# HISTORY OF THE SIGNAL CORPS IN THE MAINE NATIONAL GUARD

*Field Telephone Number 4 near San Juan Hill, Cuba, 1898*

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## INTRODUCTION

The history of the Signal Corps in the Maine Army National Guard is unique amongst the various units that grew out of the original state militia. Under the Militia Law of 1893, each state was authorized a Signal Corps, what we would now refer to as a detachment. The Signal Corps provided an innovative and adaptive force in its short history, one that is hard to find a rival for in the annals of Maine Army National Guard history. Through the study of this history, Signal Soldiers can trace their own lineage and develop a sense of pride in their heritage.

## BEGINNINGS

Prior to 1893, there was no allocation within the Maine Volunteer Militia for signal corps units. Although officers were trained in some signal tactics as part of the Infantry School, there was no one group of subject matter experts within the organization. Change came in 1893, when the Maine Volunteer Militia, by Federal legislation, became the National Guard of the State of Maine. Under this new legislation, the state was authorized to form a Signal Corps. Calls for this had already begun prior to 1893, as officers within the state recognized the need for a unique unit that would enhance the organization's ability to communicate. In this era, the Signal Soldiers were not only communicators, but also reconnaissance and intelligence gathering forces. While they maintained lines of communication in the rear, they also scouted ahead and reported back on enemy movements or terrain obstructions.

Even though the state had its authorization, it did not recruit and fill a signal unit until 1895, because they were working to bring their infantry regiments to strength. On July 2, 1895, Second Lieutenant George W. Butler took command of the small signal detachment based out of Portland with First Sergeant Amos W. Herrick. They drilled out of the Milk Street Armory. Its strength at the time of organization was one officer, three non-commissioned officers, and fifteen privates. They were, for the most part, telegraph operators in their civilian jobs, and the Adjutant General's report of 1895 refers to them as "intelligent men." For equipment, the unit was provided with two sets of telegraph and telephone instruments, 500 yards of cable, a heliograph, compasses, and signal flags. They were armed with Springfield breech loading .45 caliber carbines and wore the blue uniforms and wide-brimmed hats of the infantry. With a view for the future, the Signal Corps was to be trained not only to be proficient in communications technology and techniques, but also in collecting intelligence and relaying it to maneuver elements.

Through the following years, the Corps continued targeted recruitment, gaining electricians and linesmen. Because of the specialized nature of their work, retention was significantly higher than in other units, and the Corps became rapidly known for its efficiency and professionalism. Due to budget limitations, however, they were in need of much necessary equipment, such as a prime mover for their gear and additional linesmen equipment. With telegraphs being the main method of communication, rapid movement to be able to lay wire and repair breaks was essential.


*Lieutenant George Butler, around the time of the Spanish American War, where he led the 8th Company, Signal Corps, Maine Volunteers (Image Courtesy Maine Memory Network)*

## DEVELOPMENT AS A PROFESSIONAL CORPS

As an indication of the inventiveness of the Signal Corps, the unit volunteered to experiment with bicycles as a mode of transport during the Annual Encampment conducted in Augusta in 1897. Fifteen troops rode bicycles while a sergeant and Lieutenant Butler travelled on horses, in order to compare the two modes of transport.

Using cyclometers, they navigated to each waypoint, recording the distance and time. The trip from Portland to Augusta took just under two days. Upon arrival to Camp Powers (now Camp Keyes), they compiled their notes and produced an accurate map of the route with times and distances noted. Because of this, Lieutenant Butler was asked by the camp commander, Colonel Kendall, to conduct a thorough reconnaissance of "the country west of Camp Powers from Winthrop Road to Western Avenue, locating all plated fields, and to ascertain the names of the owners," and then to make a topographical sketch of the area.

The Signal Corps in this encampment demonstrated how they could turn anything into training. Instructed by Colonel Kendall to investigate rumors of improper conduct of Maine Guardsmen at a dance in Hallowell, Lieutenant Butler visited the town and discovered there was no dance and the Guardsmen who were there were behaving with propriety. He then reported this back to the colonel by means of signals, from Hallowell, and received orders to return to camp in the same manner. During this encampment, the Signal Corps set up several signal stations which could rapidly relay information back and forth, such as the arrival of the governor for a grand review.

Leaving it to the enterprising Lieutenant Butler to offer an opinion of the bicycle as a mode of transportation for the Maine Guard, he had this to say:

> "In my honest opinion, the cycle is entirely unfit for the purpose except in a country where the roads are good and even, and then only in daylight, for it is almost impossible to travel in the dark with full equipment without a lantern which is not to be thought of in a hostile country. Of the fifteen cycles that left Portland in a good condition, six tires were punctured, one crank broken, one frame twisted and rear brace broken, and one rim cracked."

During that same year, the Signal Corps was used an advance guard and an opposing force as part of a tactical exercise with companies A, B, E, and L of the First Regiment of Infantry in Portland. During the march out from Portland, the Signal Corps advanced ahead of the main body to act as early warning. Arriving at the site for the tactical exercise in South Portland, the Corps then occupied a railroad cut to act as the "enemy." As the infantry set up outposts, the Corps began a harassing fire, driving them back. The main body then assaulted and finally charged the Corps, ending the exercise. The Signal Corps was congratulated for their fine work, and in having so many of their men present in comparison to the line companies. This is notable as this was an era before pay for drill periods was authorized. This vignette serves to show how adaptable the Signal Corps was, as a reconnaissance and fighting force.

## WAR WITH SPAIN

In 1898, the President put out a call for volunteers from the National Guard for service in the war with Spain. Although there was no express call for signal corps Soldiers at first, Maine's Signal Corps assembled with the rest of the Soldiers of the state for training. In Washington, DC, the War Department realized that the tiny Active Duty Signal Corps (eight officers, fifty enlisted men) could not handle the requirements for signal troops, and authorized a Volunteer Signal Corps. On May 20, 1898, the exuberant Soldiers received the word that they were needed in Cuba. The signal detachment was to consist of two officers and forty-four privates. Telegraph operators, linemen, and electricians were recruited to fill the ranks of Maine's Signal Corps. By June 11, the detachment was ready to go, armed with Springfield .45 caliber rifles as well as various types of signal equipment. They were officially designated as the 8th Company Signal Corps, Maine Volunteers on June 11.

By June 17, the detachment was in Washington, DC and arrived in Tampa, Florida on June 23. They received their orders for Cuba on June 29 and were loaded on board ships by July 3, but were prevented from bringing much of their equipment with them. General Shafter had instructed that he only wanted "soldiers with guns on their shoulders" and the quartermasters at Tampa took this quite literally. The detachment was split up at this point, with two men going to serve with the 9th Company, Signal Corps, United States Volunteers (Ohio National Guard) in Puerto Rico. The Corps was further divided amongst the transports and warships en route to Cuba, in order for the ships to be able to "talk" to each other using the Signalers. The main body arrived in Cuba on July 10, where Butler, now a temporary captain, visited the battlefield at San Juan Hill.

The U.S. forces were at that time involved in the siege of the city of Santiago and had an immediate need for establishing lines of communication from the front to the rear areas. As such, Captain Butler and the men of the signal detachment were kept busy laying wires and maintaining these lines in the week leading up to the Spanish surrender of Santiago on July 17. The telegraph lines were continuously getting cut, both by Cuban guerillas and U.S. troops, the latter who were evidently unaware of the lines' importance. The Mainers strung the wires up in trees or on poles that had to be brought from a distance. Even semaphore flags were used once for signaling the American fleet when showing a light would have brought enemy fire. In general, however, the mountainous terrain and dense jungle prevented visual signals from being effective. The telegraph proved to be the most efficient way of conveying information.

The troops battled disease, poor food, the weather, and an inadequate Army supply corps. Captain Butler reported that the quartermasters refused to supply him with anything and at times he was obliged to steal mules from them, fashioning packs out of shelter tents: "Have now on hand thirty-one good mules that I am not responsible for." Mules were desperately needed as the men were scattered in little groups all over the country, and mules were the only transportation that could carry food and communications supplies out to them.

The expertise brought by the Mainers was evident in how proficient they were in their tasks due to their civilian occupations. When the detachment arrived, they found

that all the instruments and electronics at their new station had been burnt out by lightning. Sergeant George Frarey, formerly the division inspector for the New England Telephone and Telegraph Company, had it all working again in a matter of hours. Yankee ingenuity was again used when the detachment was ordered to recover a length of wire. Lacking any type of contrivance, the detachment built a one-wheeled device that could be hauled by a mule over the uneven terrain of Cuba. The detachment also noted that many U.S. troops seemed very ignorant of signal technology, sometimes cutting a wire and splicing it with rope, as if that would repair the damage.

August 12 brought an end to hostilities. Sickness became an issue for the detachment by September. Captain Butler on September 16 reported that "I have twenty-one men fit for duty but have not one that could run one hundred yards without becoming exhausted." Disease had done what the Spanish could not. It was malaria and yellow fever that forced the U.S. troops to leave Cuba in the fall of 1898.

Before the detachment left Cuba, they were visited by General Adolphus W. Greely, commander of the U.S. Signal Corps (also leader of the famous Greely Expedition in 1881). He assembled the detachment and thanked them for "the intelligent and efficient manner in which they had performed their duty." He praised the volunteers, saying that they performed as admirably as their Regular Army counterparts; more so, even, as they were just lately civilians with little military training. "The State of Maine ought to be proud of you and should be proud of the manner in which she prepared you for the field," said the general. Before he left, General Greely asked to visit every sick man of the detachment, which he did, thanking each one personally. The detachment, less those sick, arrived home in Augusta on September 23. Three men had died of sickness in the campaign: Sergeant Fred Stuart, Private Ezra Colcord, and Private Frank Locke. It was the only unit of the National Guard of the State of Maine to serve during combat operations in the Spanish-American War. The men who deployed were permitted to wear the coveted service chevron on their jacket sleeves, to indicate that they were veterans of overseas campaigns.

## POST-WAR AND DISBANDMENT

Life returned to normal for the men of the Signal Corps following the excitement and harrowing duty in Cuba. There were rumors of more deployments to come, however, in 1900. On August 16, The *Lewiston Daily Sun* reported that they had firm knowledge that the Signal Corps was going to be requested to accompany the American expeditionary force being sent to China to rescue Americans trapped by the Boxer Rebellion. However, the official request never materialized and a signal company stationed in the Philippines was tapped to go instead of the Mainers.

The size of the Corps was increased to twenty-one at this time, with additional signal equipment being authorized. However, men were still not paid for armory drills or for regimental schools. Even when brought into service for the Annual Encampment or disaster relief, pay was slight. A second lieutenant would receive $2.00 per day, with an additional $3.00 if he was required to be on horse (officers in the Maine National Guard rented horses unless they already owned one). A private Soldier received only $1.25 a day. This would remain unchanged until 1916, when pay for drills finally became authorized.

In 1901, the Signal Corps received a new commander, George Butler retiring to civilian life due to medical reasons, possibly from the severe fever that he had contracted in Cuba. Second Lieutenant John R. Lowell of Portland took command on July 3, 1901. Prior to leaving command, however, Lieutenant Butler led Maine's Signal Corps in one last notable event: the inauguration ceremony for President William McKinley in February of 1901. The unit formed a part of the Maine Battalion which marched in the inaugural parade past the President's reviewing stand. Just seven months later, President McKinley would be killed by an assassin's bullet.

Command of the Signal Corps changed yet again in 1902, with Second Lieutenant Wylie D. Floyd taking over from Lowell. Floyd had been a sergeant within the Corps prior to gaining a commission, and was noted for being an excellent marksman. The Corps was commended for its work at the Annual Encampment that year and for its drill and ceremony during a military exhibition in Portland. The Annual Report for that year noted that there were six expert telegraph operators within the Corps and that sixteen out of the twenty-one men were able to receive and relay messages in all the different methods with speed and efficiency. Both the Morse and Myers Code ("wig-wag") were used in visual signaling, through flags and heliographs.

In 1903, the Maine National Guard took part in its first joint military exercise with the Regular Army, Navy, Massachusetts National Guard (First Regiment of Massachusetts Heavy Artillery), and New York National Guard (New York Signal Corps Companies) in the Military District of Portland. On August 21, the Signal Corps arrived at Fort Preble in South Portland to receive its equipment and be assigned its stations. The exercise pitted the Army forces versus the Navy. The Navy's North Atlantic Fleet waited offshore, ready to test Portland's coast defenses with its battleships and cruisers.

The Signal Corps was broken up, with groups of four men at Fletcher's Neck, Prout's Neck, Jordan's Point, and Two Lights. All were equipped with signal equipment and descriptions of the "enemy" ships. Lieutenant Floyd's command was augmented by some signalmen from the Regular Army and New York National Guard. Primary means of communication during the day were flags and heliographs, while lanterns and Ardois lights were used during the night. Rockets and "Very lights" were also sent up when needed. The signal stations were used to rapidly relay information regarding the fleet's activities back to the forts. When not actively taking part in the exercise, the signalmen practiced various techniques and tested the functionality of their equipment.

The signal stations were lightly defended, and landing parties of Marines put two of them out of action, although the station at Two Lights was able to evade capture and send a warning back to Fort Preble. Through the valuable work of the Signal Corps, the ground forces were able to shift troops to meet landing parties and defeat them at the beaches. They were commended for their excellent work at the end of the exercise.

That was to be the last exercise the Corps would take part in, as they were disbanded on June 22, 1904 for falling below 85 percent attendance during their annual inspection that February. However, during the inspection, they had still received top marks in character, zeal, efficiency, and reliability. The men were discharged and returned to their civilian jobs.

One of the reasons for the end of the Signal Corps was the reorganization of the National Guard brought about by the Militia Act of 1903. The Act standardized state National Guard units along the same lines as the Regular Army. Evolving along these

lines, the infantry regiments soon received allotments for Signal Corps personnel in their ranks. In 1910, the First Regiment of Infantry became thirteen companies of Coast Artillery. Under the guidelines for this organization, multiple positions for Signal officers and enlisted men became open. They were needed to relay messages between the lookout stations to the fire direction and control centers. As the Coast Artillery developed and the defenses around Portland Harbor became more sophisticated, Signal Corps personnel became invaluable. Plotters, observers, and gunners needed to know how to use the basic communications equipment on hand.

Signal Corps officers and enlisted personnel have served in every Maine Army National Guard Organization since the disbanding of the original detachment in 1904, ensuring reliable and accurate communication on the battlefield and during civilian relief missions. This expert corps of personnel owe much to the very first Signaleers under George Butler.

## NOTABLE MAINE SIGNALEER

### George Sterling

Born on Peaks Island on June 21, 1894, George Sterling was interested in radio technology. In 1912, he received one of the first amateur radio licenses issued by the Department of Commerce Radio Service. After graduating high school, Sterling enlisted into the Maine National Guard's Company M, Second Infantry. When the U.S. entered World War I, the Second Infantry became the 103rd U.S. Infantry and deployed to France. Because of his interest in Signal technology, Sterling was sent to the French Corps Specialist School where he learned French Army Signal techniques. After this training, he was assigned to the Army Signal Corps where he served as an instructor of wireless at the 1st Corps School in Gondrecourt, France. He attended officer's training school and was commissioned as a second lieutenant, assigned to General Army Headquarters. In this role, he was sent to the Front to organize and operate the first radio intelligence section of the Signal Corps, which located German radio transmitters and intercepted their traffic. For this, he received a citation from Major General Owen Squier, Chief Signal Officer of the American Expeditionary Force, for "especially excellent and meritorious service."

After the war, Sterling became a Federal employee with the Federal Radio Commission (forerunner to the Federal Communications Commission) as Radio Inspector in Charge at Fort McHenry. In 1937, he was promoted to Assistant Chief of the Field Division of the engineering department of the FCC. In 1940, he was appointed to lead the new National Defense Operations section, later changed to the Radio Intelligence Division. He led the RID through World War II, helping modernize data processing and intelligence gathering. In 1948, President Truman appointed Sterling as the Commissioner of the FCC. He served in that position until 1954, when he retired to Peaks Island. Sterling died in 1990 at the age of 96.

## GLOSSARY

Heliograph: A wireless solar telegraph that signals by slashes of sunlight (generally using Morse code) reflected by mirror.

Electrical Telegraph: Signals sent via electric pulses through wires that could be transposed using signaling alphabets.

Signal Flags: Rectangular flags used to send messages through visual recognition, using the wig-wag technique: if the flag dipped right or left, it held certain values that could be transposed to an alphabet. Was used in the Civil War when units had good line of sight and if telegraphs were not available.