their major issues was that the Air Force had used the wrong type of mud in testing the pistols' ability to function after immersion in mud. Though this may sound ridiculous, the Army and the Marines do spend a lot more time crawling through the mud than the Air Force, so may well have had some insights into the type of mud most likely to be encountered!

THE ARMY TAKES CHARGE

In any case, the Army took over the JSSAP trials in 1981. There was a definite need for a new service pistol as the Army, Navy, and Marine Corps were using 1911 and 1911A1 pistols, the most recent of which had been produced in 1946. The Air Force had Smith & Wesson revolvers of more recent manufacture. Four pistols were submitted to the new trials – Beretta Model 92SB, HK P7M13, Smith & Wesson 459A, and SIG-Sauer P226. As in the Air Force trials, a 1911A1 pistol was used as a control. However, all four pistols failed this test. As a result, the US Congress withheld funding for .45 ACP ammunition, to force the Army to develop test criteria that could be passed by a well-designed pistol.

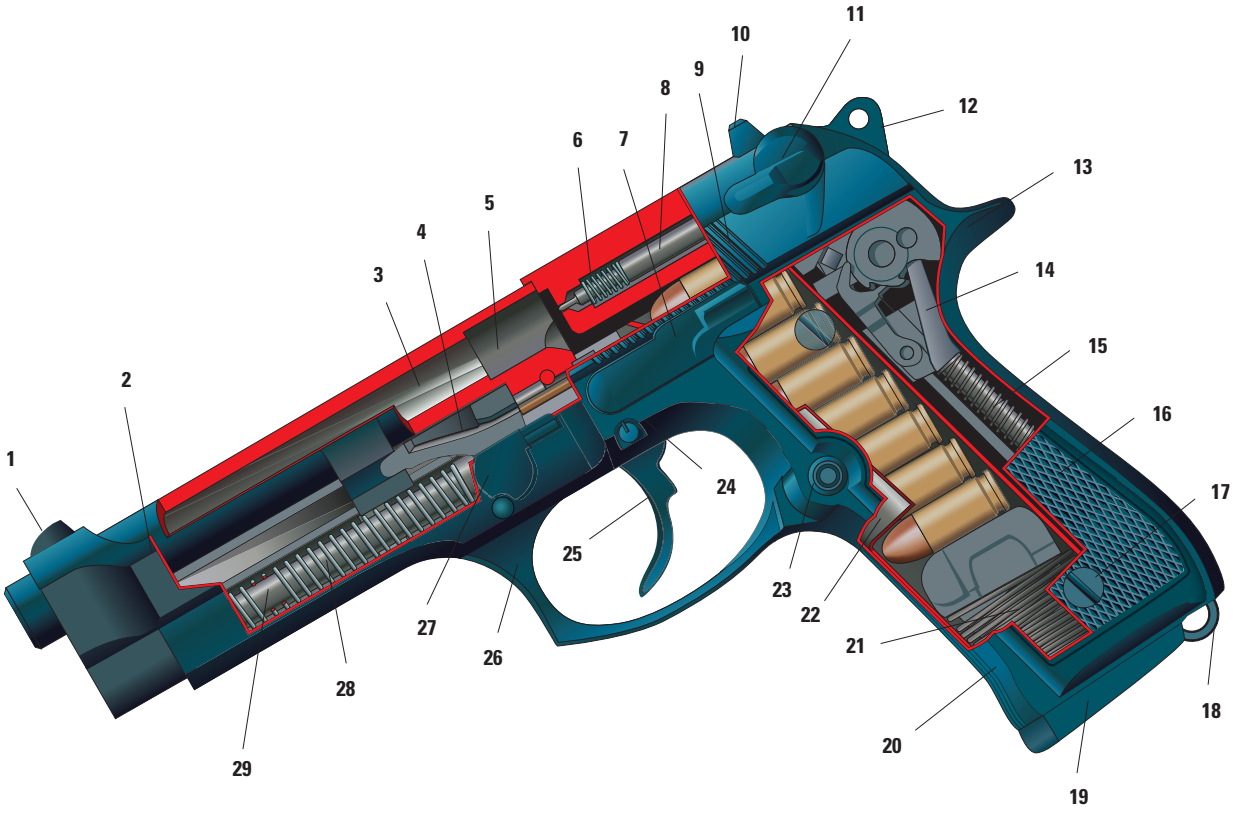
After the Army had circulated a Request for Test Samples requiring interested companies to submit 30 samples for the competition in November 1983, the next set of XM9 trials began in January 1984. For these XM9 trials, Beretta made some additional modifications to the Model 92SB, creating what was designated the Model 92SB-F. Modifications included: making all parts 100 percent interchangeable among pistols in a large government contract; contouring the front of the triggerguard so that a finger could rest there for enhanced aiming capability with a two-hand hold; re-curving the forward base of the grip for a more natural two-hand hold when shooting; adding a sturdier magazine floorplate; hard-chroming the barrel for enhanced corrosion and wear resistance; and anticorrosion-coating the slide with "Bruniton," an anticorrosive finish combining a proprietary epoxy paint over Parkerizing that is then baked.

Included in the 1984 tests were some previous players and some new ones. Pistols submitted included the Beretta 92SB-F, plus the Colt SSP, FN DA Hi-Power, HK P7M13, Smith & Wesson 459A, SIG-Sauer P226, Steyr GB, and a prototype of the Walther P88. For the XM9, 85 requirements were stated for the winning pistol, 72 of which were mandatory and 13 of which were desirable. Many of these mandatory requirements were very military-specific, which made it difficult for an off-the-shelf commercial pistol to fulfill them without alteration.

The XM9 PDW (Personal Defense Weapon) requirements included: double-action trigger mechanism; 9×19mm NATO chambering; minimum magazine capacity of ten rounds with 15 desirable; maximum overall length

Marvin Johnson, a tactics instructor, trains members of the US Air Force 2nd, 3rd, and 4th Combat Camera Squadrons with the M9 during an advanced arms training course. (USAF)

THE BERETTA M9 EXPOSED



Key

1. Front sight
2. Slide
3. Barrel
4. Locking block
5. Chamber
6. Firing-pin spring
7. Slide stop/release
8. Firing pin
9. Slide serrations
10. Rear sight
11. Ambidextrous safety
12. Hammer
13. Grip tang
14. Hammer strut
15. Hammer spring
16. Checkered grip
17. Grip screw
18. Lanyard loop
19. Magazine base plate
20. Frame
21. Magazine spring
22. Magazine
23. Magazine catch
24. Trigger pin
25. Trigger
26. Trigger guard
27. Takedown lever
28. Recoil spring
29. Recoil spring guide

of 8.7in (221mm); maximum overall height of 5.8in (147mm); minimum barrel length of 4in (101.6mm); maximum weight with a fully loaded magazine of 44.4oz (1.26kg); single-action trigger pull with a minimum of 4lb (1.81kg) and a maximum of 5.1lb (2.31kg); double-action trigger pull with a minimum of 8.2lb (3.72kg) and a maximum of 14.3lb (6.49kg); maximum single-action trigger pull distance of 2.75in (69.9mm); maximum double-action trigger pull distance of 3in (76.2mm); a firing-pin safety; a de-cocking lever or other method of being brought to safe without activating the trigger; and ambidextrous magazine release and de-cocking lever.

In addition to these basic requirements, the magazine release was expected to actually eject the magazine to speed reloading; a lanyard loop which did not protrude from the grip was specified; the grip should be of non-slip design; protrusions which would catch on clothing during the draw should be eliminated; and a simplified field-stripping system should be no more complicated than that of the M1911A1 and preferably simpler. The minimum expected service life was surprisingly short at a minimum of 5,000 rounds, with 10,000 rounds as the desired goal.

Specifications for RAM (Reliability, Availability, Maintainability) called for the minimum mean number of rounds between operational mission failures over a 5,000-round service life to be 645, though 1,000 rounds between failures was considered to be the "best operational capability." Malfunctions that constituted a mission failure included a stoppage requiring corrective action, incapability to commence or interrupt functioning, or an incident affecting safety. For malfunctions which could be corrected in the field by the user, ten minutes was specified as the maximum time limit, while for those that required an armorer the maximum time was 30 minutes. The Army actually specified how many of each type of malfunction were acceptable during each string of rounds fired. During the first 2,500 rounds one misfire and two minor jams were allowed, while during the second 2,500 rounds two failures of the slide to close, a second misfire, one pierced primer, one firing-pin breakage, two minor part breakages, one failure to feed, one magazine-follower deformation, and four additional "small incidents" were permitted.

Among the tests carried out with the pistols by the Joint Small Arms Planning Commission were: exposure to temperatures from -40 degrees F to +140 degrees F (-40° C to +60° C), soaking in salt water, burial in mud and snow, and dropping repeatedly on concrete, after which the pistols were fired for functioning; a drop test from 4ft (1.22m); firing a large number of rounds to determine failure rate of parts; firing for accuracy; tests of ergonomics and ease of disassembly for cleaning; interchangeability of parts.

Although the technical and operating requirements were important, the Army also pointed out that there were six factors that would be weighed in choosing the winning pistol. In decreasing order of importance, these were: (1) technical characteristics and performance; (2) costs per pistol, for magazines, and for spare parts; (3) production capability and means (willingness to produce the pistol in the USA was part of this consideration); (4) the quality control system which would be used; (5) program management; (6) logistical considerations.

A Beretta M9 along with a box of the M882 ammunition issued by the US armed forces with the pistol. (Martin Floyd)

At least some companies did not enter because they could not meet the requirement of being able to submit along with their 30 test guns a bid for immediate production of 250,000 pistols.

An interesting sidenote on the specifications is that Beretta, always known for technological innovation in engineering, was already using CAD (Computer Assisted Drafting) design techniques by 1985, but the US Army specified that drawings submitted for the trials should be in pencil on vellum, thus requiring Beretta draftsmen to prepare retrograde drawings. Beretta also had a state-of-the-art computer system at the time, but the Army required data to be submitted on IBM cards, so Beretta USA had to find an IBM card machine and engineers had to devote time to keeping it operating by cannibalizing parts from other machines they purchased. Basically, high-tech Beretta had to go low-tech so the Army could adopt their high-tech pistol!

Only the Beretta and the SIG-Sauer passed all of the tests. The Beretta's Mean Rounds Before Failure rate was 35,000 rounds, which was considered exceptionally good. Each company was asked to submit bids for an initial production and delivery of 305,580 pistols over five years, and SIG-Sauer was the lower bidder. After the initial bid was increased by 10,350 units and the two companies were asked to resubmit bids, Beretta cut its per unit price from $217.84 per unit to $178.50, but this was still more than SIG's per unit price of $176.33.

BERETTA: A CONTROVERSIAL CHOICE

Despite its higher unit price, Beretta was given the contract due to a lower price quote on spare parts and magazines that were part of the total package. A few minor changes in the basic design were specified for the M9. For example, on production M9s, the lanyard loop, which on the early 92SB-F had been perpendicular to the axis of the bore, was changed to be in line with the bore.

Much acrimony resulted, with allegations that SIG-Sauer's bid had been leaked to Beretta so they could undercut it. There were also allegations that a deal had been cut with Italy to allow US missiles to be based in Italy in return for adoption of the Beretta. Smith & Wesson claimed their pistol had failed the firing-pin energy requirement due to a rounding-up error converting between US customary measurements and metric. There was much truth in Smith & Wesson's claim, as this requirement was based on the inertia required to fire NATO standard 9×19mm ammunition. Based on the NATO standard, Smith & Wesson's 459 would have passed the test, but the Army standard was actually rounded up to a slightly higher figure. Two Smith & Wesson pistols failed by 1/10,000th of an inch (0.00254mm) and another by 4/10,000th of an inch (0.01016mm).

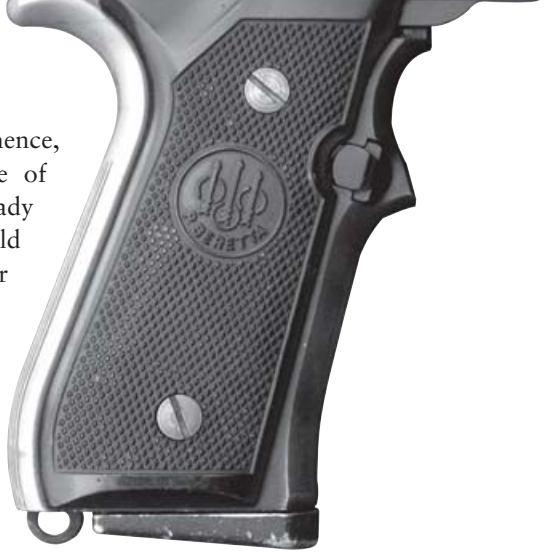
The Army officially announced the selection of the Beretta on January 14, 1985, but bid protests by the losing companies delayed the signature of the contract with Beretta until April that year. Smith & Wesson, being an American company, decided to contest the matter in the US courts, but the legal challenge was denied by a US District Court and the decision upheld on appeal. A campaign led by the two Representatives from the area of Massachusetts, where Smith & Wesson is located, initially resulted in the appropriations for the M9 program being "frozen." However, the

BELOW
This right-side view of the M9 shows the ASSY (assembly) number and "US M9" markings. (Author's photo)

BELOW RIGHT
The left-side view shows clearly the safety/de-cocker switch, magazine release, slide release, and takedown lever. (Author's photo)

move did not gain strong support in the US Senate; hence, a compromise was reached between the US House of Representatives and US Senate in which the contract already awarded would be fulfilled, but that the Army would hold new trials to determine whether more Berettas or another pistol would be ordered.

Despite complaints, the Army, anxious to get on with replacing the 1911 automatic, placed an initial order for 315,930 Beretta 9mm pistols, which were designated the M9. This order was later increased by 321,960 pistols. The contract specified that during the first year Beretta would deliver 52,930 pistols to be made at the Beretta plant in Italy. These pistols were delivered during 1986–87. Reportedly, the first pistols supplied by Beretta did not meet acceptance standards and thus by May 1986 deliveries were 8,800 short of the established quotas. However, Beretta increased production and soon made up the shortfall. Production for the second year would be 65,750 pistols, with parts made in Italy but assembled at the Beretta USA plant at Accokeek, Maryland. These pistols were delivered in 1987–89. US inspectors in Italy monitored production.



The M9's grip is comfortable for most shooters, though its double-column magazine does make it thick for very small hands. Note the lanyard ring and the thicker base plate on the M9, compared to the Beretta 92. (Author's photo)

A new ergonomic holster

When the M9 was adopted, a new holster was also adopted. Designated the M-12 Olive Drab Nylon Hip Holster, it was designed by Bianchi for all branches of the service issuing the M9. The M-12's flap is designed to be easily reversed so it may be used by either right-handed or left-handed shooters. A cleaning rod is carried in a snap pocket on the holster. Among other features of the M-12 are a weight of only 8.8oz (249.5g), the ability to float, resistance to chemical and biological agents, resistance to detection by infrared night-vision optics, and silence when opening or closing the flap. The design of the M-12 is such that it may be worn in 14 different positions, including as a crossdraw or shoulder holster. Because of the M-12's versatility, a new shoulder holster was not deemed necessary, but the M-7 Leather Shoulder Holster used for the 1911A1 continued in use with the M9. (Later holster designs are covered in the Use chapter.)

ABOVE The versatile Bianchi M-12 holster designed for the M9. (Author's photo)

M9 castings await machining on sophisticated numerically controlled machine tools. (Author's photo)

During the last three years of the initial M9 contract, over 200,000 M9s were to be completely manufactured at the Accokeek plant. Production of parts at the Accokeek facility began in 1989, with the pistols being fully produced there by 1990.

As Beretta began fulfilling the order, M9 pistols were issued to various units, especially among special operations and airborne forces. However, controversies relating to the M9 were not over. As a result of the investigations by the US General Accounting Office and Congress mentioned above, a new series of trials were ordered in 1987. With the M9 in production and being issued, the Army resisted another series of tests, while SIG-Sauer and Smith & Wesson continued to protest the previous trials.

Complicating the matter even more, in September 1987, the US Navy SEALs had three cases in which the M9 slide fractured where the locking block mates with the slide, resulting in the broken portion of slide flying back into the faces of the SEALs and causing injury. This problem and the solution will be discussed in more detail in the chapter on Use. However, it should be pointed out here that later-production M9s incorporate an enlarged hammer spring with a groove on the underside of the slide to prevent a fractured slide from coming back at the shooter. In fact, proper heat-treating has made slide fracturing a non-issue.

New tests scheduled for 1987 had been canceled because manufacturers refused to participate, but they were rescheduled for 1988 as the XM10 tests. Beretta, arguing they had already passed the rigorous testing procedure, refused to submit samples, so the Army used M9 pistols already in the inventory. SIG-Sauer also argued that they had passed the XM9 tests and refused to submit samples. This left Smith & Wesson, which once again submitted the 459; and Ruger, entering for the first time, which submitted the P85. Once again, the Beretta was declared the winner, though Smith &

M9 frames at Beretta USA awaiting further fitting and finishing. (Author's photo)

Wesson alleged that the tests were flawed and/or fixed. An important factor in Beretta's favor was that by 1987 production of the M9 was in process of being moved to the plant in Accokeek, Maryland, and US workers were employed in the pistol's manufacture.

Now the clear winner, in May 1989 Beretta received another order for 57,000 M9 pistols, which seemingly indicated that, from the Army's point of view, the matter was closed. The M9 was the new US service pistol. Other orders followed to bring the total pistols ordered to over 600,000, the number deemed necessary to arm all of the US armed forces with M9 pistols. Despite controversy and acrimony, the M9 was adopted and, as the first deliveries were made, began to be used by the troops.

Beretta USA machines Model 92 and M9 slides on the same machinery; note that it marks them differently. (Author's photo)

Specifications of the M9 pistol

Materials: frame – aluminum alloy, sand blasted and anodized black; slide – steel

Operating and locking system: short recoil, semiautomatic with an oscillating block

Trigger system: double-action/single-action, with first round fired double-action through a heavier pull on the trigger, while subsequent rounds may be fired single-action as the slide cocks the hammer during recoil. The hammer-drop safety may be used at any point to return the pistol to double-action mode

Caliber: 9×19mm NATO

Overall length: 8.54in (217mm)

Width: 1.5in (38mm)

Height: 5.51in (140mm)

Magazine capacity: 15 rounds (20-round magazines available for special operations units). Magazine release button may be changed to opposite side to accommodate left-handed shooters. The standard load for an individual soldier is 45 rounds in three magazines

Weight with a loaded 15-round magazine: 2.6lb (1.15kg)

Barrel length and rifling: 4.92in (125mm); rifling: right-hand, six-groove, 1/10in

Muzzle velocity: 1,230fps (375m/s)

Muzzle energy: 430 foot pounds (569.5 Newton meters)

Specified maximum range: 1,962yd (1,800m)

Maximum effective range: 54.7yd (50m); note that some special operations troops practice effective engagement to 100yd or more

Sights: front – blade, integral with slide; rear – notched bar, dovetailed to slide, both with white inserts to aid acquisition and night shooting

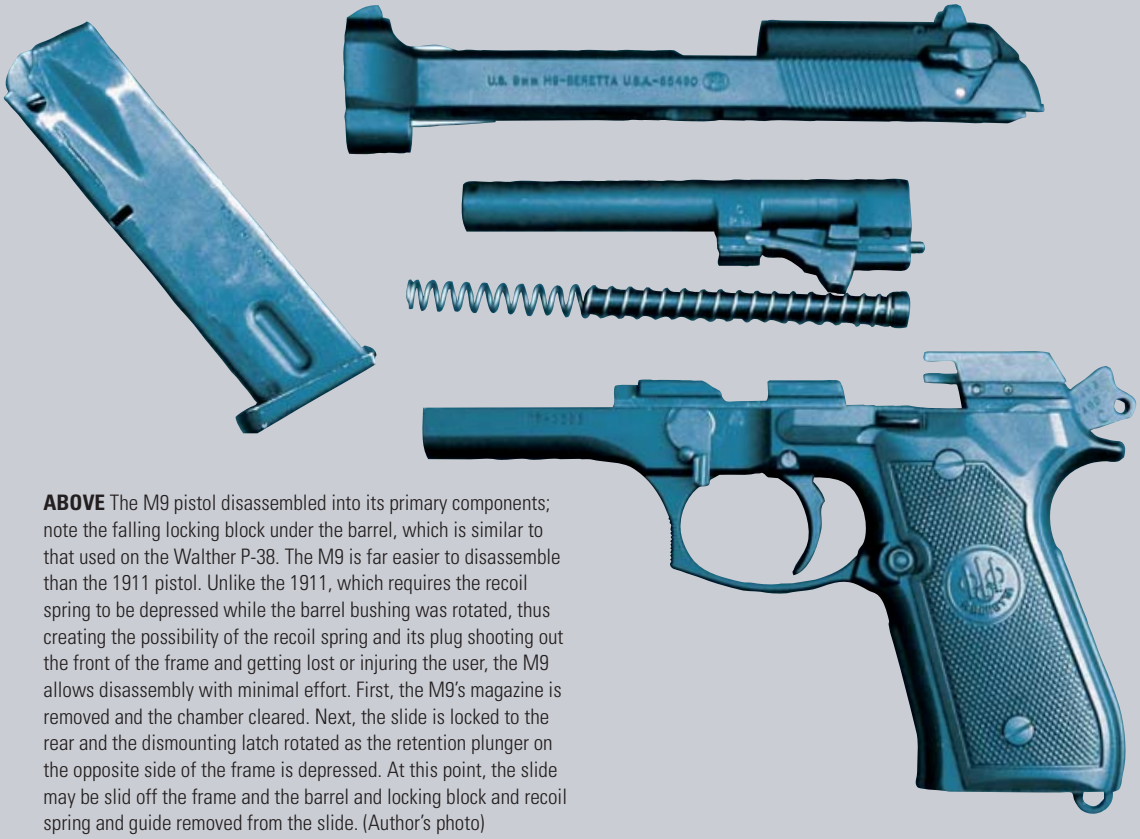
Safety features: de-cocking/safety lever on slide, which rotates the striker out of alignment when rotated to the safe position, allowing the hammer to de-cock safely and disconnecting the trigger bar from the hammer/sear mechanism; firing-pin block; hammer half-cock notch; loaded chamber indicator – both visual and tactile

Slide: open design for nearly the full length of the slide to aid ejection of fired cases and also to lower weight

Trigger pull: single-action – 5.50lb (2.49kg); double-action – 12.33lb (5.59kg)

Finish: non-glare, matte black, corrosion resistant

Grips: checkered black plastic, grooved front and back for better gripping surface



ABOVE The M9 pistol disassembled into its primary components; note the falling locking block under the barrel, which is similar to that used on the Walther P-38. The M9 is far easier to disassemble than the 1911 pistol. Unlike the 1911, which requires the recoil spring to be depressed while the barrel bushing was rotated, thus creating the possibility of the recoil spring and its plug shooting out the front of the frame and getting lost or injuring the user, the M9 allows disassembly with minimal effort. First, the M9's magazine is removed and the chamber cleared. Next, the slide is locked to the rear and the dismounting latch rotated as the retention plunger on the opposite side of the frame is depressed. At this point, the slide may be slid off the frame and the barrel and locking block and recoil spring and guide removed from the slide. (Author's photo)

USE

Modern warfare's 9mm

INTO SERVICE

Some ordnance personnel and armorers received early examples of the M9 for evaluation and training purposes, but the first issuance to "teeth" units was to units such as the US Army special forces and the US Navy SEALs, followed by the 82nd Airborne Division, the 101st Air Assault Division, the Army Rangers, US Air Force special operations units, and other units likely to be among the first into combat. One of the first units to receive the M9 was SEAL Team 6, the Navy's Maritime Anti-Terrorist unit. Since SEAL 6 were known to fire as many as 5,000 rounds per week from their handguns in training, they offered a good early warning system for possible problems that would arise with the M9.

A member of the US Air Force explains a new video training system for the M9 that projects scenarios to which the trainee must react. The training pistol has a laser mounted, which shows where the shots fired would have impacted. More sophisticated systems of this type allow the "enemies" encountered on the screen to change their method of attack based on the reaction of the trainee. (USAF)

Although it is generally accepted that the first combat deployment of the M9 was during Operation *Just Cause*, the US invasion of Panama in December 1989, there have been some reports that at least a few Beretta M9s were in use during the 1983 invasion of Grenada, Operation *Urgent Fury*. If so, they would have been in the hands of special operations troops for field testing. I did hear from friends in the special operations community that the SEALs had shot some Cubans with 9×19mm rounds and taken the corpses to a field hospital to have the bullets removed so they could see how well they had performed inside the bodies! If this report is true, it is quite possible that the SEALs were using some Beretta Model 92SB pistols acquired through their weapons-procurement channels.

As troops began using the M9, certain changes were recommended based on field experience. For example, a series of minor changes were made in May 1987. Most were designed to ease production and prevent parts being installed incorrectly, but at least one was intended to make maintenance in the field easier as a 60-degree-inclined countersink was added to the disassembly hole at the base of the magazine to allow disassembly using the rim of a 9mm cartridge. One criticism some users still have of the M9 is that other screw slots were not designed so the rim of a 9mm cartridge could be used to turn them; consequently they require the use of a screwdriver if they need to be removed. Other problems that were noted in the first few years of service included the possibility of losing the small trigger-bar spring, thus rendering the pistol incapable of firing, and the possibility of losing the washers inside the grips, which would prevent them being reattached. However, neither of these seems to have become a major issue.

In September 1987, it was the SEALs that encountered the first major problem with the M9 in use. The SEALs had three cases of a slide fracturing, with the separated portion coming back at the shooter and injuring his face. As the SEALs were known for pushing the capabilities of their weapons, there were reports that they had been using very hot submachine-gun ammunition, possibly with suppressed pistols, or that they had been firing the pistols underwater. It was also deemed likely that

US Marine embassy guards train in using their M9s along with a flashlight, using what is known as the Harries method of holding the flashlight in conjunction with the pistol. (USMC)

Castings for M9 slides awaiting machining at Beretta USA. The fracturing of the SEALs' Italian-made M9 slides was the first operational failure suffered by the new 9mm. By 1988, however, slides were being manufactured at Beretta USA, and no further problems were encountered. (Author's photo)

the SEALs had fired a substantial number of rounds through the pistols. Beretta also claimed that some lots of the M882 US service round had been loaded to above NATO maximum pressures.

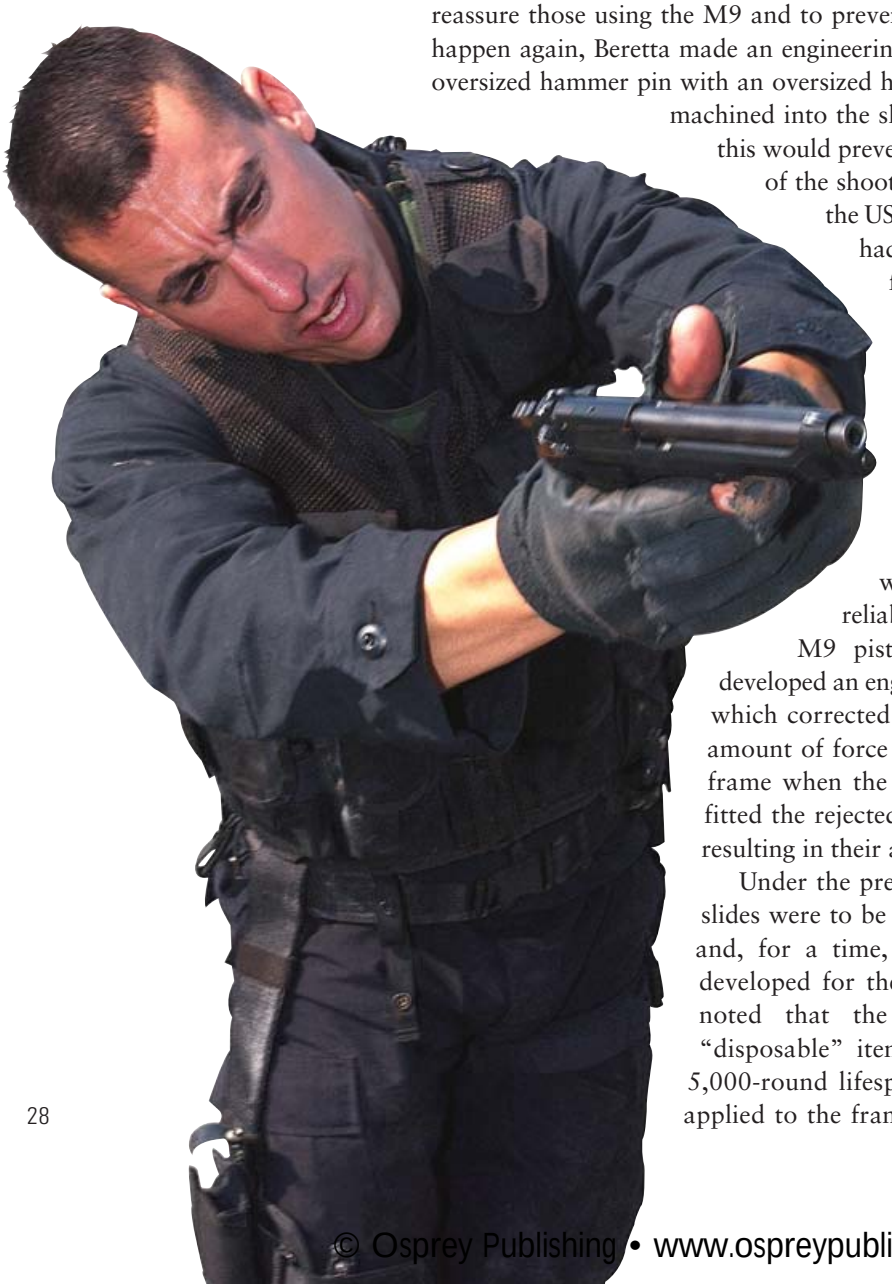
In the NSIAD Report 88-213 on the slide failures, it was stated that the first failure of one of the SEALs' pistols occurred after 30,000 rounds had been fired using non-NATO-standard ammunition. However, the second failure of a SEAL M9 occurred after about 4,500 rounds, reportedly using NATO-standard ammunition. The third failure of one of the SEAL guns actually occurred after the 3,000-round replacement policy was in effect (see below), but the unit had just returned from an operational deployment and the pistol had fired around 10,000 rounds.

However, there was independent confirmation of the problem as the Army was doing barrel testing on three M9 pistols at the same time. When the three pistols that had each been fired for 10,000 rounds were inspected, one had a cracked slide. As a result, the Army continued to fire the pistols to determine when they would have complete slide failure. This occurred at 23,310, 30,083, and 30,545 rounds on the three weapons. Reportedly, the Army tested another eight pistols and also had slide failures. The slides of the SEALs' pistols and the Army test ones that had failed showed that metal toughness was below standard on all of the failed slides. However, of all of the slides which had failed only four failures occurred below 10,000 rounds – although one of these occurred with fewer than 3,000 rounds fired. This resulted in a policy related to those M9s already on issue. Initially, slides were to be replaced after 3,000 rounds had been fired, but after one pistol allegedly failed below 3,000 rounds this policy was changed to replacement after 1,000 rounds. The word "allegedly" is used above because the lowest number of rounds for a failure given in the US GAO (General Accounting Office) report, *Quality and Safety Problems With the Beretta M9 Handgun*, was 4,500. See below for more on this policy.

At this time, frames for the M9 were being produced in the USA, but slides were still being produced in Italy. There are anecdotal reports that a Picatinny Arsenal analysis of the cracked slides stated that the low metal toughness in the Italian-made slides could be traced to the use of Tellurium in the manufacturing process. Tellurium is added to steel to make it more machinable, but it is known for its brittleness. Other anecdotal accounts state that the defective slides were either part of a French contract that Beretta used in order to deliver for the US M9 contract, or were made using the steel supplied by the French. Beretta continued to argue that the problems were ammunition-related and not due to any defects in manufacture. The US Army concluded, however, that the problems were metallurgical.

As of April 1988, slides were being produced in the USA, and no further problems occurred with them. Nevertheless, the Army reviewed the heat-treating process in use at the Beretta factory in the USA. Additionally, to reassure those using the M9 and to prevent injury should a slide failure happen again, Beretta made an engineering change that incorporated an oversized hammer pin with an oversized head which fitted into a groove machined into the slide. Should the slide separate, this would prevent it coming back into the face of the shooter. However, Beretta also sued the US Navy, claiming that the SEALs had leaked information about the failed slides to Ruger at the time of the XM10 trials.

A member of the US Air Force Security Forces practices rolling out from behind a barricade to engage a target with his M9. (USAF)



Another problem arose in December 1987 and January 1988: during tests of some M9 pistol frames, cracks were discovered at the rear of the frame. Although it was determined that these cracks would not affect safety or reliability, the Army rejected 24,000 M9 pistols. The Army and Beretta developed an engineering change in April 1988, which corrected the problem by lessening the amount of force transmitted to the rear of the frame when the pistol was fired, and Beretta fitted the rejected pistols with the new frames, resulting in their acceptance.

Under the preventative policy noted above, slides were to be replaced first at 3,000 rounds and, for a time, at 1,000 until a "fix" was developed for the slide problem. It should be noted that the slides were considered a "disposable" item by the Army and that the 5,000-round lifespan specified in the bid specs applied to the frame, not the slide. Moreover it

was felt within the US armed forces that, except for those pistols used for training, most M9s would fire fewer than 100 rounds per year – in fact, 80 rounds was the number often given.

The Beretta M9 as match pistol

The M9 has proved to be extremely accurate in service pistol matches, generally shooting tighter groups than M1911A1 match pistols, and it now holds all of the service pistol records at the Camp Perry National Matches. Those M9 pistols used by US Army competitive shooters are actually hand built by the Army Marksmanship Unit at Fort Benning, Georgia, and incorporate every enhancement possible while still technically qualifying as "service pistols." AMU National Match M9 pistols shot from a Ransom Rest will normally produce a ten-shot, 50yd (45.72m) group of 1.5–2in (38.1–50.8mm). Among the enhancements to these M9 National Match Pistols are steel inserts in the rails, a built-up lip on the barrel where it contacts the slide, and stippling on the front and backstrap for a better grip. Triggers are worked over to allow a very light, smooth pull. Groups tighten up even more when a KKM Precision Match barrel with a 1-in-32 twist is used. However, Barsto precision barrels are also used.

US Marine Corps Match M9 pistols are built by the Marine Weapons Training Battalion at Quantico, Virginia. Marine armorers work over the Match M9s in much the same way as those in the Army; however, the Marines have reportedly solved the problem of the aluminum rails on the M9 by installing hardened screws into the aluminum frame to give a better bearing surface. These screws are then ground to fit the slide. On both Army and Marine Corps pistols, higher adjustable sights are generally installed. No matter how well the pistol is worked over, however, ammunition can still be a problem, so shooters generally handload their own match ammunition, often with 115-grain (7.45g) Sierra ball.

To allow members of the US Army Reserve Forces to compete in matches requiring the use of an M9 pistol, a special dispensation was made to the rule that M9 pistols cannot be sold except to the US government. The Beretta 92 commercial pistol could be sold, but in some matches Reserve competitors were finding that their pistols were disallowed as not being true service pistols, even though they were the commercial version of the same pistol.

To meet the needs of these competitors, 211 M9 pistols were pulled from the military production line, but were numbered with commercial Beretta serial numbers. These pistols were then sold directly to the Army Reserve competitors. The commercial serial numbers prevented the pistols from being mistaken for stolen government pistols. These pistols were normally used in matches requiring "stock" service pistols as opposed to those worked over for top-level National Match usage. Since these pistols were never government property and were sold directly by Beretta to the reservists they were private property. As a result, some have been sold on the collector market by owners who are no longer in the Reserves. These pistols are highly sought after by US military collectors as M9s that may be legally owned and included in collections. Owing to fear of liability by the Department of Defense, no more M9s were sold to Reserve competitors after the initial 211.There is one other type of M9 that may be encountered by collectors and legally purchased. Early in the production of the M9 some law-enforcement agencies wanted to adopt the M9, and Beretta pulled a relatively small number of M9s from the military production line and gave them commercial serial numbers so they could be sold to civilian law-enforcement agencies. The commercial 92FS was soon available so this practice did not continue for long, but some of these former police pistols have been traded in on newer models and sold on the civilian market.

A 1st Cavalry dog handler with his WMD dog Robbie in Iraq carries an M4 carbine and an M9 pistol. The pistol is carried in a chest holster, which will allow fast access should the handler have to retain the leash with one hand while drawing his weapon. (USAF)

However, during the late 1980s I was providing training for members of the US Army special forces who frequently shot their M9s. At that point, each soldier who was issued an M9 had a log book in which he had to record every round fired. When he reached 1,000 rounds he had to stop shooting, even in the middle of a training rotation. As a result, when we were doing tactical training courses on which we had military personnel armed with M9s, we always kept a couple of commercial Beretta 92FS pistols that we could lend them to complete training should they hit 1,000 or 3,000 rounds, depending on the policy at the time. Once the slide problems were deemed solved, this policy was no longer in effect. However, the January 1989 GAO report *Responses to Questions Posed by Beretta on the M9 Handgun* notes that as of October 1988 a total of 1,821 M9 slides had been replaced under the 3,000 rounds policy. Of these 1,066 were replaced at Crane Naval Weapons Support Center where SEAL pistols would have been serviced.

MOVING FROM THE 1911 TO THE M9

While involved with this type of training, I also had the opportunity of seeing the changeover from the M1911A1 to the M9 at first hand, and so comparing the two pistols in use. During 1989–90 I had a series of contracts to train Army SRTs (Special Reaction Teams) in General Officer Protection and Hostage Rescue Tactics. When I provided initial training some teams were armed with the M1911A1, but when I returned to give more advanced training they had the Beretta M9.

When training military personnel armed with the M1911A1 pistol – even those select soldiers who formed base antiterrorist units – we had to design tactics around the fact that they were required to carry the pistol

House-to-house combat (previous pages)

While searching for insurgents in Iraq, an Army entry team dog handler sends his military working dog in to check the interior of a darkened building. The dog alerts to an insurgent and attacks him. Since the dog handler is holding the dog's leash in his left hand he draws his Beretta M9 from a BlackHawk SERPA holster on his STRIKE vest with his right hand.

Members of the Fort Lewis, Washington, Special Reaction Team training on building entries shortly after receiving their M9 pistols in 1989 or 1990. Note that the first, third, and fourth men in the stack are armed with the M9, while the second man has an MP5 submachine gun and the "tailgunner" has a shotgun. (Author's photo)

with an empty chamber. As a result, when performing AOP (Attack on Principal) drills during General Officer Protection training, the soldier identifying the threat had to make the threat known (i.e. "Gun, Right!"), then draw his weapon and rack the slide before engaging a potential target while the rest of the protective team evacuated the protectee. Any potential assassin would have had a lot of time to get off shots!

What made these drills especially illustrative was that at one base that was located near a US Air Force base, members of the Air Force Security Police (SPs) as well as Army Military Police (MPs) were part of the SRT. The SPs had already received their M9s and could carry them with a round chambered and ready for a first-round double-action shot. During our AOP and Evacuation Under Fire drills, when one of the SPs was the "shooter" he always engaged much more quickly – and accurately, we found – since he could concentrate on acquiring the target and firing, rather than on manipulating the slide to ready his pistol for action. We also found that the higher magazine capacity of the M9 (15 rounds) versus that of the M1911A1 (seven rounds) allowed the SPs on the protective detail to deliver covering fire for twice as long during an evacuation under fire.

Although the MPs armed with the .45 automatics were good shooters and scored well when we shot, the SPs armed with M9s shot at least as well and often better. The age of the M1911A1s, no doubt, contributed to

the poorer accuracy. Shooters with the M9 recovered faster from recoil, allowing them to do double-taps (two shots to the center of mass of a target – i.e. the chest) or Mozambique drills (two shots center of mass, then one to the head to make sure) noticeably faster than those armed with the M1911A1.

When training SRT members for hostage rescue operations, safety is imperative, as operators are entering a shooting house lined along the wall outside the door in a "stack" and multiple shooters are clearing a room simultaneously. Once again for safety purposes and because of Army regulations, the MPs in the SRT being trained had to keep their M1911A1 pistols with an empty chamber until after completing entry and moving into shooting position. Those SPs armed with the M9 with a round chambered, hammer down and ready for a double-action first round only had to worry about keeping their fingers off the trigger until ready to engage a target.

As was to be expected, when I trained some of the same Army personnel after they had received their M9s, they could carry them ready for action and, thus, acquire and engage their target more quickly on the various drills we performed. One drill, in which we had initially been hesitant to train troops armed with the M1911A1, we carried out flawlessly with the M9. This drill, designed to train a close-protection team

Members of the Fort Lewis, Washington, Special Reaction Team training in bus assaults with their newly issued M9 pistols. Note that the pistols have been taped to show they have been checked and are empty for the training exercise. (Author's photo)

A Beretta 92 equipped with an early tactical light clamped to the frame and with the 20-round magazine sometimes used by tactical operators. (Author's photo)

to evacuate a principal from an immobilized vehicle into a pickup vehicle, requires multiple operators to move from vehicle to vehicle or into shooting positions to give covering fire for the evacuation. We had previously demonstrated the drill but not performed it "live fire" with the M1911A1. With all operators having M9s loaded and made safe for first-round double-action usage we felt confident in our trainees that they would keep their fingers outside the triggerguard until ready to engage. When personnel had the M1911A1 we worried that they might become excited by the action and attempt to chamber a round too early and before they were in a safe shooting position.

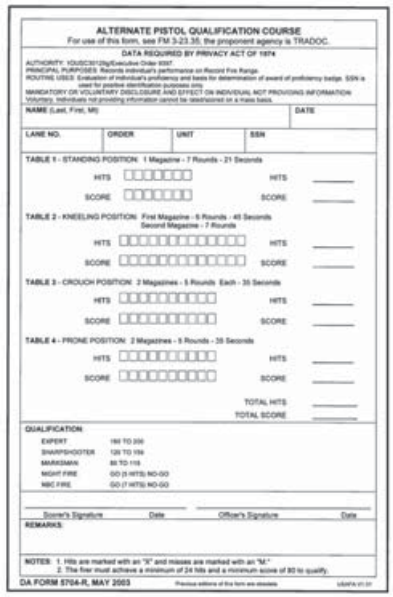
We also found that those we trained a second time when they were using the M9 generally shot better scores with the Beretta and were much better at engaging multiple targets quickly. Another thing we noticed with some female MPIs (Military Police Investigators) who might be used to augment a protective team is that they were much more confident with the M9s. In fact, female MPIs we had trained previously had not normally used the M1911A1, but had used 2in-barreled Smith & Wesson Model 10 revolvers, which were available for concealed usage, when performing their investigative duties.

These observations gave me an early positive view of the M9 and the reactions of those troops I trained who were using the M9 also seemed to be quite positive. A few who had been in the Army for a number of years did express concerns about the switch to the 9mm round, which used a bullet half the weight of the .45 ACP. But even these soldiers generally liked the ergonomics of the M9.

LEFT
The standard pistol qualification card used with the M9. Note that despite the M9's 15-round capacity, the requirements are still for a maximum seven rounds per magazine. (Author's photo)

RIGHT
Alternate pistol qualification card used with the M9. (Author's photo)

COMBAT PISTOL QUALIFICATION COURSE SCORECARD
For use of this form, see FM 3-23.35; the proponent agency is TRADOC.
DATA REQUIRED BY PRIVACY ACT OF 1974
AUTHORITY: 10USC301/28g/Executive Order 9397
PRINCIPAL PURPOSES: Records individual's performance on Record Fire Range.
ROUTINE USES: Evaluation of individual's proficiency and basis for determination of award of proficiency badge. SSN is used for positive identification purposes only.
MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION: Voluntary. Individuals not providing information cannot be rated/scored on a mass basis.
NAME (Last, First, MI) | DATE
LANE NO. | ORDER | GROUP | UNIT | SSN
TABLE I — 1 Magazine - 7 Rounds
TABLE II — 1 Magazine - 7 Rounds; 5-second Delay for Magazine Change; 1 Magazine - 7 Rounds
TABLE III — 1 Magazine - 7 Rounds
TABLE IV — 1 Magazine - 5 Rounds
TABLE V — 1 Magazine - 1 Round; 5-second Delay for Magazine Change; 1 Magazine - 7 Rounds; Controlled Magazine Change; 1 Magazine - 5 Rounds
TOTAL HITS
TOTAL SCORE
QUALIFICATION
Expert 260
Sharpshooter 210
Marksman 140
Night Fire GO (5 HITS) NO-GO
NBC Fire GO (7 HITS) NO-GO
Scorer's Signature | Date | Officer's Signature | Date
REMARKS:
NOTE: When the pistol is fired, liners are issued the number of rounds required to fire a specific table. The officer-in-charge of firing establishes procedures for loading and unloading.
DA FORM 88-R, MAY 2003 — Previous editions of this form are obsolete. — USAPA V1.01

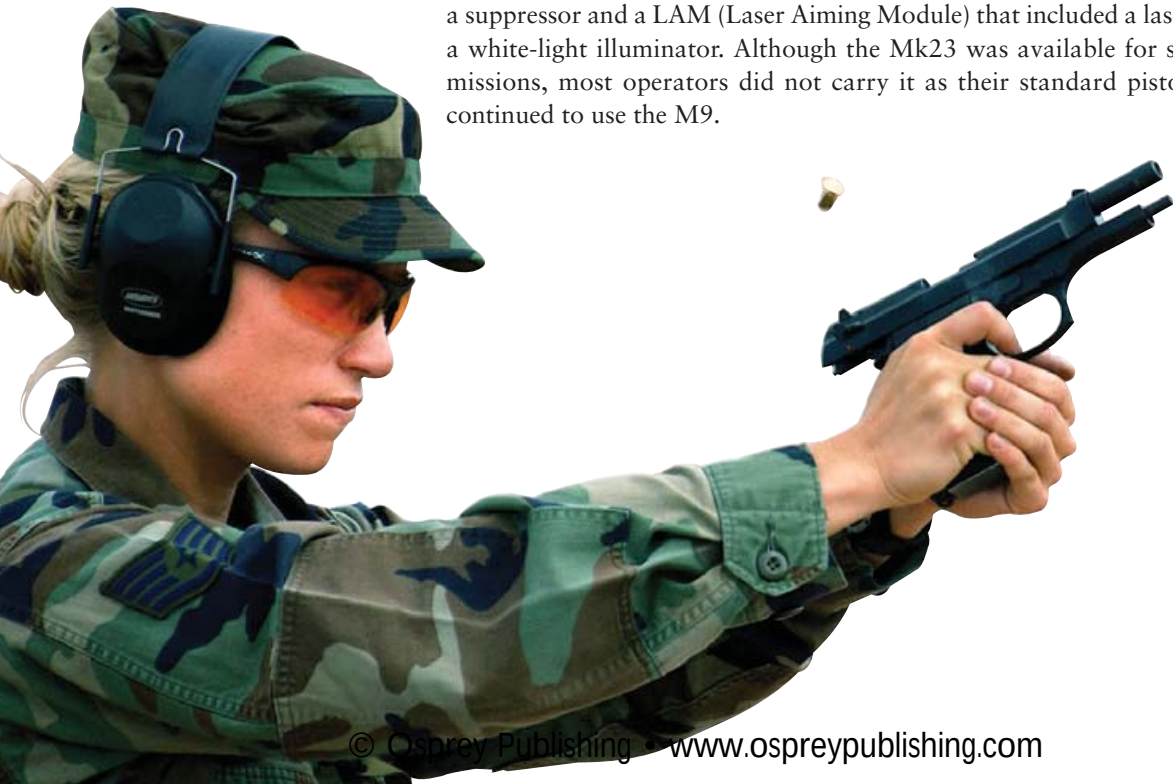


ALTERNATE PISTOL QUALIFICATION COURSE
For use of this form, see FM 3-23.35; the proponent agency is TRADOC.
DATA REQUIRED BY PRIVACY ACT OF 1974
AUTHORITY: 10USC301/28g/Executive Order 9397
PRINCIPAL PURPOSES: Records individual's performance on Record Fire Range.
ROUTINE USES: Evaluation of individual's proficiency and basis for determination of award of proficiency badge. SSN is used for positive identification purposes only.
MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION: Voluntary. Individuals not providing information cannot be rated/scored on a mass basis.
NAME (Last, First, MI) | DATE
LANE NO. | ORDER | UNIT | SSN
TABLE 1 - STANDING POSITION: 1 Magazine - 7 Rounds - 21 Seconds
TABLE 2 - KNEELING POSITION: First Magazine - 5 Rounds - 45 Seconds; Second Magazine - 7 Rounds
TABLE 3 - CROUCH POSITION: 2 Magazines - 5 Rounds Each - 35 Seconds
TABLE 4 - PRONE POSITION: 2 Magazines - 5 Rounds - 35 Seconds
HITS / SCORE
TOTAL HITS
TOTAL SCORE
QUALIFICATION
EXPERT 190 TO 200
SHARPSHOOTER 120 TO 189
MARKSMAN 80 TO 119
NIGHT FIRE GO (3 HITS) NO-GO
NBC FIRE GO (7 HITS) NO-GO
Scorer's Signature | Date | Officer's Signature | Date
REMARKS:
NOTES: 1. Hits are marked with an "X" and misses are marked with an "M."
2. The firer must achieve a minimum of 24 hits and a minimum score of 80 to qualify.
DA FORM 5704-R, MAY 2003 — Previous editions of this form are obsolete. — USAPA V1.01

OTHER PISTOL TYPES IN USE

As early as 1991, however, USSOCOM (US Special Operations Command) expressed a desire for another pistol that could serve on "offensive" missions. The resulting pistol, which was adopted in 1996 and designated the Mk23 Mod 0 SOCOM, was produced by Heckler & Koch. The Mk23 was a large pistol – 9.7in (246mm) overall and over 51oz (1.45kg) loaded – which might be used in double-action/single-action mode or as a cocked and locked single-action pistol. It was chambered for the .45 ACP round and had a magazine capacity of 12 rounds. Because of its intended use "offensively" on raids or other missions, the Mk23 took a suppressor and a LAM (Laser Aiming Module) that included a laser and a white-light illuminator. Although the Mk23 was available for special missions, most operators did not carry it as their standard pistol and continued to use the M9.

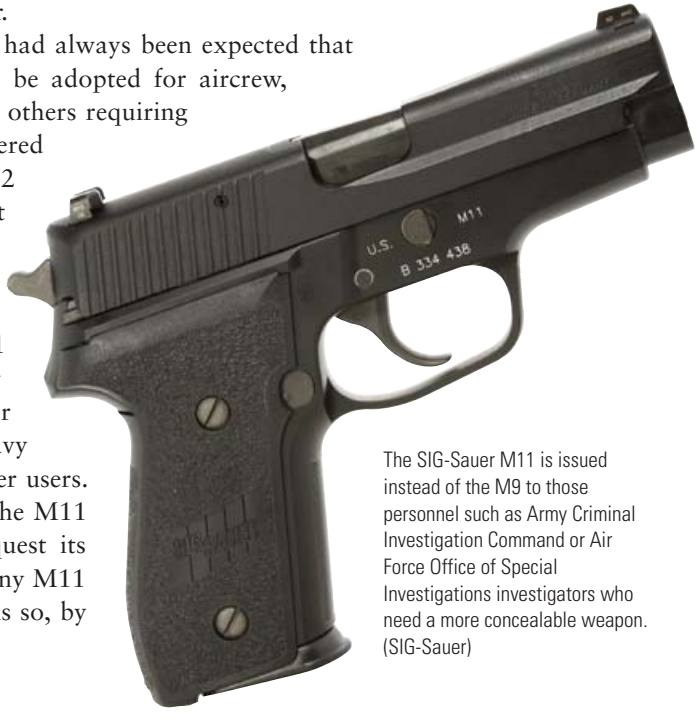
A member of the US Air Force fires her M9 pistol; note the muzzle rise but she is handling the recoil well. Most troops find the recoil of the M9 very manageable. (USAF)



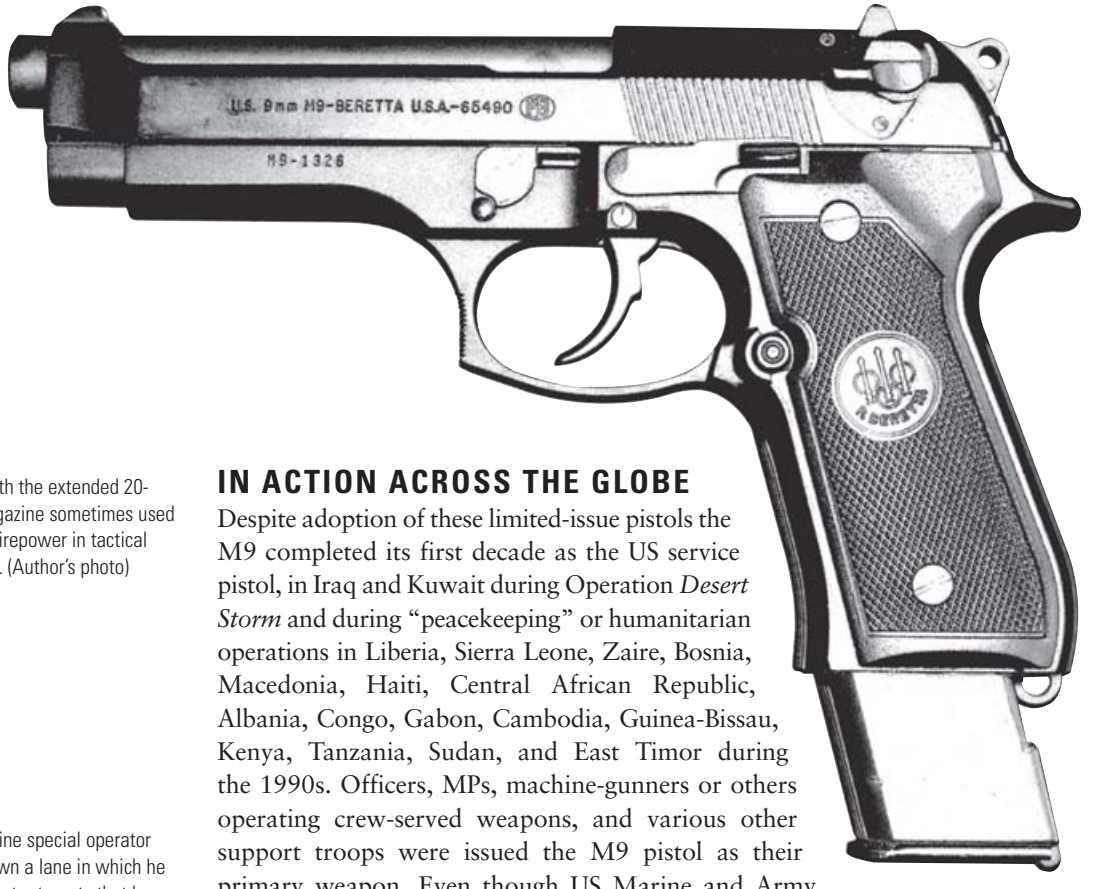
A Marine lieutenant on the firing line slaps the magazine of her M9 to make sure it is seated before beginning to fire. (USMC)

Even earlier, the US Navy SEALs had adopted the SIG P-226 as their standard pistol. Very similar to the pistol that had passed the XM9 trials but had been underbid by Beretta, the P-226 offered a double-action, high-capacity pistol that the SEALs considered to be more reliable and more accurate. The SEALs continued to use a version of the P-226 with a special phosphate corrosion-resistant finish on internal parts, black hard anodized finish on the frame, and Nitron finish on the slide. Current versions are the "R" model with a rail for a light or laser.

When the XM9 trials were held, it had always been expected that a second, more compact pistol would be adopted for aircrew, plainclothes military investigators, and others requiring an easily concealed pistol. Beretta offered more compact versions of the Model 92 that could have served this purpose, but the SIG P-228, a 9mm pistol with a 13-round magazine capacity and only 7.1in (180mm) in overall length, was adopted as the M11 pistol. The M11 continues in service with aircrew, Army Criminal Investigation Command, Air Force Office of Special Investigations, Navy Criminal Investigation Service, and other users. Reportedly, many female officers find the M11 easier to shoot than the M9 and request its issuance. However, nowhere near as many M11 pistols have been acquired as M9 pistols so, by necessity, its issuance remains limited.



The SIG-Sauer M11 is issued instead of the M9 to those personnel such as Army Criminal Investigation Command or Air Force Office of Special Investigations investigators who need a more concealable weapon. (SIG-Sauer)



An M9 with the extended 20-round magazine sometimes used for more firepower in tactical situations. (Author's photo)

IN ACTION ACROSS THE GLOBE

Despite adoption of these limited-issue pistols the M9 completed its first decade as the US service pistol, in Iraq and Kuwait during Operation *Desert Storm* and during "peacekeeping" or humanitarian operations in Liberia, Sierra Leone, Zaire, Bosnia, Macedonia, Haiti, Central African Republic, Albania, Congo, Gabon, Cambodia, Guinea-Bissau, Kenya, Tanzania, Sudan, and East Timor during the 1990s. Officers, MPs, machine-gunners or others operating crew-served weapons, and various other support troops were issued the M9 pistol as their primary weapon. Even though US Marine and Army infantry officers were issued the M9, their troops generally knew they were going into combat when their lieutenants and captains drew rifles in addition to the pistols! Because they were limited to "defense" weapons rather than offensive ones, medics were also issued the M9. Special operations forces such the US Army Special Forces, US Marine Corps Reconnaissance, US Air Force Special Tactics Teams (and others) were often issued an M9 as a secondary weapon should their primary weapon become inoperable, since they frequently operated far from resupply.

A US Marine special operator moves down a lane in which he will encounter targets that he must engage with his M9. He is training at the private Gunsite facility where many US and foreign special operators receive advanced handgun training. (USMC)

During Operation *Desert Storm* itself – and the months before the actual invasion of Kuwait started – a substantial number of US troops carried M9 pistols. In fact, the US Commander of Coalition Forces during the conflict was often seen wearing his M9 pistol. A former airborne and infantry officer, General Schwartzkopf always seemed satisfied to be armed with the same pistol as his troops. As early as 1985, there were M9 pistols designated as General Officers' pistols. Their serial numbers began with "GO," and they had a polished blue finish instead of matte, wood

grips, and Bianchi holsters that resembled the standard Bianchi M-12 but in black leather. However, from photographs it appears that Schwartzkopf carried a standard M9 in a standard M-12 holster.

The M9 was used during *Desert Storm* by troops assigned to clear Iraqi bunkers, though many found grenades or a burst of 5.56mm fire a safer method of clearing. Still, when looking for chemical weapons or intelligence, or in other situations where maximum force was not called for, the M9 was used when operating in close quarters.

LOOKING BACK ON TEN YEARS' SERVICE

In June 1996, when the M9 had been in service – more or less – for ten years, the Army Material Command issued a report entitled *Final Report for the Continued Assurance Test (CAT) of the M9 Pistol*. In *The World of Beretta*, R. L. Wilson quotes the conclusion of this lengthy report:

A US Navy gunner's mate cleans M9 pistols after shipboard live-fire training. (USN)

In the course of this test, successful attempts were made to function fire samples of the M9 pistol to six times their normal life (5,000/30,000 rounds). A combined total of 129 samples was received from two manufacturing facilities. For that effort, in excess of 3 million rounds were expended at Aberdeen Proving Ground, this beyond the 60,000 rounds expended in the factory tests. While one might view that effort as an excessive use of manpower and material, at the time of its inception, it was deemed necessary to reinforce the initial decision to adopt the M9 and the decision to continue full-rate production. As production continued, the decision was made to continue this higher than normal level of quality assurance oversight. The end result was greater faith in the product's reliability and durability. Not in the post-World War II era has an armament system been so extensively tested, nor likely before.

A US Navy gunner's mate loads M9 magazines prior to live-fire training at sea. (USN)

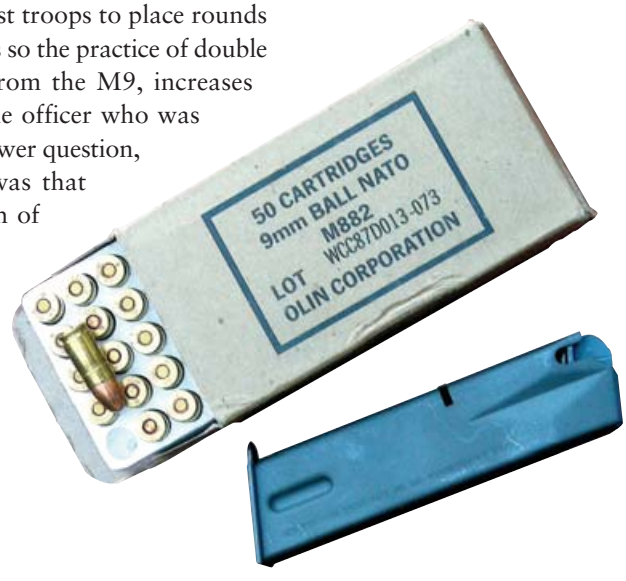
The report was a resounding affirmation of the M9 pistol, but the very fact that the report was deemed necessary reflects the fact that widespread criticism of the M9 continued from some very vocal critics.

Although the M9 had been carried on a substantial number of deployments, it had not seen sustained combat usage. It had been carried by a considerable number of troops during Operation *Desert Storm*, but its primary use seems to have been to be pointed in the general direction of large numbers of Iraqi troops rushing to surrender! As is to be expected, there were criticisms of the M9 by veterans of *Desert Storm*, but there were far more favorable comments. Beretta USA, in fact, has an extensive file of letters from veterans lauding their M9s. Skeptics had initially postulated that the open slide of the M9 would allow sand to enter the action and render the pistol inoperable; however, this does not seem to have been a major issue. In fact, the open slide may have been a plus as it allowed easier access to shake sand out of the action by locking the slide open or to push a rag through to clear any debris.

Of course, using less oil in a desert environment was also important to limit sand sticking to oily surfaces. As with any weapon, it is important to use the proper lubricant for local conditions in the AO (Area of Operations). Three lubricants are generally available in the US military supply system: Cleaner, Lubricant, Preservative (CLP); Lubricating Oil Weapons (LAW); and Lubricating Oil Weapons Semi-Fluid (LSA). CLP and LSA are designed for use when temperatures will be no lower than -10 degrees F (-23.33° C). LAW may be used from +10 degrees F (-12.22° C) to well below zero. LAW is a synthetic oil designed originally for lubricating aircraft weapons, which at altitude must be able to operate in subzero conditions.

Probably the foremost criticism of the M9 to come out of *Desert Storm* and other early deployments was skepticism about its stopping power, especially among troops who had previously been issued M1911A1 .45-caliber pistols. On the other hand, the faster, lighter 9mm round had greater penetration. Well-placed 9mm rounds will normally put an enemy down, and the more controllable M9 allows most troops to place rounds better. Not only that, but the M9 holds 15 rounds so the practice of double or triple taps, which can be delivered faster from the M9, increases stopping power dramatically. To paraphrase one officer who was commenting on the mostly academic stopping-power question, the problem with the M9 for many soldiers was that it wasn't the M1911A1 they had used for much of their careers.

M882 M9 ammunition from two contractors along with one of the Check-Mate M9 magazines that experienced problems in Iraq. (Author's photo)



During pistol qualifications of US Navy personnel at Norfolk Naval Base, sailors practice from the kneeling position with their M9s. Note that the man in the foreground uses a coyote tan BlackHawk SERPA drop holster. (USN)

Another consideration that has been aired regarding the .45 ACP versus the 9mm is that the US Army and other branches are now fully volunteer professionals. Many criticisms in the past of the excessive recoil of the .45 ACP round came from conscript troops. More recent sessions in which troops fired pistols in 9mm, .40 S&W, and .45 ACP as part of the Joint Combat Pistol Trials, which will be discussed later, found that the

US Air Force personnel waiting for the order to load their M9s on a tactical weapons course. (USAF)

majority favored a .40- or .45-caliber pistol. To a large extent this is attributable to smaller frames, better ergonomics, and recoil buffer systems on contemporary larger-caliber pistols. Even many female soldiers who took part in tests of different pistols did not find recoil excessive or frame size an issue on the .40- or .45-caliber pistols.

Beretta tests, which have been monitored by US military observers, have found that random pistols chosen from the M9 production lines for testing fire an average of 17,500 rounds without a stoppage. In one test session, under Army supervision, 12 pistols pulled from the Beretta production lines fired a total of 168,000 rounds without a single malfunction. During firing tests, Beretta has also determined that average durability of M9 slides is over 35,000 rounds. Durability may be longer, but the US Army only tests to 35,000 rounds. Other durability tests have shown that M9 frames last over 30,000 rounds and M9 locking blocks over 22,000 rounds.

An M9 pistol carried in the BlackHawk SERPA thigh holster widely used by US military personnel. Note the retention paddle/lever on the holster, which must be depressed by the trigger finger as the pistol is drawn to release the pistol. Not only is this an excellent retention system for the pistol, but it also forces the user to keep his finger off the pistol until it is drawn and on target. The black mounting points on each side of the holster allow mounting of two magazine carriers or a magazine carrier and a tactical light carrier. (Author's photo)

SERVICE IN AFGHANISTAN AND IRAQ

The extensive deployment of large numbers of US troops to Afghanistan and Iraq has presented the US military with many challenges. These operations have seen a substantial number of reserve medical and administrative personnel being called to active duty. Many had not even had basic weapons training; hence, some of the private US combat shooting schools were contracted to give them courses in use of the M9. As a result, they actually got excellent training with their pistols. However, one friend of mine who provided some of the training mentioned that he had learned that under stress some of the reservists could not tell if they were pulling the trigger and the hammer was falling with nothing happening, or if they were pulling the trigger with it meeting no resistance. As a result, he added a new element to the immediate-action drill – that the shooter would use the knuckle of the thumb on his shooting hand to press against the safety/de-cocker to make sure that it had been returned to the fire position.

Among special operations personnel, the M9 generally serves as a backup to their M4s, as they operate in areas where they do not have access to a quick resupply channel should their primary weapon go down. Members of the US Army special forces who entered Afghanistan shortly after 9/11 fell into two groups where weapons were concerned. Some of those who went in to work with the Northern Alliance against the Taliban specifically did not carry US-issue weapons, being armed instead with AK-47 rifles and FN Hi-Power pistols. However, ODA 574 (Operational Detachment-A 574) went into Afghanistan far to the south to contact a then-little-known Pashtun leader named Hamid Karzai, carrying their M4s and M9s. For special forces soldiers operating in Taliban country, the M9

Members of the Tripper Army Medical Center Special Reaction Team practice engaging from the prone position using cover. (US Army)

also offered a constant companion should a threat suddenly arise. In *The Only Thing Worth Dying For*, Eric Blehm describes such a situation:

> Late on the night of Tuesday, November 13, 2001, Hamid Karzai and his military advisor, US Special Forces Captain Jason Amerine, walked briskly down a deserted road near their safe house in the Jacobabad District of Sindh Province, Pakistan. For Amerine, it felt almost as if they were walking along a country road stateside, the adjacent implanted fields softly illuminated by starlight. In the distance, a half mile to the west, a dull glow marked more densely populated civilization, but here they were relatively isolated.

Malfunction drills

The *Operator's Manual, Pistol, Semiautomatic, 9mm, M9* contains an extensive section on malfunction drills:

Section V. **EMERGENCY PROCEDURES**.

2-15. **IMMEDIATE ACTION**

Immediate action is the prompt action taken by the user to correct a stoppage. The procedure for applying immediate action should become instinctive to the user, without the user attempting to discover the cause. It is important that the user apply immediate action instinctively to correct a stoppage.

WARNING

During the following procedures always keep the pistol pointed in a safe direction.

1. When the slide (1) is fully forward and the pistol fails to fire, apply immediate action as follows:
a. Squeeze the trigger (2) again.
b. If the pistol does not fire, ensure that the magazine is fully seated, retract the slide to rear and release.
c. Squeeze the trigger.
d. If the pistol still does not fire, remove the magazine and retract the slide to eject the chambered cartridge. Insert a new magazine, retract the slide and release to chamber another cartridge.
e. Squeeze the trigger.
f. If the pistol still does not fire, replace the ammunition.
g. If the pistol still does not fire, clear/unload the pistol and refer to paragraph 3.

WARNING

During the following procedures always keep the pistol pointed in a safe direction.

2. When the slide is not fully seated forward, remove finger from the trigger. With the other hand, attempt to push the slide forward. If the slide does not move forward, proceed as follows:
a. Place safety in a safe position.
b. Remove magazine.
c. Grasp the slide and retract to the rear, locking with the slide stop.
d. Inspect the chamber and remove any obstructions.
e. Insert another loaded magazine into the pistol.
f. Release slide.
g. Place safety in fire position, aim and attempt to fire.
3. If the pistol does not fire after the application of immediate action (para 1 and 2 above), a detailed inspection should be made to determine the cause of the stoppage (see Troubleshooting Procedures, Chapter 3). If the cause cannot be determined by the operator, evacuate the pistol to organizational maintenance/next authorized repair level.

These basic procedures covered in the M9 TM (Training Manual) are designed for those troops receiving a general orientation on the pistol. Special operators, some MPs such as Special Reaction Teams, and others most likely to employ the M9 in combat may receive more extensive training in clearing malfunctions. For example, drills will often include quickly clearing various types of jams by slapping a "smokestacked" case free with the side of the hand or turning the pistol sideways while racking the slide to clear a case or partially fed round. Operators also learn to do the drills at speed. For example, when making sure the magazine is seated and operating the slide as described above in 1a–1c, operators are often taught what is called the "Tap, Rack, and Roll Drill" in which they quickly slap the bottom of the magazine with some force to make sure it is seated, then tilt the pistol 90 degrees or more, and finally rack the slide back and release it.

> Karzai was unarmed and wearing the traditional Afghan *shalwar kameez*, and his poise and flowing arm motions marked him as an orator. Tall and thin, Amerine had an M9 pistol tucked into the belt of his camouflage uniform. Above a coarse brown beard, his alert eyes never stopped scanning the dark fields while he and Karzai spoke in hushed tones.

Amerine's M9 allowed him to remain armed but without insulting Karzai by implying he needed a rifle. Special forces operators also found the M9 could be concealed well in the loose Afghan clothing so that they could be armed without appearing to be so.

In his book *In the Company of Soldiers* about being embedded with the 101st Airborne Division during the 2003 invasion of Iraq, Rick Atkinson describes the basic combat load of one of the aides of General Petraeus, at that time a divisional commander, showing the place of the M9 among a junior officer's equipment. Captain David Fivecoat was first an infantry officer and chose his equipment and weapons accordingly when going into combat. The inventory of Fivecoat's uniform pockets and body armor pouches included:

> Three pens (two black, one blue); a Chap Stick; two packets of MRE toilet paper; two identification cards; $47 and €40; packets of instant coffee, creamer, and sugar; a camera; a red penlight; a small flashlight; a handheld global positioning system; five magazines of M-4 carbine ammunition; two magazines of M-9 pistol ammo; a Silva compass; two first-aid bandages; and a cloth-bound notebook, volume XXII. In his helmet he carried two laminated pictures of his girlfriend, a piece of an emergency signal panel, and DA Forms 1155 and 1156 [casualty report forms]. He wore a Timex Ironman watch, dog tags, and thick Ranger glasses. He carried a Buck knife, a Leatherman combination tool, the M-4 with a Surefire Tac Light and C-More red dot scope, and, in a leg holster, his M-9. The Interceptor Body Armor and SAPI (small arms protective insert) ceramic plates used to reinforce the armor weighed sixteen pounds …

Since he was going into combat, the captain was carrying an M4 as well as his M9 pistol. Although General Petraeus would have had a protective team, as a general's aide Fivecoat would also have had some responsibility in protecting the general. In his case, the M9 would be his constant companion, a backup to the M4 and a weapon that could be with him everywhere.

An interesting reference to the M9 occurred during the preliminaries to Operation *Anaconda* in Afghanistan. In his book *Not a Good Day to Die*, Sean Naylor describes a colonel's briefing given to troops prior to the operation: "He gave briefings at high volume, accentuating his remarks by using a red laser aiming device attached to his 9mm Beretta pistol. His over-the-top, all-action style unsettled some soldiers, who had to suppress laughter when confronted with this vociferous, pistol-waving officer." As the colonel was briefing experienced special operations troops

This photo of the M9 being fired by a member of the US Air Force offers a good view of the slide cycling and the spent cartridge case being ejected. (USAF)

who had had weapons-handling safety drilled into them throughout their careers, such a performance would not have inspired confidence. It is quite likely that the colonel had cleared the pistol and was using it unloaded, but anyone who carries a pistol professionally has been trained never to pull it out and wave it around, nor to point it at anything he does not intend to shoot! (In fact, in searching for accounts of the M9 being used in combat, I have come across more than one negative comment about the weapons-handling skills of some officers. A common complaint seems to have been about officers who purchased shoulder holsters that carried the M9 horizontally under the arm so that the muzzle would point at anyone behind them in the chow line or elsewhere.)

The fact the colonel had a laser pointer mounted on his M9 is interesting. Since the colonel involved had been the deputy commander of one of the special forces groups, it is possible that he had acquired the laser pointer through the supply system, which allowed special operations troops to purchase special weapons or equipment. It may also have been a private purchase. It is most likely that what was mounted was a LaserMax internal laser pointer that replaced the pistol's recoil spring guide. However Crimson Trace Corporation also offers a MilSpec laser system in a grip designed to replace the standard M9 grip, which may have been used on the colonel's M9. Still another option would have been a laser designed to mount to the frame of the pistol, as the standard M9 does not have a rail for a pointer or illuminator. However, this would have precluded use of the standard M9 holster.

A CONSTANT COMPANION

An interesting look at the use of the M9 comes in Robert D. Kaplan's book *Imperial Grunts*, in which he discusses the carrying of the M9 by troops on a variety of assignments including advisory assignments, where assassination or kidnapping is a constant danger. When observing a special forces training team in Colombia assisting Colombian forces against FARC, Kaplan notes, "Thus, Lt. Col. Duke Christie and I left Bogota one afternoon in an armored pickup truck. Duke carried his M-4 assault rifle and 9 mm Beretta pistol." In discussing a special forces team operating against terrorists in the Philippines, Kaplan mentions the fact that even off-duty, the special forces operators remained armed with their M9s:

> One of Major Lemire's A-Teams was allowed the run of the town, though. This was ODA-145, headed by the laconic master sergeant from Mississippi, in white slacks, penny loafers, and a loose summer shirt concealing his 9mm Beretta. ODA-145 was the force protection team for Zamboanga. Over the years and decades, following the bombing of the US Marine barracks in 1983 in Lebanon, of the Khobar Towers complex in 1996, and other incidents, the US military had become Israeli-like in its distrust of the local environment and obsession with security. It was ODA-145's job to get to know people: to get outside the perimeter, prowl around, find out the normal traffic patterns so that they could spot abnormal ones, develop contacts at the docks and whorehouses, make friends with the local drug-enforcement people for the extra eyes and ears they offered. "No freaking way we're depending on the Filipino military," the Mississippian counseled.

No matter what they were doing, their M9s were constant companions for ODA-145. Kaplan offers another example of an officer escorting him in the Philippines: "For example, one night in Zamboanga, I had left the JSOTF with Col. Walker to have dinner at a local hotel with a visiting US diplomat. En route he packed a cocked Beretta and wore body armor which he removed only at the last minute, quickly changing into a barong tagalog." It is highly doubtful if Colonel Walker was actually carrying his Beretta cocked. Instead, he probably had the chamber loaded and hammer down ready for a double-action first round. He may have removed the body armor, but, no doubt, the loose barong tagalog still covered the M9.

Kaplan also mentioned another classic mission of the M9 as backup to the primary weapon. He describes observing hours of training at Fort Magsaysay in the Philippines by special forces operators to transition smoothly from the M4 carbine to the Beretta M9 pistol should a malfunction or damage cause the M4 to go down during a firefight.

US troops in Kosovo examine the Makarovs carried by Ukrainian soldiers and show them their M9s. The US soldier in the left foreground carries his M9 in the BlackHawk drop holster and has magazine pouches affixed to the two mounting points. (US DOD)

MORE THAN A SIDEARM

Those whose primary weapon is crew-served, such as an M240B machine gun, are generally armed with an M9 to give them close-range protection from an enemy trying to flank them or infiltrate close to their position. However, in *This Man's Army*, Andrew Exum describes how one of his 10th Mountain Division machine-gunners used his M9 during the fighting in the mountains of Afghanistan:

A US Marine Squad Automatic Weapon gunner has his M9 out while traversing a ditch; note the lanyard which helps retain the M9. (USMC)

I first instructed McCauley to set his gun aside and pull out his sidearm, a Beretta 9 mm pistol. McCauley's heavy machine gun would be too awkward to maneuver in the steep narrow gully leading off from the one we were in. Tayo, his assistant gunner, went in first with his carbine, followed by McCauley, then me, then Flash bringing up the rear with a radio. We advanced carefully and were creeping up slowly, trying to flank the position covertly.

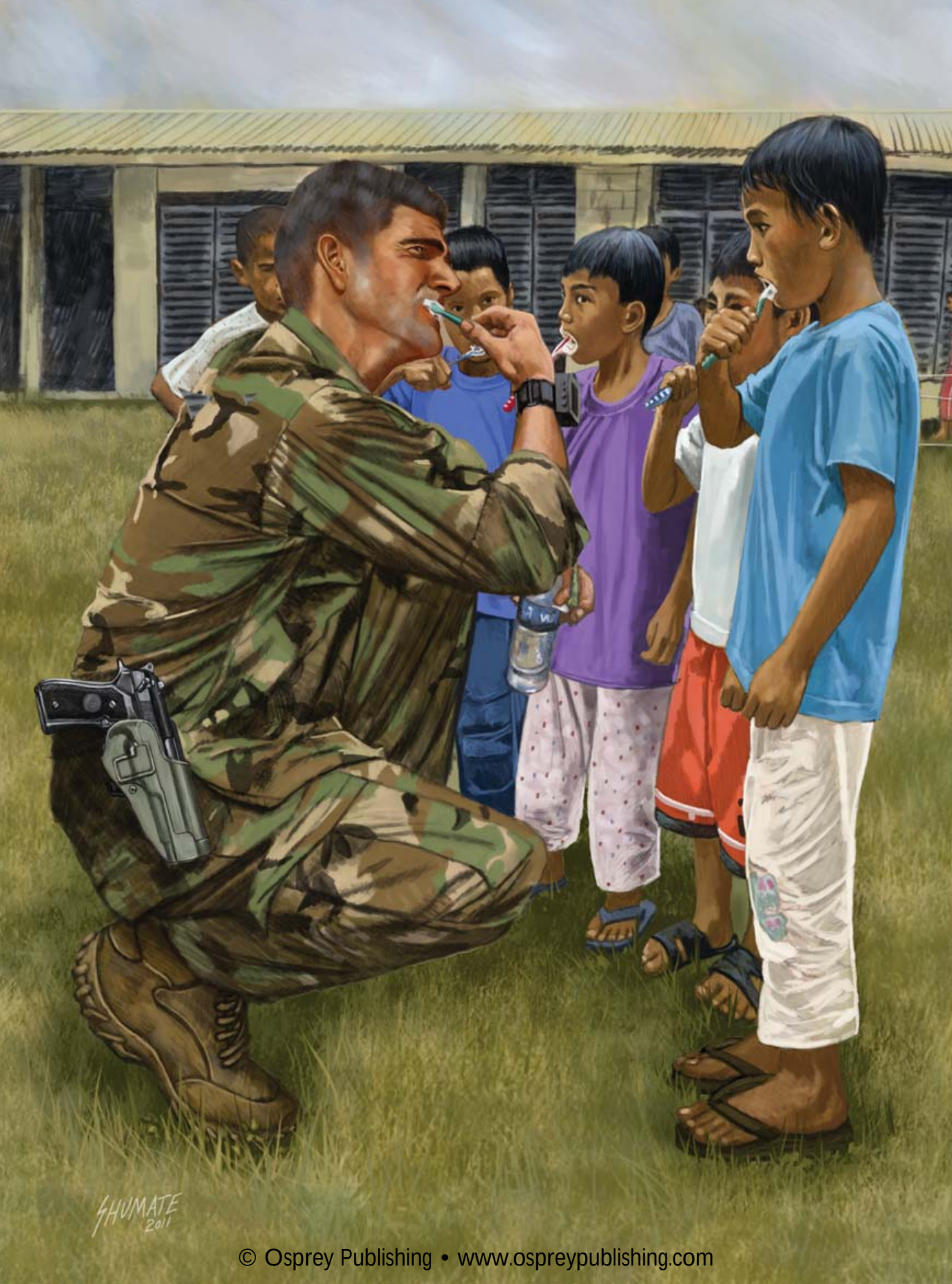
The tactical situation facing Exum was an enemy machine-gun position that covered a kill zone some of his advancing troops were about to enter. Exum had to flank the position quickly and engage the enemy before they could open up on his troops. As a result, he had to organize an attack quickly with what he had. The fact that the M240B gunner had his M9, which he could use in the close quarters of the gully, allowed him to take part in the operation. Had his M240B been put out of action, he would also have relied on the M9 until he could fix the machine gun or get an M4 carbine.

US Air Force Pararescuemen, often known as PJs (Parachute Jumpers), are skilled emergency medical and rescue personnel who are trained to the level of special forces troops so that they can go into any environment behind enemy lines to rescue downed airmen. Their motto is: "That Others May Live." Because they often operate behind enemy lines in Afghanistan and Iraq where the fact they are medics will not keep them from being fired upon, they are normally armed with the same weapons as other special operations forces personnel. For the PJ, the M9 is an important backup weapon to his GAU (Air Force terminology for the M4A1) but the M9 also gives him the possibility of defending himself and his patient should he have to engage an enemy at close range while carrying or working on the injured serviceman. Additionally, since the PJ often parachutes or rappels in to the site of a downed aircraft, there is always the chance of losing the primary weapon, but the M9 strapped to his leg will still be there. In *None Braver*, Michael Hirsh offers a description of the equipment carried by the typical PJ including the M9:

A US Army dog handler in Iraq carries his M9 in a BlackHawk SERPA holster attached to his STRIKE vest in quick access position. Note that he has also attached the leash for his dog to his webbed gear to keep both hands free. (US Army)

Keeping armed (opposite)

An important mission of the M9 is to allow troops operating in dangerous areas on civic-action missions to remain armed. This member of the US special forces is operating in the Philippines against Abu Sayyaf terrorists. Even though he is helping local villagers to improve their lives he is a target for assassination or kidnapping. He is teaching children basic hygiene such as brushing their teeth, but keeps his M9 in a BlackHawk SERPA holster handy.



> Pararescuemen carry an assortment of weapons on missions, and are fully prepared to engage the enemy in order to defend their patients. In addition to the standard 9 mm sidearm – which a lot of guys dislike because it doesn't have the close-in knockdown power of the old .45 – Ethridge has chosen the GAU-5, a version of the M4 rifle, which is a cut-down, special-ops version of the M16 – other PJs carry the GAU that not only fires the small 5.56 round, but has the M-203 grenade launcher underslung beneath the barrel. Preference even extends to the choice of ammo for the grenade launcher, with high-explosive, white phosphorous and tear gas rounds all in the arsenal.

Another group who rely on the M9 are US Marine Corps snipers, though many snipers also carry an M16A2 in addition to their M40A3 sniper rifle. The M9 was intended to lighten the load, but since snipers normally operate in small numbers and the bolt-action sniper rifle would not be all that effective if their "hide" were to be attacked, many opt for the M16A2 as well. In *Hogs in the Shadows*, Milo S. Afong describes the gear carried by Marine Corps snipers in Iraq during 2004. On one occasion, Afong himself chose to carry an M40A3 with a Simrad night-vision attachment, along with an M16 and his M9. His colleague selected an M16 with M203 grenade launcher as well as an M9. Both men took an assortment of other gear including Claymore mines and grenades.

Sometimes the lack of availability of some weapons determined what was carried into action. Afong mentions another Marine sniper team deployed in Fallujah from March 2004 until September 2004. The team's two snipers, again armed with M40A3s but aware that they could find themselves facing insurgents armed with fully automatic weapons, would have preferred to carry something heavier for close-in work than their M9s, but no M16s were available for them. However, other team members did carry M16s.

Another Marine who was in Fallujah during the same period – March to September 2004 – related to Afong an instance where he did resort to his M9 pistol. Unlike most snipers, Sergeant Memo carried a shotgun as his secondary weapon instead of an M16 and resorted to both it and his M9 when insurgents attacked him inside a house he had entered. Unfortunately, he found he needed more range than that offered by the shotgun, which was loaded with ammunition for blowing off door locks or hinges.

Memo initially had the advantage, as the insurgents had to come down the stairs to see him; this meant he would see them first. One insurgent's feet came into view as he descended the stairs. Memo fired at him but the man was uninjured and hastily retreated upstairs. Memo considered running, but hesitated as another insurgent threw grenades at him. He then

> … realized that he desperately needed to change weapons before another person came down the stairs. His sniper rifle was strapped to his pack and was useless in close-quarters battle. His last option was his pistol, and he reached for it, figuring that it would give him a better chance… He was used to competition pistol shooting on the rifle team,

which allowed only one hand. Memo took the weapon in his right hand while leaning against the wall with his left. His decision was to let the insurgents take a few more steps so he could get a better shot on their legs … soon another insurgent came walking down.

When Memo could see the man's knees, he shot and hit him in the ankle, which made him trip and tumble down the stairs. The wounded insurgent came to rest facing Memo. He could see fear in the Arab man's eyes as he pointed the pistol at his face and fired two shots into his head. Blood spattered from the back of his skull. It was a gruesome kill, but Memo was unfazed – not out of cold blood but out of survival.

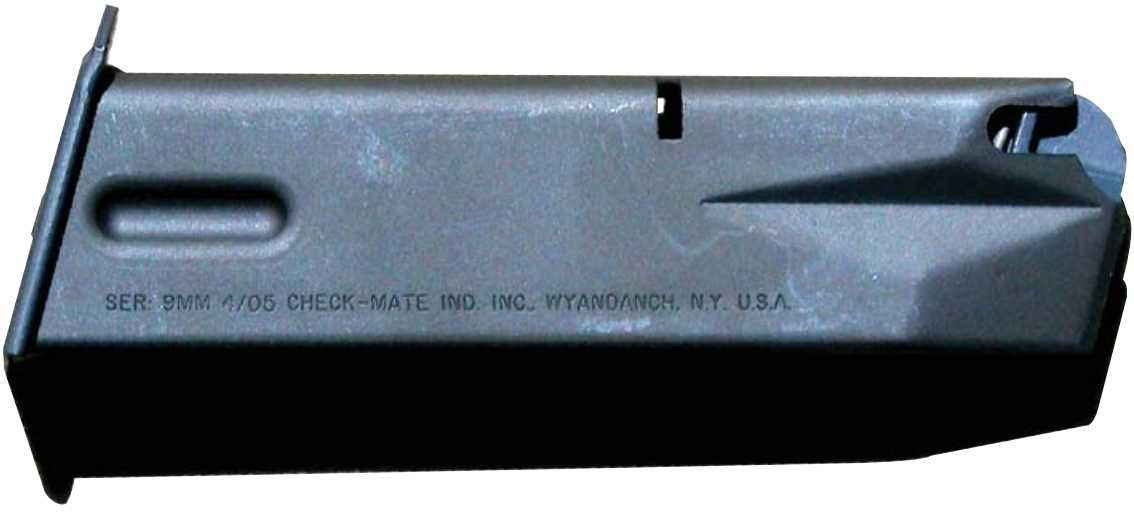
Hearing more insurgents upstairs, Memo decided to remain in the building and fight on until he was able to exit the building. Once again grenades were thrown down upon the sniper:

After the blasts, dust filled the air, and another man charged down the stairs. Memo opened fire on his legs and wasn't sure that he hit the man, until he fell and landed with his back to Memo. In a flash, Memo decided that he was going to paralyze the man and shot for his spine. But his aim wasn't surgical enough to cause the damage he wanted, and the bullets ripped into the insurgent's buttocks and back. The man was screaming hysterically, and Memo couldn't stand hearing him. He fired one shot in the back of his head killing him. As he did so, another man came running down the stairs and caught Memo off guard. The insurgent stopped halfway down and while crouching, he fired an AK from the hip, spraying toward Memo. Memo swung his pistol toward the man and unloaded the rest of his magazine into his chest. From ten feet away it was hard not to notice the pain in the man's face as he was hit with 9 mm bullets. The insurgent dropped his rifle while collapsing down the steps. Memo made the fastest magazine change of his life and refocused on the stairs.

A US Army lieutenant colonel in Iraq carries his M9 in a BlackHawk holster on his chest. On his M9 he has mounted Crimson Trace laser grips. He has also appropriated a Polish PM84P submachine gun. Purchased in large numbers by Iraq, the PM84P fires the same cartridge as the M9. (US Army)

Members of a US Navy Security Reaction Force train on techniques for moving through a building while searching for an active shooter. They use dummy red M9s at this stage of training and will later progress to live fire with their M9s. (USN)

Memo had been hit but his body armor had stopped the three bullets. The man that he had shot was still alive, and screamed until Memo shot him in the chest. By this time Memo had begun to worry that he would run out of ammunition before he ran out of insurgents. He killed two more insurgents with his M9 before finally flinging a Claymore mine up the stairs and detonating it to cover his escape from the house. Memo's experience certainly shows why having an M9 pistol as a secondary weapon can save a soldier or Marine's life. It is important to note, too, that Memo showed good tactical awareness of his position and used it to engage the insurgents as they came down the stairs when they were vulnerable. The six insurgents Memo accounted for with his M9 are the most the present author has found reference to in one encounter.



One of the Check-Mate magazines for the M9, the finish of which allowed fine sand to bond to it, causing malfunctions. Note that this one was manufactured in 2004–05 before the problem was corrected. (Author's photo)

MAGAZINE PROBLEMS

During operations in Afghanistan and Iraq during 2003–04, a major issue arose with M9 reliability that could be traced to the purchase of "lowest bidder" magazines. These magazines, manufactured by Check-Mate, are not as sturdy as the Beretta magazines that are known for quality. Not only that, but the Check-Mate magazines proved highly sensitive to sand and dirt getting into them. (Bear in mind these are magazines being used in Iraq and Afghanistan.) The situation was so bad that family members of deployed troops who carried M9s were trawling US gun shops for Beretta-produced commercial M92 magazines and some police departments were searching through their confiscated pistols to find magazines to ship to the troops, in many case police officers from the agency involved who were deployed as MPs with their Reserve or National Guard unit.

Some troops also asked friends or family in the USA to send them stronger Wolff magazine springs to replace those in the Check-Mate magazines. There are, however, anecdotal reports that many of the spring problems arose because troops had problems with the Check-Mate magazines and decided the problem was the springs, so removed them and stretched them out thinking this would stop their magazines malfunctioning; but instead they caused the springs to lose their strength.

The US armed forces responded to the issues by testing the Check-Mate magazines and interviewing troops who had problems. The conclusion was that problems arose due to the heavy phosphate finish called for in the Check-Mate contract from the US government. It seems that the sand encountered in Iraq is very fine – almost like talcum powder – and was becoming embedded in the thick phosphate finish. Once the finish specs were revised, Check-Mate seems to have solved the problem by switching to a dry-film finish, after which it delivered more than two million magazines without additional problems. In fact, many troops actually preferred the second-generation Check-Mate magazines – those dated after 12/05 – to even Beretta-produced magazines. Criticism of Check-Mate magazines continued, however, because those with the thick phosphate

A US Marine special operator from MARSOC practices use of cover with his M9, during training for carrying the pistol while operating in civilian clothing. (USMC)

finish were not withdrawn from service and continued to malfunction. Some astute unit armorers tried to segregate the earlier Check-Mate magazines and use them only for training while the later type were used operationally.

The contract with Check-Mate was not renewed, and Airtronic Services, Inc. was given a five-year contract in 2006 for up to 14 million M9 magazines. Airtronic magazines actually cost the government less than those from Check-Mate – $8.51 each for Check-Mate compared to $4.51 each for Airtronic. By the time the first 900,000 Airtronic magazines had been delivered there had not been a single reported malfunction. The primary criticism the troops seem to have of the Airtronic magazines is that their finish scratches very easily, which makes them susceptible to corrosion.

Casualty evacuation under fire (previous pages)

In response to a helicopter going down in Afghanistan, a US Air Force rescue chopper bearing PJs (Pararescue) has landed. As one PJ gives covering fire with his M4 another PJ carries a wounded casualty in a fireman's carry and attempts to return fire one-handed with his M9 pistol.

A US Marine special operator armed with the M9A1, which mounts an illuminator that combines white light, laser, and infrared pointer in one unit. (USMC)

THE M9A1 ENTERS THE FRAY

Although most US military orders for the M9 have been for the basic pistol, the US Marine Corps began ordering the M9A1 in May 2005, with an initial order of 3,480 pistols. The primary "enhancement" for the M9A1 is the addition of a Picatinny rail, which allows the mounting of illuminators (lights or lasers) directly to the pistol. Checkering was also added to the front and backstraps to make the M9A1 easier to grip in

A member of Congress inspects an M9 pistol fitted with an integrated infrared aiming laser during Army Soldier Day at the US Capitol, Washington, DC. (US Army)

adverse conditions (i.e. wet conditions such as those that Marine units often encounter). To allow faster tactical reloads in combat, the magazine well was beveled. Magazines ordered with the M9A1 are Beretta's sand-resistant PVD-coated magazines. This coating is a type of hard ceramic coating designed for tools, which reduces friction. M9A1 magazines also have a redesigned tube, which reduces the damaging effects of sand on the magazines. When the Marines ordered the M9A1, they ordered BlackHawk Products Group holsters, which use the CQC SERPA retention system and are in coyote tan color. The Marine Corps has continued to issue contracts for the M9A1 in subsequent orders.

Standard M9 pistols also remain in service with the Marines. Presumably, the M9A1 will be issued first to members of MARSOC (Marines assigned to Special Operations Command) and members of MEUSOC (Marine Expeditionary Unit Special Operations Capable) forces. Both of these units have been using custom versions of the 1911A1 pistol for some years; however, reportedly, these .45 pistols were removed from service, presumably to be replaced by the M9A1.

After more than two decades of general issue, the M9's strengths and weaknesses have been noted and many weak points have been corrected or addressed in training. From its early deployment until today, the M9 has had an excellent reputation for reliability, an absolute necessity for a combat pistol. Generally, even the M9's critics concede its reliability. A friend of mine who is an ex-special forces NCO who trains US special operations personnel and members of the US Marine Corps in combat shooting considers the M9 to be the most reliable pistol he has ever used.

During a firefight in Iraq a US Marine stands ready with his M9. (USMC)

Training for clandestine missions

Members of MARSOC, as do members of other special operations units, train to carry their M9 pistols concealed when carrying out various types of clandestine missions. MARSOC Marines are also deployed to train allied units in counterinsurgency and counterterrorism. In many cases, the US operators will become targets for assassination by the guerrilla or terrorist forces they are helping to combat. As a result, the MARSOC Marines are given special training in carrying their weapons concealed under civilian clothing and engaging threats from the draw.

Drills include walking down an "urban road" on a tactical shooting range with multiple targets to simulate local civilians and possible terrorists along the side. As an instructor yells out colors and numbers to designate targets representing threats, the Marine must draw, identify, and engage those targets designated as "hostiles" without hitting nearby "friendlies." Other parts of the training include using available cover and firing from different positions such as prone or around "support side" cover (i.e. the left side for a right-handed shooter). Malfunction drills and combat reloads are practiced as well.

BELOW A Marine with Marine Special Operations Advisor Group, Special Operations Command, practices drawing an M9 pistol from a concealed position during the Defensive Pistol Course at the Military Operations In Urban Terrain Assault Course. (USMC)

IMPACT

In service around the world

Although other countries had considered or adopted the Beretta M92 prior to the US adoption of the M9, it was the weapon's acceptance in the US armed forces and testing in combat that helped convince other countries of its reliability and suitability. In some cases countries already considering a version of the Beretta M92 considered the intensive USA trials sufficient validation to adopt the Beretta themselves.

FRANCE ADOPTS THE BERETTA

Considering the love/hate relationship that often exists between the USA and France, to assume that the US adoption of the M9 influenced France to adopt its own version of the Beretta 92 would be simplistic, but the extensive testing done by the US certainly would have been a selling point used by Beretta prior to the French adoption in 1987 of the GIAT BM92-G1 (PAMAS-G1). Nevertheless, MAS carried out their own extensive trials of various automatic pistols. (MAS is the government arsenal at Saint-Etienne, and PAMAS stands for Pistolet Automatique de la Manufacture d'Armes de Saint-Etienne.) The finalists selected by MAS were the Beretta 92, SIG P226, and Walther P88.

The G-1 was manufactured under license in France by MAS GIAT. An initial contract called for 110,000 of the pistols to be produced. Knowledgeable observers believed that the fact that GIAT had allied themselves with Beretta certainly helped that company get the contract. However, that may have only been a superficial conclusion, since the reason GIAT found an alliance with Beretta so appealing is that Beretta's sophisticated numerically controlled machinery would allow licensed

production to begin rather painlessly. Beretta's wholly owned subsidiary Mi-Val specialized in production of numerically controlled machinery for firearms production and could support GIAT in beginning G-1 production. Another factor that may have helped the Beretta with adoption for the Gendarmerie Nationale was its successful service with the Carabinieri, the Gendarmerie's equivalent in Italy.

As was discussed earlier, the problem of the Beretta slides that fractured and came back at the shooter was traced to Tellurium, which makes the steel hard but difficult to temper. Initial French production of the G-1 used slides that contained Tellurium. Some who have studied the US slide failures believe that Beretta supplied some of these slides during early production for the M9. Since the first production G-1s were made at Beretta using French steel, this is quite possible. Certainly, MAS recalled earlier production G-1 pistols and replaced them with later slides designed to prevent a fractured slide from coming back at the shooter.

Although the G-1 is very similar to the M9, only with French markings, there is one notable difference. On the G-1, the safety/de-cocker is not ambidextrous but is located in the proper position for operation by a right-handed shooter, or may be switched to the other side for a left-handed shooter. France's Gendarmerie Nationale had also specified that they wanted a safety that returned to the fire position after operation, as on a SIG P-226 – which is reportedly the pistol the Gendarmerie actually favored. With a standard Beretta 92 or M9, when the de-cocker is depressed, it stays in the down position until manually returned to the fire position. On the "G" (for Gendarmerie) version, a spring pushes the safety back to the fire position after it is released. Some users of the M9 or the 92FS like the requirement for manual operation of the safety. Those in law enforcement sometimes carry the pistol in this mode so that if an assailant attempts to grab the pistol, they will not be able to immediately point it at the owner and shoot him or her. Some agencies also train their personnel to push the safety to the down position during a struggle, to render the pistol temporarily inoperable.

The French G-1 version of the Beretta 92 used by the French Air Force and the Gendarmerie. (Author's photo)

I have read comments to the effect that the French specified this type of safety purely out of contrariness, but this is not the case. Prior to adoption of the G-1, the Gendarmerie Nationale had been armed with the MAC 50 pistol, a single-action, single-stack design in 9×19mm caliber. Anyone who has used the MAC 50 will immediately realize why the French wanted a safety that returned to fire position. On the MAC 50, the safety locks the firing pin so that the hammer may be lowered by pressing the trigger with the safety engaged. If the user forgets to push the safety to the fire position, he can cock the hammer and pull the trigger but the pistol will not fire. He may then go into a malfunction drill in which he slaps the magazine, racks the slide, and pulls the trigger again, but once again if the safety is still on nothing happens. Based on experiences with the MAC 50, the specifications for the G-1 safety are very sensible.

Initially, the G-1 was adopted by the Gendarmerie Nationale in 1987 and the French Air Force in 1990. The MAC 50 seems to have remained in service with French Army units. This may have been an issue of cost. However, by early in the 21st century, many French special operations units had switched to the SIG P-226 or HK USP, and as of 2002, police units, including the Gendarmerie and Police Nationale, were being rearmed with the SIGPro 2022.

BRAZILIAN BERETTAS

One of the first countries to adopt the Beretta outside of Italy was Brazil, and once again Beretta's ability to help in setting up licensed production played an important role in the sale. Beretta set up a factory in Brazil that produced not only the Model 92 but some of Beretta's smaller pistols as well. The Brazilian factory was sold in 1980 to Taurus, a well-known Brazilian firearms manufacturer, and production continued of the Taurus PT92. This design is based on the early Model 92 with the frame-mounted safety for which the patent has run out so Taurus produces the PT92 without licensing fees. Designated the M975, the PT92 is the primary handgun of the Brazilian Army. Outside of Brazil, the only military user seems to be the Dominican Navy.

Since the PT92 has a frame-mounted safety as well as a double-action mechanism, it offers the capability of being carried "cocked and locked" (round chambered, hammer cocked, and safety on) or in double-action mode with hammer down for the first round. Other pistols such as the CZ75 and the new FNH FNX-9 incorporate this feature as well. On the FNX-9, the frame-mounted safety also functions as a de-cocker, making the pistol very versatile.

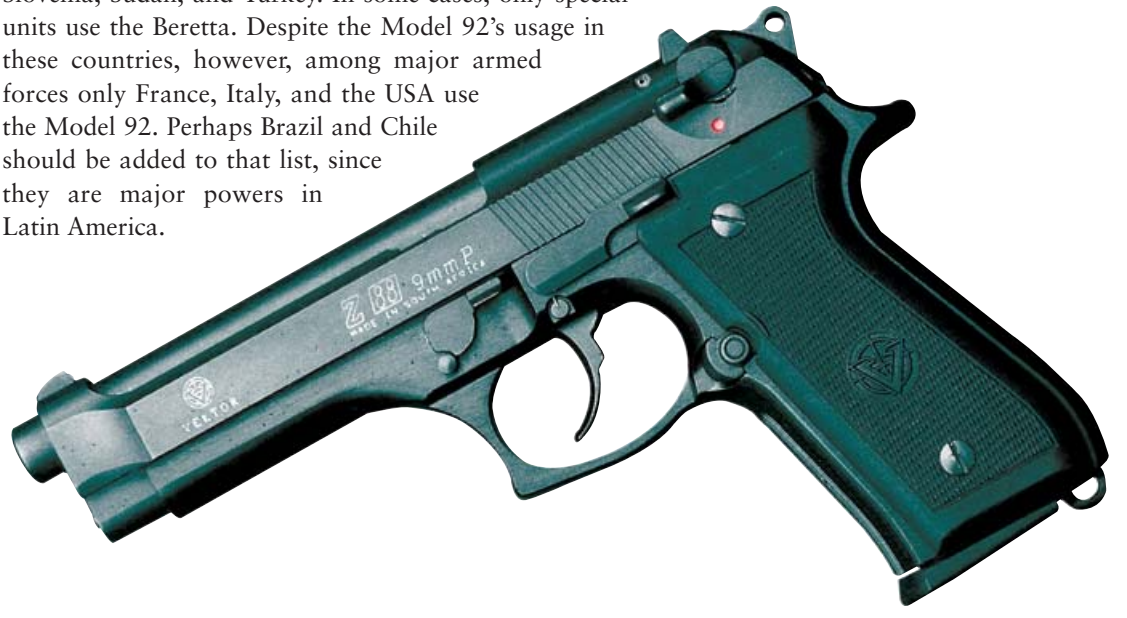
The PT92 has a reputation for being a pistol that can stand up to a lot of usage. This, combined with the ability to use it as a double-action or a single-action pistol, made it a perfect training pistol in certain circumstances. Some years ago I assisted in training civilian bodyguards in the UK who would sometimes deploy with their principal to venues where

they would be armed. As a result, the head of the training company had a shooting range in the UK purchase a number of PT92 pistols. When we did training at the facility, we could teach techniques with the PT92 as a cocked and locked pistol in case the security team would be armed with Browning P35s or Colt 1911s, or with the PT92 as a double-action pistol in case the team would be issued double-action SIGs, Tauruses, etc., when operating overseas. The range rented out the PT92s to other shooters when courses were not being run, and during the courses lots of rounds were fired. Nevertheless, when the UK passed its most recent stringent handgun laws and the PT92s had to be turned in, they were still functioning flawlessly after many thousands of rounds.

OTHER COUNTRIES JOIN THE FRAY

Licensed production of early-type Beretta 92s was carried out in a couple of other countries. In Egypt, Maadi produced the Helwan Model 920, an early-style 92 with bottom magazine release and frame-mounted safety. In Chile, FAMAE produced the early Model 92 on license for the Chilean Army and Navy. Because South Africa was embargoed during the last years of apartheid and therefore prevented from receiving arms, a licensed version of the Model 92 designated the Vector Z-88 was produced there during the 1980s.

The Model 92 is very popular in Latin America, being used by Brazil, Chile, Colombia, Mexico, Peru, and Venezuela. Those used in Brazil and Chile are local production versions, but it is not clear whether the weapons used elsewhere in Latin America were procured from Beretta or from Latin American production. Among other countries issuing the Model 92 in some form to military or police units are: Algeria, India, Indonesia, Iran, Iraq, Jordan, Kuwait, Luxembourg, Morocco, Nigeria, Pakistan, Slovenia, Sudan, and Turkey. In some cases, only special units use the Beretta. Despite the Model 92's usage in these countries, however, among major armed forces only France, Italy, and the USA use the Model 92. Perhaps Brazil and Chile should be added to that list, since they are major powers in Latin America.



The South African Vector, which was based on the Beretta 92. (Author's photo)

US LAW-ENFORCEMENT USE

Certainly in the USA, the adoption of the M9, which came at the time that many US law-enforcement agencies were switching from the revolver to the automatic pistol, had a substantial influence on the police choice of handguns. In some cases, the adoption of the M9 by the US government prompted police commissioners to approve the purchase of the "proven" Beretta 92 design, especially the 92FS, which is basically a civilian version of the M9.

Adoption of a handgun by one of the 50 US state police agencies gives the manufacturer substantial credibility and also aids sales to smaller agencies within that state. The adoption of the Beretta Model 92 by the Connecticut State Police in 1981, four years before the US Army, helped give the pistol credibility. Another relatively early user of the Beretta 92 among state police agencies was Maine, which adopted the pistol in 1988.

One of the earliest and best-known US police departments using the Model 92 was the LAPD (Los Angeles Police Department). In 1987, the LAPD authorized either Smith & Wesson or Beretta pistols, with the Model 92 proving by far the more popular choice. Officers were given a three-day course in combat use of the autoloading pistol, and the Model 92s hit the street. As a result of reports that gang members were practicing grabbing the slide of a Beretta 92 and hitting the takedown lever to remove the slide while a police officer held it, there was for a short time some discussion as to whether the Beretta Model 92 was not appropriate for the LAPD. However, the slide removal is basically a stunt that has been

The commander of 100th Security Forces Squadron readies his M9 pistol as he leads a five-member 100th SFS tactics team into a Close Quarters Battle training exercise during a simulated hostage situation at RAF Fairford. (USAF)

The commander of 100th Security Forces Squadron pulls a suspected terrorist out of a vehicle while another operator aims his M9 pistol to provide protection, during a simulated vehicle assault training exercise. (USAF)

incorporated into a few films. Trained officers do not allow dangerous suspects to get that close to their weapon; they are trained in weapons-retention techniques, which can be quite painful to those attempting to snatch their weapon; and the simplest solution if someone attempts to grab an officer's Beretta 92 is to pull the pistol closer to the body and pull the trigger, sending a bullet into the assailant. For any officer who does worry about a criminal attempting to dismantle his Beretta while it is in his hand, a "Felon Repulsion Lever" can be installed. I have friends in dozens of law-enforcement agencies that use versions of the Beretta 92, and I have never heard of an instance of an assailant successfully stripping the slide from an officer's pistol.

For some police departments, the Model 92 was a special-purpose weapon only issued to "tactical" personnel. The New York Police Department's Emergency Services Unit, which handles rescues from skyscrapers or bridges and other tasks of that sort but also acts as a SWAT (Special Weapons and Tactics) team, was issued the Beretta Model 92. Because members of the unit may be assigned duties such as using the shield during entries where they are unable to use a carbine or submachine gun, the Model 92 was issued to give them more firepower than a revolver.

Among US federal law-enforcement agencies, one of the first to adopt the Beretta 92 was the US Border Patrol. Generally conceded to be the federal agency whose agents face the most danger and are most likely to engage in armed encounters, the Border Patrol's choice of the Model 92 added even more to its credibility as a combat pistol.

A St Louis Police Department Beretta 92D Model that is double-action only. (Author's photo)

Another law-enforcement adoption of the Model 92 that lent it substantial combat credibility was that of the St Louis Police Department. St Louis has consistently ranked as one of the five most dangerous cities in the USA and has topped the list at times, often changing places for first and second with Detroit from year to year. However, because there was reluctance to change from a revolver to an automatic pistol in St Louis, the version of the Beretta 92 adopted there was what some termed a "15-shot revolver" since it was a double-action-only pistol, which had no hammer-drop safety and which could not be fired single-action as the hammer returned to DA position by following the slide forward after each shot. As St Louis was the first agency to adopt a DA-only version of the Model 92, the first ones delivered had the slide-mounted safety levers, but these were deactivated. Later deliveries were of the "slick-slide" version, which did not have the levers. Cataloged as the "D Model," this pistol was adopted by some other agencies. The St Louis Police Department has used the DA-only Model 92 for 20 years at the time of writing, and has adopted the Beretta Cx4 Storm 9mm carbine as a companion in patrol cars since the Storm also takes the Beretta 92 magazines.

NON-MILITARY VARIANTS AND SPECIALIZED MODELS

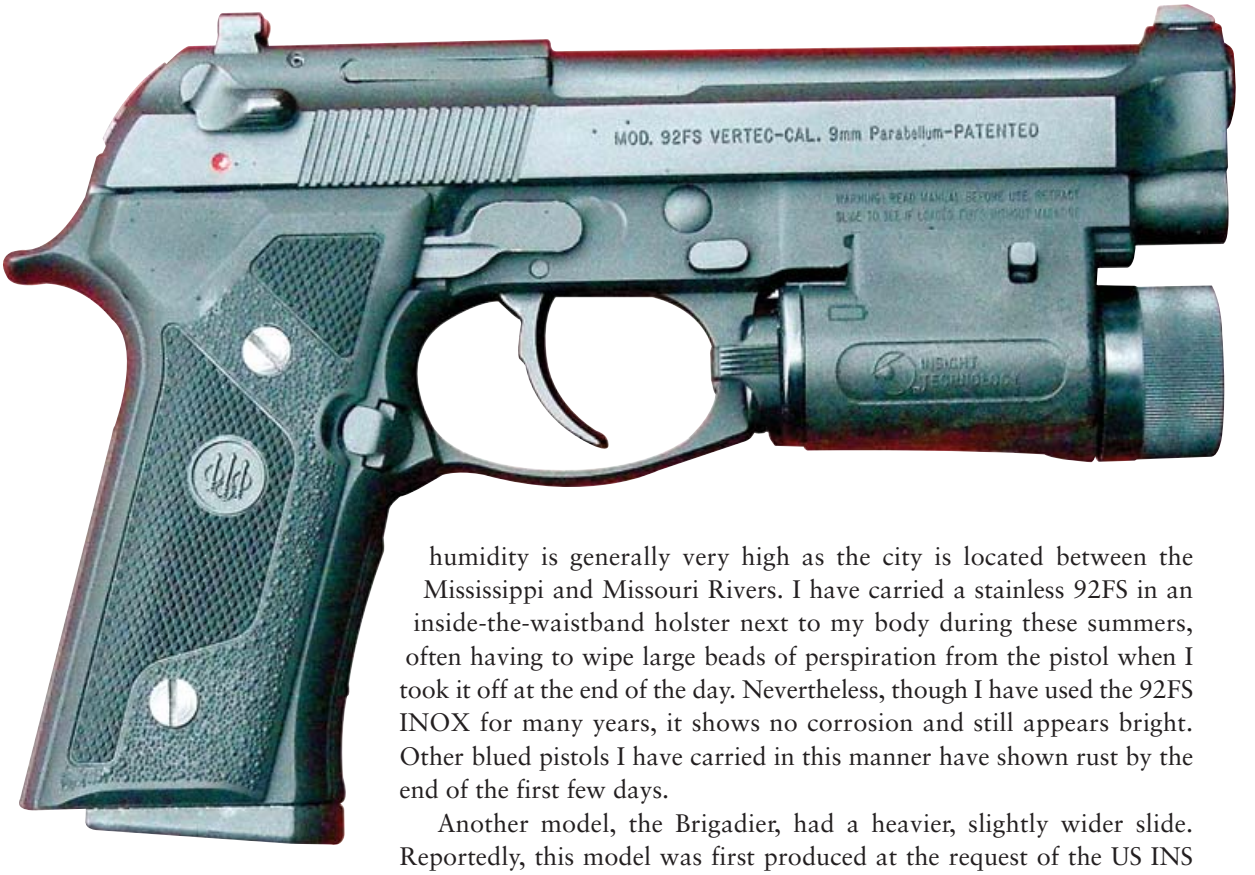
Many other law-enforcement agencies in the USA – reportedly more than 1,000 – adopted some version of the Beretta 92 or authorized its use by officers. Beretta has been responsive to agencies with special requirements, which has resulted in myriad variations being produced. In some cases, agencies liked the Model 92 but not the 9×19mm caliber. As a result, they wanted a Beretta 92 but in .40 S&W caliber, which has become the most widely used pistol caliber among US law-enforcement agencies. Models chambered for the .40 S&W are easily identified as they are designated

"96" rather than "92." Occasionally, the designation "Model 98" might be encountered. This refers to those pistols chambered for the 9×21mm round for sale in Italy and elsewhere where laws preclude civilian ownership of "military calibers" such as the 9×19mm.

Beretta pistols also carry a letter designation that indicates the action type as mentioned above – F for conventional DA/SA, G for the French style DA/SA with a safety that returns to fire after operation, and D for DA-only. Other variations include the Compact models; these include the Type L with a shorter barrel, slide, and frame, which reduced magazine capacity to 13 rounds, and the Type M, which was similar to the "L" but with a slimmer grip that took a single-column eight-round magazine. The compact versions were often ordered for investigators by agencies that were purchasing full-sized Model 92 or 96 pistols for uniformed personnel. The 92FS Compact "M" model was also sometimes ordered for female personnel who had such small hands that they could not use the full-sized Model 92. Another model, the Centurion, combined features of the full-sized 92 or 96 with features of the Compact version by putting a Compact slide and barrel on a full-sized frame.

Another feature appreciated by some law-enforcement agencies in the USA and elsewhere that operate in humid, wet conditions is the INOX (stainless steel) version of the Model 92FS. While the INOX 92FS retained an alloy frame, other parts that would normally be of blued steel were of stainless steel. As a note on the advantages of the stainless-steel version of the 92FS, I live in St Louis, Missouri, where during the summer temperatures normally are in the 90–100 degree F (32–38° C) range and

The Beretta 92FS Centurion, which was more compact and was available with a slimmer grip taking only an eight-round magazine. (Author's photo)



The Beretta 92FS Vertec, which has a grip more akin to that of the Colt 1911 and an accessory rail. (Author's photo)

humidity is generally very high as the city is located between the Mississippi and Missouri Rivers. I have carried a stainless 92FS in an inside-the-waistband holster next to my body during these summers, often having to wipe large beads of perspiration from the pistol when I took it off at the end of the day. Nevertheless, though I have used the 92FS INOX for many years, it shows no corrosion and still appears bright. Other blued pistols I have carried in this manner have shown rust by the end of the first few days.

Another model, the Brigadier, had a heavier, slightly wider slide. Reportedly, this model was first produced at the request of the US INS (Immigration and Naturalization Service), which ordered its Beretta 96 .40-caliber pistols with the heavier slide in response to the problems of fracturing encountered with some of the early M9s. The slightly wider slide also made it virtually impossible to strip the slide in the manner allegedly practiced by some gang members. After the INS order, Beretta added the Brigadier model to the line in 9×19mm and .40 S&W calibers.

Other specialized models have evolved. In 2003, Beretta USA introduced the Vertec, which was possibly designed with police tactical units in mind. Among its features were a vertical grip (which actually feels similar to the 1911A1); short-reach trigger; slimmer grip panels; integral accessory rail; removable front sight, which might be replaced with a Tritium night sight or a higher or lower sight to adjust point of impact; and beveled magazine well to allow faster, surer reloads. Vertecs were available in 9×19mm or .40 S&W. Another version of the Model 92 that offered special features was the Model 90two, which had more rounded contours, more ergonomic grip, and accessory rail. The 90two was available in both 9×19mm and .40 S&W.

In addition to those variations of the M9/92FS already mentioned, Beretta has also produced specialized target versions and versions for combat competition shooters, including some with a single-action mechanism. Although Beretta has introduced a new pistol, the Px4, the Model 92 remains popular, as its many variations illustrate.

THE BERETTA ON SCREEN

An interesting influence of the M9/Beretta 92 has been its wide use in films and on television. Because of its use by the US armed forces and many high-profile law-enforcement agencies, the Model 92 is often used as a way of showing that a character is a "pro" who uses a pro's gun. Among the more prominent film characters who have used an M9 are: Bruce Willis's Lt John McClane in the *Die Hard* series, Sylvester Stallone

The M9 is widely carried in Iraq and Afghanistan by all types of support troops; in this instance a Navy corpsman in Iraq carries his M9 while giving aid to the locals. Note the lanyard to help retain his M9. (USN)

A US Marine Civil Affairs sergeant who works closely with the locals in Afghanistan carries his M9 in a belt slide holster. (USMC)

as Jack Carter in the American remake of *Get Carter*, Chow Yun-Fat in various Hong Kong action films including the *Better Tomorrow* series, Mel Gibson as Detective Martin Riggs in the *Lethal Weapon* series, Jean Reno as Leon in *The Professional*, Keanu Reeves as Neo in *The Matrix* series, Jackie Chan as Chief Inspector Lee in *Rush Hour*, Nicolas Cage and Sean Connery in *The Rock*, Sylvester Stallone as John Spartan in *Demolition Man*, Steven Seagal as Nico Toscani in *Above the Law*, Clive Owen as Louis Salinger in *The International*, Sue Price as Alex Sinclair in the *Nemesis* series, and in various other films, including some where members of the US armed forces carry the M9. Among the earliest film usages were *A Better Tomorrow* in 1986, *Lethal Weapon* in 1987, and *Die Hard* in 1988. In a few cases, the film makers obviously thought the INOX version of the Model 92 was more "photogenic" and had Jean Reno in *Ronin*, Milla Jovovich in *Resident Evil*, Jason Statham in *The Transporter*, Bruce Willis in *The Last Boy Scout* and *Mercury Rising*, Natasha Henstridge in *Ghosts of Mars*, and Simon Baker in *Land of the Dead* use it. Oh, and we mustn't forget that Rowan Atkinson used an INOX Model 92 in *Johnny English*!

The Beretta's film career took off with its issue to the US armed forces. (Warner Bros/Kobal Collection)

In addition, a few characters used other versions of the Model 92. For example Carrie-Anne Moss as Trinity in the *Matrix* series used an 92FS Compact, a 92FS Centurion, a 92FS Brigadier, and a 92FS Brigadier INOX; and Tom Cruise as Ethan Hunt in *Mission Impossible II* carried a 92FS Centurion and a 92FS Brigadier. In other films in the *Mission Impossible* series Cruise had other versions of the Model 92. In the original 1988 version of *The Bourne Identity*, Richard Chamberlain (playing Jason Bourne) used the original style Model 92 with the frame-mounted safety and magazine release on the butt. This is only a fraction of the Model 92/M9 film appearances, but offers a good précis of the types of action heroes filmmakers have identified with the big Beretta.

The Model 92/M9 has also been the weapon of choice for many television heroes. Once again just to give a sampling, these include Nikki Amuka-Bird and Julie Graham as Samantha Willis and Abby Grant in *Survivors*; David James Elliott and Catherine Bell as Lieutenant Commander Harmon Rabb and Lieutenant Colonel Sarah

Mackenzie in *JAG* (note that in the *JAG* spinoff *NCIS*, agents correctly carry the SIG M11; however, in the new series *NCIS Los Angeles,* characters incorrectly carry the M9/M92); Amanda Tapping as Major Samantha Carter and Michael Shanks as Dr Daniel Jackson in *Stargate: SG1*; Kiefer Sutherland as Agent Jack Bauer in *24*; Michael Imperioli as Christopher Moltisanti, James Gandolfini as Tony Soprano, and others in *The Sopranos*; an array of characters in *Jericho* and in *Lost*; Chuck Norris as Cordell Walker carrying an INOX 92FS in *Walker, Texas Ranger*; and Juliet Aubrey as Helen Cutter and James Murray as Stephen Hart, carrying the INOX 92FS, in *Primeval*. Among very early portrayals were Fred Dryer as Det Rick Hunter in *Hunter* (1984) and Robert Urich as Spenser in *Spenser for Hire* (1985). Once again, this is only a small sampling of the use of the Model 92/M9 on television.

Just as for many years the use of a Colt 1911A1 in films or on television identified the user as "hard," a person to be taken seriously, the Model 92/M9 has assumed that position during the 25 years since the M9 was adopted. The M9 or Model 92 is not yet as iconic as the Colt 1911, but its film career appears to be going from strength to strength.

LOOKING TO THE FUTURE

In 2005, it appeared that the M9 might be replaced as the standard US service pistol. Two previous programs – the Army's Future Handgun System and the Special Operations Forces Combat Pistol – were combined. The new program was termed the Joint Combat Pistol Program, in which it was planned to eventually acquire 645,000 handguns once a pistol was chosen. Many of the requirements reflected the desires of the special operations community, as bid specs included .45 ACP caliber, Picatinny rail, day/night sights, and capability to accept a suppressor.

Other specifications included: double-action/single-action (DA/SA) or double-action-only (DAO) action; trigger pull between 4lb and 6lb (between 1.81kg and 2.72kg) for an SA and between 5lb and 8lb (between 2.27kg and 3.63kg) for a DAO; minimum capacity for standard magazines of eight rounds and for high-capacity magazines of ten rounds, ergonomically designed to fit a range of users falling between the 5th and the 96th percentile of likely operators; a modular grip system to fit an array of hand sizes; length of no more than 9.65in (245.11mm) overall with standard barrel and width of no more than 1.53in (36.82mm) at the widest part; magazine that dropped free of the magazine well when the release button was pressed with the pistol held at any angle between 0 and 45 degrees; capability of firing with the magazine removed; lanyard attachment that did not interfere with magazine changes or operation of controls; an external manual safety – workable with the firing hand – that prevented firing if the trigger was pulled when it was applied; an internal safety that prevented firing if the weapon was dropped or struck a hard blow; and easy field stripping for maintenance.

A member of the US Army's 227th Aviation Regiment practicing transition drills with his M9. (1st Cavalry Division Public Affairs)

Accuracy requirements included a ten-shot group of 3.15in (80.01mm) when fired from a rest at 50m (164ft). To test durability and reliability the pistol had to stand up to a 20,000-round firing test with a maximum of ten stoppages. A pistol would fail the trial if the same part had to be changed more than four times within the 20,000 rounds, or if more than eight parts in total had to be changed. Because the pistol had to be capable of taking a suppressor, sights had to be high enough for use with the suppressor attached. Pistols solicited for the trials were to be in coyote brown. There were other technical specifications, but those listed should give an idea of the principal characteristics desired.

A member of a US Army special forces team in Afghanistan carries his M9 in a left-side thigh holster. This may be because he is left-handed or because he wants it to offer left-side access should his right arm or hand be disabled. (US Army)

More subtle differences between the M9A1 on left and M9 on right include a checkered rather than a ribbed backstrap and twin white dot rear sight inserts instead of a single white half moon. (Author's photo)

In 2006, the designation was changed to "Combat Pistol System," which would consist of a .45-caliber pistol, standard and high-capacity magazines, suppressor attachment kit, holster, magazine carrier for both standard and high-capacity magazines, and cleaning kit and operator's manual. Pistols submitted for evaluation included: HK45, SIG P220 Combat, Ruger P345, Smith & Wesson M&P, Glock 21SF, Beretta Px4 Storm, Taurus PT 24.7 OSS, FNP45-USG, Springfield Armory HS45, and Para-Ordnance LDA 1911. Reportedly, the HK45 was the frontrunner for the contract. However, in 2006, the number of pistols to be acquired was dropped to 50,000, primarily for special operations personnel. Then the program was suspended indefinitely, though independently, the US Air Force retained interest in adopting a pistol in either .40 S&W caliber or .45 ACP to give greater stopping power than the 9×19mm round.

Thus, in 2011 as this is written, the M9 remains in service and it appears likely it will do so for some time to come. The availability of the M9A1, which will take a light or laser on its Picatinny rail, has satisfied some of the requirements for a tactical pistol for special operators. The stopping-power issue is also being addressed – Federal Cartridge has developed a round for the US armed forces that uses a thinner brass jacket. This allows the bullet to deform on impact, causing a much larger wound cavity and, hence, better stopping power. At the time of writing US government orders for the M9 and M9A1 are for over 600,000 pistols. Until those pistols wear out, a new service pistol is not likely to be a high priority.

The most noticeable difference between the M9 and the M9A1 is the accessory rail to take a light or laser. (Author's photo)

CONCLUSION

During its 25 years of US service, the M9 has displayed some disadvantages but also many advantages. Criticisms have generally centered on the early slide problems and the batch of problematic magazines, along with the lack of stopping power. Some users also feel the M9 is too large to make a good "companion pistol." On the other hand, the M9 has proved to be very reliable, aside from the problems caused by one batch of magazines. It has also proved to be quite accurate, aided by its long sight radius. Despite its size, the M9 has a comfortable grip for most users, offers good ergonomics, and disassembles readily for cleaning or maintenance. However, there have been reports from Iraq of corrosion problems with M9 barrels. These problems may have arisen because the soldiers did not properly clean the barrels due to the lack of brushes and picks to get the pistol really clean. The open slide is viewed by some as a disadvantage since it allows dust, dirt, or sand to enter the action, while others see it as an advantage that allows that same dust, dirt, or sand to escape easily from the barrel/slide assembly.

A portion of the pressure to adopt a new .45-caliber pistol has come from the special operations community, which sometimes uses pistols as offensive weapons during raids or missions that require infiltration in civilian clothing. For much of the US armed forces, however, the pistol is a defensive weapon carried in case of deadly contingencies. In Afghanistan and Iraq, the danger of attack has dictated that support troops are constantly armed with an M9. For some administrative and medical personnel the greatest problem has been getting them to remember to carry their M9s with them everywhere. For these members of "tail units" who are not as weapons-oriented as members of "teeth units," the M9 has performed its mission quite well.

In fact, overall the M9 has performed well during the War on Terror. Since most troops do not have their M9s issued permanently, they receive

them when they enter the combat zone and turn them in when they leave. Armorers check the pistols over and reissue them to the next arrivals. As a result, many M9s have seen years of service in Iraq or Afghanistan, though except for familiarization firing and qualification they may go months without being fired.

Ironically, as the November 5, 2009, Fort Hood shootings of more than 40 soldiers by Nidal Malik Hasan, an Islamist officer in the US Army, show, the US Army does not trust its soldiers at home with weapons. Had officers and NCOs on the post been armed with M9 pistols, Hasan would have been dealt with much more quickly. Nevertheless, on many US military posts, even those MPs armed with the M9 are limited to five rounds in the magazine and are not allowed to carry a round chambered. Obviously, on bases within the USA, the M9's safety features and large magazine capacity mean little.

Despite its value as a secondary weapon or a primary weapon for support personnel, the pistol is not viewed as a high-priority weapon in the US armed forces. As a result, given the large number of M9s in service and the cost of replacing them it is unlikely that a general-issue replacement pistol will be adopted in the near future. The M1911 served for more than three-quarters of a century before being replaced. The M9 has now reached a quarter of a century. Though it is doubtful that it will last as long as the M1911, the M9 is likely to be around for quite a few more years.

A US Marine AH-1 Cobra pilot in Iraq carries her M9 in an M-7 shoulder holster. (USMC)

GLOSSARY

BLOWBACK: An operating system that relies on the inertia of the slide to delay opening, rather than a locking block

CHAMBER: The part of the pistol in which the cartridge is contained when it is fired

CHECKERING: Cross-hatching on stocks or a pistol's grip to help the user grip it more effectively

CLIP: Although sometimes used synonymously with "magazine" a clip is actually a device that carries cartridges and allows them to be "stripped" into a magazine or directly into the weapon

COMPENSATOR: A muzzle brake used on some competition pistols to reduce muzzle flip by redirecting gas from the fired round

CROWN: The bevel or countersink on a pistol's barrel

DA (DOUBLE ACTION): A handgun that allows the hammer to be cocked and the pistol fired by a long pull on the trigger

DISCONNECTOR: Mechanical device that limits a pistol to firing only one round for each pull of the trigger

EXTRACTOR: The part that removes a spent cartridge case from the chamber after firing

FIELD STRIP: To disassemble a firearm for standard maintenance away from an armory

HAMMER: The part of a pistol that is released through the sear by pulling the trigger and that falls forward striking the firing pin to ignite the cartridge

LOCKED BREECH: Unlike a blowback pistol, a locked-breech is locked in place until pressure drops enough to allow the unlocking of the slide so that it can recoil and extract the spent cartridge case

MAGAZINE: The device in which cartridges are carried for insertion into the pistol, normally inserted into a magazine well in the grip

MAGAZINE FOLLOWER: The plate over the spring in a pistol magazine that positions the cartridges for feeding

MAGAZINE RELEASE: The button or lever that must be operated to allow an empty magazine to fall free from the pistol; when inserting a fresh magazine it must be thrust home with enough force so that the release engages to hold the magazine in place

PARKERIZING: An electrochemical phosphate conversion coating used to protect a pistol from corrosion

SEAR: The part that translates movement from the trigger to the hammer or sear to discharge the pistol

SELECT-FIRE: A weapon that may be fired on semi-auto or full auto fire by means of a selector switch of some type

TAKEUP: Free trigger movement before the firing pin, or sear is released

THUMB SAFETY: A safety which may be applied to lock the trigger and/or hammer on a pistol so that it may not be fired until the safety is pushed off, generally with the thumb of the shooting hand

TRIGGER: Portion of the pistol's action that the shooter's finger operates to release the firing pin or sear

TRIGGER STOP: Device added to competition pistols to limit trigger overtravel

ZERO: Sight setting in which the point or impact and point of aim coincide

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Editor's Note

The following will help in converting measurements referred to in the text between US customary and metric measurements:

1 mile = 1.6km
1 yard = 0.9m
1ft = 0.3m
1in = 2.54cm/25.4mm

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