# The 1911 Browning/Colt Pistol, A Short History

## By **David Tong**



Illustration courtesy of Colt's Mfg. Co., Inc.

During the latter part of the Nineteenth Century, after the advent of centerfire metallic ammunition, Great Britain and the United States settled on .45 caliber (.45 inch bore) handguns for the personal defense of officers and senior non-commissioned officers. There were several reasons for this.

First, black powder, the only gunpowder of the time, was an explosive and did not burn progressively, as does smokeless (nitrocellulose) powder. Typical bullet muzzle velocities (MV) ran below about 1400 fps from rifles and below about 950 fps from handguns. Black powder left a great deal of highly corrosive residue in the barrel and action after firing, requiring very thorough cleaning of the gun immediately after use.

Second, up to this point the only bullet material was cast or swaged lead and one cannot drive bullets made of this very soft metal at high velocity without "stripping" and clogging the rifling of the barrel with lead, causing rapid loss of accuracy. Again, frequent and thorough cleaning was required.

The smaller the bore (caliber), the more quickly a gun clogged and the greater the cleaning problem caused by black powder and lead bullets. Naturally, these conditions favored big bore rifles and handguns. The U.S. Army's service rifle cartridge was the .45-70 and the service revolver cartridge was the .45 Colt. Thus, shooters of the day were very accustomed to .45 caliber firearms and tended to mistrust smaller calibers, particularly those below about .36 caliber.

In the early 1880s, the French came up with a repeating rifle whose cartridges used the then new smokeless powder, as well as gilding metal (a copper/tin alloy) bullet jackets to allow the bullets to firmly obturate within the rifling for greater accuracy at higher speeds without leading. By the 1890s, nearly all nations had adopted rifles and handguns firing jacketed bullets at higher speeds (generally around 2000-2400 fps MV).

The debate over what created stopping power was just as hotly debated then as now. Fans of the new small bore (.26-.32 caliber), high velocity rifle cartridges presumed that the same advantages would carry over to handgun cartridges, but it quickly became obvious that it was not that simple at the lower velocities attainable from handgun barrels.

In addition, there was the Hague Convention of 1899, specifically Declaration IV, 3 which stated: "Declaration concerning the Prohibition of the Use of Bullets which can Easily Expand or Change their Form inside the Human Body such as Bullets with a Hard Covering which does not Completely Cover the Core, or containing Indentations." This declaration states that, in any war between signatory powers, the parties will abstain from using bullets that expand or flatten easily in the human body.

This was ratified by all major powers, except the United States. To this day the U.S. has adhered to the Convention without officially ratifying it. The notion that we should engage in discussions over the implements of war was started by no less than Abraham Lincoln in 1863, based upon something named the Lieber Code, which provided a template for the Conventions of 1899 and 1907.

Early jacketed or lead alloy handgun projectiles, whether fired in revolvers or semiautomatic pistols, were of round nose design. This was to ensure ease of loading by hand or mechanism. The round nose is not a very good shape for a bullet in terms of terminal effectiveness if it is a non-expanding type approved by the Hague Convention Dec. IV.

Those that subsequently were adopted, whether the 7.62mm Russian Nagant (108 grain FMJ bullet at 1100 fps), the 7.65mm Luger (93 grain FMJ bullet at 1220 fps), or the 7.63mm Mauser (86 grain FMJ bullet at 1400 fps), did not distinguish themselves on the battlefield. The relatively high velocity Mauser round could be effective if it struck bone and created secondary projectiles in the form of bone splinters, but not so much otherwise.

During the Philippine Insurrection (1899-1913), stories circulated about drugged Muslim Moros with Bolo knives successfully surprise attacking American personnel. The Americans were trying to defend themselves at very short range with the then standard U.S. Army issue .35 caliber Colt DA revolver, which fired a 150 grain round nose lead bullet at only 770 fps MV. The results, predictably, were less than desirable.

This situation inspired the U.S. Army to send old stocks of the Colt Single Action Army revolver in .45 Long Colt caliber to address the miserable stopping results. Very little actual documentation existed regarding the terminal effect of the smaller (.38 Long Colt) round, but the big .45 Long Colt round (255 grains at 930 fps MV) provided better stopping power, as well as psychological comfort, and complaints diminished.

The notion of the superiority of the big bore (specifically .45 caliber) handgun persisted around the turn of the century in the U.S. and Great Britain. The Army wanted a new .45 service pistol to replace the underpowered .38 Long Colt revolver. This was justified, in part, by the Army's scientifically inconclusive and incompetently conducted Thompson/LeGarde ballistic tests, which resulted (surprise, surprise!) in the recommendation of a .45 caliber handgun cartridge for use by our military forces and an autoloading pistol to shoot it.

## **Pistol Development**

John Browning, the Utah mechanical wizard, was developing short recoil operated semi-automatic pistols throughout the first decade of the 20th Century. His FN 1900 was the first pistol to feature his invention, the operating slide, later used by all semi-auto centerfire pistols. A series of so-called Military models developed and patented by Colt (in collaboration with Browning) quickly followed.

Two of these were the Models 1905 and 1907, which took into account the desire of U.S. Army Ordnance officials of the era to adopt a .45 caliber service pistol. Browning worked primarily with the Union Metallic Cartridge Company to develop a suitable .45 caliber cartridge, originally using a 200 grain bullet, but later with a 250 grain bullet similar to the one used in the old Colt SAA revolver.

The 1905 and 1907 pistols were of the older pattern Colt tilting barrel designs by Browning. They had only a removable, hardened steel crossbar located at the front underside of the slide to provide a mechanical stop to the rearward motion of the slide.

The stress on this part was great and failure of the part would cause the slide to fly off the frame into the shooter's face.

The 250 grain projectiles tested evidently had too much recoil and the 200 grain was dismissed for insufficient sectional density. Also, the pistol's grip angle was 84-degrees, nearly perpendicular to the barrel, which accentuated the recoil and made natural pointing of the pistol awkward.

Around 1909-1910, some new Colt prototypes designed by Browning went into Army trials. These featured the now ubiquitous 74-degree grip angle, the one shared by the majority of all semi-automatic pistols in use today. In addition, the Army requested a grip safety at the rear of the grip frame. John Browning thought this superfluous, since his design already incorporated an inertia firing pin and a manual (thumb) safety, but complied.

The grip safety provided a trigger block that prevented rearward trigger motion unless a firm firing grip was used to depress (release) the safety. A small tab projects forward from it and rotates out of the way to allow the trigger to move to the rear and trip the sear to fire the pistol.

People who understand firearms parts and their function realize that this is the same sort of function that has been provided recently and more elegantly by Glock and others to prevent unintentional rearward motion of a trigger blade until it is automatically disengaged. The grip safety also helped ensure that only people of a certain hand size or strength would be able to easily depress it, causing a problem for those with small hands (especially women). Some argue the grip safety is a clumsy and needless affectation.

The design of the thumb safety on Browning's new service pistol was another example of Browning's mechanical genius. Rather than the clumsy thumb safeties of the Broomhandle Mauser, Luger and other European pistol designs, which required the shooter's thumb to push up or forward to fire, Browning's more ergonomic, frame mounted safety lever pushes down to fire.

After surviving a number of dust, mud, rusting and sand tests, as well as extensive test firing lasting six-thousand rounds through one pistol, on March 29, 1911, the new handgun was named the Model of 1911 and adopted by the U.S. Army. Caliber was .45

Automatic Colt Pistol (ACP), using a 230 grain RN/FMJ bullet at a MV between 825-855 fps.

These early martial pistols are usually marked on the right side of the slide "Model of 1911, U.S. Army," though very much rarer "U.S. Navy" marked examples are found. None were marked "U.S. Marine Corps," but these were pulled from Navy stock within serial number ranges designated for their service. The Navy and Marine Corps adopted the pistol in 1913.

Colt pre-war production through July, 1914 amounted to approximately 89,600 1911s for the U.S. military. During the Great War (July 1914 - Oct 1918) approximately 368,000 1911s were built in the U.S. by Colt. In addition, the government Springfield Armory built 60,615 and Remington/UMC produced 21,676 1911 pistols. The military requirement for handguns after the U.S. entered the war was supplemented by Colt and S&W revolvers adapted to .45 ACP caliber. The original 1911 design, with its small sights, blued finish and straight/smooth mainspring housing served through the Great War and into the 1920s.

#### The 1911A1

In 1926, the Army slightly redesigned the 1911 to make it easier for smaller handed people to use. The trigger blade was shortened, two semi-circular cuts were made in the frame behind the trigger guard to allow shorter fingers access to the trigger, the grip safety tang was lengthened to prevent hammer bite, an arched mainspring housing was installed to lock the pistol better into the heel of one's hand and the front sight was made into a flat blade to make it (somewhat) easier to see.

Many of the original 1911 pistols remaining in inventory were subsequently converted to "A1" specification. The 1911A1 pistol served the U.S. as our official service pistol for the next 59 years.

Other countries that used the 1911 included Mexico, Argentina, Brazil and Norway. Norway even built their own Model 1914, differing cosmetically by its use of a slide stop with a much lower thumb pad, which arguably is easier to reach.

When the Second World War broke out, it was readily apparent that many more pistols needed to be built than Colt could supply. The traditional blued finish gave way to Parkerizing, walnut grips to plastic and Colt, Ithaca, Remington-Rand, Singer Sewing Machine, Union Switch and Signal and other manufacturers cranked out approximately

1.9 million 1911A1 pistols. In addition to the U.S. military, the 1911 was used by various Allied forces, including those from the Commonwealth of South Africa and various British commando units, including the famed Special Operations Executive (SOE).

At the end of WW II, the U.S. cancelled most military contracts, including those for 1911A1 pistols. Existing pistols were kept in service by fitting new parts, as required. Major repairs were often accompanied by refinishing the entire pistol. Thousands of 1911s were refurbished in U.S. government armories, their frames marked with the armory initials. (For example, SA=Springfield Armory, which should not be confused with the current civilian importer that adopted the same name.)

Old Slabsides remained standard issue through the Korean and Vietnam wars. Although no longer standard Army issue, it was even used in small numbers in Desert Storm. As late as the early 1990s, I vividly recall Marine MPs at El Toro Marine Corps Air Station in California still wearing the grand old pistol. When I asked, they emphatically stated that they were NOT Berettas!

### **Later Military Variations**

General Officers' pistols were built by Rock Island Armory (RIA), and designated the M15. This was presented to these exalted officers with a deluxe leather belt and opentopped holster, a buckle with our National Emblem on it and a leather double magazine pouch. The pistol was issued between 1972 and 1981, fitted with a 4.25 inch barrel and finished in polished blue with checkered walnut stocks. After 1981, the flag ranks were again reduced to carrying standard issue 1911A1s.

In the late 1970s it was the U.S. Air Force, which had previously spearheaded the military trials that led to the adoption of the M16, that argued most vociferously for the adoption of a modern double action 9x19mm pistol with a large capacity magazine. We know how well the M16 worked out. Without disrespect to our nation's air arm, maybe our ground personnel should have had a bit more to say about the matter?

To this day, the Navy usually goes their own way with small arms issuance. The Navy's official rifle is still the vintage M14 (7.62x51mm NATO caliber) and while the naval service has largely issued Beretta 9mm pistols, the Marines have adopted the M45, a Colt-produced enhanced version of the 1911 for special operations personnel. This pistol greatly resembles recent civilian and law enforcement modified versions of the 1911 pistol.

The Marines never fully abandoned the 1911 and modified versions of the pistol were built in their Precision Weapons Section at Quantico, Virginia. Earlier on, these were built on USGI spec frames and slides, but newer civilian sourced components made from better steel with tighter tolerances have made the conditioning process easier and the product more durable.

These talented armorers also build the Marine Corps sniper rifles, as well as pistols for the renowned shooting team at the Camp Perry National Matches. It was there that GySgt Brian Zins, a member of the USMC Pistol Team, won more National Championships (11 so far, including two since his retirement from the Corps) than any other person in history. He uses the 1911, for the past two years pistols built by Cabot Arms of Pennsylvania.

## Into the 21st Century

The U.S military has traditionally believed that the pistol plays a useful role in armed service, besides being a badge of rank. Some of it is the culture of America, of the self-sufficient rugged individual, compared to the socialist/statist tendencies of most of the rest of the world.

As a practical matter, if we have a rifle of questionable reliability in adverse conditions, it behooves us to provide the troops with an effective, high capacity sidearm in case something goes "Tango Uniform." (Perhaps adopting a more powerful, more reliable service rifle that would eliminate the necessity for carrying the additional bulk and weight of a "back-up" pistol and its ammunition might be a preferable solution? -Editor)

It seems as if the NATO 9x19mm cartridge with hardball ammo has lost a lot of its military luster. Once again, we find ourselves pondering a new service pistol. It seems to this writer that, if we continue to observe Hague 1899 Dec. IV and its prohibition of expanding bullets, we should at least go back to big hardball for all the reasons, real or imagined, that served us so well for most of a century.

In the "modern combat shooting" disciplines of IPSC and IDPA the 1911 pistol in .45 ACP caliber remains very popular. In addition to .45 ACP, Colt, Kimber and others have offered civilian 1911s in other calibers, including 10mm Auto, 9mm Luger and .38 Super, but .45 ACP has always accounted for the lion's share of sales. Modern 1911s are used by some law enforcement agencies and many civilian shooters, where its ease of

inexpensive ergonomic modification and development still captures the popular imagination.

Its main strengths these days are its slim profile (due to its single stack magazine) and single action trigger mechanism. (Oddly, the limited capacity, single stack magazine and SA trigger are also perceived as its greatest weaknesses by its detractors. -Editor)

The 1911 pistol's main mechanical weaknesses are its double feed ramps and spring steel internal extractor. Most autoloading pistols have gone to single straight ramps, higher magazine feed lip release angles and coil-sprung, cross-pin retained external extractors for greater reliability. However, from experience, I know a 1911 pistol that is well built and tuned correctly is sufficiently reliable for my purposes. These are, admittedly, not as demanding as military service requirements.

Some find the all steel 1911 excessively heavy and it behooves one to wear a double thickness sewn leather gun belt and a quality holster to provide good weight bearing and consistent location for comfort. I have never found it much of a burden. I consider it "comforting, thus comfortable," with due respect to Clint Smith for my paraphrasing! For going onto three decades I have been wearing 1911 pistols.

Then, there is the still legendary stopping power of the .45 ACP cartridge, which with optimum JHP ammunition achieves a near statistical tie with the vaunted .357 Magnum revolver cartridge, even though it operates at half of that round's pressure and at 55% of its velocity. Who says caliber doesn't matter?

Finally, I think that the widespread use of CNC machining has made fabricating steel parts and producing this previously labor-intensive handgun much more affordable. A decent quality 1911 can be had for little more than some of the plastic or aluminum framed pistols so prevalent these days. There are more companies manufacturing 1911 pistols today than any other model of handgun.

Just like the earlier Colt Single Action Army revolver, I think the modern 1911 pistol will remain an enduring American instrument of justice and recreation long after most of the current crop of autoloading pistols have disappeared. In addition, a phalanx of ardent collectors have ensured the continuing value of classic, original condition 1911 pistols.