

The Colt Monitor: A Rare Improved BAR

Eric Richard

Collections Assistant Texas Ranger Hall of Fame and Museum

In June of 2022 our museum began to look more into a rifle in our collection known as a Colt Automatic Machine Rifle R80. Better known as a Colt Monitor. The rifle was claimed to be owned by Frank Hamer; a retired Texas Ranger who is well known for the pursuit of the Barrow Gang (“Bonnie and Clyde”). The original objective of this was to find more information on the history of this rifle but it developed into a three-month investigation into the history of these rifles and a goal to find how many are still in existence.

Terms

Browning Automatic Rifle (BAR)- Designed by firearm designer John Browning (1855-1926) as a light machine gun for use in WWI, used by many nations for many years after.

Colt Automatic Machine Rifle (CAMR)- Produced by Colt Patent Firearms Company. Based on Browning Automatic Rifle from 1919 to 1942.

Colt Patent Firearms Company (Colt)- Now known as Colt Manufacturing Company LLC. Was the manufacture of the CAMR models.

Fabrique Nationale d’Armes de Guerre (FN)- European firearm manufacture who had a contract to produce the BAR in Europe. Now known as Fabrique Nationale Herstal but still referred to as FN.

Mostly Monitor- Firearms that uses Monitor Parts on a receiver that is not a Colt Automatic Machine Rifle 1925/R75 or 1931/R80 receiver. Could be all Colt parts, but not all from the same CAMR.

History of Colt Monitors

The Colt Monitor’s story starts with famed firearm designer John Moses Browning (1855-1926). Browning designed some the most well-known late Nineteenth and early Twentieth Centuries firearms including the Winchester Model 1887 Shotgun, Remington Model 8 rifle, and Colt 1911 pistol. Browning had several ideas of how to create a weapon that could fire multiples rounds without the need of multiple barrels like the famed Gatling gun. Browning’s first successful endeavor into machine gun technology was the Colt-Browning M1895. This machine gun’s main components and gas operated system would become the basis for the BAR. The BAR would see significant use in the first half of the 20th century, including both world wars and with several militaries around the world. The BAR was pushed through the United States Patent Office by Colt’s main patent lawyer Carl J. Ehbett when the US entered World War I. Colt hoped to have it approved for use with American forces before the war ended. The US military would

order 288,174 produced but only 174,000 would be finished by the time the contract was canceled in 1919. The BAR was produced by several companies including Colt.

In an agreement with the war department, following the end of World War I Colt retained ownership to the patents for the BAR. The original M1918 BAR is a machine gun weighing sixteen pounds without ammunition. Colt began to sell the BAR under the name the Colt Automatic Machine Rifle (CAMR). The first CAMRs were the Model 1919. The 1919 was made from an overrun of M1918 BAR and look nearly identical to the original BAR. It held twenty rounds of .30-06 Springfield. The first serial numbered Model 1919 was C-100251 but several were produced before this without the CAMR serial number system. Around 1,093 CAMR Model 1919 were made prior to the Model 1924.

The CAMR Model 1924 brought in the innovation of a pistol grip behind the trigger. This design was inspired by Fabrique Nationale d'Armes de Guerre(FN) of Herstal, Belgium. FN had the contract with Colt to produce BARs for the European and African markets. FN found that under full automatic fire, a pistol grip allowed for greater control of the rifle. The Model 1924 also had the innovation of a dust cover over the ejection port. This was a purely military idea inspired by the muddy trenches of World War I. Only fourteen CAMR Model 1924s were sold in 1924 and could possibly be the only model 1924s produced in the entire run of CAMRs. This cannot be proven without more solid paperwork from Colt or locating any surviving Model 1924s.

The next model was the CAMR Model 1925. It carried many of the same characteristics from the Model 1924. In addition, it had a folding bipod, a finned barrel for better cooling, and a second dust cover for the magazine well for when it was not in use. This model would later be renamed the Colt Automatic Machine Rifle R75. Its improvements made it the heaviest CAMR at twenty and a quarter pounds.

Due to the rise in crime with the start of prohibition; many police departments found themselves dealing with automatic weapons such as the Thompson submachine gun and BARs. Colt responded with a lighter version of the Model 1925/R75 and turned several Model 1925/R75 into a new model they called the Colt Monitor in 1931. This improved model became the Model 1931/R80. Based on the Monitors still in existence, it appears that Monitor R80s and CAMR R75s were produced at the same time along side one another. The first and second Monitors were sold to the Charlestown Prison of Boston, Massachusetts on March 25, 1931 (C-102792 and C-102793) and both are marked as Model 1925 Colt Monitor. There is one Monitor that is a later serial number marked with Model 1931 Colt Monitor. All Monitors later than the Model 1931 are marked Model R80. The Monitor had a smooth barrel instead of the heavier finned barrel of the R75s. The magazine well dust cover was removed as it was inferred that these weapons would be stored in clean law enforcement armories instead of being used in muddy trenches. Lastly the bipod was removed and a sizable compensator, from the Cutts company, was attached at the end to deal with the CAMR's tendency to climb from the recoil of full auto fire. The Monitor was only sixteen pounds making it the lightest CAMR produced. About 125 to 150 Monitors were produced from 1931 to 1942.

The last CAMR was the Model R75A and was sold almost exclusively to the Dutch military. The CAMR production came to an end with Americas entry into World War II and Colt switching back to the production of BARs and other models for the war effort. As many as 1041 CAMR R75A were produced. In total about 5,024 CAMR were produced from 1919 to 1942.

Why So Rare?

Several factors have converged that have made these rifles very rare and difficult to find. In 1934 the Federal Bureau of Investigation (FBI) made the Monitor their official fighting rifle and ordered 86 of them on June 7, 1934. Eleven went to the US Treasury Department. These Monitors fate are unknown but the FBI and Treasury could have either scrapped them, sold them as surplus, or transferred them to the various military branches. Potentially there is a Monitor in the FBI firearm reference collection in the FBI Laboratory but this will require more time to confirm.

In 1934 the National Firearms Act was introduced and put a \$200 transfer tax on machine guns (in 2022 about \$4,400), on a firearm that already cost as much as \$300 (\$6,400 in 2022). This was the height of the Great Depression, and such an expensive firearm was just not practical for most police budgets. For this same price a regular police department could afford several shotguns instead of arming only one officer with a Monitor. The Monitor was only advertised in Colt law enforcement catalogs and not the public Colt catalogs. Any who could afford one was not aware unless they received a law enforcement catalog or worked in law enforcement.

Lastly in 1986 the passage of the Firearms Owners Protection Act made it very difficult to acquire these rifles and caused many to either be destroyed by law enforcement or donated to museums. The 1986 act made it illegal for the average citizen to own machine guns produced after 1986. It also required that machine guns manufactured prior to 1986 be registered during a grace period or become a felony to own or sell. This has contributed to at least one confirmed Monitor being cut in half over fear of federal prosecution. No telling how many were stashed away or destroyed after 1986.

Where Have They Gone?

It is difficult to say where all the Monitors have gone. Over the course of about five months in 2022, I have attempted to find all known Monitors still in existence. This consisted of calling over 300 museums, contacting state level law enforcement agencies, the federal law enforcement, the US military branches, and several private collectors to locate known Monitors. I have concluded that as many as nineteen of the original 125+ still exist. Of the current Monitors I have located, I have confirmed where eleven are with various museums, law enforcement agencies, and private individuals. I have identified five surviving Monitors that could be in private hands. They could also have been simply scrapped as surplus by several different law enforcement and military agencies that have owned Monitors in the past. In all about 106 to 131 Monitors have likely been lost between 1941 and 2000.

Of the original 125+ produced; eighty-six were sent to the FBI, eleven to the US Treasury Department, and one acquired by former Texas Ranger Frank Hamer at some point. Twenty-four

were sold to state prisons, banks, security companies and city, county, and state police departments. Three Monitors were made as either test models, kept at FBI headquarters for training, or sold to private individuals or governments around the world. It is unclear how many were sold to governments outside of the United states, but possibly a dozen were sold to the Gendarmería Nacional of Argentina in the 1930s.

CAMR Data

5,024+ Colt Automatic Machine Rifles were sold internationally and domestic, but the number produced could be higher than this. This includes Model 1919, Model 1924, Model 1925/R75, Model 1925 Monitor, Model 1931/R80 Monitor, and Model R75A.

- Serial numbers start at C-100251 with the Model 1919 in June 28,1919 and end at C-105359 with Model R75A in 1942.
- 5,108 Difference between first and last serial number for CAMRs.
- Most definitive numbers are that 125 Monitors and 1,024 R75A were produced.
- All other CAMR models total about 3,942 produced.
- CAMR made before 1924 is 1093, likely all model 1919s.
- CAMR between 1924 and 1925 is only 14, likely all model 1924s.
- CAMR sold between 1925 and first Monitor is 1416, likely all Model 1925/R75 but could also be Model 1924s.
- R75A are in C-104318 to C-105359. 832 of these were sold to the Netherlands Purchasing Commission in 1942.
- Estimated numbers are low for Model 1925/R75 as it appears to have continued to be made alongside the Model 1931/R80 Monitors.

Monitor Data

Likely range for Monitors is between C-102792 to C-104317, but serial numbers are not in sequential order. Earliest known Monitor is C-102792 and latest Monitor known is C-104120. There are also several Mostly Monitors or clone Monitors such as one that was owned by author James Lester Ballou who wrote the book on BARs. Several European FN produced BARs have also been fitted with Monitor kits and have been seen at various auction houses and museums. Only a handful of Monitors have well document history of their original purchase date. The date of purchase very well could not be the same year they were manufactured. The serial numbers are also intertwined with CAMR R75s and so we only know a likely range of serial numbers.

Possible Date Range for Monitors: Based On Order Dates

March 25, 1931 to April 23, 1931	C-102792 to C-102801
...To December 5, 1931	...to C-102805
...To May 24, 1934	...to C-103110
...To 1938	...to C-103209
...To 1941	...to C-104317

Known Monitors

There are as many as eighteen to twenty real Colt Monitors still in existence. There are nine Monitors in public collections. Five confirmed in private collections but this could be higher, this requires more research. One is with a law enforcement agency. At least two known replica Monitors are in private and public collections. There are several Monitors that have been referenced in books for which I have yet to find current locations. There are three that I have yet to confirm if they are real or still exist. My research indicates that some Monitors had been exported but where they are now is not known without more in-depth research.

JOHN EDGAR HOOVER
DIRECTOR

Division of Investigation
U. S. Department of Justice
Washington, D. C.
June 7, 1934.

MR. TOLSON
MR. CLEGG
MR. GLAVIN
MR. LADD
MR. NICHOLS
MR. ROSEN
MR. TRACY
MR. WATSON
MR. WEAVER
MR. WOOD

WJ

MEMORANDUM FOR MR. TOLSON

The following is a list of field offices showing the number of Colt Monitor Automatics ordered and the number delivered as of June 7, 1934, according to the records maintained in this office.

It is possible that further deliveries have been made and that this office has not as yet been so advised by the interested field offices. Hr. Holland of the Supply Division has advised that he is following Mr. Lorch closely relative to the delivery of these guns.

<u>OFFICE</u>	<u>ORDERED</u>	<u>DELIVERED</u>
Birmingham	4	0
Boston	2	0
Buffalo	2	0
Butte	2	0
Charlotte	2	0
Chicago	4	0
Cincinnati	4	1
Dallas	2	2
Denver	2	0
Detroit	2	2
El Paso	2	2
Jacksonville	2	0
Indianapolis	2	0
Kansas City	4	4
Little Rock	2	0
Los Angeles	2	0
Nashville	2	0
New Orleans	2	0
New York	8	0
Oklahoma City	6	0
Omaha	2	0
Philadelphia	2	0
Pittsburgh	2	0
Portland	2	0

JUN 11 1934

66-3760-401X11
66-3760-1930
JUN 11 1934
RECORDED
INDEXED
FILE

Check should do everything possible to expedite shipment
COPIES DESTROYED
20 5 JAN 28 1965

Supply Division all supplied
WJ

<u>OFFICE</u>	<u>ORDERED</u>	<u>DELIVERED</u>
Salt Lake City	4	0
San Antonio	4	4
San Francisco	2	0
St. Louis	2	2
St. Paul	4	4
Washington	4	2
Total	<u>26</u>	<u>22</u>

Respectfully,

W. R. Glavin
W. R. Glavin.

Known Markings for Colt Automatic Machine Rifle “Monitor” (1931-1942) Current as of 11/21/2022

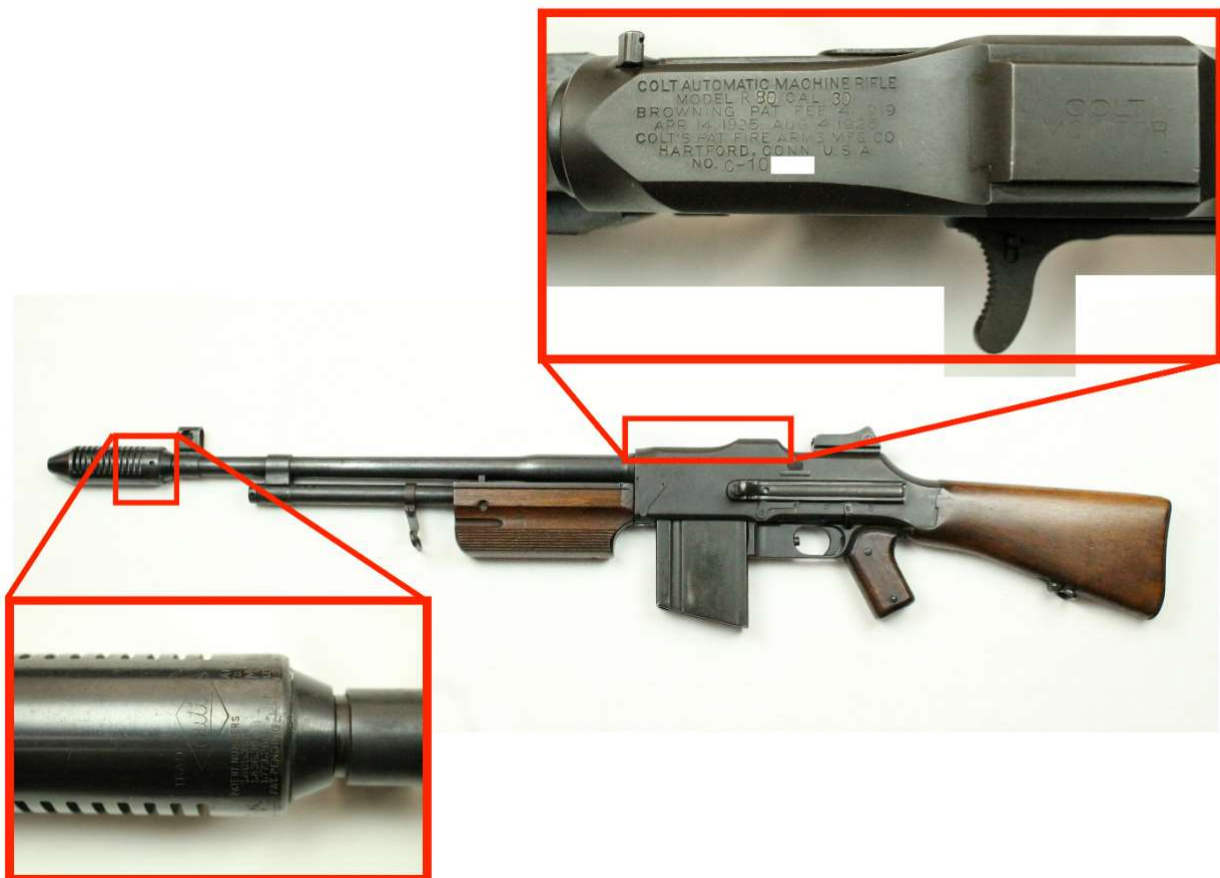
Eric Richard- Collections Assistant Texas Ranger Hall of Fame and Museum. Waco, TX. (2022)

This document is to serve as a reference to all known Monitor markings that I have been able to find as of 11/21/2022. As far as I am aware there are no documents that provide a complete list of these markings. All information on Monitors that Colt Manufacturing LLC had in their archives has unfortunately been lost at some point prior to 2022. Images of Monitors in this document were provided by their current owners or pulled from books depicting real Monitors. Monitor serial numbers start with “C-10” followed by four digits. Serial numbers have been obscured in images by those who requested they be.

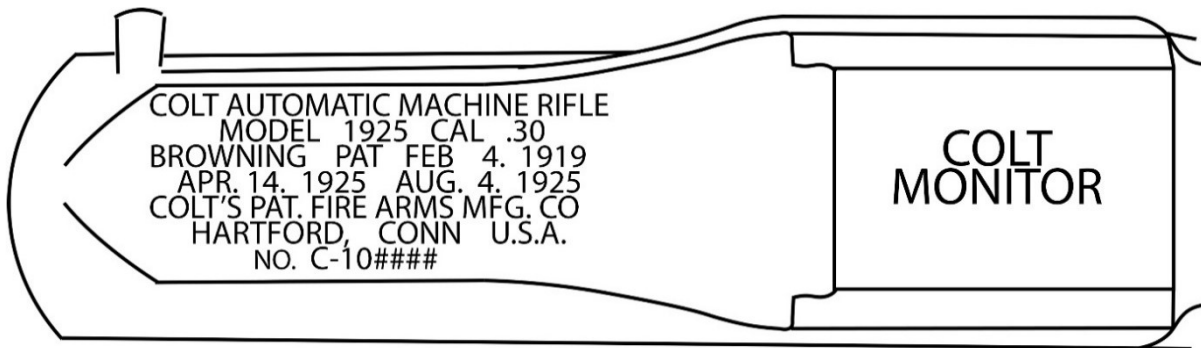
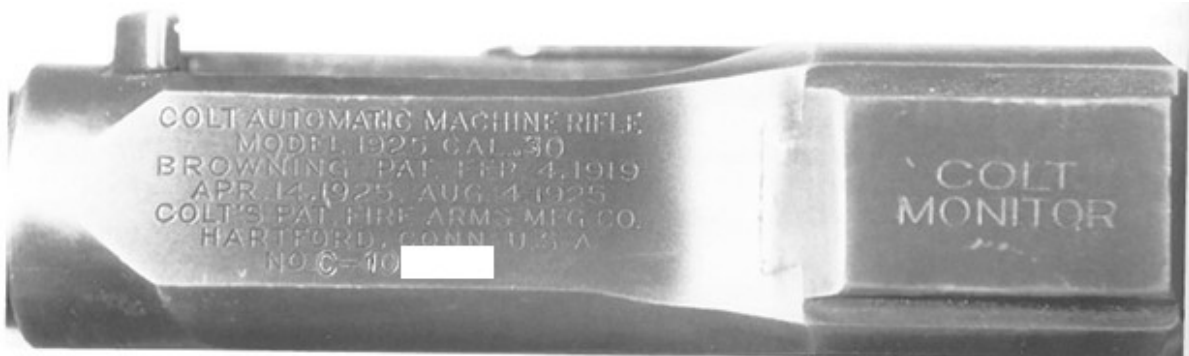
Sources

- Ballou, James L., and R. Blake Stevens. *Rock in a Hard Place: The Browning Automatic Rifle*. Collector Grade Publications, 2000. There are not many sources on Colt Monitors. Could not locate and significant information besides *Rock in a Hard Place: The Browning Automatic Rifle* by Ballou.
 - This has proven to be the best source of information on these rifles.
- Information also based on images of Monitors.

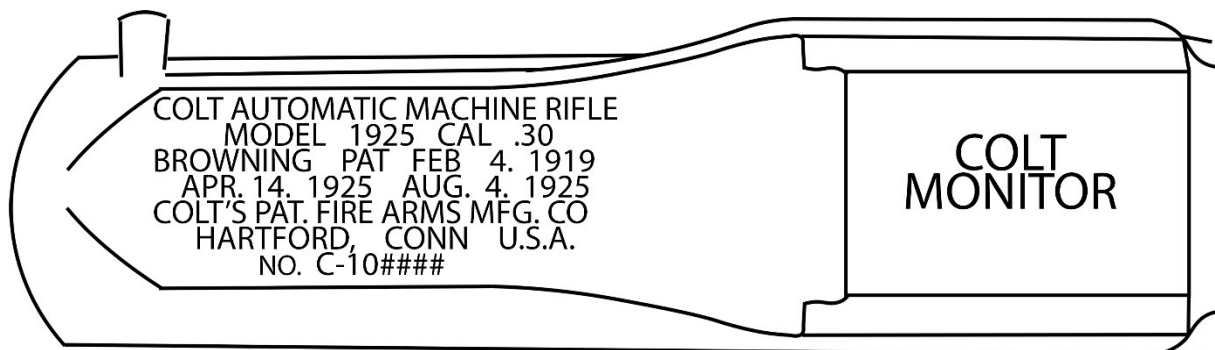
Location of Know markings. Currently markings are known to be located on the top of the receiver and on the body of the Cutts Compensator on the end of the Barrel.



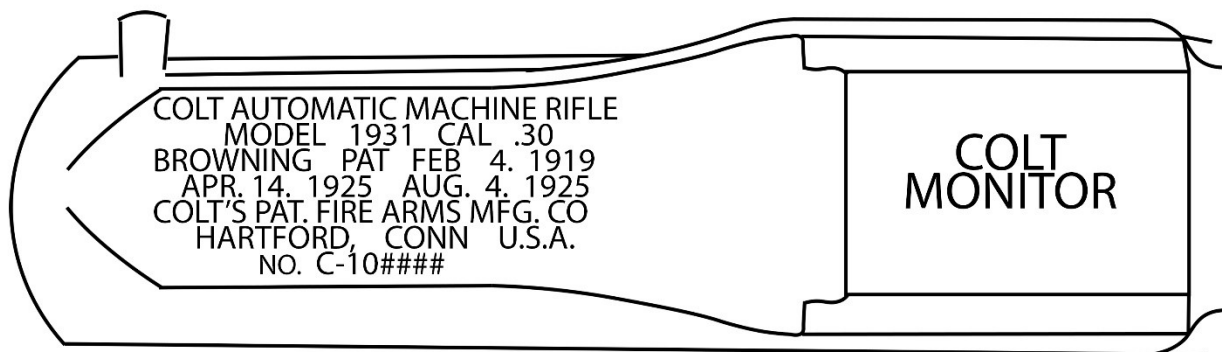
Possibly First Monitor produced. Model 1925. Sold to Charlestown Prison in Boston, Mass. March 25, 1931. James Ballou, Rock in a Hard Place: The Browning Automatic Rifle pg.90, 2000. Now at a law enforcement agency in Massachusetts as of 9/26/2022.



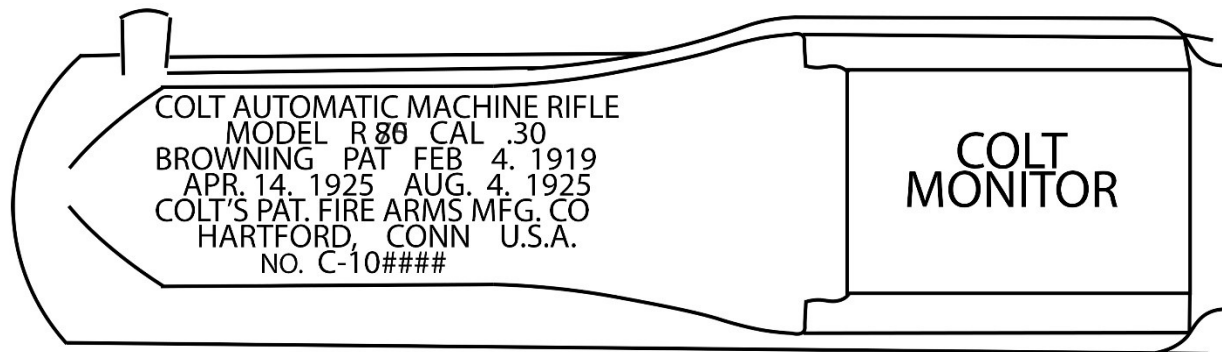
Model 1925. Sold to the Washoe County Sheriffs Department of Reno, Nevada on April 23, 1931. Now part of a private collection in West Virginia as of 11/19/2022.



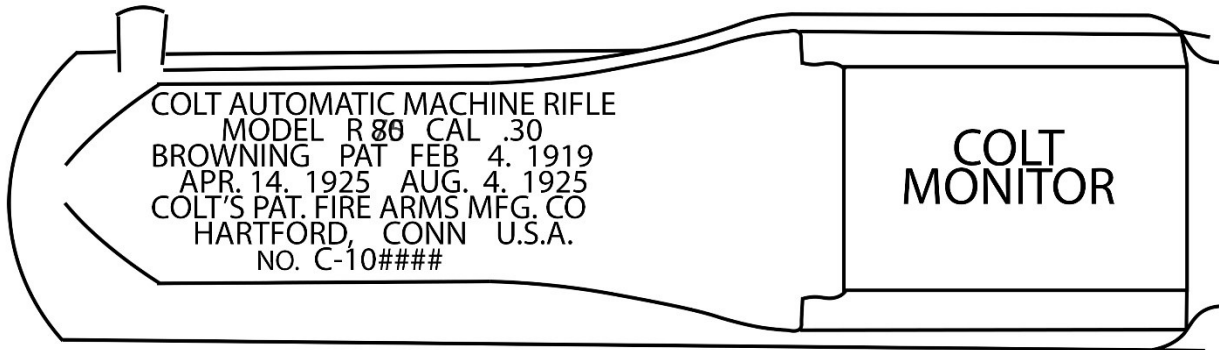
Model 1931. Says “Model 1931” on receiver from a museum in Indiana, in holdings as of 8/8/2022. This is the only Monitor found so far with Model 1931 on receiver and not Model 1925 or R80.



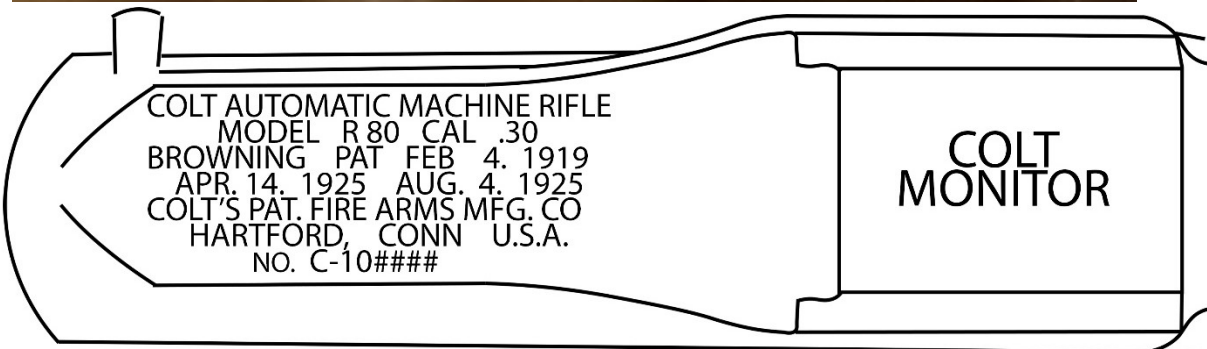
Model R80 Over R75. Rock Island Auction 2018. In private collection. Shows “R80” stamped over “R75” at factory. This shows that several R75 were made into R80 Monitors.



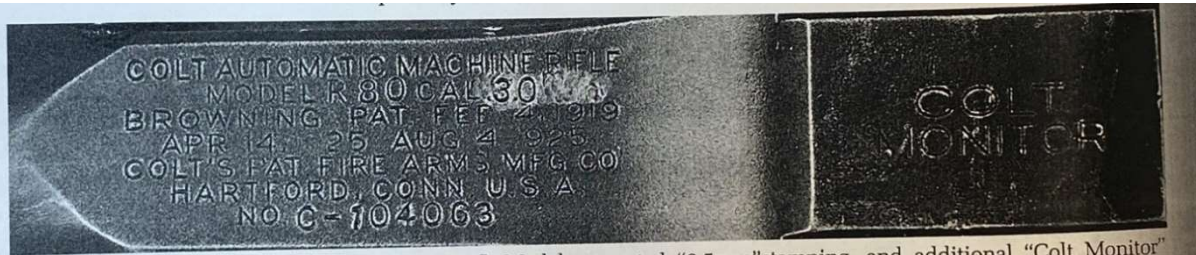
Model R80 Over R75. Texas Ranger Hall of Fame and Museum 2022. Shows “R80” stamped over “R75” at factory. In collection as of 10/18/2022.



Model R80. Minnesota Department of Corrections, Stillwater, Minnesota facility. Acquired by prison in 1938, in holdings as of 10/12/2022. Shows R80 that is not an over stamp of the R75. Rifle was intended to be an R80 and was not a R75 receiver made into an R80.

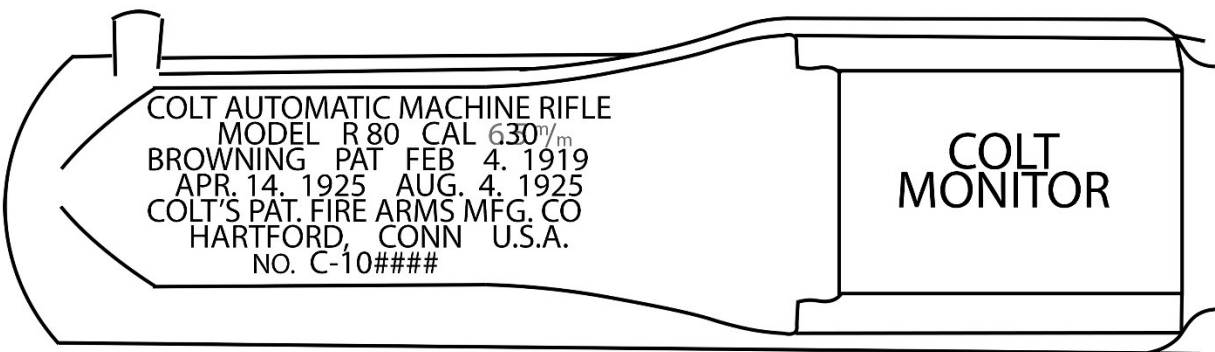


Model R80 Cal.30 Over 6.5m/m. James Ballou, Rock in a Hard Place: The Browning Automatic Rifle pg.212, 2000. "Cal 6.5mm" stamped over with a "Cal .30" at the factory. Shows that several 6.5mm, European/South American R80 models, were made into or converted back to .30-06.

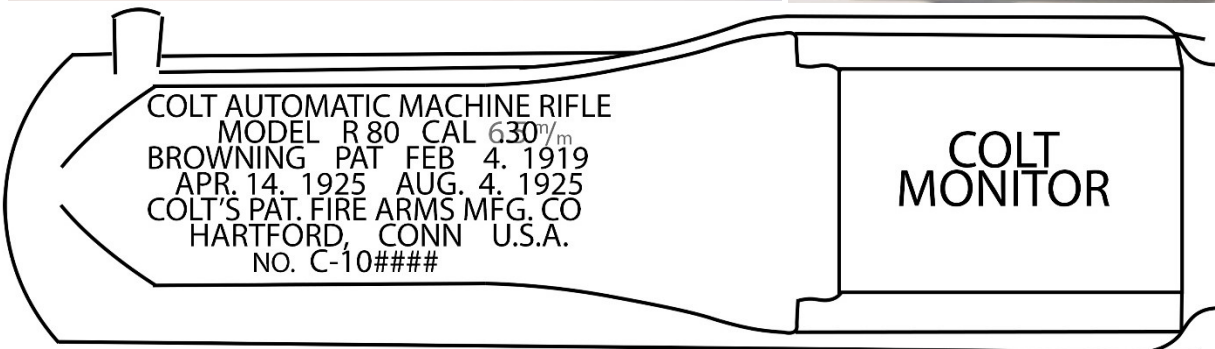
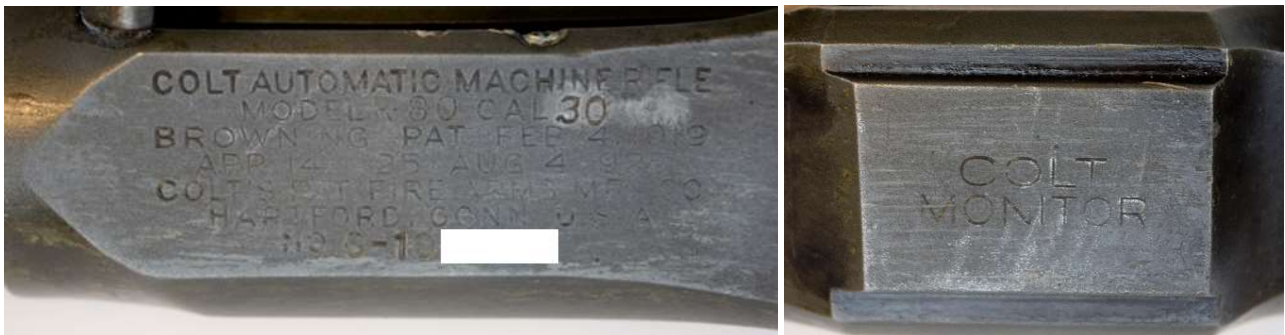


215. Top closeup of Colt commercial machine rifle Model R 80 serial no. C-104063, showing markings. Note caliber ".30" handstamped over partially obliterated

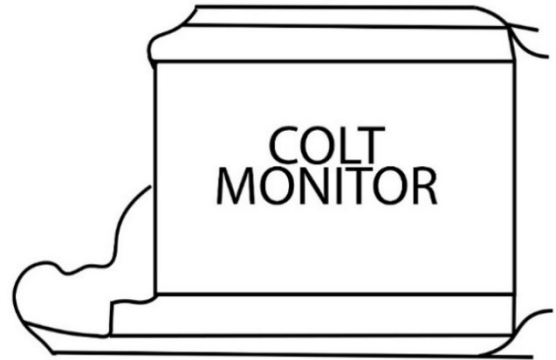
"6.5mm" stamping, and additional "Colt Monitor" marking roll-stamped on receiver top plate, at right. William M. Douglas collection



Model R80 Cal.30 Over 6.5m/m. The Hastings Museum of Natural and Cultural History owned Monitor, Hastings, Nebraska, as of 8/17/2022. "Cal 6.5mm" stamped over "Cal .30" at the factory.



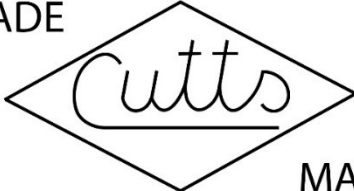
Cut In Half. WWII BAR Man Online Store. Was for sale on website in 7/22/2022. Cut In Half and lost serial number. Example of COLT MONITOR text. "COLT MONITOR" on receiver is consistent across all known Monitors.



Cutts Compensator. Texas Ranger Hall of Fame and Museum Monitor. Cutts Compensator showing bottom side of Compensator. Cutts Compensator was standard on the Monitor. This is best example of Cutts logo and patents.



TRADE

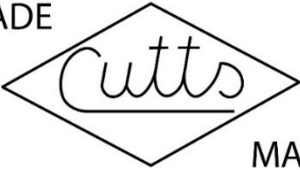


PATENT NUMBERS
 1,605,393
 1,636,357
 1,773,260
 PAT. PENDING

MARK
 MFD. BY
LYMAN
 MIDDLEFIELD
 CONN. U.S.A

Cutts Compensator. Minnesota Department of Corrections, Stillwater, Minnesota facility. Acquired by prison in 1938. Shows Cutts logo can be located on side of compensator. Partly obscured by screw hole and has patent numbers located to the right, instead of below, the Cutts logo.




TRADE

 MARK

PATENT NUMBERS
 1,605,393
 1,636,357
 1,773,260
 PAT. PENDING

MFD. BY
LYMAN
 MIDDLEFEILD
 CONN. U.S.A

Cutts Compensator. The Hastings Museum of Natural and Cultural History owned Monitor, Hastings, Nebraska as of 8/1/2022. Patents on Bottom of Compensator. Partly obscured by vent holes.



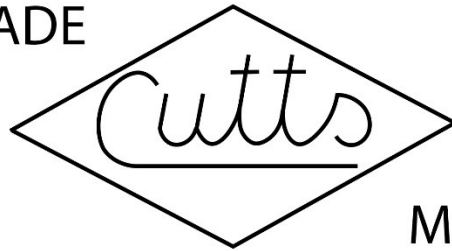
TRADE

 MARK
 MFD. BY
LYMAN
 MIDDLEFEILD
 CONN. U.S.A

PATENT NUMBERS
 1,605,393
 1,636,357
 1,773,260
 PAT. PENDING

M1919 Colt Automatic Machine Rifle made into a Monitor. Owned by James L. Ballou now at National Military Vehicle Museum, DuBois, Wyoming as of 8/22/2022. Bottom Of Compensator. These markings are from a M1919 made into a Monitor. Compensator is reproduction of Cutts Compensator produced by a friend of original owner. Reproduction markings.



TRADE

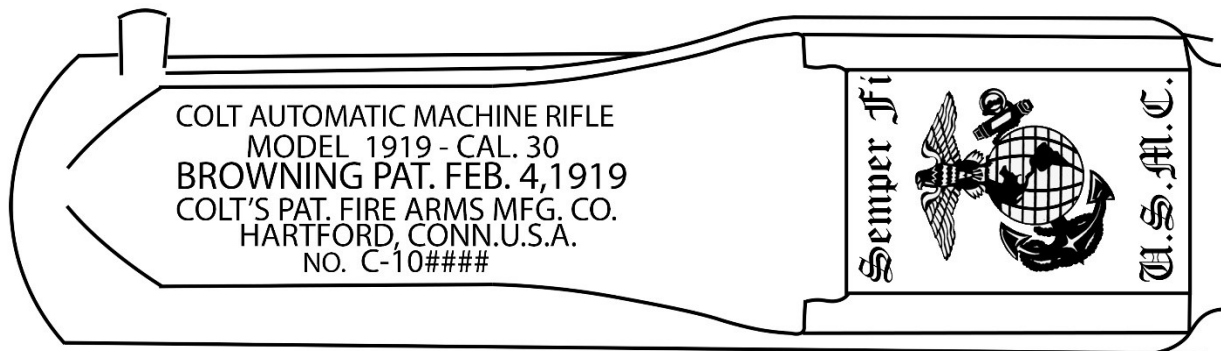


MARK
MFD. BY
SD&M

Barrel Markings. The Hastings Museum of Natural and Cultural History, Hastings, Nebraska, owned Monitor as of 8/1/2022. Have not located a significant number of barrel proof marks to determine what they mean. Could be armory marks from the military, FBI, or could be from Colt. This is the only Monitor found so far with barrel marks. Need more Information to determine the markings meaning.



Not Real Colt Monitor Markings. Monitor parts kit ordered from a Polish company installed on a Model 1919 Reproduction Monitor. This M1919 Colt Automatic Machine Rifle was made into a Monitor. It has the US Marines Crest, this is because James Ballou, former owner of this rifle, was in the Marines. Owned by James L. Ballou, author of *Rock in Hard Place*, now at National Military Vehicle Museum, DuBois, Wyoming.



Not Real Colt Monitor Markings. Real Monitor does not say “COLT MONITOR” on left side of receiver. “COLT MONITOR” only on top of receiver of all known Colt Monitors. This Monitor is an earlier Colt Automatic Machine Rifle Model 1919, 1919s were never made into Monitors as far as research has determined. This is by far the truest to form reproduction found so far of Monitors. Now at National Military Vehicle Museum, DuBois, Wyoming as of 11/22/2022.

National Military Vehicle Museum Model 1919 Reproduction Monitor.



Texas Ranger Hall of Fame and Museum owned Colt Monitor R80. Monitor receivers did not originally have text on side besides at the select fire switch.



Bibliography

Ballou, James L., and R. Blake Stevens. *Rock in a Hard Place: The Browning Automatic Rifle*. Collector Grade Publications, 2000.

This is the only significant published source of information on Monitors. It appears to be the best authority on CAMRs, BARs, and Monitors. Every book written after 2000 cites this book. Ballou's sources appear to be based on a diverse range of sources including books, various firearm companies, and governmental documents. Any other source I found were already cited by Ballou.

Sutherland, Robert Q., and R. L. Wilson. *The Book of Colt Firearms*. 1971.

This source is great for Colt firearms in general. It does mention CAMR and Monitors but does not go into much depth.

United States, Federal Bureau of Investigation, "Memorandum For Mr. Tolson", June 7, 1934.

Document about the Monitors ordered for the FBI. This is the largest order of Monitors by one agency but does not include serial numbers of which Monitors were ordered. Copy of this FBI list is included later in this document.

Vortisch, Hans, "Colt R80 Monitor", Belin, Germany. November 15, 2022. Microsoft Excel file.

Hans Vortish has been researching Monitors for several years now and has a running database of Monitor manufacture dates. He bases his research on Ballou and Steven's work and research he has done in historic 1930s newspapers. The newspaper articles are mostly from law enforcement and prisons talking about the new Monitors they have acquired from Colt. He is not an academic but is certainly an expert on the subject and his research appears accurate.