

Dr. Glen Schmidt

Retired, Former SNAP-10a Test Engineer



After graduation from Oregon State College in 1957, Glen joined Atomics International as a Research Engineer to design and develop remote pyro-processing equipment to recover the uranium metal from spent nuclear reactor fuels. A short time later, he was re-assigned to perform lab tests on the first SNAP critical assembly, co-invented by Joe Wetch.

Within the next year, he was assigned to design a small sodium EM pump attached to one end of the combined rotating 3 kw 40,000 rpm SNAP generator. (During lab flow tests at 1200 F and ~ 40,00 rpm, the pump produced 6 psi at 12 gpm.) He was later selected to attend the first start-up and demonstrations of the mercury Rankine cycle 3 kw power conversion systems built by a contractor.

During 1959, the SNAP Experimental Reactor (SER) was built and operated for one year using 1200 °F NaK coolant to collect performance data and verify the basic reactor design. Glen was chosen to be the Shift Leader of Crew A during continuous operations (there were 3 additional crews) The S2DR was the next reactor to be built and was tested by other reactor crews.

In December 1960, The AEC initiated the SNAP 10A program which included two orbital flight tests identified as SNAPSHOT.

During the next 5 years, the SNAP10A test program involved: component development and acceptance and the assembly and testing of non-nuclear prototypes, flight system mockups, flight system qualification, and nuclear flight system acceptance.

During this period, Glen was first assigned as System Test Supervisor and later as the Group Leader of system assembly, component testing, system testing and qualification, and nuclear flight system acceptance testing.

After the successful flight demonstration of SNAP 10A, Glen was re-assigned as the Superintendent of nuclear Fuel Manufacturing to produce nuclear fuels for the US ETR and ATR reactors and fuel plates for the Japanese JAERI critical assembly.

Glen retired in 1990 from Rockwell to participate in the purchase and test evaluation of Russian TOPAZ II space reactors.