

Guard. This is noncontroversial amendment, and I urge my colleagues to support it.

MORNING BUSINESS

Mr. REID. Madam President, I ask unanimous consent that the Senate now proceed to a period for morning business, with Senators allowed to speak for not to exceed 10 minutes each, and further, of course, this time, under the previous unanimous consent agreement, will be charged against the postclosure time that is now pending.

The PRESIDING OFFICER. Is there objection?

Mr. GRAMM. Madam President, reserving the right to object, may I ask a question?

The PRESIDING OFFICER. The Senator from Texas.

Mr. GRAMM. I would be perfectly happy to go to morning business, but I want to be assured that tonight we are not going to go back on the bill.

Mr. REID. No. The only thing we are going to do is wrapup, and it will have no bearing whatsoever on the legislation.

Mr. GRAMM. With that understanding, I have no objection.

The PRESIDING OFFICER. Without objection, it is so ordered.

NAVAJO CODE TALKERS' CONGRESSIONAL GOLD MEDAL

Mr. BYRD. Madam President, for those who toil in the clandestine world of national security, where the dictates of secrecy cloak heroes actions in vaults full of files marked with code words and warnings, there are precious few opportunities to stand before bright lights and listen to applause. Today, a group of men were honored who kept their secret from 1942 until 1968, when their talents and contributions in winning the war in the Pacific were finally declassified. Today was their turn in the sun, as the President awarded the original 29 Navajo Code Talkers the Congressional Gold Medal.

Now the world knows how these men gave the U.S. military a decisive edge in communications during the war in the Pacific theater and elsewhere. Their presence at Iwo Jima, at Guadalcanal, and throughout the Pacific provided U.S. military units with secure communications and the element of surprise that allowed U.S. forces to overwhelm dug-in Japanese units and win some of the bloodiest battles in World War II. The Navajo Code Talkers' unique contribution to the nation's security can be counted in those victories and in the number of servicemen who survived the war and returned home to their families.

The story behind the development of the Navajo Code Talkers is fascinating. Every American knows the history behind December 7, 1941, the "day that will live in infamy," as Japanese forces launched a surprise attack on U.S. military bases in Pearl Harbor, Hawaii.

Almost simultaneously, having assured themselves that the U.S. could not react militarily, the Japanese attacked and overwhelmed other islands throughout southeast Asia and the Pacific. U.S. losses were staggering, and reaction was immediate—the U.S. declared war against Japan and the other Axis powers within hours.

Declaring war and waging war, however, are two very different animals. The Pacific theater of war presented U.S. military forces with unique challenges. Distances were large, and the Japanese defenders were able to "dig in," creating bastions from which small numbers of Japanese troops could hold off invading forces and inflict terrible losses upon the military men of the United States. Synchronizing air, land, and seaborne forces in coordinated attacks proved to be a major challenge. And the Japanese held an early intelligence advantage.

An elite group of English-speaking Japanese soldiers would intercept U.S. radio communications and then sabotage the message or issue false commands that led American forces into ambushes. The U.S. responded by creating ever more complex military codes, but his effort had its own problems. At Guadalcanal, military leaders faced a two-and-a-half hour delay in sending and decoding a single message. Something needed to be done.

That something was first suggested by Philip Johnston, a World War I veteran who was familiar with the use of Choctaw Indians as Code Talkers during that war. Johnston, the son of a missionary who was raised on a Navajo Indian reservation and who spoke Navajo fluently, believed that the Navajo language was the ideal candidate for service as a military code. Navajo is an unwritten language of great linguistic complexity. It would be doubtful indeed to suppose that the Japanese Army would possess any fluent Navajo speakers. Mr. Johnston contacted the U.S. Marine Corps with his proposal in early 1942, and after a demonstration of his concept, a group of twenty-nine Navajo speakers was recruited to become Marine Corps radio operators.

Those first twenty-nine men, and the others that followed them and who will be receiving a Congressional Silver Medal in a ceremony next month, developed a code so successful that it became one of the war's most closely held secrets. The first twenty-nine recruits developed the original code vocabulary of some 200 terms. Then, in a novel way of addressing other words outside that initial vocabulary, the group developed an ingenious method of spelling out any other word using any Navajo words that would, when translated into English, begin with the initial letter that was desired. Thus, if a Code Talker wanted to spell "day," for instance, they could use the Navajo word for "dog" or "dig" or "door" followed by any Navajo words that translated to a word beginning with "a" and "y." Thus any five radio operators could pick a

different combination of Navajo words that would, when translated, spell "day." "Dog" "ant," and "yellow" or "door," "apple," "yawn" would both give you the initials "d," "a," and "y" in the correct order. Combined with the unique linguistic and tonal qualities of the Navajo language, such flexibility made the Navajo Code bewildering to the Japanese yet speedy and flexible to use.

Military commanders credited the Code Talkers with saving the lives of countless American soldiers and with providing a decisive edge in such battles as those that took place in Guadalcanal, Tarawa, Saipan, Iwo Jima, and Okinawa. Major Howard Connor, the 5th Marine Division signal officer at Iwo Jima, had six Navajo Code Talkers working nonstop during the first 48 hours of the battle for Iwo Jima. Those six men sent and received more than 800 error-free messages during that period. Major Connor stated that "Were it not for the Navajos, the Marines would never have taken Iwo Jima." The raising of the American flag at Iwo Jima was captured on film—I can see it now—captured on film as one of the war's most compelling images, one that was translated into bronze at the Marine Corps memorial here in Washington, here in the city.

Today the Department of Defense has an Undersecretary of Defense for what is termed "C4ISR" which stands for Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance. Billions of dollars are spent in an effort to keep swift-moving combined military forces coordinated in an attack and aware of the dangers around them. In World War II, such things were more rudimentary. Communications were largely confined to open radio waves, making U.S. forces vulnerable to exactly the kind of intercept and sabotage practiced by Japanese forces. The Navajo Code Talkers, like World War I's Choctaw Code Talkers, represented an innovative and hugely successful answer to a problem that plagues military forces to this day. It is not surprising that the Department of Defense wanted to keep the Navajo Code Talkers a closely guarded military secret until 1968. What is laudable is that the Code Talkers kept their secret so well, despite every temptation to brag and every disappointment in having their priceless contribution remain hidden behind a Top Secret stamp.

In receiving the Congressional Gold Medal, the Navajo Code Talkers join a very short list of American heroes and luminaries that began with General George Washington on March 25, 1776. Their service merits this, the long-overdue thanks of a grateful nation and the award of the Congressional Gold Medal. To each Navajo Code Talker, I offer the sincere thanks and deep appreciation of the United States Senate. My thanks also go to Senator Jeff BINGAMAN for sponsoring the legislation in the Senate authorizing the

award of the Congressional Gold Medal to this gathering of heroes, the Navajo Code Talkers. It should never be too late to recognize and reward the heroism of those who risk much to preserve the freedom and liberty that we all enjoy. It is all too common to heap the laurels on the general, admirals, and other leaders, and to overlook the invaluable contribution made by each soldier, sailor, airman, and, in this case, each radio operator who put just as much on the line as did those with more braid and brass on their collars. The Navajo Code Talkers were an essential element in each victory, as much as the man at the top who gave the command to attack.

I close on that thought with the words of John Jerome Rooney, who wrote the following lines in his poem, "The Men Behind the Guns." I give you his first and last stanzas.

A cheer and salute for the Admiral, and here's to the Captain bold,
 And never forget the Commodore's debt when the deeds of might are told!
 They stand to the deck through the battle's wreck when the great shells roar and screech—
 And never they fear when the foe is near to practice what they preach:
 But off with your hat and three times three for Columbia's true-blue sons,
 The men below who batter the foe—the men behind the guns!
 Oh, well they know how the cyclones blow that they loose from their cloud of death,
 And they know is heard the thunder-word their fierce ten-incher saith!
 The steel decks rock with the lightning shock, and shake with the great recoil,
 And the sea grows red with the blood of the dead and reaches for his spoil—
 But not till the foe has gone below or turns his prow and runs,
 Shall the voice of peace bring sweet release to the men behind the guns!

Today, Mr. President, I tip my hat and offer three times three to the Navajo Code Talkers.

Mr. CAMPBELL. Madam President earlier today I was honored to join President Bush, four of the five surviving Navajo Code Talkers, their families, and the families of all the Code Talkers in a ceremony in which the President awarded the Code Talkers the Congressional Gold Medal.

The ceremony also included other members of Congress, Indian tribal leaders, and dignitaries from around the Nation.

For far too many Americans, bred on cynicism and hopelessness, these men remind us what real American heroes are all about.

It is unfortunate that we could not have recognized these men and their contributions sooner than this.

Think of this—just 77 years before World War II, the grandfathers of these heroes were forced at gunpoint with 9,000 other Navajos from their homeland and marched 300 miles through the burning desert. For four long years the Navajo people were interned at the Bosque Redondo.

For these men and their comrades to rise above that injustice in American

history and put their lives on the line speaks of their character and their patriotism.

Just as the Japanese were never able to break the Navajo Code, it is also a mystery why it took so long for our Nation to recognize the critical role the Code Talkers played in achieving victory in the Pacific.

The answer may lie in the secrecy of their mission.

The Navajo Code Talkers took part in every major assault the U.S. Marines conducted in the Pacific from 1942 to 1945. It was their duty to transmit messages in their native language, Diné Bizaad, a code the Japanese were never able to decipher.

Mr. Philip Johnston, the son of a missionary to the Navajos and one of the few non-Navajos who spoke the Navajo language fluently, was the individual responsible for recognizing the potential of the Navajo people and language and the contributions they could make to World War II.

A World War I veteran who knew the value of secure communications, Johnston was reared on the Navajo reservation, and recommended the Navajo language be used for this purpose.

The Navajo language is complex because it has no alphabet or symbols and fit the military's need for an "undecipherable code".

Johnston staged tests under simulated combat conditions with the commanding general of the Amphibious Corps, Pacific Fleet.

The tests demonstrated that Navajos could encode, transmit, and decode a three-line message in 20 seconds. After the simulation the Navajo were recommended to the Commandant of the Marine Corps to serve as Code Talkers. It was recommended that the Marines recruit 200 Navajos.

In May 1942, the first 29 of the 200 requested Navajo recruits attended boot camp. During this time they developed and memorized a dictionary and numerous words for military terms.

After the successful completion of boot camp, the Code Talkers were sent to a Marine unit deployed in the Pacific theater. At this duty station it became the primary job of the Code Talkers to transmit information on tactics, troop movements, orders, and other vital battlefield communications over telephones and radios.

The Navajos were praised for their skill, speed, and accuracy in communications throughout the war.

At Iwo Jima, Major Howard Connor, 5th Marine Division Signal officer, declared, "Were it not for the Navajos, the Marines would never have taken Iwo Jima." Connor had six Navajo Code Talkers who worked around the clock during the first two days of the battle sending and receiving over 800 messages—all without error.

The Japanese, who were skilled code breakers, were confused by the Navajo language. The Japanese chief of intelligence, Lieutenant General Seizo Arisue said that while they were at

times able to decipher the codes used by the other armed forces, they never were able to crack the code used by the Marines and Navajos.

American Indians and their commitment to this Nation can be described in one quote from David E. Patterson, of the 4th Marine Division, "When I was inducted into the service, one of the commitments I made was that I was willing to die for my country—the U.S., the Navajo Nation, and my family. My [native] language was my weapon."

I would like to thank the Navajo Code Talkers who served in World War II for their dedication and bravery to our Nation.

They believed in what they fought for and were willing to sacrifice their lives to create a communication system that was unbreakable.

Without these brave men and their knowledge of their language, the success of our Nation's military efforts in the Pacific would not have been possible.

I urge all Americans to thank these brave men for their uncommon valor and dedication to a cause higher than themselves.

Mr. DOMENICI. Madam President, I rise to formally pay tribute to the Navajo Code Talkers, who today received the Congressional Gold Medal.

The award of the Congressional Gold Medal, one of our Nation's highest honors, is a fitting tribute to the Navajo Code Talkers for their relentless efforts, sacrifice and dedication during the decisive battles for the Pacific in World War II. I am proud and honored to witness our country's long overdue recognition of the Navajo Code Talkers' place in history.

I salute my friend, Senator BINGAMAN, for leading the effort to bring national attention to the crucial role the Navajo Code Talkers played in the history of our country, and indeed, the world.

The Navajo Code Talkers began as an idea by Phillip Johnston, a Marine Corps officer living in Los Angeles, CA, whose father was a Protestant missionary on the Navajo reservation. He was aware that the Marine Corps was deeply troubled over Japan's ability to break American codes.

In late April of 1942, two recruiting officers were sent to the Navajo reservation. In May, 29 Navajos were sworn in at Ft. Wingate, NM, and taken to Camp Elliott where they became the first all-Navajo platoon in Marine Corps history—Platoon 382.

This was not an easy recruitment. Many Navajos were willing to help, but not as many were literate in the English language. The Navajo recruits adjusted well to boot camp, considering few had ever been off the reservation before. Many had never met "Anglos" before.

They fought across an ocean they had never seen, against an enemy they had never met. To ensure their own land would not be in danger, they

joined in the effort with the United States.

The Navajo Code Talkers made a major contribution to WWII. They provided instantaneous technical, detailed communication. None of their codes were written; they were only memorized. The Navajo Code Talkers came to be known as extremely dependable. They were called upon for tasks other than just code talking; they also had duties as Marines.

The Navajo code was used almost exclusively during the battle of Iwo Jima. They were credited for sending and receiving over 800 messages without an error.

"Were it not for the Navajos, the Marines would never have taken Iwo Jima," stated Major Howard M. Conner, signal officer for the Fifth Division.

Eventually there would be over 400 Marine Code Talkers who would play a vital part in the United States winning the war against Japan. In fact, the Navajo Code Talkers would participate in every assault the Marines took part in from late 1942 to 1945.

During the 3 years the Navajo Code Talkers participated in the war, Japanese Intelligence was able to break almost every U.S. Army and Army Air Corps code but not once were they able to break the Navajo code.

The Navajo Code Talkers are becoming more widely known by appearing in Veterans Day events, special honoring ceremonies, and there was even a Navajo G.I. Joe code talker toy developed. And now, a Hollywood film is being developed.

So I add my voice to the much-deserved recognition and appreciation going out today to the Navajo Code Talkers for their relentless efforts, sacrifice and dedication in the successful outcomes in the battle for the Pacific in World War II.

THE SPACEPORT EQUALITY ACT

Mr. REID. Madam President, I am pleased to join my distinguished colleague from Florida, Senator GRAHAM, as a sponsor of the Spaceport Equality Act.

Space commercialization holds great promise for the development of new drugs, ultrapure materials with incredible strength and flexibility, and even space tourism. To make space commercialization a reality, the US needs to support the growth of its domestic commercial space launch facilities or "spaceports." It's a sad state of affairs, but U.S. satellite manufacturers are facing increasing pressure to use foreign launch services due to a lack of a sufficient domestic launch capability.

The purpose of the Spaceport Equality Act is to ensure a strong U.S. launch capability. This act will provide tax exempt status for spaceport facility bonds, just like we do for publicly-owned airports and seaports. The government will not be directly funding the commercial space transportation

business, but creating the conditions necessary to stimulate private sector capital investment in these spaceports. Coupled with the development of "reusable launch vehicles," these spaceports will be "aero-space ports" that will accommodate both air and space vehicles. Reusable launch vehicles are essential to reduce the cost of access to space by a factor of 10 to 100 from its present level of \$2000/pound.

My home State of Nevada has an important role to play in space commercialization. As part of NASA's Space Launch Initiative, a public-private team will use the Nevada Test Site for orbital flights. This sets the stage for commercial space operations in Nevada as early as 2003-4.

The Spaceport Equality Act simply puts spaceports on equal footing with airports by treating them the same for purposes of exempt facility bond rules. I urge my colleagues to support this legislation which is essential to opening the space frontier for continued civil exploration and commercial development.

Mr. LUGAR. Madam President, earlier this month, the United States and the country of Kazakhstan successfully completed one of the most ambitious nonproliferation projects undertaken in history—the securing of one of the world's largest stockpiles of weapons-grade plutonium under the auspices of the Nunn-Lugar Cooperative Threat Reduction program. The security surrounding some three tons of plutonium—sufficient to make some 400 bombs—was enhanced and, commencing in 1998, the fuel assemblies containing spent nuclear fuel were packaged to prevent theft.

In August of 1998, I visited a torpedo factory in Almaty, then the capital of Kazakhstan, that had been converted to manufacture the big steel cannisters in which the plutonium-rich assemblies were packaged and sealed. The last cannister was sealed and lowered into a cooling pond in early July of this year.

Last week, the Washington Times carried a special report by Christopher Pala on this program under the title of "Kazakh Plutonium Stores Made Safe." I ask unanimous consent that this article be printed in the RECORD and urge all of my colleagues to inform themselves about a real success story in U.S.-Kazakhstan relations.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the Washington Times, July 21, 2001]

KAZAKH PLUTONIUM STORES MADE SAFE

(By Christopher Pala)

ALMATY, KAZAKHSTAN.—U.S. officials last week voiced quiet satisfaction after one of the world's largest stockpiles of weapons-grade plutonium, located in a sensitive zone, was successfully made theft-proof in what the Energy Department called "one of the world's largest and most successful nonproliferation projects."

More than three tons of plutonium, enough to make about 400 bombs, had been stored in a fast-breeder reactor on the Caspian Sea shore in security conditions one early visitor

described as similar to those of an office building.

Today, the plutonium has been fully secured, said Trisha Dedik, director of the U.S. Department of Energy's Office of Nonproliferation Policy, in an interview July 13 in Almaty, Kazakhstan's economic capital. "It's been a great success."

A day earlier, Miss Dedik and others took part in a ceremony at Aktau with Kazakh officials celebrating completion of the project.

The plutonium was produced by a BN-350 fast-breeder nuclear reactor on the arid northwestern shore of the Caspian, a few miles from the city of Aktau. Both the city and 350-megawatt power plant on the Mangyshlak Peninsula, the first-ever commercial breeder reactor, owed their location to considerable uranium deposits that were mined nearby.

The plutonium had been intended to be shipped to other parts of the Soviet Union for use as fuel in other reactors like it, but only one, the BN-600, was ever built. Located near Yekaterinburg on the eastern slope of the Urals nearly 900 miles north-northeast of Aktau, it ultimately took little or no plutonium from the BN-350, so the material just piled up.

The plant closed in 1999, at the end of its useful life.

After 26 years of providing electricity and water (by powering a desalination plant) to the Aktau region, the plant had an accumulation of 3,000 15-foot cylinders, called fuel assemblies, containing spent nuclear fuel.

About 7,250 pounds of weapons-grade plutonium could be extracted from the assemblies with relative ease, according to the Energy Department.

Nearly half the assemblies emitted little radiation and could be safely handled by workers wearing light protection. The other half were too "hot" to be handled by anything but robots. All spent years in a cooling pond the size of a football field at the plant.

"When I walked in there the first time back in 1995, it had all the security of a modern office building," said Fredrick Crane, an American physicist familiar with the plant.

"It was a clean and well-run reactor," said Mr. Crane. There were some guards, but otherwise all you needed was one code, like in an airport terminal, and you were in."

With each fuel assembly weighing 300 pounds, a couple of strong men with accomplices inside could spirit out the half-dozen cylinders it would take to make a nuclear bomb.

"It was attractive material, and it was accessible," said Miss Dedik of the Energy Department.

Just 500 miles to the south along the Caspian coastline lies Iran and what U.S. officials say is a covert nuclear-weapons program. Eight hundred miles to the southeast is Afghanistan, base and refuge of accused terrorist mastermind Osama Bin Laden, and due west, straight across the Caspian, Chechnya smolders.

"There are fast-breeder reactors in Western Europe and Japan, but the plutonium produced there doesn't accumulate like it did in Aktau. It's reprocessed pretty quickly," Miss Dedik said.

"There just aren't any big stockpiles. Remember, most weapons-grade plutonium is produced by dedicated reactors, controlled by the military, and they're usually much better guarded than this one was."

So in 1996, the government of President Nursultan Nazarbayev, the International Atomic Energy Agency and the United States quietly set up a program to immediately enhance security and, starting in 1998, to package the fuel assemblies to prevent theft.

Miss Dedik and Mr. Crane were among several dozen Americans who worked on the