

Biography:

Dr. Resio earned his BA, MA, and PhD degrees at the University of Virginia, with the last of these awarded in 1974 in the field of Environmental Science: fluid dynamics. Dr. Resio's professional experience includes 26 years of government service, 4 years as a professor at the Florida Institute of Technology, 2 years as a Vice President of Oceanweather, Inc., and 8 years as president of his own consulting company, Offshore & Coastal Technologies, Inc.

In July of 2011, Dr. Resio joined the faculty at the University of North Florida as a Professor of Ocean Engineering and as the Director of the Taylor Engineering Research Institute (TERI). From May 1994 through June 2011, Dr. Resio served as the Senior Technologist (ST) for coastal research within the Army Corps of Engineers. He has been a leader in meteorological and oceanographic research for over 40 years and his efforts have contributed significantly to improving the predictive state of the art for winds, waves, currents, surges, and coastal evolution due to storms, as well as improved methods for the quantification of risk incorporating both aleatory and epistemic uncertainty into a consistent physical framework for coastal hazards.

Much of Dr. Resio's recent research has focused investigations of coastal vulnerabilities and methods to decrease these vulnerabilities within the US. From 2002 through 2008, he led an interdisciplinary team on the development of a new class of bridging which could be deployed rapidly by air, land or sea for military operations or in post-disaster scenarios to rebuild needed logistics capabilities. This new class of bridge was developed, designed, and tested at full scale and was awarded the Best Technology Implementation of the Year by the Defense Logistics Agency, which serves all US Armed Forces. In 2005, Dr. Resio was selected as co-leader (with Professor Emeritus Robert Dean of the University of Florida) of the post-Katrina Interagency Performance Evaluation Taskforce (IPET) Task 5a effort (analysis of wave and surge effects, overtopping and related forces on levees) and led the Risk Analysis team for the South Louisiana Hurricane Protection Project, including consideration of the effects of climatic variability on hurricane characteristics in the Gulf of Mexico. This team developed a new technical approach for hurricane hazard/risk assessment, which serves as part of the foundation for much of the approach to risk along all US coastlines today. Following that work, he led an effort sponsored by the Nuclear Regulatory Agency to extend his approach to the estimation of hazards for licensing Nuclear Power Plants in coastal areas, now being considered as a potential basis for new NRC regulations being implemented within the US. From 2006 through 2011, under Department of Homeland Security sponsorship, Dr. Resio led a team of researchers in the development of innovative methods for the rapid repair of levee breaches. This work offers new options for flood mitigation in many areas of the US and was recognized by the Engineering News Record in 2008 as one of the top 25 newsmaking events worldwide in the field of construction. Following successful full-scale testing, this system has now been deployed in Lake Okeechobee, Florida as a precaution against levee breaching in that area.

Dr Resio has published many articles in leading international journals, including a recent invited article in *Physics Today* entitled "Modeling the Physics of Hurricane Storm

Surges” and has been the keynote speaker at many National and International conferences on ocean and atmospheric physics and statistics. He serves as a US delegate to the United Nations’ Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) in the area of climate effects and the ocean and is the co-chair of the UN Coastal Inundation and Flooding Demonstration Project. He also serves as an interagency representative on the White House Disaster Reduction Subcommittee and serves as a reviewer for many national and international efforts to quantify coastal hazards and risks, including a recent week-long review of the Indian Institute of Technology’s (New Delhi) program on cyclone flooding in the north Indian Ocean.

RECENT HONORS AND AWARDS

- 2013 American Society of Civil Engineers’ Coasts, Oceans, Ports and Rivers Institute (COPRI) - 2013 **International Coastal Engineering Award**
- 2013 Professor of the Year – Florida Engineer Society – Northeast Chapter
- 201 Silver Order of the De Fleury Medal - Army Engineer Association
- 2011 Decoration for Exceptional Civilian Service – Secretary of the Army
- 2008 Engineering News Record Award of Excellence – McGraw Hill
- 2007 U.S. Army Corps of Engineers Researcher of the Year Award
- 2007 Engineer Research and Development Center Researcher of the Year Award
- 2007 Engineer Research and Development Center Program Development Achievement Award
- 2007 Department of the Army Meritorious Civilian Service Award
- 2007 Chief of Engineers Award for leadership role in Interagency Performance Evaluation Taskforce
- 2006 Engineer Research and Development Center Research and Development Achievement Award