

BOOKS & ARTS

A celebration of Sputnik's fiftieth birthday

The launch of the first satellite sparked rejoicing worldwide but frayed some nerves in the West.

Red Moon Rising: Sputnik and the Hidden Rivalries that Ignited the Space Age

by Matthew Brzezinski

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The flight of the first Sputnik satellite in 1957, like the discoveries of electricity and nuclear energy, gave little hint of the leap it would start in civilization's development — except perhaps to a handful of rocket pioneers and science-fiction aficionados. Its successors would carry people to the Moon, orbit Earth as many hundreds of manned and unmanned mechanical servants, and conduct the otherwise unimaginable exploration of the Solar System.

One of the pioneers was Sputnik's creator, the articulate and infinitely imaginative Mikhail Tikhonravov. (To Matthew Brzezinski's credit, he dispels the old myth that Sergei Korolev was the mastermind behind Sputnik and lays that bouquet on Tikhonravov's grave, where it belongs. Tikhonravov's pioneering studies of orbital flight long predate Korolev's influence). Tikhonravov understood that the world changed forever on 4 October 1957, the International Geophysical Year. "This date," he said, "has become one of the most glorious in the history of humanity." Scientists around the world shared his enthusiasm: they knew that access to space would provide a cornucopia of understanding about our planet and the worlds around it.

Two days after the launch of 'primitive satellite number 1', as it was known to its operators, Washington newsman Eric Sevareid noted that the event had sparked a range of emotions: "Here in the capital responsible men think and talk of little but the metal spheroid that now looms larger in the eye of the mind than the planet it circles around. Men are divided in their feelings between those who rejoice and those who worry." He described scientists as mostly being "in raptures that the nascent, god-like instinct of *Homo sapiens* has driven him from his primordial mud to break, at last, the bound

of his earth." Merton E. Davies, who was on Voyager 2's imaging team when the spacecraft did its 12-year grand tour of the outer planets, put it thus: "The joy of exploration is finding answers for which there are no questions."

As Brzezinski makes clear in his masterful history of the project, the glorious feat was mired in ignorance and petty bureaucratic politics at home. And it severely frayed nerves in the West, particularly in the United States. Many feared immediately that Sputnik was some sort of death-dealing weapon. Later they worried that the massive R-7 rocket that lifted it into space could just as easily carry a nuclear warhead due westward or over the Arctic. As it turns out, there is an uncanny similarity between R-7 and intercontinental ballistic missiles.

"Sputnik contained one final element that no ambitious newsman could resist: fear," explains

Brzezinski, formerly *The Wall Street Journal's* man in Moscow, "The missile that lofted Sputnik into space shattered America's sense of invulnerability". For the first time, the United States mainland lay exposed to enemy fire. In that respect, Russia's rockets were infinitely more frightening than the Japanese bombers that had attacked Pearl Harbor 16 years before. It was not distant naval bases on Pacific islands that were at risk, but the impregnable heartland itself: Cincinnati, St Louis, Chicago, Detroit, places that had never before had occasion to worry about foreign aggression.

The US Army had long since come to realize that the V-2 rockets that Germany rained down on the south of England near the end of the Second World War were actually very long-range artillery, the weapon of the future. In 1945, it took the precaution of grabbing Wernher von Braun and roughly 100 of his best engineers, together with a mountain of

their V-2 missile engineering drawings. In 1945, in an operation code-named 'Paperclip' at Huntsville, Alabama, von Braun's team was hurriedly tasked to design the equivalent of the R-7, which they called Jupiter.

Sputnik's legacy goes far beyond being the first man-made machine in space, more than justifying the long-range historical perspective of *Red Moon Rising* (see page 542). Sputnik and its immediate successors were the formative ancestors of the aptly named spaceships that extended the human presence beyond the confines of the home planet. It was nothing less than the device that started the space age. That is cause indeed for a fiftieth birthday celebration. ■

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