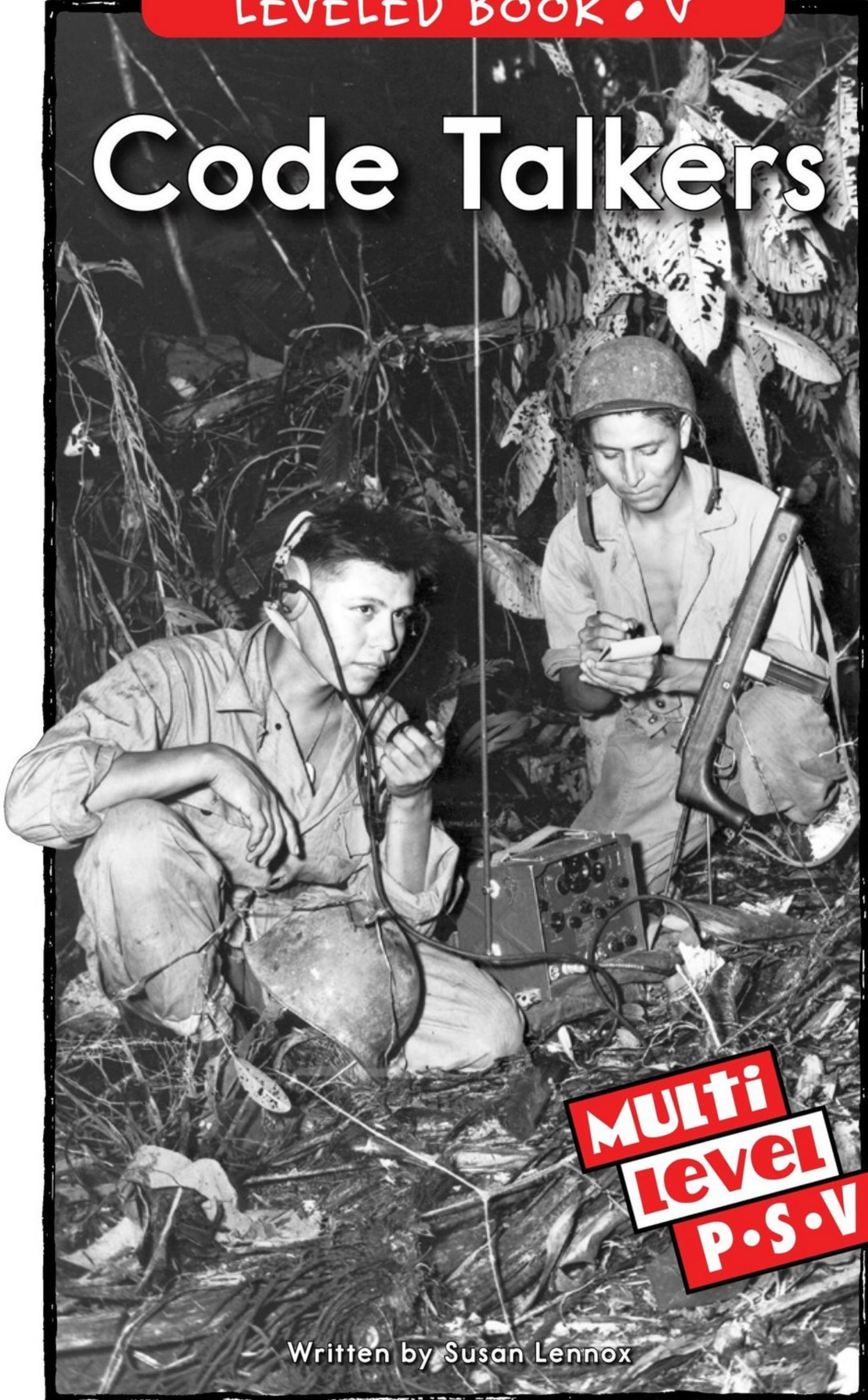


LEVELED BOOK • V

Code Talkers



MULTI
LEVEL
P.S.V

Written by Susan Lennox

Code Talkers



Written by Susan Lennox



Table of Contents

Introduction	4
Philip Johnston's Bright Idea	5
Mysterious Messages	7
Why Navajo?	9
Communicating in Code	11
Unsung Heroes	14
Glossary	16



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

Introduction

The date is February 19, 1945. A platoon of U.S. Marines jumps from a landing craft and struggles 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 platoon leader radios his commander for instructions.

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

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 keep troops supplied, safe, and ready to do battle.

However, U.S. commanders had a serious problem. Encoded messages sent between units were being **intercepted** and decoded by the enemy. 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. While there, he had learned the Navajo language. Johnston was well aware that few people outside of the isolated tribe understood Navajo. He also knew that Navajo was a "hidden language"—it was only spoken and had no corresponding written symbols. These characteristics made it perfect for top-secret communications. When he learned about the problems with message **encryption**, he was sure he knew a way to solve them.



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 military authorities in California about using a code based on Navajo. At first, leaders were skeptical about the plan. However, they finally agreed to a test. If Johnston could show that using Navajo was a fast and secure way to transmit messages, the United States military would try it.

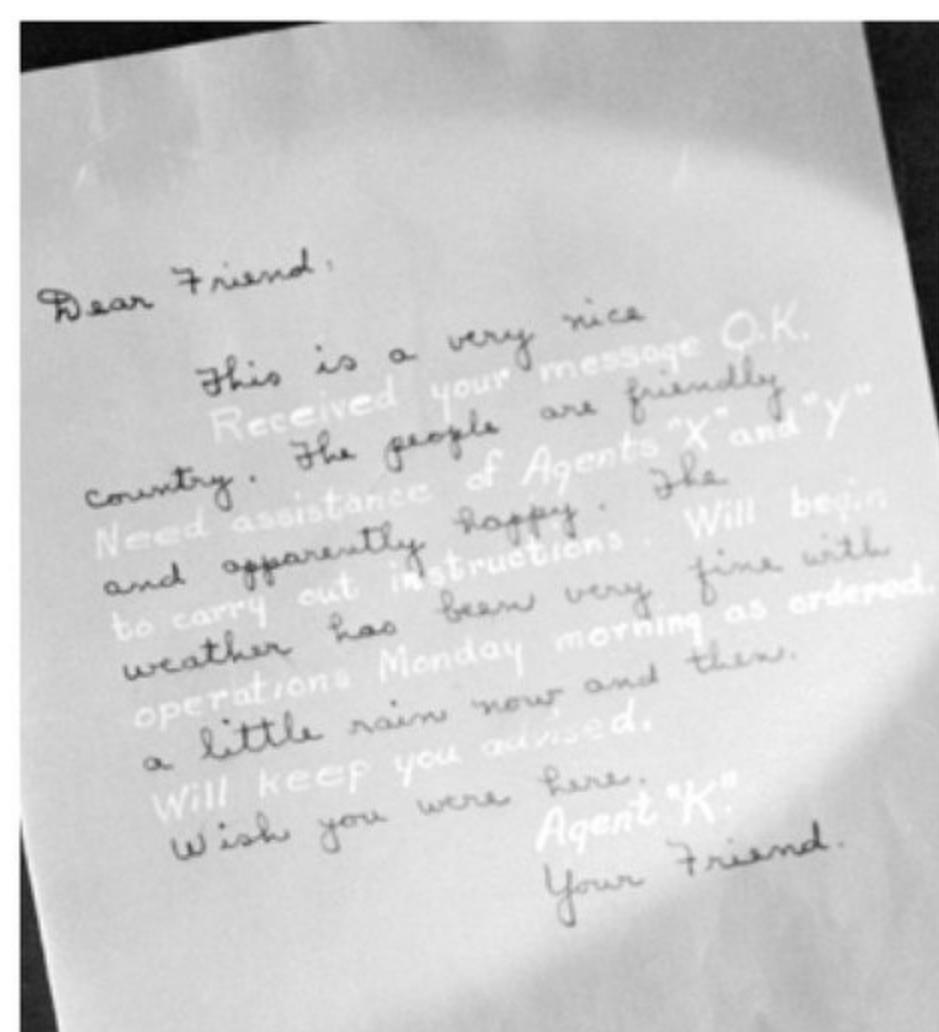


Mysterious Messages

Sending hidden messages dates back to ancient times. Early methods used steganography, a way of physically hiding or disguising a message. Only the sender and the **recipient** knew how the message was hidden. Sometimes messages were concealed with the use of 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.



When invisible ink is made visible, the "real" message appears (here, in white).

Cipher Text

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

Substitution: 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.**"

Transposition: Another method of coding a message involves scrambling the letters. An example is the Rail Fence Cipher. The message is encoded by writing the words alternating 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, yet their efforts consistently failed. Many Japanese students had been educated in the United States and were familiar with 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. Cherokee soldiers helped the 30th Infantry Division send messages from the battlefield during the Second Battle of the Somme. Choctaw men from the army's 36th Infantry Division used code to help Allied forces win important battles in France. Comanche codes helped as well. With such successes using these languages, why did the military switch to Navajo during World War II?



World War I Choctaw Telephone Squad

The answer mainly lies with Adolf Hitler, Germany's ruler from 1933 to 1945. Hitler knew that the United States had used Choctaw successfully during the previous conflict. He wanted to make sure they didn't do so again. After World War I, Hitler sent German students to the United States to learn about different Native American languages. The U.S. military was aware of this and knew that Japan had sent students to study these languages as well. For a brief time, U.S. armed forces tried using Native Americans from the Meskwaki tribe. They even attempted to train servicemen of Basque descent to act as **code talkers**. The populations of these two groups were small, however, resulting in a shortage of eligible native speakers.

Navajo men were numerous and willing to help. Even better, any students—German or Japanese—would have had a hard time learning Navajo. Unlike other Native American languages, Navajo was not an Amerindian language. Navajo (and Apache) belongs to the Na-Dene (nah-de-NAY) language family. At the time, little had been written about that language family. The U.S. Marines had confidence that no one outside the United States would understand the Navajo code.

Communicating in Code

Johnston recruited twenty-nine men for an all-Navajo marine platoon. The Navajo 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 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!

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

Navajo servicemen were trained from an early age to listen to and learn the stories of their people. They not only had incredible memories, they were also exceptional listeners. Since Navajo has a strong oral tradition, the Navajo soldiers had no problem memorizing this new vocabulary.



Two Navajo soldiers relay 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.

After a brief training period, Johnston's plan was ready to be tested. The signal corps conducted time trials to test how quickly and accurately the Navajo soldiers could transmit radio messages. The results were astounding. The code talkers could do in seconds what traditional coders needed half an hour to do!

The military immediately adopted the code and began training more code talkers. Many Navajo men were eager to serve. In total, 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 heads or tails 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 speak about their experiences. They remained silent for years.

The code talkers' loyalty and patriotism were especially noteworthy given the difficult lives they returned to after the war. Jobs were hard to find for many former soldiers, and Native Americans often faced **discrimination**. Although the United States had extended citizenship to all Native American people in 1924, many tribes were denied the right to vote by individual states. The right to vote wasn't actually guaranteed to all Native Americans until forty years later.

A Vote = A Voice

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



The Code Talkers Recognition Act

Signed into law in 2008, this act states that at ". . . a time when Indians were discouraged from practicing their native culture, a few brave men used their cultural heritage, their language, to help change the course of history."

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 surrounding the code talker program ended. The world then learned about the amazing contributions of these men. In December of 2000, President Clinton signed a law awarding the Congressional Gold Medal to the twenty-nine original Navajo code talkers. In a 2001 ceremony at the U.S. Capitol, President Bush presented medals to four of the five surviving members of that group.

The unusual Navajo language and the honorable actions of the code talkers contributed to the success of the code and, in turn, to victory during the war. To this day, it is the only spoken military code that has never been broken.

Glossary

casualties (<i>n.</i>)	people wounded or killed during a war, accident, or disaster (p. 5)
code talkers (<i>n.</i>)	Native American soldiers who used their native language as a code during World Wars I and II (p. 10)
cryptographic (<i>adj.</i>)	of or relating to the use of a cipher or code for the reading or writing of secret messages (p. 7)
decipher (<i>v.</i>)	to make out the meaning of something that is difficult to understand; to decode (p. 4)
discrimination (<i>n.</i>)	the unfair treatment of a person or group based on gender, race, age, religion, or other differences (p. 14)
encryption (<i>n.</i>)	the act of coding a message in order to hide its meaning (p. 5)
intercepted (<i>v.</i>)	stopped or took a message that was traveling from one place to another (p. 5)
Navajo (<i>n.</i>)	a member of a Native American people in the Southwest; the language of these people (p. 4)
recipient (<i>n.</i>)	one who receives something (p. 7)
reservation (<i>n.</i>)	land set aside by the U.S. government for Native Americans (p. 5)
translation (<i>n.</i>)	words from one language that have been changed to another language (p. 11)
transmit (<i>v.</i>)	to pass something from one person to another (p. 4)

Photo Credits:

Front cover: Official Marine Corps Photo #69889-A; back cover: © Jon Freeman/REX USA; title page: © AP Images; page 3: Official Marine Corps Photo #89670; page 4: © Corbis; page 5: courtesy of U.S. Marine Corps; page 6: © Northern Arizona University Cline Library [Johnston, Philip. NAU.PH.413.980]; pages 7, 14: © Bettmann/Corbis; page 9: © Rodger Mallison/MCT/Landov; page 12: Official Marine Corps Photo #57875; page 13: © Felicia Fonseca/AP Images; page 15: © Eric Charbonneau/BEImages/REX USA

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.

Code Talkers
Level V Leveled Book
© Learning A-Z
Written by Susan Lennox

All rights reserved.
www.readinga-z.com

Correlation

LEVEL V	
Fountas & Pinnell	R
Reading Recovery	40
DRA	40