

The Telegraph in the Civil War

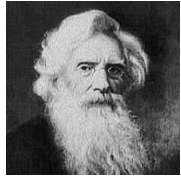







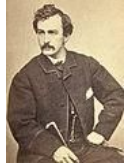
During the Civil War, Abraham Lincoln and the Union Army War Department set up their own telegraph office to communicate. Many of these telegrams were written in code to keep the Confederate Army from intercepting and reading messages. Thomas T. Eckert was head of the War Department's telegraph office and kept a collection of these telegrams as well as the book he used to encode them. Now, for the first time, the telegrams are being transcribed and are available for public use.

In this explainer, you will learn about the telegraph machine, which was invented in the 1830s. The telegraph was cutting edge technology, sort of like a cell phone is today. You will read about how the telegraph made new ways of communicating possible. You'll also read about how the United States military used the telegraph in the Civil War. In the last section, you will learn about an important figure in telegraph history during the Civil War named Thomas T. Eckert.

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Timeline

1844	May 24th - Samuel Morse sends the first telegraphic message. (Samuel Morse - Right)	
1860	November 6th - Abraham Lincoln elected president. (Lincoln ca. 1860 - Right)	
1861	April 12th - The Civil War begins when Confederate forces fire on Fort Sumter in South Carolina. (Fort pictured - Right) October 24th - Western Union Telegraph Company finishes the first transcontinental telegraph line. (Western Union Telegram - Right)	 
1862	United States Military Telegraph Office opens. (U.S. Flag with the Thirty Four Stars ca. 1861-1863 - Right)	
1863	April - Thomas T. Eckert is made head of the Military Telegraph Office at the War Department in Washington D.C. (Eckert pictured - Right) July 1st - 3rd - The Union Army wins a major battle against the Confederate Army at Gettysburg. (Drawing of battle - Right)	 
1865	April 9th - Confederate General Robert E. Lee surrenders to Union General Ulysses S. Grant in Appomattox Courthouse, Virginia, ending the war. (Site of surrender pictured - Right) April 15th - President Abraham Lincoln assassinated at Ford's Theatre in Washington D.C. by John Wilkes Booth. (Booth pictured - Right)	 

Timeline Photo Credits:

1. CREDIT: Morse, Samuel Finley Breese, artist. Samuel Finley Breese Morse, Head and Shoulders Self-Portrait, ca. 1900 - 1912. Prints and Photographs Division, Library of Congress. Reproduction Number LC-D413-24.

2.

https://commons.wikimedia.org/wiki/Abraham_Lincoln#/media/File:Thomas_Hicks_-_Leopold_Grozelier_-_Presidential_Candidate_Abraham_Lincoln_1860.jpg

3. https://commons.wikimedia.org/wiki/Fort_Sumter#/media/File:Sumter1.gif

4. https://commons.wikimedia.org/wiki/Category:Western_Union#/media/File:MIA_Telegram.jpg

5. https://commons.wikimedia.org/wiki/American_Civil_War#/media/File:US_flag_34_stars.svg

6. https://commons.wikimedia.org/wiki/File:Thomas_T_Eckert_06182.jpg

7. https://commons.wikimedia.org/wiki/Battle_of_Gettysburg#/media/File:Battle_of_Gettysburg,_by_Currier_and_Ives.png

8. https://commons.wikimedia.org/wiki/File:Appomatox_Court_House_National_Historical_Park_APCO2613.jpg

9. https://commons.wikimedia.org/wiki/John_Wilkes_Booth#/media/File:John_Wilkes_Booth-portrait.jpg

What is a Telegraph Machine?

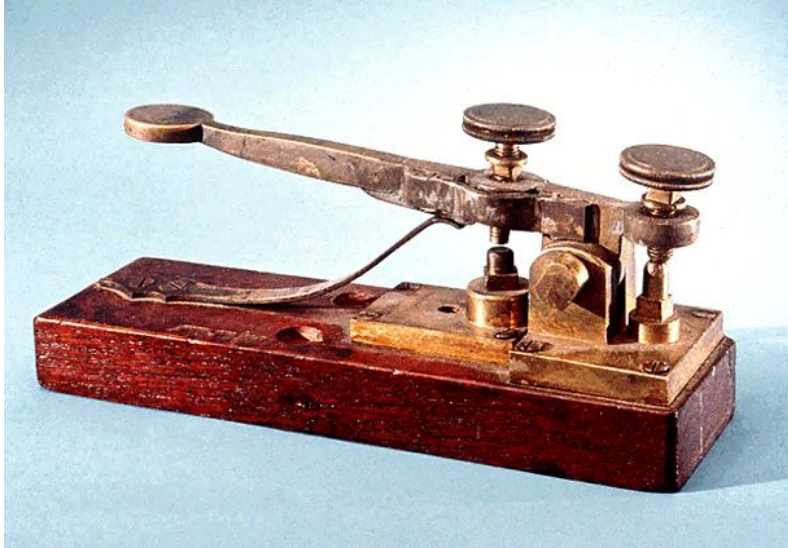
Imagine the only way you could communicate with people who lived far away from you was by sending them a handwritten letter that would be carried in a satchel by a deliveryman on a horse. Well, this is actually what happened before telegrams! The most famous of these delivery services was called the Pony Express. As you probably already guessed, it wasn't the fastest way to send messages. What would happen if there was an emergency? It might be too late by the time the letter arrived to do anything about it.

Enter the telegraph machine! Invented in the 1830s, the telegraph was a new form of communication that used electrical signals to transmit words. It allowed people to send messages in a fraction of the time it would normally take during this era. While it may not sound that fast to people these days, messages could be sent at a rate of ten words per minute using the telegraph.

The first **telegraph** machine, designed by Samuel Morse and Alfred Vail, was demonstrated by Samuel Morse at Speedwell Iron Works in Morristown, New Jersey, in January, 1838. This demonstration, in which the message "A patient waiter is no loser" was sent across two miles of wire, was more of a test run. More famously, however, the first public telegram was sent on May 24, 1844, across 30 miles of wire from Washington, D.C., to Baltimore, Maryland. This historic moment was witnessed by members of Congress who had approved funding for the first long-distance telegraph line. The message Samuel Morse sent was "What hath God wrought?," which is a quotation from the Bible.

The telegraph sent and received messages using a pattern of beeps along a wire. Those beeps were translated using long and short beeps to represent letters. By recording those beeps and translating them into words, telegraph operators could reproduce the original message. This system of encoding and decoding messages came to be known as Morse Code (see image below). Telegraph operators sent messages sort of like the U.S. Post Office or Federal Express send packages today. Check out this video to see what the first telegram actually looked like and why it was so significant. To learn even more about the telegraph machine and why it was a game changer, visit this website:

<http://www.smithsonianmag.com/arts-culture/how-the-telegraph-went-from-semaphore-to-communication-game-changer>.



The telegraph key, pictured above, was pressed repeatedly to send a pattern of long and short signals. This key was used by Samuel Morse to send the famous message “What hath God wrought?” in 1844.

Image credit: Smithsonian Art Museum

http://americanart.si.edu/exhibitions/online/helios/secrets/darkchamber-noframe.html?exhibitions/online/helios/secrets/secrets_innovation.html

Checking Your Understanding

- How did people use the telegraph machine to communicate?

Cutting Edge Technology

During the Civil War, telegrams were just beginning to be used by the public. Telegram messages were expensive and only available in major cities. The most common use of telegraphs before the war was among stockbrokers. Being able to send information quickly was very important in stock markets. When the Civil War began, the telegraph was quickly adopted in the North. The Confederate military did not adopt the telegraph as quickly as the Union. President Abraham Lincoln quickly recognized the importance of the telegraph. The use of the telegraph changed the way wars were fought. The telegraph allowed for instant communication. It was like a slower version of text messaging today. Before telegrams, letters were the main form of communication over long distances. Being able to send telegrams changed how military campaigns were conducted and battles were fought. The telegraph allowed generals and the President to have more immediate contact with the battlefield, giving leaders, both military and otherwise, a more active role.



Telegraph operators set up tent offices on battlefields to send messages about the battle. This photograph is of telegraph operators on the battlefield after the Battle of Gettysburg.

Image credit: Library of Congress

<http://www.pri.org/stories/2013-11-07/history-electronic-surveillance-abraham-lincolns-wiretaps-operation-shamrock>

Checking Your Understanding

- How did the use of the telegraph change the way wars were fought?

The United States Military Telegraph Office

In the 1860s, there were just a small number of telegraph companies. Since almost everyone went to the same company to send telegrams, the military worried it was not very secure. By 1862, the United States War Department set up its own telegraph office. This office was next to the White House. It allowed president Lincoln and his generals to quickly communicate with troops on the field. The United States Military Telegraph Office was run by **civilian** personnel. Most of these workers had worked for private companies like Western Union. This made some in the army uneasy. To make the army officers feel better, several managers were given military commissions.



This engraving of a famous painting shows Abraham Lincoln sitting in the War Department Telegraph Office while working on the Emancipation Proclamation.

Image credit: Library of Congress

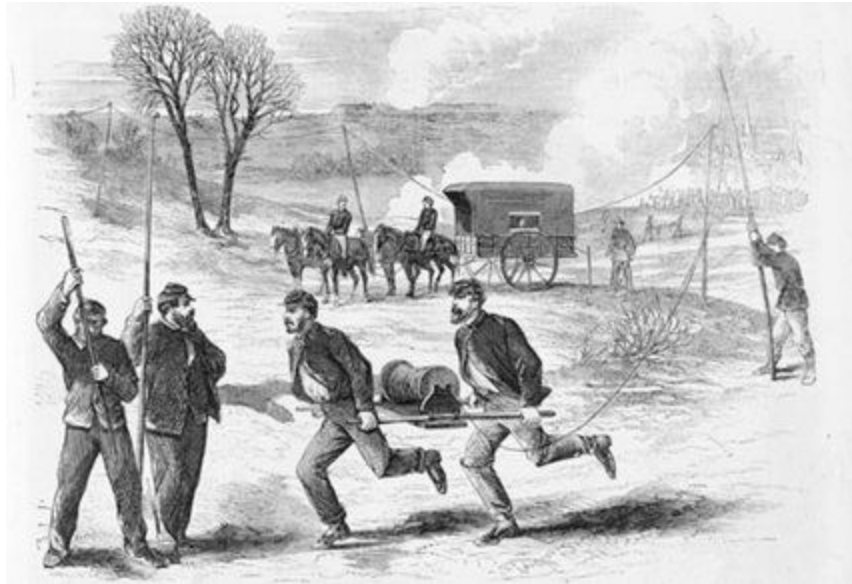
<https://www.loc.gov/item/2002715446>

Checking Your Understanding

- Why did the War Department set up its own telegraph office?

Wires in War Zones

In order to communicate with soldiers in the field, actual wires had to be strung. They would run from the office in Washington D.C. all the way to the site of the battle. This was dangerous work. Men were hired to risk their lives setting up these wires in war zones. As a result of their efforts, by 1862, the military telegraph line had almost 1,200 miles of wire. The system employed 130 operators as well as hundreds of people who worked on the lines in the field.



This drawing shows soldiers stringing and setting up wires by hand so that the Army could send telegrams from the battlefield.

Image credit: Library of Congress - Soldiers setting up the Army telegraph.

<https://www.loc.gov/item/94510098/>

Checking Your Understanding

- What did soldiers have to do to allow the War Department to send telegrams to the battlefield?

Thomas T. Eckert

The telegraph office was run by Thomas T. Eckert. He started out working for the Morse Telegraph Company. Soon, he became the head of the Chicago Branch of the Union Telegraph Company. In February of 1862, Eckert was put in charge of all telegraphic operations for General George McClellan and the Union Army of the Potomac. In 1863, Eckert was chosen to be the head of the Military Telegraph office at the War Department. Eckert was also trusted with important political missions. In March 1865, he was promoted to the rank of Brigadier General. During the Civil War, Eckert kept handwritten **ledger** books of all the telegrams sent through the office. He also kept copies of codes, or **cipher** books, with instructions for the secret code used to encode telegrams. Most of the time, people destroyed telegrams after sending or receiving them to keep their contents a secret. Since most telegrams were destroyed, Eckert's books are our main source for Union telegrams from the Civil War.



This photograph shows a page from a codebook that is part of Thomas T. Eckert's collection. His collection is now being housed at the Huntington Library in San Marino, California.

Image credit: The Archives of Thomas T. Eckert, 1862–1877, an extensive and extraordinarily rare collection of Civil War telegraph messages. Huntington Library, Art Collections, and Botanical Gardens.

<http://www.huntington.org/WebAssets/Templates/content.aspx?id=14506>

Checking Your Understanding

- Who was Thomas T. Eckert?
- Why is the collection of telegrams and cipher books important?

Did You Know?

Stockbrokers

In the stock market, people can invest money in large companies or the government. The companies use the money people invest to help their businesses grow. Then, the people who invested get a piece of the profits.

Samuel Morse

Samuel Morse was a painter and inventor who lived from 1791-1872. He painted landscapes, but he became famous for developing a more advanced telegraph and helping develop Morse Code. The telegraph he invented was the first version that could send messages over long distances.

The War Department

The modern day Department of Defense used to be known as the War Department. The War Department was the United States government department in charge of the military. The Secretary of War was a member of the cabinet.

Telegraph Companies

Most telegraph machines were run by private companies. The most famous were Western Union and the American Telegraph Company. This proved a problem when the military wanted to use the telegraph to communicate during the Civil War.

How the Telegraph Works

The telegraph is a machine that sends electrical signals across wires. The machines connected to each end could send and receive messages. The signals could then be translated into letters and numbers to form a message.

Instructional materials for this explainer

Pre-reading Prompts

1. How do you use technology to communicate in your daily life?
2. Describe a time when you or someone you know had trouble figuring out a new technology.
3. If you had no access to phones or to the internet, how would you communicate with your friends and family?

Final Checking Your Understanding

- Given what you have read, how do you think the telegraph helped the Union fight the war against the Confederacy?
- Can you think of another time in history when the United States military used technology to gain an advantage? Can you think of a time when technology used by the United States military had a non-military use?
- How do you think military telegraph lines were put to use after the war?

Vocabulary Words

- Cipher: (noun) A secret way of writing, a code; (verb) to write in code
- Civilian: (noun) A person who does not work for the military
- Ledger: (noun) A book for recording accounts and other information
- Telegraph: (noun) A machine that uses a pattern of beeps to send messages over long wires

KWL Chart

Fill out the first two columns before reading and the third column after reading the text.

Know	Want to Know	Learned
What do you already know about the Civil War?	What do you want to know about the Civil War?	What have you learned about the Civil War?
What do you already know about the telegraph?	What do you want to know about the telegraph?	What have you learned about the telegraph?
What do you already know about the use of the telegraph in the Civil War?	What do you want to know about the use of the telegraph in the Civil War?	What have you learned about the use of the telegraph in the Civil War?

Extension Activities

- Have students form groups, and ask each group to give an explanation of one of the seven sections to the class using a drawing or other visual aid.
- Have students create a cartoon explaining the reading with a panel for each section.
- Create an outline or graphic organizer explaining the main ideas of each section.