

# EDDYSTONE MODEL 1917 RIFLE

Kurt Sellers, Major, U.S. Army (retired)



## *U.S. Rifle, Caliber .30, Model of 1917*

Cal. .30 M1906 ball: 150 grain bullet with 2700 fps muzzle velocity

Bolt action, 6-round internal box magazine, 5 rd. stripper clip loading <sup>1</sup>

9 lbs., 46.3 in., 26 in. barrel

10.3 lbs with attached bayonet (1.1 lbs) and oil & thong case (.2 Lbs)

Rear sight: folding leaf with protective wings  
battle sight aperture on folded leaf set for 450 yards  
sliding aperture on raised leaf graduated from 200-900 yards in 100 yard increments and  
900-1600 yards in 50 yard increments,  
no windage adjustment

Front sight: blade with protective ears

Barrel: five groove rifling , left hand twist, 1 in 10 rate of twist

Manufactured by Eddystone, Remington-UMC and Winchester 1917-1919



Rifle manufacture in Eddystone is an outstanding example of the dominant industrial role of Pennsylvania in arming and equipping American and Allied forces in World War I. A rifle is the most prolific military arm and Eddystone Model 1917 rifles armed more American soldiers than any other weapon used in the Great War.

The M1917 "Enfield" was a development of the British Enfield Pattern 13 trial rifle chambered in an experimental .276 caliber rimless cartridge. With the outbreak of World War I in 1914, the Pattern 13 was modified to use the standard rimmed .303 cal. cartridge and adopted as the Pattern 14 Mark I. The P.14 was produced solely in the U.S. under contract to Britain.

The contracted manufacturers were Remington-United Metallic Cartridge Co., Ilion NY, Winchester Repeating Arms Co., New Haven CT, and Remington Arms Co. of Delaware, Eddystone PA. Remington Arms Co. of Delaware was a Remington subsidiary specifically created to produce the rifle in Eddystone.

In 1915, the massive Eddystone Rifle Works was built on land owned by the Baldwin Locomotive Works. Baldwin constructed the plant on provision its buildings would be absorbed by Baldwin after the war to expand its adjacent locomotive factory. Eddystone delivered its first Pattern 14 rifles on May 20, 1916, and production ended June 1, 1917, with 604,941 rifles having been made.<sup>2</sup>

When the U.S. entered World War I on April 6, 1917, the army had only 208,034 men in service.<sup>3</sup> By Armistice day November 11, 1918, the army was four million strong with two million serving in the Army Expeditionary Forces. Over a million men in the AEF were in combat units.<sup>4</sup> Arming this force was a major undertaking.

Upon entry into the war, there were 585,468 standard M1903 Springfield rifles on hand.<sup>5</sup> Production capacity at Springfield Armory and Rock Island Arsenal was inadequate to meet the demands of an expanding army. With three factories producing the Pattern 14 rifle, it was decided to modify that weapon to chamber the standard U.S. caliber .30 cartridge. The resulting rifle was adopted as the Model of 1917. Following delays in achieving parts standardization among manufacturers, Eddystone delivered its first M1917 rifle on September 10, 1917, preceded by Winchester (August 18) and followed by Remington (October 28).<sup>6</sup>

In January 1918, Remington Arms Co. of Delaware was absorbed by Midvale Steel & Ordnance Co. of Nicetown, Philadelphia PA. The factory was renamed Eddystone Rifle Plant after its acquisition by Midvale Steel.

The Eddystone Rifle Plant was the largest rifle factory in the world occupying 34.5 acres and employing a high of 15,409 workers.<sup>7</sup> From June 1918, onward, monthly production exceeded 100,000 rifles. Daily production averaged 5,000 rifles with a high of 7,801.<sup>8</sup>

Wartime manufacture of the M1917 at all three factories totaled 2,193,429 rifles which amounted to 87.5% of U.S. rifle production. Almost fifty-four percent of these M1917 rifles were made at Eddystone. In contrast, the two government arsenals made only 312,878 M1903 Springfield rifles during the war.<sup>9</sup>

By the time of the Armistice, some 1,123,259 M1917 rifles had been shipped to France; 800,967 issued to troops and 322,292 "floated in bulk" (unissued in reserve).<sup>10</sup> With an AEF combat strength of 1,078,222, the issue of 800,967 rifles indicates up to 74% of soldiers were armed with the M1917.<sup>11</sup>

From August 1917-Nov 9, 1918, the Eddystone plant manufactured 1,181,908 rifles which constituted 47% of the total wartime rifle production.<sup>12</sup> When allowing for M1903 rifles on hand at the start of the war, Eddystone rifles still accounted for 38% of U.S. World War I rifles.<sup>13</sup> The Eddystone Model 1917 was the most prolific U.S. weapon of the war and armed more doughboys than any other weapon.

Eddystone ceased production of the M1917 on January 9, 1919.<sup>14</sup> The final production figure was 1,352,477 rifles - an addition of 170,569 rifles to its wartime total.<sup>15</sup> Spare parts equivalent to at least an additional 135,000 rifles were also made at Eddystone from 1917-1919.<sup>16</sup>

Eddystone production of the Model 1917 rifle was a premier achievement in arming the American soldier in World War I. It was a great industrial accomplishment and a major contribution by Pennsylvania in that conflict.

#### ENDNOTES

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<sup>1</sup> The six round capacity was due to dimensional differences between the U.S cal .30 and British .276 / .303 cartridges. In combat, five rounds would normally be loaded via the clip common to both M1903 and M1917 rifles.

<sup>2</sup> Skennerton, p.62. Most P.14 rifles were made in 1917 and were Pattern 14 Mark I\* models. The asterisk (read "star" in British arms parlance) denotes a modification. The change, approved, Dec 21, 1916, was lengthening the bolt lug and corresponding chamber recess. Skennerton, p. 50, 52.

<sup>3</sup> CRS IN10668. 127,588 Regular Army (61%) and 80,446 National Guard soldiers

<sup>4</sup> "Combat" unit indicates division troops, along with corps and army level units. Of course, many members of combat units had support functions within their organizations. The bulk of non-combat troops were assigned to the Services of Supply operating theater logistics along with troops staffing headquarters, schools, hospitals, etc.

The principle combat unit was the division. In 1918, a division was authorized 28,059 men and 17,666 rifles. Forty-two divisions were deployed to France, of which twenty-nine saw combat service. One arrived too late and eleven were broken up for replacements. The black infantry regiments of the 93<sup>d</sup> Division saw combat with the French, but the units of the 93<sup>d</sup> never fought as a division.

<sup>5</sup> McConoughy, p.11

<sup>6</sup> Crowell, p.181 -183. Standardization of parts across manufacturers was not done during P.14 rifle production. Therefore, British nomenclature for these rifles included an 'E', 'R', or 'W' to denote manufacturer.

<sup>7</sup> Nelson manuscript, cited in Ferris, p.122.

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<sup>8</sup> Ibid., p.122.

<sup>9</sup> Production figures from Crowell, p.196.

<sup>10</sup> McConoughy, p.18.

<sup>11</sup> Cited combat strength from American Armies and Battlefields, p.502.

<sup>12</sup> Crowell, p.196.

<sup>13</sup> Meaning standard M1903 and M1917 rifles. Two divisions serving with the British were armed with Mk III Lee-Enfields and four black regiments serving with the French were armed with Mle. 1907/15 Berthier rifles. Two regiments in the Russian expedition were armed with M1891 Mosin-Nagant rifles. The Mosin-Nagant rifles used were U.S.-made. Remington and New England Westinghouse had produced the rifles for Russia before the contract was cancelled with the overthrow of the Czar. The Russian contract rifles also saw stateside service along with obsolete Krag-Jorgenson rifles and a few Canadian Ross rifles.

<sup>14</sup> Skennerton, p.67.

<sup>15</sup> Nelson manuscript, cited in Ferris, p.121. Other sources production figures: **1,356,643** (Ferris p.26, citing ordnance acceptance report for week ending 5/3/19) **1,352,862** (Williams, p.518), and **1,328,260** (Ferris p.26, citing M.D. Waite article in American Rifleman Sep 1976).

<sup>16</sup> Williams, p.60. Evidently an estimate of 10% spare parts production. An estimate of 200,00 is often given based on 20% spare parts production cited by McConoughy, p.14.