Tunnel 9 On Site Director

Robert L.P. Voisinet

Born in Woonsocket, R. I. in 1945, Robert L.P. Voisinet was the last of four children in a well established family where his father worked in a woolen textile mill and his mother took care of the home and children.

Due to the development of synthetic fibers and the fall of the natural fiber textile industry in the 1950s, Mr. Voisinet's father took the opportunity to relocate his family to Florida to begin a new career at a new research development complex operated by Pratt & Whitney. His father knew little about jet engines, but got in at the start and retired some 15 years later.

Life in Florida opened new opportunities for Mr. Voisinet he had not yet experienced in Rhode Island– fishing and boating, things the New England states could only offer in the summer months. He graduated from high school with honors in 1963 and quickly chose the aerospace industry as a career path. He had a special interest in fluid mechanics.

After graduation from the University of Florida in 1968, Mr. Voisinet was recruited by the wind tunnel group at the Naval Ordnance Laboratory (NOL) at White Oak in Silver Spring, Md. Today it is commonly known as Hypervelocity Tunnel 9. He joined the boundary layer group and began working on compressible turbulent boundary layer studies.

Mr. Voisinet met his future wife, Air Force brat Karen Murray, in 1965 and was married three short years later in 1968. He believes the early ties to and trust of the Air Force helped transition Tunnel 9 from the Navy to Air Force control.

His career at NOL reached new heights and Mr. Voisinet was getting national and international recognition for his boundary layer research. Special instrumentation had to be conceived for use in the novel boundary layer channel wind tunnel. His design of a special skin friction balance with roughness and blowing capability allowed new data to be obtained and new theories to be developed. This work still stands as landmark in the field.

Tunnel 9 became operational in 1976. It provides aerodynamic simulation in the critical altitude regimes associated with strategic offensive missile systems, advanced defensive interceptor systems and hypersonic vehicle technologies.

In 1984, he was asked to take on the leadership of the Aerodynamics Branch, Naval Surface Warfare Center (same organization, new name). His primary responsibility now became the management of the Naval Surface Warfare Center Hypervelocity Wind Tunnel No. 9. Major facility modifications were required or new innovative diagnostic techniques were developed to support these programs.

Mr. Voisinet convinced program managers in all three military services and industry that Tunnel 9 could be adapted to provide unique ways to support their programs, and he provided personal technical contributions to each of them. Through this effort, he helped develop Tunnel 9 into a critical national core capability that has saved the Department of Defense millions of dollars by providing low-cost ground testing options, minimizing flight testing, reducing risk and avoiding gross over design of new systems.

Mr. Voisinet's biggest challenge came in 1995 when the Base Realignment and Closure commission threatened to close the Navy's White Oak site and close Tunnel 9. Despite all his efforts, the BRAC commission still wanted to close the site.

But, Mr. Voisinet didn't give up. He went to the Office of the Secretary of Defense and convinced them the facility had to remain open. He also laid the foundation for a very complex reuse plan for Tunnel 9, one which

called for the transfer of management to the Air Force, long-term institutional funding, coordination with General Services Administration for host services and endorsement by the community, local government, state and congressional members.

On Oct. 1, 1997, Tunnel 9 officially became an Air Force facility. The value added to AEDC is the facility's renowned capabilities to test hypersonic weapons to speeds as high as 16 times the speed of sound and over a wide range of altitude conditions.

For this work, Mr. Voisinet was honored as an AEDC Fellow in 1999. He and his wife Karen currently live in Stuart, Fla., where Bob has returned to a life of fishing and boating. They have two daughters, Michelle and Bonnie still residing in the Maryland/Virginia area.

Robert Voisinet stands with his family at the 1999 AEDC Fellows induction banquet at the Arnold Lakeside Club. From left to right: parents J. Edgar, deceased, and Pauline Voisinet, daughters Michelle Caylor and Bonnie Aman, wife Karen, Mr. Voisinet and his brother Andy.