

Minuteman Missile

Minuteman Missile
National Historic Site
South Dakota

National Park Service
U.S. Department of the Interior



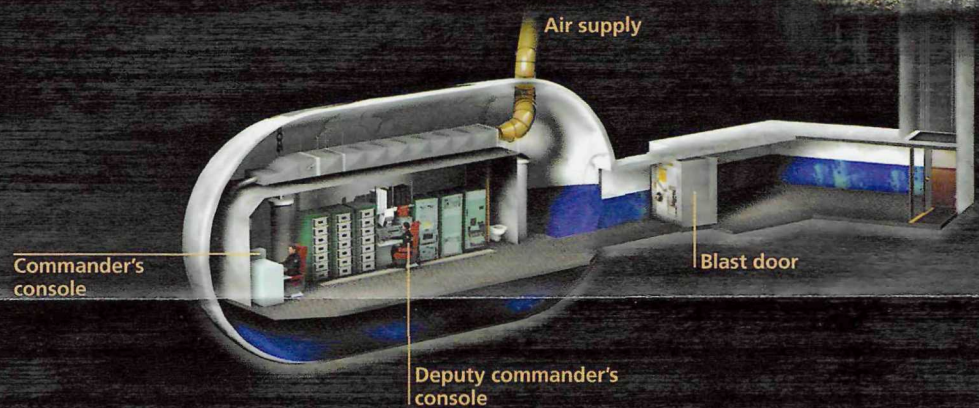
The only value in our two nations possessing nuclear weapons is to make sure they will never be used.
President Ronald Reagan

When Gene Williams was growing up in the 1960s, he knew that his family's farm held a dangerous weapon—a nuclear missile that could reach the Soviet Union. "You were always aware of the fact that the awesome power that was there could end the world," he recalls.

The missile was one of hundreds of Minuteman missiles hidden beneath the sunflowers and wheat, the cows and corn of America's Great Plains during the Cold War. Minuteman Missile National Historic Site commemorates this perilous period of world history and explores the choices a nation faces.

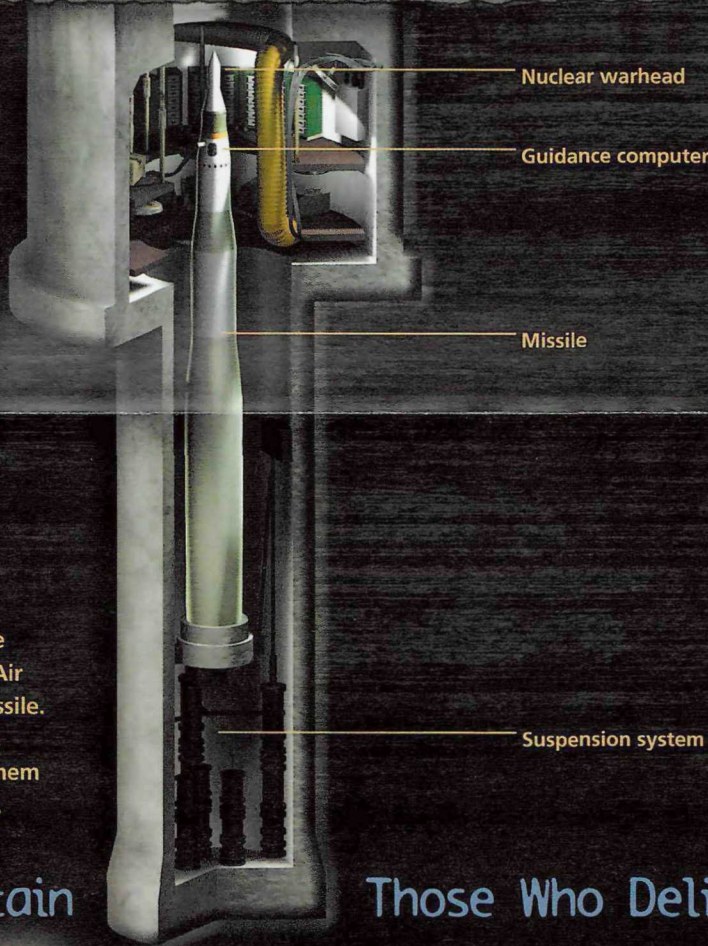
launch control

An unmarked building encircled by a tall fence gave little hint this was a **LAUNCH CONTROL FACILITY**. Above ground, security guards and other staff worked, stood watch, relaxed, and rested. Below ground, two US Air Force officers were always ready to launch nuclear missiles. All they needed was the command from the US president.



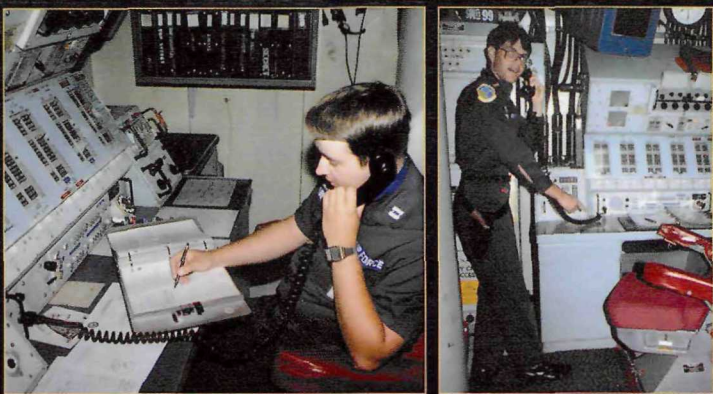
missile silo

At the **LAUNCH FACILITY** a few miles away, a nuclear missile waited in a silo. Its solid fuel was stable enough to last decades while still making the missile able to launch in minutes. The tall motion sensor would alert Launch Control of intruders. The cone-shaped antenna communicated with airborne control centers. If the command came from Launch Control, the 90-ton silo cover would slide out of the way and the Minuteman missile would blast off to a target thousands of miles around the Earth.



The Missileers Who Work the Shifts

Two people worked 24-hour shifts in a control center that was designed to protect them from a nuclear blast. It was inside a capsule made of four-foot-thick concrete reinforced with three-inch-thick steel bars, and was suspended from shock absorbers. The crew had survival gear to last two weeks, and an escape hatch in the event of disaster. What kind of world would have awaited them?



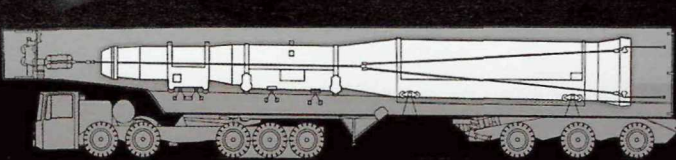
Each launch facility had 10 missiles to control. The missiles were about 3 miles apart, grouped around the launch control facility.

Missile technicians drove more than 60 miles from Ellsworth Air Force Base to maintain the missile. While the technicians worked, armed guards watched over them and the security of the facility.

Those Who Maintain



Those Who Deliver

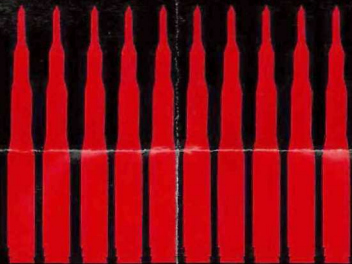


Rural roads were specially maintained for the massive truck and trailer delivering a missile. This "transporter

erector" could erect the container over the silo and lower the missile into place.

It was a "MAD" World

From the 1960s to the 1990s, the United States and Soviet Union followed a strategy called **MAD**, or **MUTUALLY ASSURED DESTRUCTION**. Neither side would risk launching an attack because the other side would launch an equally destructive counterattack.



Those They Protect

People heard about "civil defense" from radio, TV, films, magazines, newspapers, and booklets. They learned how to build and stock a private bomb shelter or where to find a community shelter. And they hoped to never need one.



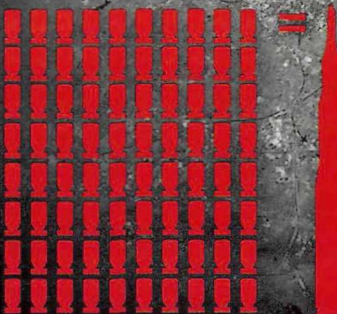
Children practiced "duck and cover" in school drills.

What Does an Arms Race Look Like?

"Little Boy," a World War II era atomic bomb, could have destroyed the center of Washington, DC. One Minuteman missile could have taken out most of the city plus adjacent cities and towns. If that happened today, at least one million people would die.

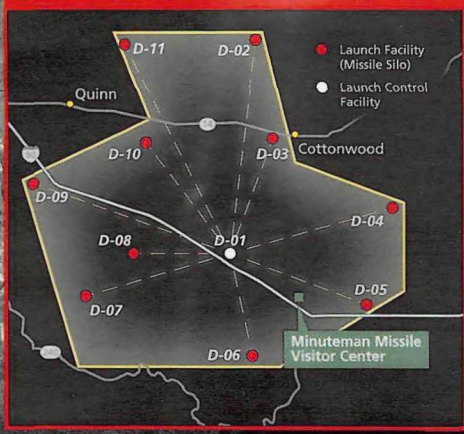
80=1
One Little Boy dropped on Hiroshima

80 Little Boys = 1 Minuteman Missile II totalling 1.2 megatons of TNT



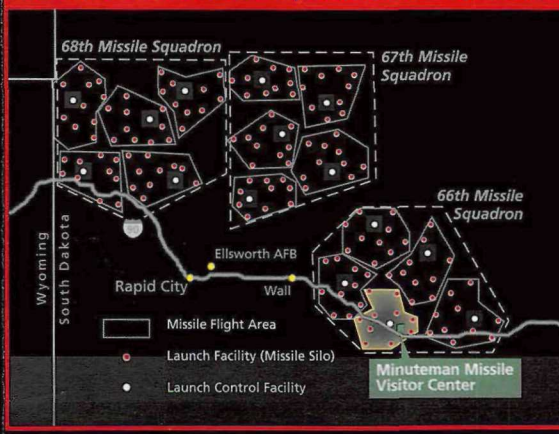
Minuteman II Missile
Burst radius

10
Each FLIGHT had 10 missiles.



With 1,000 Minuteman missiles ready (below), the United States was ready to strike back if the Soviet Union struck first. But how many Americans would have already died? In the map at far right, each circle equals one missile strike, which would create a crater 200 feet

150
One WING had at least 3 squadrons and 150 missiles.



deep and 1,000 feet wide. One such strike could kill as many as two million people, including people in civil defense shelters. Imagine how many would die if 100 missiles struck at once along the US East Coast.

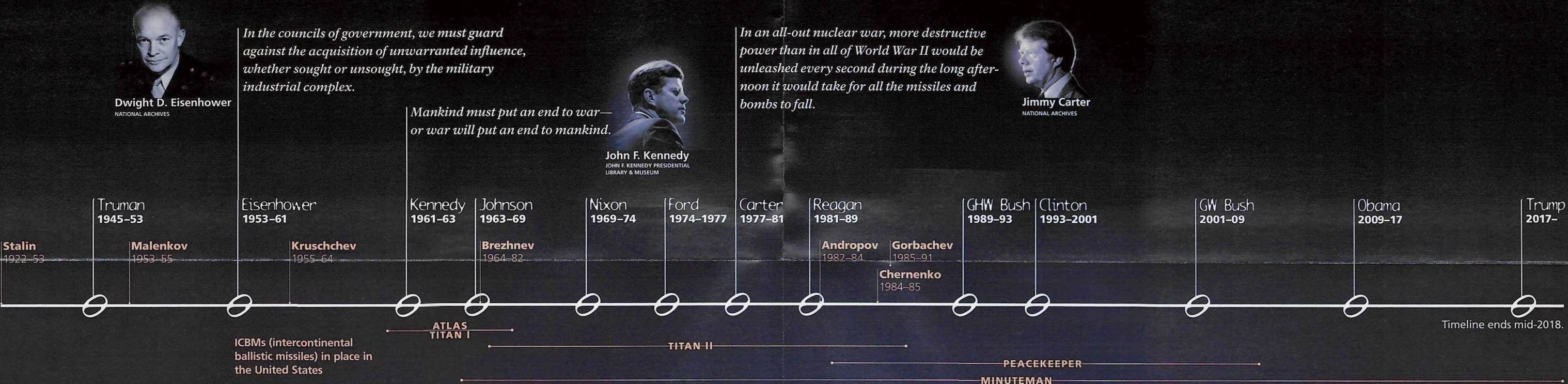
1,000
Six WINGS had a total of 1,000 missiles.



In a Minute's Notice

Minute Man—A member of the 1770s colonial militia trained to respond in a minute's notice of an attack.

Minuteman—A nuclear missile that a missileer can launch with less than a minute's notice.



1940s

- Top-secret Manhattan Project develops a US atomic bomb.
- World War II ends after US drops two atomic bombs on Japan.
- Tensions between US and USSR escalate.
- The Cold War gets a name.

1950s

- “Duck and cover” drills and backyard bomb shelters become common.
- Soviet Union launches *Sputnik*, a small satellite, using a rocket powerful enough to carry a nuclear warhead into the United States.
- US and Soviet Union develop more destructive thermonuclear weapons.
- Titan I and Atlas missiles placed in 1959.

1960s

- Eastern Germany builds the Berlin Wall.
- USSR brings missiles to Cuba; US prepares to launch Minuteman missiles.
- Titan II missiles in place.
- 1,000 Minuteman missiles in silos beneath the Great Plains.
- 189 countries sign nuclear nonproliferation treaty.

1970s

- Strategic arms limitation talks (SALT) lead to the Antiballistic Missile Treaty, which further limits nuclear weapons.
- Missiles in South Dakota upgraded to Minuteman II.
- Minuteman III installed in some missile fields.

1980s

- South Dakota rancher hosts 10-day rally against nuclear weapons.
- 1 million people demonstrate in New York City to support disarming nuclear weapons.
- Peacekeeper missiles developed; each can carry 10 nuclear warheads.
- Mikail Gorbachev comes to power in the USSR.
- Berlin Wall comes down.

1990s

- Strategic Arms Reduction Treaty (START I) is signed.
- USSR dissolves and Cold War ends.
- India and Pakistan test nuclear weapons.
- Last Minuteman II missile launch facility deactivated.
- Minuteman Missile National Historic Site established.

2000s

- US and Russia renew the START treaty.
- US withdraws from the Anti-ballistic Missile Treaty.
- North Korea tests nuclear weapons.

2010s

- Iran signs agreement that limits its ability to build nuclear weapons.
- US and Russia complete START treaty requirements. 50 Minuteman III missiles removed, leaving 400 beneath the Great Plains. (None are in South Dakota.)
- North Korea continues testing nuclear weapons and missiles.
- At least 8 other countries have nuclear weapons of some type.

Living with Missiles

We would always go out to the missile silos and . . . listen to the machinery that’s humming . . . and it just reminded me of Darth Vader.

—Lindi Kirkbride, rancher in Wyoming and antinuclear activist

It was kind of like this macho competition, but it was never like complete hatred.

—Valeri Bochkov, artist and writer who grew up in Russia during the Cold War

You had a bathroom at the end that looked like something out of Alcatraz [prison] . . . and the bed was right there. There is really no changing area. . . . no privacy whatsoever in a Minuteman capsule.

—Linda Aldrich, missileer 1982–98

That’s what the nuclear forces have done is created that environment where there generally has been peace at the highest levels, and that’s what we continue to do today.

—Tucker Fagan, missileer 1968–73

The best type of war to have is one that you never have to fight, and this is one case where we fought a war and we never actually fired a weapon in anger.

—Gene Williams, who had Delta-06, a Minuteman launch facility, on his ranch



A test launch of a Minuteman III missile from Vandenberg Air Force Base, California, in 2016.
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Planning Your Visit

The park's three sites are along I-90 between Badlands National Park and Wall, South Dakota. Begin at the visitor center, located north of I-90 exit 131. A film and exhibits explore the Cold War.

The Delta-01 Launch Control Facility is open only during ranger-led tours. Fee; reservations required. Go to the park website or call the park. • Delta-09, the missile silo site, is open daily; exhibits explain the site, you can look down into the silo. • Parking and facilities are limited at both sites.

Safety and Regulations The launch control facility tour is limited to six persons. It requires a ride in a small elevator; visitors must also be able to climb two long ladders. • Be prepared for sudden changes in weather and road conditions. • Check the park website for firearms regulations.

Accessibility We strive to make our facilities, services, and programs accessible to all. For information go to the visitor center, call, or check our website.

Emergencies call 911

Minuteman Missile National Historic Site
24545 Cottonwood Rd., Philip, SD 57567
605-433-5552; www.nps.gov/mimi

Follow us on social media.

Minuteman Missile National Historic Site is one of over 400 parks in the National Park System. To learn more about parks and National Park Service programs in America's communities, please visit www.nps.gov.

You might also want to visit the South Dakota Air and Space Museum at Ellsworth Air Force Base. It has a launch control simulator and a Minuteman II missile. The base tour includes an opportunity to go inside a missile silo. The base is outside Rapid City. Go to www.sdairandspacemuseum.com or call 605-385-5189 or 605-385-5188.

National Park Foundation
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www.nationalparks.org