

allocated to other laboratories), and the General Electric budget which included some funds for safety analyses. The General Electric personnel not only developed their own capabilities with materials and other key aspects of the generator, but performed many safety tests, sometimes going to Albuquerque to use Sandia test facilities. "We ran a lot of impact tests with sleds at Sandia," said Pitrolo, "and we did a lot of work with hot capsules. Remember, the re-entry velocities and the heating rates for a lunar return are much higher than for an earth-orbital mission." Sandia frequently ran independent tests to verify data that had been produced by General Electric.⁴²

By the time of the first lunar landing mission, there had been personnel changes in the program. Prior to the fire at Cape Kennedy, Webb had called upon Finger to head a task force studying NASA organization. In March 1967, after the fire, Webb appointed Finger to serve as Associate Administrator for Organization and Management at NASA. Finger never returned to the space-nuclear work. He was replaced on the project by Milton Klein.

Webb retired from NASA shortly before the elections in 1968, although he remained on call to President Johnson for further duty at NASA, should he be needed.⁴³ Webb said he made this move to clear the way for the incoming Nixon administration and the final stages of the race to the Moon. He also said, "I would have been a little slower in taking those last steps [on Apollo 8, 9, 10]. After the fire in 1967, we couldn't stand any more mishaps. But Paine [his successor at NASA] moved right along step by step with no delays in the revised schedule." Webb was delighted with the outcome and the successful culmination of the efforts he had set in motion and done so much to nurture.⁴⁴

At the AEC, Seaborg received unofficial word as early as 10 October 1968 that the SNAP-27s would not be used on the first manned lunar landing.⁴⁵ When the decision had been firmed, he received an explanation from George E. Mueller, NASA Associate Administrator for Manned Space Flight:

...we have sharpened the focus on some of the problems involved. The first landing mission represents a large step from orbital operations... The 1/6 g lunar surface environment will be a new experience. We cannot simulate it completely on Earth. We find... that we simply do not have as much metabolic data as we would like in order to predict with high confidence, rates in a 1/6 g environment. Only educated guesses are possible on the difficulties the astronaut will