## **Thomas Moyer**

Senior Research Scientist/Technical Consultant Survivability Modeling & Simulation Naval Surface Warfare Center/Carderock Division Naval Sea Systems Command

Dr. Moyer was appointed to the ST position for Survivability Modeling & Simulation (M&S) in April, 2007. He is responsible for the development and application of M&S to the prediction of the survivability of Naval Systems/Platforms/Equipment. Dr. Moyer provides technical advice and oversight supporting the NAVSEA technical warrants, PEO Ships, PEO Carriers and PEO Submarines in the application of M&S for the prediction of Platform Survivability. Dr. Moyer has a total of 30 post-doctoral years of professional experience having held senior positions in civilian service, industry and academia.

From September 2000 until April 2007, Dr. Moyer was a Senior Scientist at Northrop-Grumman Ship Systems in Pascagoula, MS. Dr. Moyer was the prime contractor Survivability lead for the LPD-17 design until the start of the DDG-1000 Phase III effort in 2002. Supporting the DDG-1000 Phase III program, Dr. Moyer was the Ship Segment Chief Scientist supporting the Technical Director in all aspects of the HM&E design as well as directly leading/overseeing all Vulnerability & Structural Design activities. Dr. Moyer was the technical lead for the development of the Peripheral Vertical Launch System (PVLS) Engineering Development Model (EDM) directing the \$32M EDM R&D effort.

From January 1990 to August 2000, Dr. Moyer was a principle scientist for several defense consulting firms providing Subject Matter Expert (SME) support to various Navy, Army and Air Force customers in structural vehicle design and vulnerability assessment. In this capacity, Dr. Moyer developed various M&S tools and methodologies for the Vulnerability assessment of military platforms. In addition, he supported the design of various platforms including the LPD-17, Advanced Seal Delivery System, Advanced Amphibious Assault Vehicle, Swedish-American Minesweeper and the MHC-51.

From June 1982 to December 1990, Dr. Moyer served on the academic faculty in Mechanical & Aerospace Engineering at the George Washington University reaching the rank of Associate Professor. He taught various graduate and undergraduate courses in Mechanical Engineering and led a vigorous sponsored research program in Applied Mechanics. He was the faculty

advisor for four Ph.D. students and more than a dozen M.S. students who successfully defended their theses during his tenure. Dr. Moyer continued as a member of the Adjunct Faculty until June of 2000 teaching graduate courses in Applied Mechanics.

Dr. Moyer received his Ph.D. in applied mechanics from Lehigh University in 1982. He also holds a master's of science degree in applied mechanics and a bachelor's of science degree in physics & mathematics.

Dr. Moyer is the author of more than 50 publications in refereed journals and conference proceedings. He serves as a technical reviewer for the Journal Of Impact Engineering, the Shock & Vibration journal as well as the journal of Critical Technologies in Shock & Vibration. Dr. Moyer's awards include the Henry Pusey award for best technical paper, the ASME award for mentoring and the George Washington University award for Outstanding Service. He is an active member of the American Society of Mechanical Engineering and is a frequent lecturer for the ASME as well as the Shock & Vibration Institute.