VGCA VISITS THE COLT FACTORY

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Photos by Rob Becker, VGCA (unless otherwise attributed)



Fourteen members of the Virginia Gun Collectors Association visited Colt Manufacturing LLC in West Hartford, Connecticut on September 20, 2017. The visit was set up by VGCA Vice-President Rick Nahas. Colt extended the welcome mat and provided a superb guided tour of the factory and custom shop, as well as a meeting with the Colt research staff. Colt has had its ups and downs in recent years, like much of the firearms industry, but it appears to be in good shape. The venerable firearms manufacturer had a rough but has emerged from Chapter 11 bankruptcy and while military and law enforcement/security sales are still important, it appears to be pivoting back to the civilian market.

A case in point is the recent introduction of the Colt Cobra revolver. Designed for concealed carry, it is all steel construction, small frame, .38 caliber (+P capable) with a 2" barrel and fiber-optic front sight. It holds 6 rounds and has a Hogue overmolded grip to enhance control.



Colt Cobra. Photo - Colt.

The Colt factory, which is co-located with Colt company headquarters, has been at its current location since 1994. The factory is divided into three sections – 1) handguns, 2) M-240 General Purpose Machine Guns, and 3) rifles (M-16 and M-4). Colt makes standard M-240's and M-240L's, or light. According to Bob Grainger, the Colt 2nd shift Director of Operations, who graciously took the group on an outstanding and informative tour of the factory, there are 450 factory employees operating in two shifts, although Colt can surge to three shifts. Colt can make 1,000 guns a day with plenty of surge capacity. The large manufacturing area was an impressive mix of old and new technology. The old technology carried on the tradition of Colt quality and individual attention to detail while the vast array of modern automated and computerized manufacturing machines brought efficient, cost-effective and ultra-precise fabrication to the mix. For instance, Colt invested \$10 million in new computerized machinery to make the M-240 machine gun. Quality control and multiple inspections were evident throughout the manufacturing process. Colt uses 100% U.S. made parts in its guns and manufactures most of the components on site. Raw forgings and some smaller parts, such as springs, pins and barrel nuts are purchased from sub-contractors, but they still have to go through a rigorous inspection before they are allowed on the factory floor.

At the beginning of the factory tour, the VGCA members saw the Cobra line, where a special order of Cobras was being fabricated for the Friends of the NRA. Colt graciously escorted the group around the factory where it observed the equipment in operation. The group saw milling machines, heat treating equipment, the chemical finishing department where bluing took place, computerized engraving of dot-matrix serial numbers and other markings, hardening of parts in furnaces, phosphating of barrels and other components, rifling of barrels and robotic assembly of components to exact tolerances. Polishing is still done with old technology – humans and polishing belts. Barrels come in as 20 foot long blank rods, are cut to the proper length and rifled in the factory by button broaching. Those rifled barrels that are to be chrome lined are sent to a sub-contractor but are still put through rigorous testing when they are returned to the factory. Colt is known for the tight tolerances of its guns and there are quality control inspections and testing of components, sub-assemblies and finished products all along the manufacturing process to ensure that both government and civilian products meet the highest standards and perform flawlessly.



Colt Trooper Patrol Carbine. Photo - Colt.

All Colt firearms, both military and civilian, are tested before they leave the factory. There is a 100 yard range for testing rifles and machines guns and a shorter range for handguns. The civilian guns are made to the same high standard as the military weapons. Colt has many U.S. government contracts and there are three government inspectors in the factory on a full-time basis who have the authority to pull any part or gun destined for the government and test it at any time. Guns are tested for both targeting and accuracy, and for function and endurance. The targeting and accuracy test is computer controlled and the results recorded for each firearm. The function and endurance tests for government contract guns (including full-auto tests) is extremely demanding and includes firing 6,000 rounds from selected firearms. An interesting government inspection that ensures interchangeability of parts involves randomly selecting 10 completed guns and completely disassembling them down to the smallest of the 170-180 components. The parts are mixed together and the guns reassembled. They are then test fired for

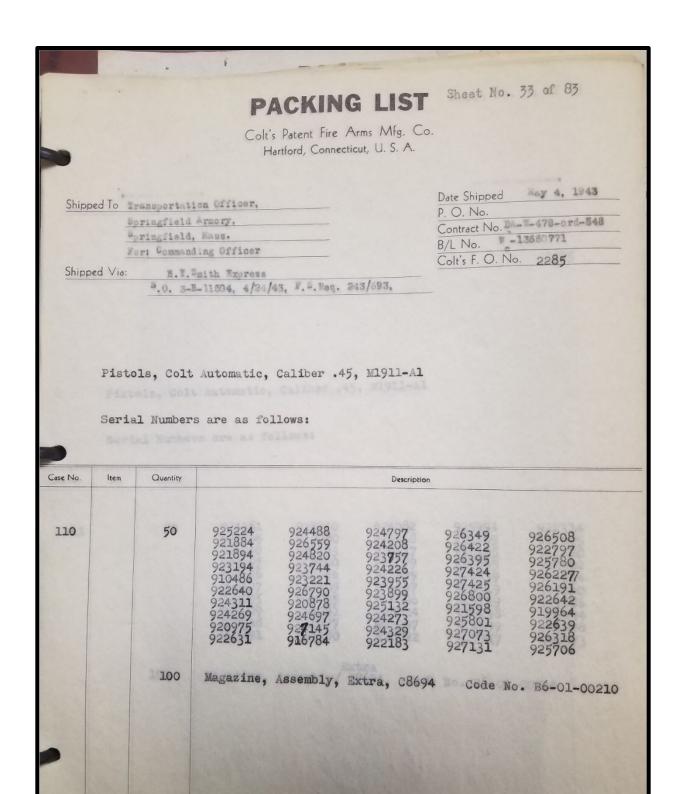
accuracy and for function/endurance. Colt has many Foreign Military Sales contracts and deal with 90 countries. These guns are as rigorously inspected as those destined for the U.S. military. Colt uses the best quality ammunition in these tests. Colt also manufactures the M-203 Grenade Launcher at the factory that is attached to M-16's.

One of the highlights of the tour was a visit to the Colt Custom Shop. Here master gunsmiths assemble guns by hand and tune them to meet special orders from customers. The custom shop has a two-year backlog. The engraving section was a star attraction of the tour. The VGCA group saw and talked to the master engravers who were there. All engraving in the Custom Shop is done by hand and the engravers are true artists and masters of their craft. Customers can send in photos of what they want and the artisans will translate the photos into magnificent works of art. The people in the custom shop, as well as the workers on the factory floor were friendly and seemed to display a pride in their work as well as the Colt tradition.



VGCA members discuss Colt shipping documents with Ms. Haynes (Colt Historian) – and examine individual records in detail.

The last part of the tour was extremely fascinating – the group met with Colt Historian Beverly Haynes and Colt Archivist Paul Szymaszek who allowed them examine original Colt paper records. Although Samuel Colt started manufacturing revolvers in 1836, and Colt Manufacturing was established in 1855, Colt shipping and production records go back only as far as the Civil War (1861) with a gap from 1864-1871. The records examined were in bound books and included records from the Civil War, 1878 and 1883 shotgun records, World War Two 1911 production for 1943, and Colt Python records for the 1950's. Haynes and Szymaszek talked freely about the intricacies and difficulties of research in the Colt archives. For instance, they have to search by serial number, which are usually not in numerical order, there was no cross-referencing of gun with customer in the old records, and the hand written entries can hard to decipher because of bad handwriting, strange abbreviations and/or fading ink. While Colt began scanning the paper records about 15 years ago to preserve them they were not indexed. So if you were wondering why Colt charges as much as it does for an archive search it is because of the time and effort involved.



One page of a WWII-era shipping inventory leaving Colt for the Springfield Armory in May 1943. Document lists 50 M1911A1 serial numbers. Note this is one page of 83 similar pages of 50 serial numbers that left Colt on that date – that is 4,150 M1911A1 pistols shipped in one day! Also note that the numbers are <u>not</u> sequential – certainly a challenge for researchers!

Visiting the Colt factory was worth the long drive from Virginia to West Hartford, Connecticut and back. Several VGCA members took the opportunity to visit Springfield Armory while they were in the area. The VGCA is especially grateful to Bob Grainger, Beverly Haynes, Paul Szymaszek and the other Colt employees for taking the time to make this a memorable visit.



Onion dome at the original Colt factory in Hartford, CN (not the current factory). Note the infamous Colt "Prancing Pony" on top!