



Biography

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Gary DeMoss

Gary DeMoss is the Chief of the Performance and Reliability Branch in the Office of Nuclear Regulatory Research at the U.S. Nuclear Regulatory Commission (NRC). He has over 25 years of experience applying risk analysis and reliability and safety engineering techniques to various problems, and 4 years supervising the operations and maintenance of a nuclear reactor on a submarine.

DeMoss' recent activities at the NRC include evaluation of human reliability analysis methods, development of probabilistic risk assessment (PRA) models, participation in the Interagency Nuclear Safety Review Panel for the Mars Science Laboratory, development of risk analysis methods for the Accident Sequence Precursor Program and the Reactor Oversight Program, and aircraft impact analysis for new reactors.

Prior to his work at the NRC, as a Senior Staff Scientist with Science Applications International Corporation, DeMoss led the transportation risk analysis for several Department of Energy Environmental Impact Statements and Environmental Assessments. He is experienced in transportation risk assessment for spent nuclear fuel, several plutonium forms, several uranium compounds, low and high level waste, and tritium. Early in his career, DeMoss served as a Commissioned Officer in the U.S. Navy Submarine Program.

In support of NASA, DeMoss was a principle contributor to the reliability data analysis for Space Station Freedom's external maintenance task team. He performed several studies to estimate the maintenance requirements of the space station design that was eventually changed to the current, simpler and more maintainable International Space Station. In alternative fuels safety, DeMoss worked on qualitative and quantitative hazard assessments of alternative fuel-related systems (i.e., compressed natural gas and liquefied natural gas) in transit operations.

DeMoss has broad experience in risk and equipment reliability analysis, with work in data analysis, modeling and uses of advanced reliability engineering techniques. He led or participated in the development of eight nuclear power plant PRAs, which included data, systems, quantification and sensitivity analyses.

His analytic experience spans the fossil and nuclear power generation, uranium enrichment, petrochemical, transportation, and aerospace fields. He specializes in focused analyses to address reliability, operational, maintenance, environmental, risk and safety issues. Additionally, he has used these analytical skills to address various issues such as accident sequence precursors, transportation of hazardous materials, procedure development, regulatory compliance and reliability program development.

DeMoss has a Bachelor of Science degree in Mechanical Engineering from the University of Virginia and a Master of Engineering Administration degree from Virginia Tech.

