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I. Historical Background

Although the term carbine is almost as old as shoulder weapons themselves, the concept of a military weapon designed from the start as a carbine is uniquely Twentieth Century, as are the airplane, submarine, missile-armed satellites and neutron bombs.

One of the earliest references to the term carbine and its possible origin appeared in 1548. According to that source, the word derived from the short barreled rifles carried by Spanish cavalry groups which were then called "Carabins". If this is true, the term would be appropriate since the carbine has, until just recently, been uniquely a cavalry weapon. While there has been a trend toward shorter barrels on military rifles for the last century and a half or so, the practice of issuing rifles with barrels as long as 30" was quite common even up through World War I. The M1903A3 Springfield, for example, had the shortest barrel of any standard issue shoulder arm during that conflict. Its 24" tube may be long by today's standards, but it was considerably shorter than the M1891 Mosin-Nagant's 31.6" or the French Lebel M1886's 31.4". Although called a rifle, the M1886 M93R35 was a true carbine with its 17.7" barrel. However, we can't help but wonder just how effective it was in combat, since it had only a three round magazine.

While it is obvious that every war since the invention of the written language has brought its technological advances, the two World Wars probably brought about more changes for the actual length of time of the conflicts than any other wars. Part of the reason for this, of course, is the capabilities for rapid change made possible by the Industrial Revolution.

The internal combustion engine made airplanes for observation, and later for bombing, a reality, as well as tanks and motorized transport. Crude, man-powered submarines had been used as early as the Revolutionary War, but when war raced across Europe in the summer of 1914, powered submarines were already in service. Although mule transport and horse cavalry lasted on into World War II, mechanization had definitely sounded their death knell.



Stock M1 Carbine as manufactured by Winchester, Inland, Rock Ola, etc.

Almost from its inception, the pistol had been considered a last ditch weapon for cavalry, the primary weapons being the carbine and saber. This practice was still prevalent during the Indian Wars in this country and in the Middle East during World War I. But as horse cavalry vanished into the dim mists of the past, so did the saber. Mechanized cavalry were armed with pistols and, in some cases, submachine guns. While some SMGs

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had found their way into the trenches near the end of the "War To End All Wars", they weren't to become prevalent in warfare until the Spanish Civil War, when their effectiveness in close quarters fighting was firmly established.

Interestingly enough, the United States began looking for a weapon to replace the SMG even before it was used in any quantity by U.S. troops.



M2 Carbine with folding stock.

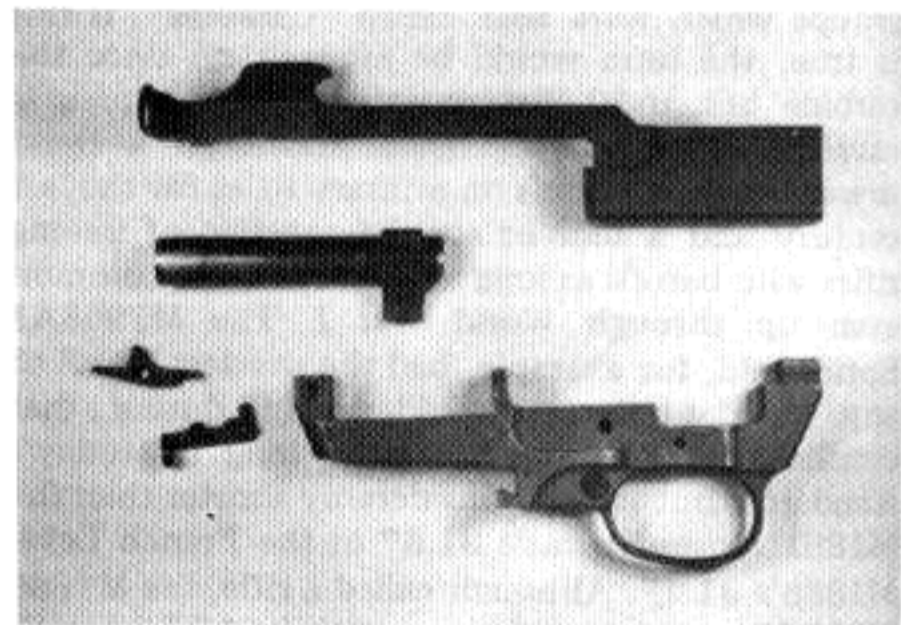
As early as 1938, the U.S. Army began thinking about a light rifle or carbine as a replacement for both the Colt N1911A1 and the Thompson SMG. While the recently adopted M1 Garand rifle was far and away the finest battle rifle in the world at that time, it was too heavy and bulky to be used by support troops who would normally not see combat but who were armed "just in case". Previous practice had been to arm such personnel with the Colt .45, a superior weapon for close in work but definitely not a good choice for the average shooter at medium to long ranges. In the late 1930's, the U.S. armed forces had only a limited number of Thompsons in their inventories, so replacing them would hardly prove an awesome burden. As for the Colt .45, well — it had been in service for nearly thirty years, so was undoubtedly obsolete, as military thinking at that time was beginning to view the military pistol in any form as a relic of the past.

The initial concept of the new light rifle or carbine was for it to weigh five pounds or less, complete with sling, and have an effective range of 300 yards. It should be semi-auto with capability for full automatic fire, have little noticeable recoil and be chambered for a cartridge similar to Winchester's .32 centerfire which they had developed for their Model 1905 autoloading rifle.

In the fall of 1940 the Ordnance Department approached Winchester with their specifications for the new cartridge. Following development work, an order for 150,000 rounds was placed in

June of the following year. A second order for 300,000 rounds followed in August.

Winchester was also invited to submit a prototype weapon for testing, but they were deeply involved in Garand production and declined. When trials began on June 16, John Garand himself had submitted two designs. Others submitting prototypes included Auto Ordnance (manufacturer of the Thompson), Harrington & Richardson, Hyde, Savage, Springfield Armory and Woodhull. Two weeks later, Winchester was again invited to submit a test sample, and agreed. A mere two weeks later to the day, a very quickly hand assembled sample was submitted to Ordnance. While not a true indication of what the production gun would be like, this crudely assembled sample worked so well that Ordnance felt it offered far more promise than any of the other guns previously tested. The Winchester team went back to work at the drawing board and assembly bench and, after 34 days of working literally day and night, had a finished carbine ready for the September tests at Aberdeen Proving Ground. At the end of the testing period, the board unanimously recommended adoption of the Winchester design. Less than two weeks before the attack on Pearl Harbor, an order for 350,000 M1 Carbines was placed with Winchester.



The slide, bolt, sear, magazine catch and trigger housing shown above are necessary for converting the M1 to M2 configuration, but are not considered part of the conversion kit. Not shown, and also necessary for the conversion, is the M2 stock.

Tooling up for large scale production is a different story than creating a prototype, however, and the first carbines didn't come off the Winchester production line until almost three weeks

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after the U.S. Marines had landed on Guadalcanal in August 1942. That particular lot consisted of just 10 carbines.

In order to facilitate speedy delivery of the much-needed carbines as American troops were shipped off to North Africa and the Pacific, production contracts were also awarded to the Inland Manufacturing Division of General Motors, Underwood Elliott Fisher, National Postal Meter, Rock-Ola Manufacturing Corp., Quality Hardware, Standard Products, Saginaw and IBM. Even though Winchester was the only carbine producer that was normally a firearm manufacturer, by the end of 1943 M1s were rolling off the production line at the rate of 500,000 per month.

As the tides of war began to turn in favor of the Allies, it became apparent that a select fire carbine as called for in the original specifications was highly desirable, especially in the jungle where the distances at which confrontations occurred could often be measured in feet rather than yards and where the enemy might be visible for only a few seconds, if at all. Some non-military minds in Washington had trouble distinguishing the concept

of burst fire from that of sustained fire associated with belt-feds. However, requests for a select fire carbine kept coming in from the field commanders who had to stand and watch their men die due to the lack of adequate firepower.

It is highly unusual for a selective fire weapon to be developed from a semi-auto only design, but in the case of the M2 Carbine that is exactly what happened. The end result was actually two different types of M2 Carbines — the "pure" version which was manufactured as a selective fire weapon from the ground up, and the "hybrid" which had gone into service as a standard semi-auto M1, then been converted to M2 configuration by installing a T17 kit. This kit was designed so that existing M1s could be converted to select fire without being sent back to an arsenal for "major surgery".

M2 Carbines went into production at the Winchester and Inland plants in May 1945, the same month that Germany surrendered. With the surrender of Japan the following September, the world supposedly returned to a state of peace, and production of the M1 and M2 Carbines ended.

TOTAL PRODUCTION, ALL MODELS

Winchester	
Experimental & Prototype	9
M1	818,059
M2	17,500
M3	1,108
Other	4
TOTAL 836,680	
Inland Manufacturing Division of General Motors Corporation	
M1	2,285,000
M1A1	140,591
M2	199,500
M3	811
M1A2	5
Other	900
TOTAL 2,626,807	

Underwood-Elliott-Fisher	
M1	546,616
Rock-Ola Company	
M1	228,500
Quality Hardware & Machine Corp.	
M1	359,662
National Postal Meter	
M1	412,778
Commercial Controls Corp.	
M1	239
Irwin-Pederson Arms Company	
M1	146,723
Standard Products Company	
M1	346,225
Saginaw Steering Gear Division of General Motors Corporation	
M1	370,490
International Business Machines Corp.	
M1	346,500
TOTAL 2,757,733	

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SERIAL NUMBERS

Inland	1 to 5
Winchester	6 to 10
Inland	11 to 999,999
Winchester	1,000,000 to 1,249,999
Underwood	1,250,000 to 1,449,999
National Postal Meter	1,450,000 to 1,549,999
Quality Hardware & Machine	1,550,000 to 1,562,519
Quality Hardware & Machine	1,562,520 to 1,662,519
Rock-Ola	1,662,520 to 1,762,519
IRWIN PEDERSEN (Saginaw, G.R.)	1,762,529 to 1,875,039
Quality Hardware & Machine	1,875,040 to 1,907,519
Quality Hardware & Machine	1,907,520 to 1,937,519
National Postal Meter	1,937,520 to 1,982,519
Standard Products	1,982,520 to 2,352,519
Underwood	2,352,520 to 2,912,519
Inland	2,912,520 to 3,212,519
Irwin Pedersen (Saginaw, G.R.)	3,212,520 to 3,250,019
Saginaw S.G.	3,250,020 to 3,651,519
I.B.M.	3,651,520 to 4,009,999
Underwood	4,010,000 to 4,074,999
National Postal Meter	4,075,000 to 4,079,999
National Postal Meter	4,080,000 to 4,432,099
Quality Hardware & Machine	4,432,100 to 4,532,099
Rock-Ola	4,532,100 to 4,632,099
Quality Hardware & Machine	4,632,100 to 4,879,525
Inland	4,879,526 to 5,549,821
Winchester	5,549,822 to 5,834,618
Saginaw S.G.	5,834,619 to 6,071,188
Rock-Ola	6,071,189 to 6,099,688
Underwood	6,099,689 to 6,199,688
Rock-Ola	6,199,689 to 6,219,688
Inland	6,219,689 to 6,449,867
Winchester	6,449,868 to 6,629,883
Inland	6,629,884 to 7,234,883
Winchester	7,234,884 to 7,369,660
Inland	7,369,661 to 8,069,660
Commercial Controls Corp.	0001 to 0239

* The reader may note that the assigned serial numbers above add up to approximately 2 million more carbines than the 6 million total production discussed in the text. This is not a typographical error, but is the result of spare numbers being assigned within blocks of numbers, some receivers being scrapped after being stamped and their numbers being re-used at a later date, etc. Additionally, major design changes or improvements were often designated by starting with a new block of numbers and purposely leaving a gap between the numbers of the first gun of the new model and the last one of the old.

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A total of over 6,000,000 of both models was produced before VJ Day.

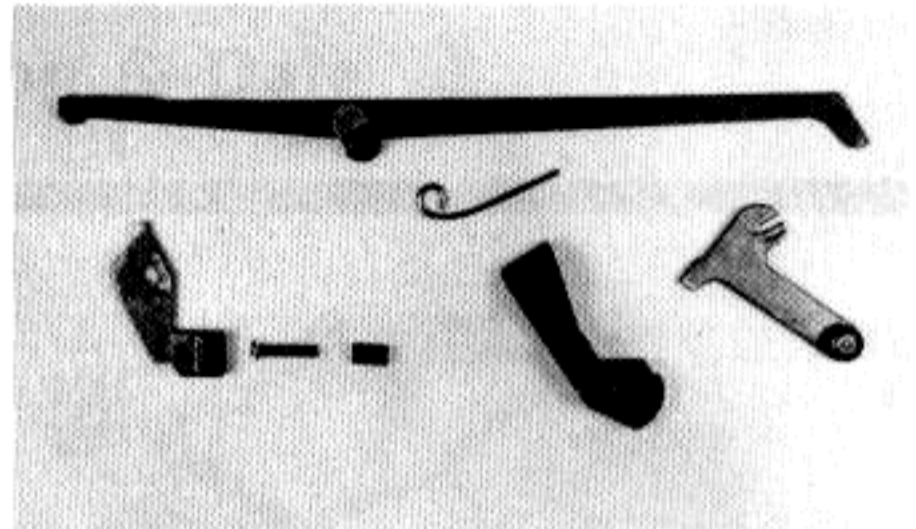
Less than five years after the Japanese surrender in Tokyo Bay, war clouds again loomed over Japan when North Korean troops moved south in June of 1950. One need only study a map of the Far East to realize the trepidation that must have filled the minds of American occupation troops in Japan at the outbreak of the Korean War. Within weeks, mothballed fighter aircraft, landing craft, Garands and M1 and M2 Carbines were being refurbished to go to war. For three years the M1 Carbine was to serve American troops in the frozen wastes of Korea, and names like Pork Chop Hill, Inchon and the Yalu River had become as familiar to the American people as Omaha Beach, El Alamein and Iwo Jima. With the signing of an uneasy truce in July 1953, the M1s and M2s were once more put back into storage.

Only a year later, an event took place that was to signal the M1's return to the front lines for yet another war. A French Indochinese fort by the name of Dien Bien Phu fell to Communist forces in far off Southeast Asia. However, it doesn't seem so far away today when you think of the present name for the country in which Dien Bien Phu is located — Vietnam.

With the end of the 300 year French rule in Indochina, the peninsula was divided into three countries, the largest being Vietnam. One might have thought the French withdrawal would bring peace to Southeast Asia, but such was not the case. Fighting continued between Communist regulars and guerrillas and the forces of the democratic governments of the countries that had been French Indochina. The situation had deteriorated so badly by the early 1960's that American "advisors" were sent to help the South Vietnamese. What followed was history, with American troops eventually becoming involved in the longest war in which America ever fought. By the time the Vietnam War officially ended in the early 1970's, over 50,000 American servicemen had payed the ultimate price for freedom.

Although some M1 Carbines saw service with American troops in Vietnam, by far the greatest users of the M1 were the Vietnamese themselves. Due to their smaller physical stature, they liked the small, light carbine with the negligible recoil. The M1 Garand had, of course, been replaced by the M14 as the standard service rifle. Although the 7.62mm NATO cartridge of the M14 produced less recoil than the Garand's .30-06, it was still a bit much for the Vietnamese. They

made do with M1 Carbines until the Armalite AR-15 became available in quantity. It was largely upon their recommendation that Gen. William Westmoreland requested AR-15s for the American troops which were dissatisfied with the M14's performance in the tropics. It should be pointed out, however, that the AR-15 which had endeared itself to the Vietnamese was a select fire weapon that was the forerunner of the M16, and not the semi-auto only civilian AR-15 we know today.



Although once readily available at gun shows, the M2 parts shown above are available as a group now only through Class III dealers since the complete kit is classified as a machine gun, even in the absence of the carbine itself.

Although the M1 and M2 Carbines are no longer standard issue with any American military unit, a number of them are still in government storage for possible future use. As of Spring 1984, 65,984 M1 and 7,298 M2 Carbines were being held for special contingency and foreign military sales requirements. M1 Carbines are likely to be encountered just about anywhere in the world, either in the hands of guerrillas or small local militia units fighting against them. While the M1 failed to replace either the Colt M1911 A1 or the SMG, both of which are still on active duty with U.S. forces, it served its country and her allies well in war and is now a favorite "pickup" gun of ranchers and farmers who want a small, lightweight arm with minimal recoil that is still more powerful than a .22 rimfire. Just how many surplus M1 Carbines have found their way into civilian hands is anyone's guess, but the fact that Ruger chambered its popular Blackhawk single action revolver for the .30 Carbine cartridge attests to the round's popularity.

Numerous commercial models of the M1 have been produced by various manufacturers since World War II and Iver Johnson currently offers a

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select fire version for police and foreign markets as well as the "standard" version for the U.S. civilian market. Whether as a surplus weapon picked up at

a gun show or brand new out of the box from the local gun shop, the M1 Carbine should be with us for a long time to come.



II. Description & Data

DESCRIPTION

The carbines are gas-operated, self-loading, air-cooled shoulder weapons, fed by 15-round or 30-round cartridge magazines. The carbines M1 and M1A1 deliver semi-automatic fire, and the carbines M2 and M3 deliver either semi-automatic or full automatic fire controlled by the operator through the use of a selector.

DIFFERENCES BETWEEN MODELS

a. Tactical Inspection. For information on differences between models which affect troop use, refer to page 44.

b. Cal. .30 Carbines M1 and M1A1 (Figs. 1 and 2). The only difference between the carbines M1 and M1A1 is the stock. The M1 has a one-piece wooden stock, whereas the M1A1 has a folding metal stock extension and a wooden hand grip.

c. Cal. .30 Carbines M2 and M3 (Figs. 3 and 3a). The carbine M2 is the same as the M1 except for differences in design of certain components and the addition of others (*d* below), which permit the M2 to deliver either semi-automatic or full automatic fire. The carbine M3 is the same as the M2 except that the rear sight is not included and the top of the receiver is designed to accommodate special sighting equipment (sniperscope) issued by the Corps of Engineers. Information on the sniperscope may be found in TM 5-9341.

d. Component Differences Between Full Automatic and Semi-Automatic Carbines (Fig. 3b).

Note. The hammer, sear, trigger housing, operating slide, and stock of the carbine M2

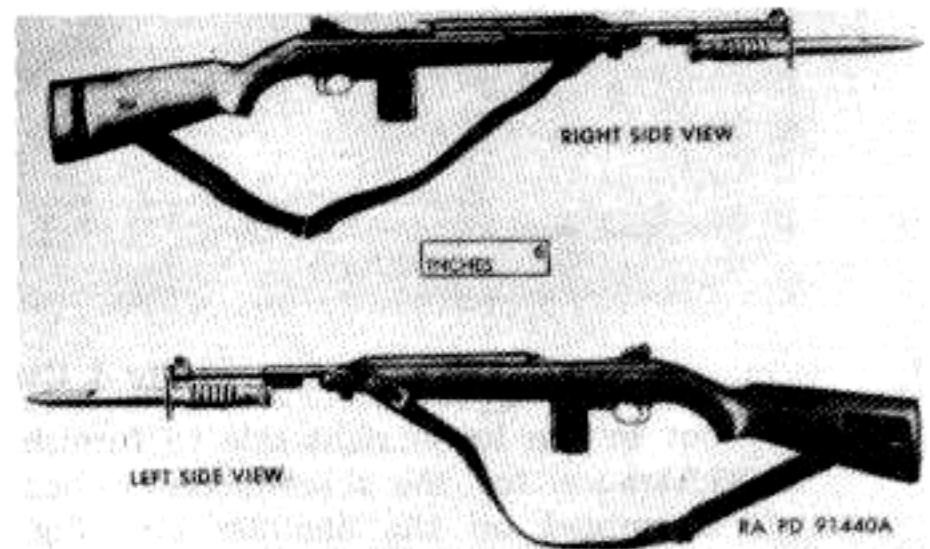


Figure 1. Cal. .30 carbine M1.

(described in (1) through (5) below) can also be used on the carbine M1.

- (1) *Hammer.* The hammer of the carbine M2 is the same as the hammer of the M1 carbine, except that it has a milled

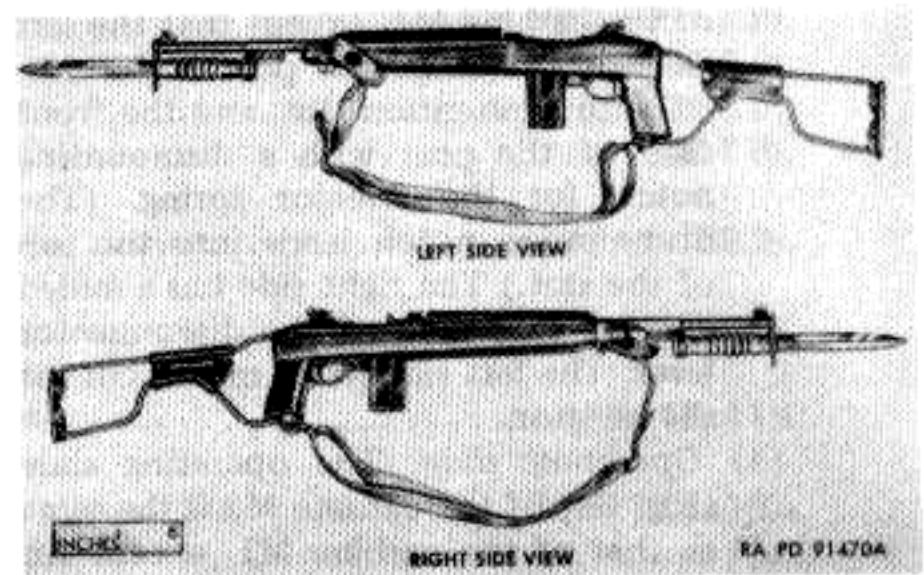


Figure 2. Cal. .30 carbine M1A1.