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# Code Talkers



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Written by Susan Lennox

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U.S. troops unload supplies at Iwo Jima on February 19, 1945.

## Introduction

The date is February 19, 1945. A group of U.S. Marines jumps from a landing craft. They struggle through the surf to the beach of Iwo Jima island in the Pacific Ocean, not far from Japan. The marines are greeted by a hail of gunfire from Japanese forces. Unsure of what to do or where to go, the group's leader radios his commander.

All will be lost if the enemy learns of the group's plans, but the marines have a secret weapon. They have a team of **Navajo** (NA-vuh-hoh) radiomen trained to **transmit** messages in a code no one else can understand.

## Philip Johnston's Bright Idea

In 1942, World War II was raging across the globe. Many nations, including the United States, had been swept into battle. Communication was vital to keeping troops safe and ready to do battle.

However, the U.S. military had a serious problem. The enemy was getting hold of coded messages sent between units and decoding them. The Japanese were especially good at **breaking** U.S. codes. In some cases, this led to many American **casualties**.

Newspaper stories about the American military's radio code struggles caught the attention of Philip Johnston. Johnston had lived on the Navajo Indian **reservation** as a child and learned the Navajo language. He knew that few people outside of the tribe understood Navajo. He also knew that Navajo was a "hidden language," meaning it was only spoken and had no written symbols. These features made it perfect for top-secret messages.



Philip Johnston in 1944



Philip Johnston (center) in 1904 at around age twelve. Johnston moved to the Navajo reservation with his family in 1896.

Johnston contacted the military about using a code based on Navajo. They agreed to a test. If Johnston could show that using Navajo was a fast and secure way to transmit messages, the U.S. military would try it.

### The Navajo Nation: Apart and a Part of the United States



## Mysterious Messages

Sending hidden messages dates back to ancient times. Early methods used steganography, a way of hiding or disguising a message. Only the sender and the recipient knew how the message was hidden. Sometimes messages were hidden with invisible ink, which seems to disappear once it is applied. Later, heat or chemicals would make the ink visible—and the message clear.

Other steganographic methods were more unusual. One used by ancient Greeks involved shaving a messenger's head, tattooing words there, and then waiting for his hair to grow back and cover the message. The messenger then traveled to the recipient, who would shave his head to read the message!

Most modern coding systems use **cryptographic** methods. With these methods, the message itself is not hidden, but its meaning is. Even if the message falls into the wrong hands, the reader must know the code in order to understand it.

# Cipher Text

How does cryptography work? Here are two different ways to encode the message "Send help now."

**Swapping:** A method called the Caesar Cipher involves swapping out each letter in the message for another. Used by the ancient Roman emperor Julius Caesar, it involves swapping letters by simply shifting the alphabet. Here, each letter will shift three letters to the left.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W

"Send help now" becomes "**PBKA EBIM KLT.**"

**Scrambling:** Another method of coding a message involves scrambling the letters. An example is the Rail Fence Cipher. The message is encoded by writing the letters of each word on two or more lines, then putting the lines together.

S		N			E		P		N	W
	E	D	H	L					O	

"Send help now" becomes "**SNEPNW EDHLO.**"

At the start of World War II, American military cryptographers constantly changed coding techniques. They even tried using coded American slang, but over and over, their efforts failed. Many Japanese students had studied in the United States and knew American English. The Japanese code breakers cracked messages almost as quickly as the Americans transmitted them.

## Why Navajo?

The idea of using a Native American language was not new. During World War I, the United States had used several Native American languages to successfully transmit messages. So why not use those same codes during World War II?



WWI Choctaw Telephone Squad

The reason is that after World War I, both Germany and Japan caught on. They sent students to the United States to learn about the different Native American languages. The U.S. military knew this. However, any students—German or Japanese—would have had a hard time learning Navajo. It belonged to a different family of languages than many other Native American languages. At the time, little had been written about Navajo. The marines had confidence that no one outside the country would understand the Navajo code.



Two Navajo soldiers send orders over a field radio using the Navajo code. In some cases, the soldiers already knew each other from living on the same reservation. These two were cousins.

## Communicating in Code

Johnston lined up twenty-nine Navajo men. These soldiers worked with the Field Signal School to come up with a system for coding messages that was based on their language. The coding system had two parts. The first part used the Navajo **translation** of English words to stand for letters. For example, the Navajo word for “bear” is *shush*, so the word *shush* was used for the letter *B*.

The second part of the system gave new military meanings to a list of 211 Navajo words. Those Navajo words were often based on the appearance or job of what each one described. For example, *owl* was used for “observation plane.” The Navajo word for *shark* meant “destroyer,” a type of warship. A “submarine” was called an *iron fish*.

### The Navajo Code Talkers’ Dictionary

#### *Alphabet Code*

Letter	Navajo Word	Navajo Meaning
A	wol-la-chee	ant
B	shush	bear
C	moasi	cat
D	be	deer
E	dzeh	elk
F	tsa-e-donin-ee	fly

#### *Common Words*

Word	Navajo Word	Navajo Meaning
squad	debeh-li-zini	black sheep
commanding officer	hash-kay-gi-na-tah	war chief
dive bomber	gini	chicken hawk
battleship	lo-tso	whale
bombs	a-ye-shi	eggs

You can see how confusing this must have been to the enemy!

Navajo people were trained from an early age to listen to and learn the stories of their people. They not only had great memories, they were also exceptional listeners. The Navajo soldiers had no problem learning the new code. After a brief training period, Johnston's plan was ready to be tested. The signal corps did time trials to test how quickly and correctly the Navajo soldiers could transmit radio messages. The results were amazing. **The code talkers** could do in seconds what other coders needed half an hour to do!



Navajo code talkers Henry Blake Jr. (left) and George Kirk operate a radio in December 1943 in the dense jungle of Bougainville, a group of islands northeast of Australia.

The military quickly adopted the code and began training more code talkers. Many Navajo men were eager to serve. All in all, more than four hundred Navajo code talkers served brilliantly in the Pacific. During one of the biggest battles of the war, the Battle of Iwo Jima, six code talkers sent and received more than eight hundred messages in the heat of combat without a single error. One of those code talkers, Keith Little, described his contribution to the battle: “My weapon was my language, and that language probably saved countless lives.”



Keith Little speaks at a 2009 book signing with fellow Navajo code talkers. Little died in 2012 at age 87.

## Unsung Heroes

The Navajo code talkers played an important role in several battles fought in the Pacific during World War II. The Japanese could not make sense of the code. Even after Japan surrendered to the United States on September 2, 1945, the code remained a government secret. The code talkers could not talk about their experiences. They remained silent for years.

Despite the code talkers' loyalty and patriotism, they returned to hard lives after the war. Jobs were tough to find for many former soldiers, and Native Americans often faced **discrimination**. Navajo and other tribes in Arizona and New Mexico could not vote until 1948. Those in Utah could not vote until 1957.

### A Vote = A Voice

Until 1965, individual states were able to use various methods to keep Native Americans and other groups from voting. The Voting Rights Act outlawed all of that, making it possible for them to actually exercise their right to vote.





President George W. Bush shakes hands with John Brown Jr. at the Navajo Code Talkers Congressional Gold Medal ceremony in 2001.

Finally, in 1968, the secrecy around the code talker program ended. Then the world learned about the amazing contributions of these men. In 2000, President Clinton signed a law awarding medals to the twenty-nine original Navajo code talkers.

The unusual Navajo language and the code talkers who spoke it led to the success of the code. To this day, it is the only spoken military code that has never been broken.

## Glossary

<b>breaking</b> ( <i>v.</i> )	solving or figuring out (p. 5)
<b>casualties</b> ( <i>n.</i> )	people wounded, killed, or missing during a war, accident, or disaster (p. 5)
<b>code talkers</b> ( <i>n.</i> )	Native American soldiers who used their native language as a code during World Wars I and II (p. 12)
<b>cryptographic</b> ( <i>adj.</i> )	of or relating to the use of a cipher or code for the reading or writing of secret messages (p. 7)
<b>discrimination</b> ( <i>n.</i> )	the unfair treatment of a person or group based on gender, race, age, religion, or other differences (p. 14)
<b>Navajo</b> ( <i>n.</i> )	a member of a Native American people in the Southwest; the language of these people (p. 4)
<b>reservation</b> ( <i>n.</i> )	land set aside by the U.S. government for Native Americans (p. 5)
<b>translation</b> ( <i>n.</i> )	words from one language that have been changed to another language (p. 10)
<b>transmit</b> ( <i>v.</i> )	to pass something, such as a signal, from one person, place, or thing to another (p. 4)

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Back cover: Navajo code talker Teddy Draper in 2002

Front cover: Navajo code talkers Henry Blake Jr. and George Kirk operate a portable radio on Bougainville, an island northeast of Australia, during WWII.

Title page: In 2009, Navajo code talker Lloyd Oliver holds a photo of himself from WWII.

Page 3: Navajo code talker Cecil Trosip works a radio in July 1944 on Saipan, an island in the Pacific Ocean between Japan and Hawaii.

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