

1994 Peninsula Engineer of the Year M. Roger Eshelman



M. Roger Eshelman is a member and current chairman of the Hampton Roads Section of the Society of Naval Architects and Marine Engineers (SNAME). He was nominated by SNAME for his contributions to naval nuclear shipbuilding and the commercial nuclear power industry as well as his support of the engineering profession.

A native of Pennsylvania, Mr. Eshelman graduated from the University of Pittsburgh in 1961 with a Bachelor of Science degree in Mechanical Engineering. He also holds a Master of Science degree in Thermal Engineering from Old Dominion University and is a graduate of the MIT Sloan School of Management Program for Senior Executives.

Mr. Eshelman began his engineering career in the Atomic Power Division at Newport News Shipbuilding in 1961. He was initially involved in engine room design for nuclear-powered surface ships and submarines.

In 1965 Mr. Eshelman was assigned as the first power plant System Engineer in a project to design the nuclear propulsion plant for the new 688 Class Attack submarine. He subsequently became Engineering Manager responsible for development of prototype and production propulsion plant components for the LOS ANGELES Class (SSN688) submarines. This submarine class has been one of the Navy's most successful. It was the vanguard of the country's defense against the threat of strategic missile attack by the Soviet Union in the 1970 and '80s.

In 1977 Mr. Eshelman moved to a corporate subsidiary, Newport News Industrial Corporation (NNI), as Director of Engineering. Under Mr. Eshelman's leadership, NNI pioneered several engineering methods and processes. One of the most noteworthy of these was the design and on-site fabrication of the primary reactor containment structure for the Perry Nuclear Power Plant in Ohio. Another notable project was the replacement of the stainless steel reactor coolant piping and in place weld repair and heat treatment of a reactor vessel at Niagara Mohawk's Nine Mile Point power plant in New York. Both of these were industry firsts.

Under Mr. Eshelman's leadership, NNI developed the first radioactive waste volume reduction system to be certified by the Nuclear Regulatory Commission (NRC). NNI was also the first company in the country to obtain the NR-1 nuclear repair stamp under Section 2 of the ASME Boiler and Pressure Vessel Code.

In 1985 Mr. Eshelman returned to Newport News Shipbuilding to manage the company's Radiological Control Program where he instituted important improvements in the way this function was organized and operated.

From 1987 to 1992 Mr. Eshelman was first a Project Manager of Advanced Technology Applications, then the Director for Naval Engineering, and was responsible for originating and developing new and improved submarine propulsion systems and components. Many of the concepts and designs originated by this group have since been adopted by the U.S. Navy. One of these, a revolutionary form of electric power generation, distribution, and propulsion for ships, takes advantage of solid-state control devices and high strength permanent magnets. It is the subject of several patents and may well become the Navy's propulsion plant of the future.

In 1992 Mr. Eshelman was appointed Chief Engineer and in 1993 Vice President, Naval Engineering. He is currently Vice President, Nuclear Engineering and provides nuclear engineering support for both submarine and aircraft carrier programs.

In addition to his SNAME membership, he is also a member of the American Society of Mechanical Engineers (ASME), the American Society of Naval Engineers, the Naval Submarine League, and the American Nuclear Society. He is a past ASME chairman and recently chaired a symposium for the National Shipbuilding Research Program.

He is a member of the First Presbyterian Church where he enjoys church music activities. He also serves on the advisory committees and boards for Old Dominion University and Christopher Newport.

He and his wife, Carolyn, have five children and live in York County.