## Theodore M. Farabee, Ph.D.



## Senior Research Scientist/Technical Consultant Radiated Flow Noise Signature Control Naval Surface Warfare Center

Dr. Farabee is the Senior Research Scientist/Technical Consultant (ST) for Radiated Flow Noise Signature Control at the Naval Surface Warfare Center, Naval Sea Systems Command. In this position Dr. Farabee serves as the technical expert for Radiated Flow Noise Signature Prediction and Control in the improvement of overall submarine and ship silencing. He is responsible for the conduct of broad based, multidisciplinary research, integrating the frontiers of all aspects of acoustic signatures and related mitigation technologies for application to ships and submarines of the Current Navy, the Next Navy, and the Navy After Next.

Dr. Farabee was appointed to the Senior Research Scientist/Technical Consultant position on 1 March 2009 and has over 39 years of Federal Service.

Dr. Farabee served as a Senior Scientist on the staff of the Acoustic Signature Technology Division of the Ship Signatures Department at the Carderock Division of the Naval Surface Warfare Center (NSWCCD) from 2001 until assuming the ST position. As a Staff Scientist, Dr. Farabee provided technical oversight and scientific direction to a wide range of ship silencing programs. He served as the scientific lead for Integrated Product Teams (IPT), consisting of navy, industry and academic team members, assembled to address SEAWOLF and VIRGINIA Class acoustic issues. Dr. Farabee served as Technical Director for NSWC oversight of acoustic issues related to VIRGINIA Class Cost Reduction Initiatives which resulted in significant reductions in Total Ownership Cost (TOC) for the Navy. Dr. Farabee also served as the U.S. Program Manager for a Joint Research Initiative on 'Surface Ship Radiated Flow Noise' conducted with the Royal Netherlands Navy (RNLN). Prior to being appointed to the position of Senior Scientist, Dr. Farabee served as the Head of the Hydroacoustics and Propulsion Development Branch of the Acoustic Signature Technology Division.

Dr. Farabee began his Federal service as a co-operative education student from Florida Atlantic University at the (then) Naval Ship Research and Development Center (now Carderock Division of NSWC). Since that time he has developed a broad expertise in hydrodynamics and acoustics as related to naval hydroacoustics. He served as the Navy's acoustic expert for a Defense Advanced Research Project Agency (DARPA) program on Magneto-Hydrodynamic (MHD) Propulsion. Early in the design phases he was involved in helping establish acoustic design requirements for both the SEAWOLF and VIRGINIA-Class submarines to ensure that stealth-related performance objectives would be achieved. Dr. Farabee was detailed to the Fluid Mechanics group at the Office of Naval Research (ONR) on a half-time basis for approximately two years to help foster and integrate research efforts in the area of hydroacoustics.

Dr. Farabee received his B.S. degree in Ocean Engineering from Florida Atlantic University in 1973. In 1976 he received an M.S. degree in Engineering and in 1986 a Ph.D., both granted from The Catholic University of America in Washington, D.C. He completed DAWIA (SPRDE-Systems Engineering) Level III Certification in 2005 and has been a Member of Acquisition Professional Community since that time.

Dr. Farabee is a member of the Acoustical Society of America (ASA), the American Institute of Aeronautics and Astronautics (AIAA, Senior Member), the David Taylor Chapter of Sigma Xi, the Fluid Dynamics Division of the American Physical Society (APS), the American Society of Naval Engineers (ASNE), and most notably a Fellow of the American Society of Mechanical Engineers (ASME). Dr. Farabee has served two terms as the Chair of the Noise Control and Acoustics Division of ASME and a full 5-year term on the Division's Executive Committee.

Dr. Farabee received the 2000 Rear Admiral David Taylor Award for Scientific Research granted by the Naval Surface Warfare Center for outstanding accomplishments in Scientific Research. In 2005 he was the recipient of the American Society of Naval Engineers (ASNE) Solberg Award for Naval Engineering Research for research accomplishments in Ship and Submarine Flow-Noise Reduction. In 2003 Dr. Farabee was elected to the grade of Fellow of the American Society of Mechanical Engineers and in 1993 he was selected as the Carderock Division of the Naval Surface Warfare Center employee of the year in the category of Scientist/Engineer.