Chapter II
The Beginnings

An Auspicious Debut

The radioisotopic power program made an auspicious public debut. A banner headline in the Washington, D.C. *Evening Star* of 16 January 1959 announced:

PRESIDENT SHOWS ATOM GENERATOR[1]

An accompanying photograph showed President Eisenhower examining the "world's first atomic battery" as it sat on his desk in the Oval Office of the White House. The president had personally ordered the display of the device shortly after seeing it himself for the first time.

The small, lightweight device on the president's desk was a radioisotope-fueled thermoelectric generator (RTG)—a companion effort to nuclear reactor developments in the Systems for Nuclear Auxiliary Power (SNAP) program. Ready for space missions, the RTG could provide the necessary auxiliary power to operate the instruments of a space satellite. The RTG displayed for the public in that historic moment had been designated SNAP-3 by the AEC. In later years, especially on missions to the Moon and beyond, the RTG role as a bit player in space spectaculars, kept it out of the headlines, but on that day it was the star of the show.

Although the isotopic power device was not made public until January 1959, the AEC had briefly discussed its development a year earlier before the Joint Committee on Atomic Energy (JCAE). The hearings before the JCAE had focused on "Outer Space Propulsion by Nuclear Energy," but Colonel Jack Armstrong, chief of the AEC Aircraft Reactors Branch, also introduced Committee members to the small isotope power program. The program had been spurred, he said, by indications that the Russian Sputnik, with its long-lasting signals, used something other than conventional battery power for its transmitter. Efforts to develop space-nuclear power for the electrical equipment in the Air Force reconnaissance satellite 117L had led to research and development in both reactors and isotopes for space-power uses. Funds were found in