Mound Science and Energy Museum Association *Presents*

Giving Wings to The Atom GE Aircraft Nuclear Propulsion Project

By: Leland Hite

Wednesday, February 28, 2024 7:00 pm

Mound Cold War Discovery Center, 1075 Mound Road, Miamisburg, OH 45342

Summary: In the 1950s, two nuclear development programs were underway: one to design the airframe for a nuclear powered engine and the other to develop the engine, better known as Aircraft Nuclear Propulsion (ANP). This presentation details the ANP program which studied two methods for nuclear-powered jet engines: the Direct Air Cycle and the Indirect Air Cycle. Pratt & Whitney attempted the Indirect Air Cycle, and General Electric, Evendale, Ohio, developed the Direct Air Cycle. While the Indirect Air Cycle



could not solve the excessive weight issues, the Direct Air Cycle by GE was simple, reliable, and doable. The prototype engine quickly exceeded the 100-hour full power requirement. Flight ready engines were developed and ready for testing.

Added benefits grew from the research forming a long list of significant contributions to the nuclear field.

Speaker: Leland Hite graduated in 1966 with a BSEE from Valparaiso, Indiana. Lee enjoyed 24 years as an engineer with the General Radio Co. in Concord, MA. He had residency in several Midwestern cities including Dayon, OH, and is now living in the Cincinnati area.

After the ANP program was declassified in 2013, Lee was asked by former ANP materials department manager, George Pomeroy, to review and archive the massive inventory of documents and artifacts. This presentation includes many of the previously classified topics. More about the program is here: www.leehite.org/anp.

For additional details on this presentation call 937-353-4457. The presentation is free and open to the public and has ample free parking.