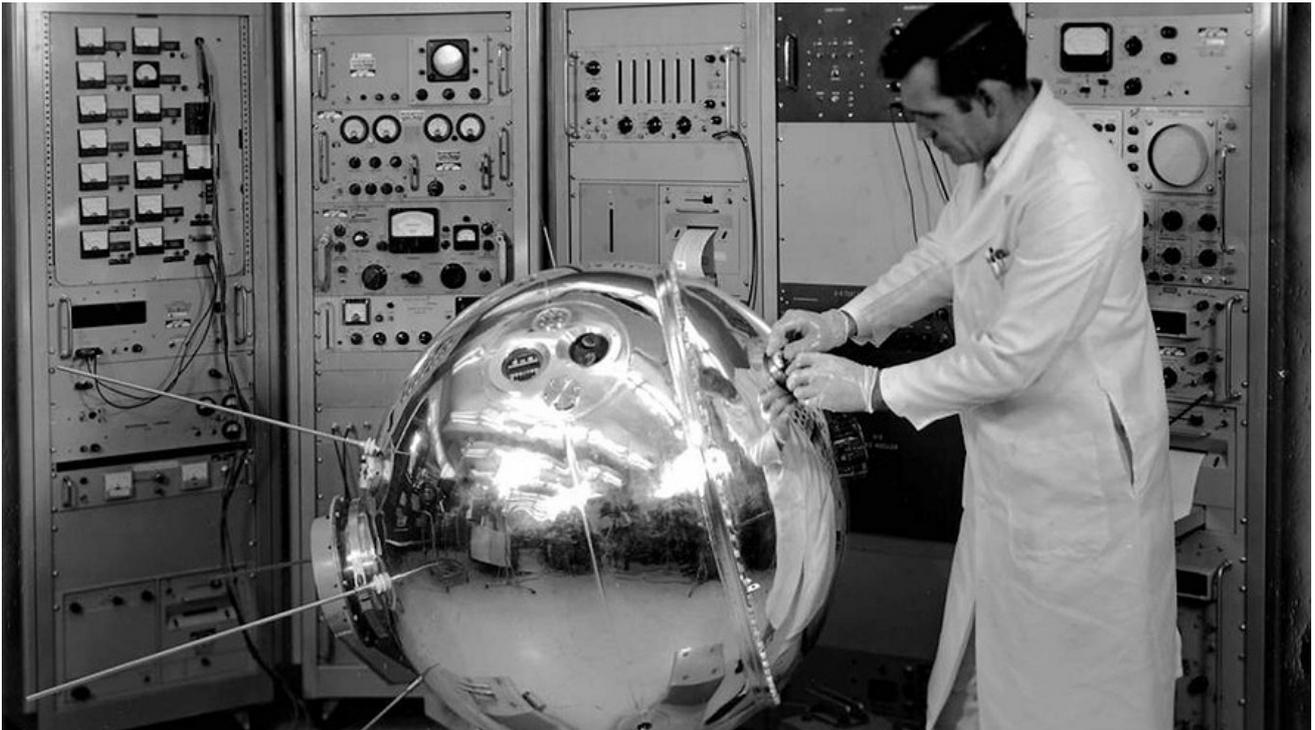


The Start of the Space Race

By NASA, U.S. State Department and USHistory.org, adapted by Newsela staff on 03.20.17

Word Count **791**



This is a photo of the Explorer XVII satellite. Weighing 405 pounds, this 35-inch pressurized stainless steel sphere measured the density, composition, pressure and temperature of Earth's atmosphere after its launch from Cape Canaveral, Florida, on April 3, 1963. Photo: NASA

Americans who happened to be gazing at the stars on Friday, October 4, 1957, may have noticed an object crossing the evening sky. Radio listeners, too, may have heard “beep, beep, beep” coming from their radios. An important event had occurred in the Soviet Union. The Soviets had launched an artificial satellite into orbit around Earth. The satellite was named Sputnik, Russian for “traveling companion.” It sent the beeping radio signals as it orbited the globe.

Rather than celebrating this historic scientific feat, Americans reacted with fear. Sputnik had been launched using a missile capable of traveling a great distance. This terrified Americans. It was widely believed that if the Soviets could launch a satellite into space, they probably could launch nuclear missiles capable of reaching U.S. shores.

United States relations were tense with the Soviet Union, which was an empire made up of Russia and several other countries under its control. It was the time of the Cold War. The U.S and Soviet Union were competing to be the most powerful country on Earth. It was not an actual war, more of a war of threats, but it almost became a war.

Americans feared Cold War attacks

Many prepared for a Soviet attack with bomb shelters and “duck and cover” drills in school where kids would quickly hide under their desks to prepare for a possible nuclear bomb attack.

Thousands rushed to stores to purchase bomb shelter kits. Congress created the National Aeronautics and Space Administration (NASA) and set aside money for science education.

The successful Sputnik launch shocked the United States. Americans had hoped that the United States would accomplish this scientific achievement first. The Soviets’ success fed fears that the U.S. military had generally fallen behind in developing new technology. As a result, the launch of Sputnik served to intensify the Cold War.

During the 1950s, both the United States and the Soviet Union were working to develop new technology. Near the end of the Second World War, Nazi Germany had been close to developing the world’s first missile capable of traveling thousands of miles. German scientists aided research in both countries after that war ended.

Russia, U.S. race to test rockets

Russia and the United States were also developing satellites. During the 1950s, the United States tested several varieties of rockets and missiles. All of these tests ended in failure.

The launch of Sputnik was part of a series of Soviet technological successes. At 184 pounds, the Soviet satellite was much heavier than anything the United States was developing at the time. Soon afterward, the Soviet Union launched two more satellites. One carried a dog into space. Together, these orbited Earth every 90 minutes. They created fear that the United States lagged far behind in technology. These concerns grew when the Soviet Union tested a long-distance missile that same year.

President Dwight Eisenhower had tried to downplay the importance of the Sputnik launch to the American people. Meanwhile, he poured money into the space program in an effort to catch up. Congress created the National Aeronautics and Space Administration (NASA).

The United States suffered a severe setback in December of 1957. Its first artificial satellite exploded on the launch pad. The explosion reminded the country how far behind the Soviet military it was.

Sputnik pushes weapons programs

At last, on January 31, 1958, the United States succeeded in launching its first satellite, the Explorer. The Explorer was smaller than Sputnik. It went deeper into space, however. The Soviets responded with yet another launch. The space race continued.

The success of Sputnik had a major effect on the Cold War. Fearing the country had fallen behind, the United States sped up its space and weapons programs. In the late 1950s, Soviet leader Nikita Khrushchev boasted about Soviet technological superiority and the weapons it had developed, which the U.S. assumed were aimed at it. The United States worked to develop its own weapons to counter. In this way, the launch of Sputnik fueled both the space race and the arms race.

When John F. Kennedy became president in 1961, the United States fell further behind. The Soviets had already placed a dog in space. Now in Kennedy's first year, Soviet cosmonaut Yuri Gagarin became the first human being to orbit the Earth.

Kennedy challenged the American people and government to put a man on the moon by the end of the 1960s. Congress responded enthusiastically. It set aside billions of dollars for the effort. While Kennedy was president, Alan Shepard became the first American to enter space. Then John Glenn became the first American to orbit Earth. In 1969, many thought of President Kennedy's challenge when Neil Armstrong became the first human being to set foot on the moon.

Quiz

- 1 What is MOST LIKELY the reason why the author included the story about Americans' reaction to Sputnik?
- (A) to show that the Soviet Union was the most advanced nation on Earth
 - (B) to show that Soviet technology made many Americans fearful
 - (C) to highlight the rapid advancement of military weapons
 - (D) to highlight the importance of satellites in modern technology

- 2 What effect did President Kennedy have on the space race?
- (A) He defeated the Soviet Union in terms of military power and scientific knowledge.
 - (B) He had a tense relationship with Soviet leader Nikita Khrushchev.
 - (C) He funded the programs that would eventually put an American on the moon.
 - (D) He sought the development of more ICBMs to destroy Soviet spacecrafts.

- 3 Read the selection from the section "Americans feared Cold War attacks."

The Soviets' success fed fears that the U.S. military had generally fallen behind in developing new technology. As a result, the launch of Sputnik served to intensify the Cold War.

Which of the following words, if it replaced "intensify" in the sentence above, would CHANGE its meaning?

- (A) reinforce
- (B) escalate
- (C) weaken
- (D) strengthen

- 4 Read the sentence from the section "Russia, U.S. race to test rockets."

Meanwhile, he poured money into the space program in an effort to catch up.

Which sentence uses "poured" in the SAME way as the sentence above?

- (A) The school poured resources into its sports teams.
- (B) The waiter poured water into the glass without missing a drop.
- (C) The rain poured down from the dark clouds.
- (D) After the ball hit her in the face, blood poured from her nose.