

schedule for mission use.” “Development” was defined “as that work conducted beyond the technology readiness phase to provide a flight-worthy and qualified system and ‘tailor’ the system to a specific mission...” The current program situation was clarified:

Over the last few years, firm mission requirements have been funded by reducing SNAP technology [readiness] programs. These reductions have reached the point where very little technology work is left in the program. Thus, that source of funding for firm user requirements is essentially no longer available. More importantly, there exists a dangerous lack of technology activity which if allowed to continue will severely impair the future use of nuclear power systems in space and affect the space program itself. (The SNAP program has virtually evolved into a ‘job shop’ to meet user agencies near term flight scheduled projects with only a very small effort being put into the technology which will be needed in the future.)<sup>4</sup>

In spite of these concerns it was basically as a “job shop”—but an aggressive one, constantly seeking missions for its devices—that the RTG program sustained momentum through difficult years. Klein said: “The bloom went off the rose after the success of the Apollo man on the Moon program. But nuclear power was needed on more distant unmanned space missions, and we were lining up on those missions.”<sup>5</sup>

Testifying before the JCAE on the Fiscal 1972 budget requests, Klein cited a history of recent successes. He told the committee:

Nuclear power is already playing an important role in space activities. For 22 months, SNAP-19 radioisotopic thermoelectric generators... have been supplying supplemental power to the Nimbus III weather satellite... On the moon, two SNAP-27 RTG’s are working perfectly to supply power through the long lunar nights and days to the lunar surface experiments... left there by the Apollo 12 and Apollo 14 astronauts...<sup>6</sup>

Looking to the future, he told the committee that efforts on five flight missions would be supported, although activities to advance the technology beyond the flight-related projects would be limited. The Pioneer probes to