Production of Military Rifles by Remington Arms Company in Ilion, New York During World War II

Roy Marcot

In the late 1930s, the firearms manufacturing plant of the Remington Arms Company in Ilion, New York was engaged in the manufacture of sporting firearms, primarily shotguns and .22 caliber rifles. The peacetime factory capacity for manufacturing centerfire hunting rifles of large caliber was only about 80 rifles a day, and only 60 employees were engaged in the manufacture of these centerfire rifles in Ilion in 1939.



During World War II Main Street ran right through the middle of the Remington factory. Remington Archives photograph.

Remington had manufactured military rifles for the Allies during the early years of World War I and for the U.S. Government after this nation declared war against Germany in 1917. The rifle made in Ilion for the United States military at that time was a modified Enfield rifle, chambered to accommodate the .30-06 Springfield cartridge.



Pattern 14 Enfield rifles being assembled and inspected at the Remington factory in Ilion, New York circa 1915. Remington Archives photograph.

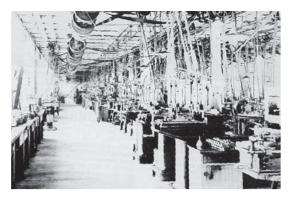


THE BRITISH CONTRACT TO MANUFACTURE SPRINGFIELD MODEL 1903-STYLE RIFLES

Following sudden and unexpected events in the European War during the spring and summer of 1940, including the Battle of Dunkirk, the British Government was urgently in need of military rifles. On August 15, 1940, the British Purchasing Commission asked Remington if they were capable of manufacturing 400,000 Model 1903-style military rifles for the United Kingdom.

The British initially wanted an Enfield rifle, but found out that Remington could build a standard U.S. Rifle, Caliber .30, M1903 to be modified to .303 British caliber, equipped with a rear aperture sight, an Enfield-style front sight with protectors, and the barrel muzzle modified to accept the Enfield No. 4 bayonet. The result was a hybrid '03.

As a result of numerous conferences in Washington to determine the fastest means of producing these rifles and supplying them to the British, a decision was reached that the quickest results could be obtained by shipping standby Model 1903 rifle gun-making equipment in storage at Rock Island Arsenal to the Remington Arms Company plant at Ilion, New York. Therefore, on November 6, 1940, Remington representatives traveled to Rock Island Arsenal to inspect the old grease-covered equipment (machinery, tooling, jigs, and fixtures) last used 19 years earlier to make M1903 rifles. In early discussions with Ordnance and other officials, 30 months



Vintage photograph of World War I production of M1903 rifles at Springfield Armory. National Archives photograph.

was estimated as the time required for Remington to get into production if new gun-making equipment was procured. Remington officials stated that they could produce rifles in 12 months if the standby U.S. Government equipment, then in storage at the Rock Island Arsenal, was moved to Ilion and full advantage was taken of the company's experience and judgment in arms manufacture.

Between November 9th and 18th, 1940, negotiations were completed authorizing the transfer of the U.S. Government's Rock Island rifle-making equipment. It was tentatively agreed that Remington would produce the hybrid Model 1903 style rifles for the British Government under a cost-plus-fixed-fee contract of \$5.00 per rifle.

On December 12, 1940, a Letter of Intent from the British Government was given to the Remington Company calling for the manufacture of 500,000 Springfield style rifles in .303 British caliber. The British agreed to advance \$4,000,000, of which \$3,347,000 was for leasing the Rock Island equipment, rehabilitation of Ilion equipment, enlargement of the plant, and training of personnel;

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Some of the machinery, jogs, tooling, and fixtures sent from Rock Island Arsenal to Remington in 1941. National Archives photographs.

\$235,000 for the purchase of raw materials; and \$400,000 for the purchase of bayonets, scabbards, and other accessories.

The U.S. Government initially withheld execution of the lease of the Rock Island equipment because of plans to consolidate aid to Great Britain. Remington

was advised of this fact on January 10, 1941, when Mr. Leigh told W. R. Scott that there was a possibility of some of the British contracts being taken over by the U.S. Government. There soon followed a meeting between representatives of U.S. Army Ordnance, Great Britain, and Remington at which the possibility of the United States taking over British commitments at Ilion was formally discussed.

On March 4, 1941, Robert B. Patterson, Under Secretary of War, advised C. K. Davis, President and General Manager of the Remington Arms Company, that the use of the Rock Island machinery is "in the interest of the United States" and that Remington should consider his letter approval and authority to employ the equipment for the British work. On that date the lease assigning the equipment to Remington was signed by Mr. Patterson assigning Rock Island rifle-making equipment to the Remington Arms Company. This equipment was moved to Ilion immediately after the lease was signed. Also shipped were 600,000 wood blanks for stocks and hand-guards as a trade against cartridges that Remington's Bridgeport facility would supply later.

During the initial negotiations with the British, they had expressed a strong preference for the Lee-Enfield rifle. Remington officials insisted that the type of rifle made for England must be acceptable to the U.S. Ordnance Department, which indicated that the use of the Rock Island equipment was authorized only for the manufacture of Springfield rifles. Even after the machinery was moved to Ilion, discussion with the British regarding the type of rifle continued. Finally, on April 7, 1941, General C. T. Harris advised D. F. Carpenter of the Remington Company that the British proposal to produce rifles of the Lee-Enfield design could not be accomplished without altering the Rock Island lease and further that any such change was undesirable to the Ordnance Department.

A supplement to the Letter of Intent to the British Government was issued on April 16, 1941, providing \$800,000 for two months production of the hybrid Model 1903-style rifles, during which time a formal definitive agreement was to be reached. Such a contract was eventually signed on June 30, 1941 and covered the production of 500,000 rifles for Great Britain at an estimated cost of \$50 each.



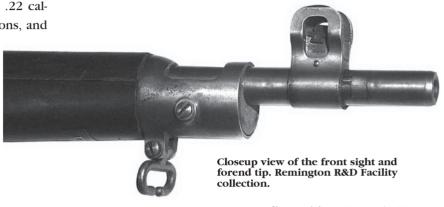
Hybrid M1903 rifle chambered in .303, made by Remington under contract to Great Britain. Remington R&D Facility collection.

On April 18, 1941, 45 railroad carloads of equipment were moved from Rock Island to Ilion and first gunmaking operations started. Despite many difficulties arising because of technical and manufacturing problems, the first completed rifles were ready for Ordnance acceptance within six months, just half the time that had been anticipated.

When production of the Springfield rifle had ended at Rock Island in 1920 and at Springfield in 1927 (only a few thousand rifles per year were manufactured until 1939, mostly National Match and other target rifles, and .22 caliber training and target rifles), drawings, specifications, and

other manufacturing data had not been kept up to date and the equipment itself was in need of rehabilitation and modernization. However, so critical was the British demand for rifles that immediate production at Remington was necessary. Time could not be spared for pilot production, experimental runs, or an engineering layout contract rifles were underway at Ilion, the plant keeping in close touch with Ordnance officials.

Even though pilot models had been completed, the British Government cancelled the original (A-2773 of June 30, 1941) contract on September 17, 1941. Great Britain was told by U.S. ordnance to have its British No. 4 military rifle manufactured by the Savage Arms Company. Only four hybrid British rifles were completed under the contract, and examples are rarely encountered today by modern collectors.



U.S. Rifle, Caliber .30, M1903 (Remington Arms Company)

Early on, Remington officials had been advised that a complete process record on the Springfield Model 1903 rifle was available. It was discovered during the set-up of machinery to produce the British rifles that the dimensions

and tolerances on the component drawings were not accurate since process changes had been made 20 years earlier without bringing the drawings up to date. Remington was advised that the gages probably represented more accurately the dimensions of the component parts, although not stamped with the correct dimensions, and there was no information available to determine if the gages were correct. In the event that there had been any warping or deterioration of the gages it would thus be difficult to determine practical working dimensions. Thus it was understood that the product to be produced by Remington would probably not be strictly in accordance with the original World War I Springfield rifle specifications.

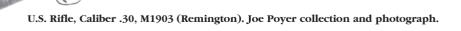


of the entire rifle in advance of initial productive operations.

Schedules were first set at 1,000 rifles per day—then to be doubled to 2,000—and then to be tripled to 3,000 per day. To attain such objectives, a program calling for the redesign of the rifle and modernization of the manufacturing process was necessary. The entire program at Ilion presented the problem of producing, within the shortest possible time, a maximum number of rifles suitable for combat use. The first of these hybrid British rifles was produced in only six months. However, in July Remington management was advised of a desire on the part of the U.S. Ordnance Department to place requisitions for Springfield rifles. On August 21st, the British government informed

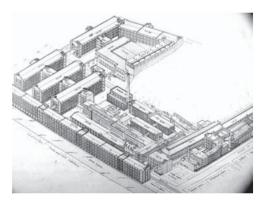
Remington that it was likely that the Ordnance

Department would take over the British contract. Meanwhile manufacturing operations on the British



This entire program to gear up to produce M1903 rifles for the U.S. Government was a formidable manufacturing and technical undertaking in which it was necessary to overcome many obstacles. In general, all of these could be attributed to the following:

- 1. Discrepancies and inadequacies of drawings, specifications, and other technical data.
- 2. Equipment and tool difficulties that would naturally occur in a program involving the use of over 1,000 machines which had stood idle for 20 years, and the procurement of thousands of tools and gages.
- The problem of recruiting and training an organization of approximately 7,500 employees, many of whom had no previous industrial experience of any kind.
- 4. The satisfactory coordination of a complex procurement-manufacturing program at a time when constantly greater and still greater efforts were required to produce rifles under abnormal conditions.



Circa 1915— Perspective drawing of the Remington facility at Ilion, New York. Remington Archives drawing.

The *U.S. Rifle, Caliber .30, M1903 (Remington)* as manufactured by Remington Arms Company Inc. was not the Model 1903A1 and to call it that is incorrect. The Remington version of the M1903 was based on the Model 1903 produced at Rock Island through the end of World War I. The M1903A1 variation was not developed until 1927.

As production of the M1903 (Remington) increased, previous manufacturing problems were intensified, and it became evident that major changes in design and equipment would be necessary to achieve the desired production level required by the U.S. Ordnance Department. Remington faced the task of procuring some 1,500 additional machine tools and enlarging plant facilities to accommodate them; or of redesigning the rifle so as to eliminate some parts and simplify the manufacture of others to make possible their procurement through subcontracting.

Remington received letter contract DA-W-740-ORD-36, dated September 17, 1941, for the manufacture of 134,000 Springfield rifles at a cost of \$54.15 each, on

which Remington's fee was to be \$3.00 per rifle. This contract officially ended Remington's work on the rifles for Great Britain. [Note: Even though Remington ceased work on the British rifles in mid-September, the British contract was not formally canceled until December 16th by a letter from H. D. Hancock, British Purchasing Commission to E. E. Handy.]

The U.S. contract also called for manufacturing 1,340 sets of spare parts at \$570 per set, with a fee to Remington of \$35.00 per set, and 1,340 sets of accessories.



The Remington factory where the M1903 rifles were made. Remington Archives photograph.

Daily capacity at the Remington plant in Ilion, New York was to be built up to 1,000 rifles, with initial deliveries on or before November 15, 1941, and completion of the full quantity ordered by July 15, 1942. As it was, on October 25, 1941, the first M1903 (Remington) rifles passed Remington inspection were ready for U.S. Ordnance Department inspection. However, Ordnance acceptance was not made until the week ending January 5, 1942, when 10,440 rifles had passed the Remington final inspection and 5,706 of these had been accepted by Ordnance.

The first rifles off the assembly line are often incorrectly referred to by modern day collectors and historians as *Model 1903A1 Rifles-Type I.* According to the official U.S. Ordnance Department nomenclature, these rifles should be known as *U.S. Rifle, Cal. .30 M1903 (Remington Arms Company).* These weapons were essentially identical to those made at Springfield Armory and Rock Island Arsenal in the World War I period. While less than 2,000 were made in the months prior to the Pearl Harbor attack, a total of 133,444 of this variation were eventually manufactured.

U.S. Rifle, Caliber .30, M1903 (Modified)

Design modifications were made to the early Remingtonproduced Springfield rifles, resulting in a new weapon known as U.S. Rifle, Caliber .30, M1903 (Modified). These are frequently, but incorrectly referred to by modern day collectors and historians as Model 1903A1 Rifles—Type II.

Around 231,500 of the "Modified" rifles were made between December 1941 and August 1942. The changes from the original U.S. Rifle, Caliber .30, M1903 (Remington) to this modified rifle were phased in between December 1941 and August 1942. The changes from the original rifle Remington made to this modified rifle were phased in between over a several month period:

- A large gas escape hole was drilled into the left side of the receiver ring.
- The lightening cut on the front inside of the forward trigger guard was omitted—December 1941.







• The bolt stop was eliminated—March 1942.

- The gas hole on the right side of the receiver was eliminated—March 1942.
- Stamped parts replaced milled parts, including: the lower band; the upper sling swivel; the extractor collar; the magazine follower; trigger guard/magazine housing; and the butt swivel assembly—April 1942.
- The rear sight fixed base was made without the decorative right and left side panels.
- Stocks were fabricated without the finger-groove in the wood forearm—August 1942.
- Metal parts were in transition from blued to Parkerized.
- The rear guard screw hole is now drilled through the tang; previous models had only been drilled up from the bottom, part way, leaving the screw head invisible.

U.S. RIFLE, CALIBER .30, M1903A3

On March 10, 1942, a formal U.S. contract was approved in the form of a supplement (No. 3) to the original letter contract. The contract called for 508,000 U.S. Rifle, Cal. .30, M1903 (Modified) to be produced by Remington on a cost-plus-fixed-fee basis. Following the execution of the contract, various change orders and supplements were negotiated, revising the quantities and schedules. On March 12,

> 1942, Remington was directed to increase rifle production from 1,000 to 2,000 per day, and on urgent Ordnance Department insistence, surveys were made to ascertain the maximum productive capacity. It was indicated that a daily production rate of 3,000 was desired.

> > In May 1942, a change order was received authorizing an increase in plant capacity to make possible the manufacture of 3,000 rifles per day. Since the nec-

essary additional facilities could not be obtained at that time, Remington accepted contract supplement No. 5, dated June 4, 1942, which ordered techClose-up view of the markings on a U.S. Rifle, Caliber .30, M1903A3. Joe Poyer collection and photograph.

nical studies to simplify the design and manufacture of the Springfield rifle.

Partially as a result of efforts to meet this increased schedule by reducing the machine tools and floor space required per rifle, and, incidentally, to reduce cost end raw steel requirements, Remington undertook the redesigning of the Springfield rifle. To overcome some of these difficulties and to make possible maximum production with the facilities available, Remington agreed to undertake studies toward redesign of the rifle and simplification of its manufacture. This program was authorized by contract supplement No. 5, dated June 4, 1942.

This assignment called for the redesign of the M1903 Springfield rifle to meet the following requirements:

- 1. Reduce the number of component parts (the original Model 1903 rifle had 91 parts).
- 2. Eliminate forging operations wherever possible (29 of the components of the Model 1903 rifle required forging).
- 3. Reduce machining operations (virtually all the parts of the Model 1903 rifle required machining).
- 4. Design parts in such a manner that the manufacture of a large number of such parts could be subcontracted to other companies.
- 5. The changeover from the manufacture of the old to the new design rifles should result in a minimum disruption to current production.
- To the maximum possible extent the new component parts should be so designed that they could be used as repair parts for either the new or the old rifle.
- 7. The new design should result in a rifle that would meet the severe performance requirements of the U.S. Army.
- 8. The entire design, engineering, plant conversion, tooling, and procurement program should be completed in the shortest possible time.

The above assignment was completed satisfactorily and met virtually all of the foregoing requirements. On July 20th, a Letter Purchase Order for 720,000 additional rifles to Remington was executed, bringing the total number of rifles ordered to 1,528,000. This was Supplement No. 8 to the Remington contract.

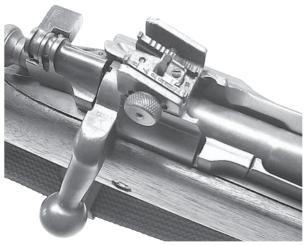
In August, 1942, the *U.S. Rifle, Cal. .30, Model 1903A3* was approved by the Ordnance Department.

The re-designed rifle was mentioned by Major General T. J. Hayes, Assistant Chief of Ordnance and Chief of Industrial Service, as one of the most outstanding improvements in the design of ordnance material by an industrial company. It was also cited by Lieutenant General W. S. Knudsen as an outstanding example of American Industrial achievement in the war effort.

The first Model 1903A3 rifle made by Remington was manufactured in October 1942. The initial rifles of this type are referred to by modern-day collectors as *Model 1903A3 Rifles*. The correct Ordnance Department designation was *U.S. Rifle, Caliber .30, Model 1903A3*. Characteristics of



Receiver marking on a U.S. Rifle, Caliber .30, M1903A3.



Rear sight on a U.S. Rifle, Caliber .30, M1903A3.

these weapons included some or all of the following. These changes were phased in between August 1942 and December 1943 and included the following:

- Barrels are marked with month and year from 10-42 to 6-44, and possibly a month or two later, as the last production was assembled.
- · Receiver-bridge mounted aperture sight.
- Front sight and mount combined in one extruded part.
- Higher front sight blade.
- Barrel contour changed to 1.200 3 0.749 inches.
- Barrel cover replaced by handguard.
- "S"-type stock used as original equipment. "C"-type and scant-grip stocks used as replacements. The "S" sock was the issue stock. "C" stocks and scant grip stocks only used as original equipment on the M1903A4 Sniper Rifle. Some "C" stocks were used on the original Remington production, very early.
- · Barrel guard ring added.
- Stock pins to replace stock bolts introduced at end of Modified rifle production October and November 1942.
- Three-part cocking piece (pentagonal shaft).
- · Long front guard screws.
- Increased-diameter trigger guard for gloved hands (so-called winter trigger guard).

Of the 91 components of the Model 1903 rifle, 12 were completely eliminated, 25 parts previously requiring forging were redesigned to be stamped and formed, and only 24 remained unchanged. Approximately 1,500 machine tools which would otherwise have been required were released for other war needs; more than six pounds of steel were saved in the manufacture of each rifle, and a saving of 50 percent in direct labor was effected. Thus, it was possible to subcontract many additional parts which were formerly machined at Ilion, because outside facilities were available to do the stamping and forming of the redesigned parts. It became possible for the company to undertake manufacturing schedules up to 3,000 rifles per day within the Ilion Works.

On September 17, 1942, Remington officials met with Ordnance Department representatives at Rochester and discussed the financial aspects of the rifle contract. Among other things covered at this meeting was the possibility of a reduction in Remingtons fees on rifles, sets of parts, and sets of accessories. This discussion was formalized in contract supplement no. 36, dated November 3, 1943, which reduced Remington's fee to \$2.25 per rifle and \$20 on each set of spare parts.

Production for the year 1942 was completed almost exactly on schedule. A total of 558,672 rifles had been accepted by the Ordnance Department as against a schedule of 547,000.

Remington's rifle contract entered a new phase of negotiations when, on January 5, 1943, Mr. Littleton, Rochester Ordnance District, called J. S. Hoffman and W. B. DeReimer on



Workers in Remington's wood shop fabricated this 20-foot tall M1903A3 rifle in 1944. Remington Archives photograph.

the telephone and suggested that the contract be converted from a cost-plus-fixed-fee to a fixed price basis. Because of the complications involved in making such a change \dots , complications resulting from such factors as the transfer of the con-

tract from the British to the U.S. Government, lease of Rock Island equipment, acquisition of government facilities, and a provision for plant rehabilita-

Bayonet for a U.S. Rifle, Caliber .30, M1903A3. Joe Poyer collection and photograph.

tion upon conclusion of the contract \dots , several months of negotiations followed.

In the Spring of 1943, when the initial urgency for rifles had passed, it was suggested to General Kirk that production be curtailed to make possible process improvements, which would subsequently insure a product even more closely approaching the limits set in the specifications. General Kirk approved such action and thus monthly production dropped for the next few months.

To attain the proposed production rate of 3,000 rifles per day, it was necessary to employ a large number of additional employees. Inasmuch as the urgency of rifle production had passed, and the manpower and housing shortage at Ilion presented serious problems, it appeared to us that a somewhat lower rate of production might lead to less disruption in the locality. This was brought to the attention of Ordnance officials, with the advice that Remington would pursue whatever course Ordnance approved.

On May 20, 1943, Brigadier General James Kirk advised D. F. Carpenter that in his opinion the further manufacture



Ilion Plant Manager George Clifford delivers the one-millionth Model 1903 rifle to Colonel Frank Atwood. Remington Archives photograph.

of the Springfield rifle was uncertain. Five days later General Kirk advised Mr. Carpenter that the Ilion schedule would be reduced from 90,000 per month to 75,000.

On August 6, 1943, Major Neilson advised D. F. Carpenter that the Springfield Armory had been manufacturing rifle spare parts, but that production on the Garand rifle was so urgent that Remington might be called upon to manufacture spare parts for the Springfield in order to release facilities at the Springfield Armory for work on the Garand. By midmonth, on September 15, 1943, Remington received a list of the spare parts that the company was requested to produce for the Ordnance Department.



A patriotic "Buy War Bonds" exhibit at the Remington plant—circa 1943. Remington Archives photograph.

In all, a total of 707,629 *U.S. Rifles, Caliber .30, Model 1903A3* were made by Remington Arms Company.

U.S. RIFLE, CALIBER .30 M1903A4 (SNIPER'S)

When the United States entered the war on December 8, 1941, its armed forces did not possess an effective rifle capable of use by snipers. It was not until January 18, 1943 that this situation was rectified by presenting the Remington Company with a contract (Production Order S-1066) to set aside 20,000 M1903 (Modified) and M1903A3 receivers to be converted to sniper rifles. The new rifle was designated the U.S. Rifle, Caliber .30 M1903A4 (Sniper's).

Characteristics of the new Remington sniper rifle include the following:

- "C" stocks utilized, marked **S** in the magazine cutoff recess from s/n 3407088-3427087.
- Weaver 330C (commercial) (2.5 power) optical telescopic sights were initially fitted to the first block of the Model 1903A4 rifle, and later Weaver "Telescope M73B1" scope (the military designation).

The actual number of M1903A4 rifles produced is not known with any certainty. Noted author Clark Campbell's survey of Remington records suggests a total of 28,365.



U.S. Rifle, Caliber .30, M1903A4 (Sniper's) and other World War II equipment and ammunition. Photo courtesy the *American Rifleman* magazine.



U.S. Army sniper armed with U.S. Rifle, Caliber .30, M1903A4 (Sniper's). U.S. Army Signal Corps photograph.



U.S. Army sniper somewhere in the Pacific. U.S. Army Signal Corps photograph.

RIFLE PRODUCTION AT ILION HALTED

In September 1943, a total discontinuance of the manufacture of Springfield rifles was first discussed between the Ordnance Department and the Remington Arms Company. Total discontinuance of the manufacture of Springfield rifles was again discussed at a meeting in General Kirk's office on November 8th, at which time Remington was requested to prepare a plan for the reduction and/or complete discontinuance of Springfield rifle manufacture.

Soon after that, formal steps were taken to reduce the manufacturing schedule, as follows:

 November
 58,500

 December
 50,000

 January
 40,000

In October, 1943, Remington executed contract supplement no. 35, which established a fixed price for rifles, spare parts, and accessories retroactive to the first delivery under the contract. These negotiations were voided when Colonel Duffy advised W. U. Reisinger by telephone that the Comptroller General had refused to approve government execution of supplement no. 35. The contract was continued on a cost-plus-fixed-fee basis.

On December 7, 1943, Remington accepted change order no. 39 permitting the manufacture of a maximum of 176,774 rifles made after November 1st. The change order also called for discontinuance of production of Model 1903A4 rifles by February 29, 1944.

Since that time the Ilion plant of the Remington Arms Company manufactured spare parts and did repair work on Springfield rifles in addition to manufacturing guns and rifles of the company's design for various Government agencies.

Thus ended the manufacturing saga of the venerable Springfield Model 1903 rifle. Remington Model 1903, Model 1903A3, and Model 1903A4 rifles served our armed forces





The first U.S. rifle, Caliber .30, M1903 made by Remington. Serial number 3000000. Peter Wainright collection.

well in both the European and the Pacific Theaters during World War II. In all, Remington had produced a total of approximately 1,084,079 variations of the M1903 rifle, including the following:

U.S. Rifle, Caliber .30, M1903	133,444 rifles
(Remington Arms Company)	
U.S. Rifle, Caliber .30, M1903	214,641 rifles
(Modified)	
U.S. Rifle, Caliber .30, M1903A3	707,629 rifles
U.S. Rifle, Caliber .30, M1903A4	28,365 rifles
(Sniper's)	

IMPORTANT EVENTS IN THE MANUFACTURE OF MODEL 1903 RIFLES DURING WORLD WAR II

Aug. 15, 1940	The British Purchasing	
	Commission asks if Remington	
	will manufacture 400,000	
	Model 1903 style military	
	rifles for the United Kingdom.	
October 25, 1940	Sir Walter Layton emphasized	
	the urgent need for rifles and	
	believes that five million will	
	be required at the earliest pos-	
	sible date.	
November 6-7, 1940	Remington representatives	
	travel to Rock Island Arsenal to	
	inspect old grease-covered tool-	
	ing last used 19 years earlier to	
	make M1903 rifles.	

November 0, 10, 10/0	Nonetiations completed
November 9-16, 1940	Negotiations completed
	authorizing the use of Rock
	Island equipment. Tentatively
	agreed that Remington would
	produce Model 1903 rifles
	under a cost-plus-fixed-fee
	contract of \$5.00 per rifle.
December 12, 1940	Letter of Intent from British
	providing for the manufacture
	of 500,000 Springfield rifles—
	caliber .303 British.
March 4, 1941	Robert B. Patterson,
	Undersecretary of War, signed
	the lease assigning Rock Island
	equipment to Remington
36 1 / 10/1	Arms Company.
March 4, 1941	The first of the Model 1903
	machinery is shipped from
	Rock Island Arsenal to
	Remington's Ilion factory.
March 11, 1941	The Lend-Lease Act is passed.
April 18, 1941	First manufacturing operations
	on Springfield rifles.
April 22, 1941	The last of the Model 1903
	machinery from Rock Island
	Arsenal arrives in Ilion. The
	machinery is all set up for full
	production by the end of May
	1941.
June 16, 1941	Remington's factory workers
J	go to a 50-hour work week.
September 17, 1941	Remington received Letter
september 17, 1711	Contract DA-W-740-36-ORD-56
	for 134,000 Springfield rifles
	on a cost-plus-fixed-fee basis at
0 - 1 - 25 10/1	a fee of \$3.00 per rifle.
October 25, 1941	First rifles passed Remington
	final inspection.
December 10, 1941	First rifle manufactured under
	Remington's contract (made
	months earlier) is presented to
	Lieutenant Colonel Roy L.
	Bowlin, Deputy Chief of the
	Rochester Ordnance District.
December 16, 1941	British contract formally can-
	celled.
March 10, 1942	Contract supplement No. 3
	executed calling for an aggre-
	gate total of 508,000
	Springfield rifles.

April 1942	Workers at Remington's plant	October, 1945	Remington executed contract
June 4, 1942	go to a 7-day week schedule. Contract supplement No. 5, ordering technical studies to simplify the design and manufacture of the Springfield rifle.		supplement No. 55 establishing fixed prices retroactive to first delivery under contract. (Above negotiation was not consum- mated because of Comptroller
July 20, 1942	Remington received Letter Purchase Order for 720,000 additional rifles. Supplement No. 8.	November 5, 1945	General's refusal to approve government execution of sup- plement No. 55.) Remington's fee reduced from
August, 1942	Redesigned rifle (Model 1905-A3) approved by Ordnance.	November 8, 1945	\$5.00 to \$2.25 per rifle. Discontinuance of rifle manu-
September 14, 1942	The Ordnance Department awarded the workers at	110.011110110, 17.17	facture discussed with Ordnance officials.
	Remington's Ilion Plant the E- Award for "high achievement in the production of war materiel."	December 7, 1945	Remington accepted change order No. 59 calling for the cessation of production on
January 18, 1943	The Remington Company was given a contract (Production		February 29, 1944. Total number of Remington-manufac-
	Order S-1066) to set aside 20,000 M1903 (Modified) and		tured rifles came to 1,084,079.
	M1903A3 receivers to be converted to sniper rifles—U.S. Rifle, Caliber .30, M1903A4	BIBL	IOGRAPHY
January 4, 1944	(Sniper's). At an awards presentation, Remington gave Colonel Frank Atwood the one-millionth	Variations. Edited by Ed. F	el 1903 Springfield Rifle and Its Furler, Jr. 2nd Edition, Revised and 4. North Cape Publications, Inc., 92781.
	Model 1903A3 rifle. A presentation plaque on the stock designated the rifle to Colonel Frank Atwood, District Chief	Revolutionized U.S. Riflery	the '03 Era—When Smokeless 2 Copyright 1994. Collector Grade x 1046, Cobourg, Ontario Canada
September 20, 1944	of the Rochester Ordnance District. Remington Arms Company's Ilion factory workers are presented with their 2nd E-Award	Bill Brophy, The Springfield 1903 Rifles. Copyright 1985. Stackpole Books, P.O. Box 1831, Harrisburg, PA 17105. Internal Remington Arms Company Report by Donald F. Carpenter—June 1945 about rifle production at Remington Arms Company Inc. During World War II.	
January 5, 1945	by the U.S. Government. Remington first contacted regarding conversion from		WLEDGEMENTS
May 25, 1945	cost-plus-fixed-fee to a fixed price basis. Remington advised of monthly schedule reduction from 90,000 to 75,000 rifles.		o thank the following individuals ting this article: Bill Hansen, Joe