

Part I: The Problem of Nuclear Weapons

After the terrorist attacks of September 11, 2001, the public began to fear that a terrorist group might acquire a nuclear weapon. People who had not worried about nuclear weapons for a generation began to pay attention to this danger. But the threat of nuclear weapons is not new. And while the threat of nuclear terrorism is a deep concern, the role of nuclear weapons in international politics and security is more complex than the threat from terrorists alone.

In fact, nuclear weapons pose many risks and challenges for the United States and the world. Nuclear weapons are linked to our most complex and challenging foreign policy problems. For example, the United States went to war against Iraq in 2003, arguing (incorrectly) that Iraq was trying to build a nuclear weapon.

Preventing the spread of nuclear weapons (the spread of these weapons is known as proliferation) is a top priority for the United States. The United States has identified Iran as a country that represents a threat to U.S. security because of its nuclear program and foreign policy. Tensions with Iran are high.

Some policy makers have called for military action against Iran.

“We’re not going to let Iran get a nuclear weapon, but I think there is still a window of time for us to resolve this diplomatically.”

—President Barack Obama,
November 15, 2012

Finally, more than sixteen thousand weapons produced during the Cold War are held by the United States and Russia—an issue that some experts worry more about than the threat of nuclear terrorism. Russia and the United States have approximately 16,200 warheads

of the approximately 17,300 nuclear weapons in the world. Not all are deployed with military units or ready for use. Some are kept in storage. The United States has

1,950 nuclear weapons that are deployed and ready to be used. Russia has approximately 1,740 nuclear weapons deployed and ready to be used. Both the U.S. and Russian arsenals are capable of destroying a large part of humanity.

“[After nuclear war, the] two sides would have neither powers, nor laws, nor cities, nor cultures, nor tombs.”

—French President Charles de Gaulle,
May 31, 1960

Nuclear Weapons Terminology

“Nuclear weapons” is the term used throughout this reading to describe weapons that harness the power of the atom. Nuclear weapons are vastly more powerful than conventional weapons. The earliest nuclear weapons were referred to as atomic bombs or weapons and used a process called fission to produce explosive energy. In the 1950s, both the United States and the Soviet Union increased the explosive power of weapons by utilizing a process known as fusion; these weapons are known as thermonuclear bombs.

The explosive force of nuclear weapons is measured in kilotons (thousands of tons) or megatons (millions of tons) of TNT. The bomb dropped on Hiroshima had an explosive force of thirteen kilotons, equivalent to thirteen thousand tons of TNT. The largest bomb ever tested was a Soviet hydrogen bomb of fifty-nine megatons or about 4,500 times that of the Hiroshima bomb. Today, most nuclear weapons are between one hundred kilotons and one megaton.

President Ronald Reagan (1981-1989) and Soviet President Mikhail Gorbachev said in a joint declaration in 1986, “A nuclear war cannot be won and must never be fought.” Nevertheless, both the United States and Russia currently have plans in place for fighting—and, if possible, winning—a nuclear war.

It seems strange to consider that countries would have so many destructive weapons if it is also accepted wisdom that a nuclear war could not be won and should never be fought. There are sharp political and moral arguments about what to do with nuclear weapons. Some believe that they serve a purpose, while others see their very existence as a threat to the world.

When were nuclear weapons first used?

The United States developed nuclear weapons during World War II in a massive and costly effort called “The Manhattan Project.” The project involved thousands of scientists and engineers and cost more than two billion dollars (about twenty-five billion in 2013 dollars). Germany surrendered in May 1945, before the atomic bomb was ready, but the war against Japan continued.

The war in the Pacific against Japan had been particularly bloody; fighting killed or wounded nearly 300,000 U.S. soldiers. The U.S. military believed that it would have to invade Japan and that U.S. casualties could range between 100,000 and 500,000.

Hoping to speed the end of the war, President Harry S. Truman (1945-1953) authorized dropping the bomb on Japan. The United States dropped the first nuclear bomb on the city of Hiroshima on August 6, 1945.



Hiroshima after the atom bomb explosion.

U.S. Army Photo.

What effect did the bomb have on Hiroshima?

The Hiroshima bomb was set to detonate 1,900 feet above ground level to maximize the effects of the blast. It struck Hiroshima with an explosive force of 12,500 tons of TNT. The city was home to approximately 280,000 civilians and 43,000 soldiers. Approximately 100,000 of them died immediately or suffered injuries that killed them within a few months of the attack.

“I felt as though I had been struck on the back with something like a big hammer, and thrown into boiling oil... The vicinity was in pitch darkness; from the depths of the gloom, bright red flames rise crackling, and spread moment by moment. The faces of my friends who just before were working energetically are now burned and blistered, their clothes torn to rags.”

—Hiroshima college student

In addition, the radiation burns and internal damage caused by gamma rays produced lethal injuries to people as far as two

miles from the center of the blast. Forty-eight thousand of Hiroshima's seventy-six thousand buildings were totally destroyed by the atomic bomb, while another twenty-two thousand were seriously damaged.

“The appearance of people was... well, they all had skin blackened by burns.... They had no hair because their hair was burned, and at a glance you couldn't tell whether you were looking at them from in front or in back.... Their skin not only on their hands, but on their faces and bodies too hung down.”

—Hiroshima grocer

Three days later, the United States dropped another bomb on the city of Nagasaki with similar results. Japan offered to surrender one day after the bombing of Nagasaki.

The use of a nuclear weapon against Japan demonstrated the incredible military power that a nation had if it possessed these weapons. A country with nuclear weapons could win any war that it fought, provided that its opponent did not have them also. By October 1945, President Truman realized that an international race to acquire atomic weapons was likely.

As people in the United States learned about the devastation of Hiroshima and Nagasaki, a debate about the morality of such powerful weapons began. Most argued that they had shortened the war and saved U.S. lives, while others argued that the United States had lost its position of moral leadership in the world. Scientists and others recognized that the power of nuclear weapons had changed the nature of warfare and the world.

“The lesson we should learn from all this, and the frightening thing which we did learn in the course of the war, was how easy it is to kill people when you turn your mind to it. When you turn the resources of modern science to the problem of killing

people, you realize how vulnerable they really are.”

—I.I. Rabi, Manhattan Project physicist

The Cold War and the Nuclear Arms Race

Soon after the defeat of Japan and Nazi Germany, the United States faced a new challenge from its World War II ally, the Soviet Union. Despite their enormous war losses, the Soviets had built up an army of twelve million soldiers to defeat Nazi Germany. In February 1946, the Soviet leader Josef Stalin predicted that the conflict between communism and capitalism would lead to a new war. Meanwhile, Soviet troops remained firmly in place throughout much of Eastern Europe. U.S. leaders feared that the Soviets would attempt to extend communist rule over the entire continent. Containing the influence of the Soviet Union and the spread of communism became the top priority of the United States. Thus began a conflict, known as the Cold War, which would last for more than forty years.

Most people in the United States viewed communist aggression as a serious threat to the United States and the world. U.S. leaders and the American people saw the global struggle as a contest between good and evil, pitting God-fearing, democratic people against godless, communist regimes determined to extinguish the central values of Western civilization.

During the Cold War, anxiety about the Soviet Union consumed the United States. Movies, books, and television programs in the United States typically depicted the Soviets as a global menace. From Central America to southern Africa to the Middle East to Southeast Asia, Washington struggled with Moscow for power and influence. Looming over the confrontation was the possibility that the Cold War might ignite a catastrophic nuclear exchange that would dwarf the devastation of Hiroshima and Nagasaki.

In 1949, the United States formed a military alliance with ten countries of Western Europe and Canada to create the North Atlantic Treaty Organization (NATO). The NATO

Treaty committed the United States to the defense of Western Europe and pledged for the first time in history to maintain a substantial U.S. troop presence overseas.

Why did the Soviet Union want nuclear weapons?

Soviet leaders believed that they would not be able to defend their country or compete internationally with the United States and its allies if they could not match U.S. military power. In September 1949, the Soviets exploded their first atomic bomb.

“The security of the country and patriotic duty demanded that we create the atomic bomb.... Who would forgive the leadership of the country if it began to create weapons only after the enemy had decided to attack? The ancients had a point when they coined the phrase, ‘If you want peace, prepare for war.’”

—Nikolai Dollezal, chief designer of the first Soviet nuclear reactor

How did the nuclear arms race begin?

Soviet nuclear weapons forced U.S. defense planners to devise a new approach to national security. President Truman increased the U.S. military presence in Western Europe in response to crises in Berlin and Czechoslovakia. U.S. policy makers also hoped to maintain their head start in the number of nuclear weapons they possessed. Truman ordered the development of the vastly more powerful hydrogen bomb; he ordered that four hundred hydrogen bombs be ready by 1953. This was the beginning of the nuclear arms race.

Deterrence

U.S. military planners began to rethink the strategy of war. For many, the prospect of nuclear war was so horrible that it was difficult to consider. The U.S. Air Force formed a group of strategists whose job was to “think about the unthinkable” prospect of nuclear war. The

group prided itself on its scientific approach to solving the problem of nuclear war. They devoted their efforts to developing plans to prevent nuclear war, to fighting and winning a nuclear war if necessary, and to surviving a nuclear attack should one occur.

These strategists believed that it was possible for the United States to fight and win a nuclear war. They examined various scenarios and carefully calculated the number of people in the United States who might die (between 2 and 160 million), and the number of years it would take the economy to recover (between 1 and 100).

The strategists came up with a plan to prevent nuclear war known as “deterrence.” Deterrence was based on the idea that the threat of nuclear retaliation could actually prevent one side from starting a nuclear war. Simply put, if one side were to attack the other with nuclear weapons, the other side would launch a nuclear response that would devastate the original attacker. Knowing that they faced certain destruction, both sides would be deterred from attacking.

“Thus far the chief goal of our military establishment has been to win wars. From now on it must be to avert them. It can have almost no other useful purpose.”

—Bernard Brodie, nuclear strategist, 1946

As strategists thought more about deterrence, they realized that they needed to make the other side believe the United States had enough weapons to survive a surprise “first-strike” by an enemy and launch a retaliatory strike. Of course, this raised the question about how many weapons are enough. Both the Soviets and the United States raced to produce enough weapons and found different ways to protect weapons from being destroyed during a “first-strike.”

The U.S. military strategy based on deterrence meant that the United States would go to war not only in response to an attack, but also in anticipation of one.

China, France, and Great Britain

While the United States and Soviet Union built their nuclear arsenals, other great powers also wanted to develop their own nuclear weapons, including two important U.S. allies, Great Britain and France. Great Britain developed a nuclear arsenal during the 1950s, in large part to emphasize its role as a great power. France, defeated in World War II, and also interested in asserting itself as a leading power, also developed nuclear weapons. Both the French and the British believed that having their own bomb could protect them from attack. China developed and tested its own nuclear bomb in 1964 in part to assert its status as a great power. The British, French, and Chinese arsenals were much smaller than the U.S. and Soviet arsenals.

“There will be states that have the atomic bomb (and will not use it among themselves). There will be states without the bomb, which will be the battlefields. We need our atomic weapons.”

—French General Catroux, September 10, 1954

“An adequate program of defense... must have as a goal, the possession of superior striking power and the ability to explode at will, with greatest effectiveness, such a number of suitably designed atomic weapons as will: (a) deter a potential enemy from attack, or, (b) if he prepares an attack, overwhelm him and destroy his will and ability to make war before he can inflict significant damage upon us.”

—from *The Evaluation of the Atomic Bomb as a Military Weapon*, 1947

The implications of relying on deterrence were significant. Incorrectly anticipating an enemy attack and launching a preventive nuclear strike would be catastrophic. The result of failing to anticipate an actual attack or failing to prevent it would also be catastrophic. Belief in the theory of deterrence was the central component of U.S. nuclear security strategy throughout the Cold War.

How did the United States view the Soviet Union?

While U.S. policy makers may have trusted themselves not to misuse nuclear weapons, they did not trust the Soviet Union. Many believed that the Soviet ideology and the desire to spread communism made the Soviets more

likely to go to war and to use nuclear weapons to achieve their goal. Many people in the United States did not think the question was “if” the Soviet Union would use nuclear weapons, the question was “when.” U.S. policy makers believed that when the Soviet Union developed a large enough nuclear arsenal, it would be tempted to attack the United States.

“The avowed basic intention of the USSR is to engage in competition with the US until the US is destroyed or forced to capitulate. The Soviet concept of competition with the US is—demonstrably—to wage a relentless, unceasing struggle in which any weapon or tactic which promises success is admissible.... It consequently cannot be described as merely a political struggle, or a cold war, or a limited war. In the eyes of the Kremlin, it is war in the broadest sense of the term, a war to the death.”

—U.S. Policy Document “Soviet Intentions and Capabilities,” February 1950

How did the Soviet Union view the United States?

Soviet planners assumed that a war with the United States would begin with a U.S. nuclear attack. Unwilling to be intimidated,

Stalin dramatically increased Soviet forces in Europe and ordered efforts to increase the Soviet arsenal. He even ordered a military force stationed in Siberia to be prepared to invade Alaska. Tensions increased as both sides refused to be intimidated by each other. In 1950, a Soviet military expert calculated that the United States could not build enough weapons to destroy the Soviet Union's conventional (non-nuclear) forces. Three years later, the United States had tripled its inventory of nuclear weapons from three hundred to more than eleven hundred.

How did U.S. nuclear policy evolve under Eisenhower?

In his inaugural address, President Dwight D. Eisenhower (1953-1961) spoke of the danger of nuclear weapons. The development of a more powerful bomb, the thermonuclear hydrogen bomb in 1952, had increased the lethality of these weapons. Other developments also concerned Eisenhower. One month after the Soviets exploded their first atomic bomb in September 1949, communists led by Mao Zedong won control of mainland China and joined Moscow in pressing for the spread of communism worldwide. In June 1950, communist North Korean forces invaded South Korea, drawing the United States into a three-year conflict. Chinese intervention in that war led to a stalemate and to serious consideration of using nuclear weapons.

In spite of his concerns about the dangers of nuclear weapons, Eisenhower developed a policy that would rely on a larger nuclear force that was capable of responding anywhere in the world. Eisenhower realized that using U.S. conventional military forces to counter the



During the Cold War, the United States used radar to keep watch for signs of a Soviet attack.

larger Soviet and Chinese armies everywhere in the world would be expensive and difficult. As a solution, the United States decided that “massive retaliation” would be used in response to an attack by Soviet conventional forces. The plan called for a nuclear attack on 118 Soviet cities; it expected Soviet casualties would be around sixty million. Eisenhower also introduced the idea of “pre-delegating” the authority for the military to use nuclear weapons if the president was unable to give the order to respond to an attack.

“The basic decision is to depend primarily on a greater [nuclear] capacity to retaliate instantly by means and at places of our choosing. As a result it is now possible to get and to share more basic security at less cost.”

—Secretary of State, John Foster Dulles,
January 12, 1954

In response to the growing U.S. nuclear arsenal, the Soviet Union worked feverishly to increase its nuclear inventory and to produce more powerful weapons. Both the United States and the Soviet Union conducted hundreds of tests of these new weapons in the

atmosphere. Thousands of civilians were exposed to radioactive fallout, the poisonous by-product of nuclear explosions, that spread throughout the atmosphere. Many would fall ill and die. Estimates of deaths in the United States and around the world from cancer due to the U.S. testing program range from 70,000 to 800,000 people. Estimates are similar for the Soviet testing program.

“If you were outdoors... you might be advised to bathe, wash your hair, dust your clothes, brush your shoes, etc. Fallout can be inconvenient, but your best action is not to be worried about [it].”

—U.S. government pamphlet,
Atomic Tests in Nevada, 1957

What was Sputnik?

In 1957, the Soviet Union launched Sputnik, the first satellite to orbit the earth. The reaction in the United States was one of shock, and added to the fear that the United States might be falling behind the Soviet Union in technology. The Soviet Union and the United States began a race to put nuclear warheads on intercontinental ballistic missiles (ICBMs) that could strike a target more than six thousand miles away in thirty minutes or less. During his campaign for the U.S. presidency in 1960, John F. Kennedy promised to be tough on the Soviets.

In 1961, Soviet and U.S. tanks stood ready to fire on each other in the occupied city of Berlin, Germany. Tensions ran high. Both countries ended a moratorium (temporary ban) in place since late 1958 and began testing nu-

clear weapons in the atmosphere to emphasize their strength and determination. The Soviets tested a bomb that had ten times the explosive power of the total number of explosives used during the entire Second World War.

The Cuban Missile Crisis

Tensions reached a high point in October 1962, when the United States discovered that the Soviets were installing nuclear missile sites on the island of Cuba, only ninety miles from Florida. President Kennedy demanded the removal of the missiles. U.S. forces were placed on high alert. U.S. bombers took off and circled in the air, ready to deliver nuclear weapons against the Soviet Union. President Kennedy contemplated invading Cuba. Unknown to him, Soviet commanders in Cuba had operational (ready-to-use) nuclear weapons and had been authorized to use short-range weapons in the event of an U.S. invasion—an event that would likely have led to a full nuclear exchange.

The U.S. 1962 nuclear plan (Strategic Integrated Operation Plan or SIOP), based on the Eisenhower doctrine of massive retaliation, called for launching more than three thousand weapons against the Soviet Union and China—even if China was not involved in the original attack. If this plan had been implemented during the missile crisis, military planners estimated the casualties would have approached 300,000,000.

The Americans and Soviets struck a deal after thirteen days on the brink of nuclear war. The Soviet Union would remove their missiles from Cuba if the United States promised not

Language of the Nuclear Era

The Cold War introduced words and phrases to the English language. The idea of deterrence spawned the phrase Mutually Assured Destruction, often referred to simply by its acronym “MAD.” The “balance of terror” referred to the standoff between the United States and the Soviet Union. The U.S. nuclear plan (SIOP or Single Integrated Operational Plan) became known as the “doomsday machine.” Planning the use of nuclear weapons became known as “thinking the unthinkable.” The phrase “better dead than red,” referred to the unwillingness to live under communism. (Communists were often referred to as “reds,” because the color red was a symbol of international communism.)

to invade Cuba and removed nuclear missiles from Turkey, a country that bordered the Soviet Union.

“We are both engaged in a tug of war, pulling on either end of a rope and therefore tying a knot that, once tied, neither of us will be able to undo. If war should break out, it would not be in our power to stop it—war ends when it has rolled through cities and villages, everywhere sowing death and destruction.”

—Soviet Premier Nikita Khrushchev, letter to President Kennedy, October 26, 1962

How did the missile crisis affect U.S.-Soviet relations?

The missile crisis had a profound effect on President Kennedy and Premier Khrushchev. While Kennedy still believed that the United States should rely on the policy of deterrence to keep the peace with the Soviet Union, he worked with Khrushchev to reduce tensions between the two countries. After the missile crisis, both sides agreed to install a “hotline” to ease communication between U.S. and Soviet leaders in times of crisis. The arrangement featured teletype machines installed in both the Kremlin and the Pentagon. This reduced the risk of a misunderstanding causing a deadly conflict.

The missile crisis also impressed Kennedy and Khrushchev with the dangers of making nuclear threats. Having come so close to a nuclear war, leaders on both sides recognized the need to embark on a new path to prevent nuclear confrontation in the future.

“If we cannot now end our differences, at least we can help make the world safe for diversity. For, in the final analysis, our most basic common link is the fact that we all inhabit this planet. We all breathe the same air. We all cherish our children’s future. And we are all mortal.... Confident and unafraid, we labor on—not toward a strategy of annihilation, but toward a strategy of peace.”

—President Kennedy, American University speech, June 1963

Although tensions cooled after the missile crisis, the Soviet Union and the United States remained locked in a nuclear standoff. Both sides would continue to rely on the idea of deterrence and mutually assured destruction, known as “MAD.” Arguments on how many weapons were necessary to guarantee deterrence evolved as strategists and military planners continued to adjust their strategies and both sides added new technologies and



Berlin, Germany, October 1961: U.S. and Soviet tanks stare each other down across Checkpoint Charlie (a crossing point between the U.S. and Soviet sectors). The United States, the Soviet Union, Great Britain, and France each occupied sectors of Berlin after defeating Germany in World War II.

U.S. Army Military History Institute.

capabilities. Each development, designed to add to each country's sense of security, contributed to an atmosphere of mistrust. These new developments also added fuel to the arms race. Both sides remained determined to have enough weapons to maintain a credible deterrent.

Arms Control

The Cuban missile crisis motivated both countries to focus on arms control agreements as a means to limit the danger of nuclear weapons and war. The first agreement was the limited test ban treaty, which the United States, the Soviet Union, and the United Kingdom signed in 1963. It prohibited nuclear tests in the atmosphere, under water, and underground. France and China did not sign the treaty. Nevertheless, the treaty marked the beginning of years of U.S. efforts to control the dangers of nuclear weapons through arms control agreements and treaties.

“I see the possibility in the 1970s [of] the United States having to face a world in which fifteen or twenty or twenty-five nations may have these [nuclear] weapons. I regard that as the greatest possible danger and hazard.”

—President John F. Kennedy,
March 21, 1963

Kennedy also worried about the proliferation, or spread, of nuclear weapons to other countries. In 1961, Ireland had sponsored a resolution at the United Nations calling for negotiations on an international agreement. The agreement would prevent other states besides the five that already had them from acquiring nuclear weapons, but allow all states to use nuclear energy for peaceful purposes. The

U.S. and Soviet Nuclear Weapons
1970-1979



Data from the National Resources Defense Council.

United States supported the idea and worked behind the scenes diplomatically to muster world-wide support for the treaty. It would take until 1968 for negotiating parties to agree on the terms of the Nuclear Non-Proliferation Treaty (NPT). The treaty would become a cornerstone of U.S. efforts to prevent the spread of nuclear weapons. The United States and the Soviet Union would cooperate extensively to control proliferation and the export of nuclear materials during the 1970s and into the 1980s. This cooperation helped strengthen the effectiveness of the NPT.

Relations improved somewhat between the Soviet Union and the United States under President Richard Nixon (1969-1974). Nixon opened an era of “détente.” Nixon hoped détente (a French word meaning “relaxation of tensions”) would produce a new set of rules for superpower conduct and prevent international crises such as the Cuban missile crisis. During Nixon’s presidency, the United States and the Soviet Union signed two important arms control agreements in an effort to limit the arms race.

One agreement was the 1972 Anti-Bal-

listic Missile (ABM) Treaty which limited the number of ground-based missile interceptors each side could have. Both sides believed that this was needed to preserve the deterrence provided by mutually assured destruction. The other treaty was the Strategic Arms Limitation Treaty (SALT) that prevented increases in the number of ballistic missiles.

The End of the Cold War

The presidency of Ronald Reagan (1981-1989) brought nuclear issues to the fore once again. Reagan deeply mistrusted the Soviets, who had invaded Afghanistan in 1979 and placed missiles in Eastern Europe. Reagan believed the United States had fallen behind and was losing its ability to deter a nuclear attack. In 1983, Reagan proposed building a defense against nuclear missiles known as the Strategic Defense Initiative (SDI) in part because he believed that MAD was morally wrong. The SDI proposal fueled Soviet mistrust of U.S. intentions even more. Critics thought that the SDI project would be expensive, could not

guarantee security, and would violate the Anti-Ballistic Missile (ABM) Treaty.

Reagan's hostility toward the Soviet Union and his increased military spending heightened public fear of nuclear war.

Why did President Reagan shift his attitude about the Soviet Union?

Several events would lead to a change of direction for President Reagan. A practice NATO military exercise in November 1983 called Able Archer led the Soviets to believe for a short time that they were about to be attacked by nuclear weapons. Reagan was stunned to discover that the Soviets thought the United States would launch an unprovoked attack. U.S. intelligence sources uncovered additional information that the Soviets continued to fear that they were about to be attacked. Mistrust and the danger of war between the United States and the Soviet Union had reached a level unseen since the Cuban missile crisis.

Protest in the Nuclear Age

Concern about nuclear weapons began soon after the bombings of Hiroshima and Nagasaki. During the 1950s, the number of anti-nuclear activists began to grow. Grass-roots organizations objected to atmospheric testing of nuclear weapons and questioned the wisdom and morality of nuclear weapons. Widespread protests took place in Europe, Japan, and the United States. Many notable scientists, including Albert Einstein, spoke out against them.

During the Cuban missile crisis, many people in the United States could only hold their breath and hope that the world would not be consumed in a nuclear holocaust.

“Can you imagine not seeing another Christmas, Thanksgiving, Easter, birthday, dance, or even Halloween? ...We’re just too young to die.”

—A Massachusetts schoolgirl, during the Cuban missile crisis

After the missile crisis, the fear of nuclear war began to have a profound effect on U.S. popular culture. The films *Dr. Strangelove* (1964) and *Fail-Safe* (1964), which criticized the idea that nuclear wars could be fought and won, are two examples. Writers and popular singers added their voices to the protest by focusing on the human consequences of nuclear war. As fear of nuclear war with the Soviet Union grew during the Reagan presidency, a large anti-nuclear movement developed in the United States and Western Europe. At its peak in the early 1980s, millions of protestors demonstrated in the United States and Europe and called for an end to the arms race. In the United States, a television movie called *The Day After* (1983) depicted what life in the United States might be like after a nuclear war.

Reagan became convinced that he needed to negotiate with the Soviets to prevent a nuclear war. Reagan's change of heart and changes in the Soviet leadership marked the beginning of the end of the Cold War.

How did the Cold War end?

By the time Mikhail Gorbachev was selected to head the Soviet Communist Party in 1985, his country was struggling to keep up with its Cold War rival. At home, corruption and inefficiency hindered the Soviet economy. More significantly for Moscow's global ambitions, Soviet science and technology were falling further behind the United States and Europe. In his mid-fifties, energetic, and open to new ideas, Gorbachev stood apart from the previous generations of communist officials. Gorbachev hoped that greater contact with the United States and Western Europe would bring new technology and investment into the Soviet Union. A key element of his strategy stressed improving Moscow's international image. Gorbachev proposed bold arms control initiatives with the United States.

Gorbachev's policies changed international relations. Many of the basic principles that had guided U.S. policy makers during the Cold War were suddenly called into question by Moscow's new outlook. Although Gorbachev had no intention of giving up the Soviet



Courtesy of Ronald Reagan Library.

President Ronald Reagan and Mikhail Gorbachev in Iceland in 1986. Gorbachev presented a dramatic proposal to reduce nuclear weapons by 50 percent if the United States stopped work on the Strategic Defense Initiative. Reagan refused this condition, but later meetings between the two were productive and led to reductions of weapons.

Union's Eastern European empire, he was not willing to use military force to maintain control over Moscow's satellite countries. In 1989, popular pressure brought down communist regimes in Poland, Hungary, East Germany, Czechoslovakia, Bulgaria, and Romania. The historical drama continued into 1990, when West and East Germany were reunified after forty-five years of division. Faced with mounting economic and political problems, Gorbachev was unable to hold the USSR together. Gorbachev resigned as Soviet president on December 25, 1991 and the Soviet Union ceased to exist.

The Cold War had come to an end; the original reason for producing tens of thousands of nuclear weapons was no longer relevant.