**Sputnik's Impact on America**

*Never before had so small and so harmless an object created such consternation.*
—Daniel J. Boorstin, *The Americans: The Democratic Experience*

"Listen now," said the NBC radio network announcer on the night of October 4, 1957, "for the sound that forevermore separates the old from the new." Next came the chirping in the key of A-flat from outer space that the Associated Press called the "deep beep-beep." Emanating from a simple transmitter aboard the Soviet Sputnik satellite, the chirp lasted three-tenths of a second, followed by a three-tenths-of-a-second pause. This was repeated over and over again until it passed out of hearing range of the United States.

**The mouse that roared**

The satellite was silver in color, about the size of a beach ball, and weighed a mere 184 pounds. Yet for all its simplicity, small size, and inability to do more than orbit the Earth and transmit meaningless radio blips, the impact of Sputnik on the United States and the world was enormous and unprecedented. The vast majority of people living today, at the beginning of the 21st century, were born after Sputnik was launched and may be unaware of the degree to which it helped shape life as we know it.

**A Crisis of Confidence**

Just when Americans were feeling self-confident and optimistic about the future, along came the crude, kerosene-powered Sputnik launch. The space race was under way, and the Soviets had won the first leg—the United States was agog and unnerved.

"No event since Pearl Harbor set off such repercussions in public life," wrote historian Walter A. McDougall in *The Heavens and the Earth—A Political History of the Space Age*. Simon Ramo, space pioneer and cofounder of Thompson Ramo Woolridge, later known as TRW, Inc., wrote in *The Business of Science* that "the American response to the accomplishment of the Soviet Union was comparable to the reaction I could remember to Lindbergh's landing in France, the Japanese bombing of Pearl Harbor, and Franklin D. Roosevelt's death."

There was a sudden crisis of confidence in American technology, values, politics, and the military. Science, technology, and engineering were totally reworked and massively funded in the shadow of Sputnik. The Russian satellite essentially forced the United States to place a new national priority on research science, which led to the development of microelectronics—the technology used in today's laptop, personal, and handheld computers. Many essential technologies of modern life, including the Internet, owe their early development to the accelerated pace of applied research triggered by Sputnik.

**The space race begins**

Politically, Sputnik created a perception of American weakness, complacency, and a "missile gap," which led to bitter accusations, resignations of key military figures, and contributed to the election of John F. Kennedy, who emphasized the space gap and the role of the Eisenhower-Nixon administration in creating it. But although the Sputnik episode publicly depicted Eisenhower as passive and unconcerned, he was fiercely dedicated to averting nuclear war at a time when the threat was very real. His concern for national security took precedence over any concerns about beating the Russians into Earth orbit.

*Without Sputnik, it is all but certain that there would not have been a race to the moon.*

When Kennedy as president decided to put Americans on the moon, he did so with the belief that voters who had been kids at the time of Sputnik were more willing than their parents to pay the high price of going into space.

NASA chief historian Roger D. Launius wrote on the 40th anniversary of the launch: "To a remarkable degree, the Soviet announcement changed the course of the Cold War…. Two generations after the event, words do not easily convey the American reaction to the Soviet satellite." Without Sputnik, it is all but certain that there would not have been a race to the moon, which became the centerpiece contest of the Cold War.