

Proceedings of the 35<sup>th</sup> International Conference

# **COASTAL ENGINEERING 2016**

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## PROCEEDINGS DEDICATION

This *Proceedings* is dedicated to **Dr. Robert George Dean**. For more than 12 years (1992-2004), Dr. Dean served as Chairman of the Coastal Engineering Research Council, the organization that is responsible for providing the coastal engineering profession with its most important conference, the ICCE. His motto was “the Coastal Engineering Research Council does one thing and we do it well”—ensuring that a high-quality conference is held every two years and that a proceedings is created as a record of the state of the art. We all can agree with that.



Dr. Dean was one of the most influential coastal engineers of this era. On the academic side, he educated a large number of masters and PhD students, many who have carried on his teachings in the field. He wrote or co-wrote several hundred articles and three books—*Water Wave Mechanics for Engineers and Scientists*, *Beach Nourishment: Theory and Practice*, and *Coastal Processes with Engineering Implications*. The first book, in print since 1984, provided to generations of coastal engineers the derivation of water wave mechanics from fluid mechanics and reflected some of his contributions to the field: such as wavemaker theory and the Stream Function wave theory. The second book (2003) provided a new rational basis for the design of beach nourishments from sand selection and beach profile to planform layout, while the third book (2004) provided a scientific bases for coastal engineering, including some of his novel work on sediment transport and tidal inlet hydraulics and stability.

He was born in Wyoming, USA, on November 1, 1930. His education included Long Beach City College and then UC Berkeley for the BS in Civil Engineering (1954), an MS in Physical Oceanography at Texas A&M (1956), and then the Doctor of Science (Civil Engineering) from MIT (1959). His professional career started in industry with five years at Chevron Research Corporation, when he developed the Stream Function theory for use in wave force calculations on offshore structures. He then became the chair of the Department of Coastal and Oceanographical Engineering at the University of Florida in 1966. For seven years (1975-1982) he served as Unidel Professor at the University of Delaware, where, among other things, he worked on equilibrium beach profiles, providing several scientific explanations and field verification of the Bruun beach profile. Then he returned to the University of Florida as a Graduate Research Professor until his retirement in 2003 as an Emeritus Graduate Research Professor (2003). Even in retirement he continued working in the field, often producing more than eight publications a year!

He was very active in consulting and service to the profession. He served on the U.S. Army Corps of Engineers' Coastal Engineering Research Board, which provides advice to the Corps on coastal topics (1968-1980; 1993-1998). He served on six National Research Council (of the National Academies of Science, Engineering and Medicine) committees on such topics as sea level rise, coastal erosion, coastal nourishment, and Louisiana, and the Marine Board (beginning in 1981). As a Floridian, he worked as the Director of the Division of Beach and Shores of the State of Florida, working on such topics as the basis of implementing the State's coastal setback line for development. He also was Chair of the Florida Shore and Beach Preservation Association and a director of the American Shore and Beach Preservation Association.

Bob possessed a tremendous skill for examine a problem and recognizing the appropriate physics to apply to it. With this skill, he was able to bring new insights into beach profiles, alongshore sediment transport rates, beach nourishment guidelines, tidal inlet stability, wave theory, and a host of other topics. For this, he was recognized by the ASCE's John G. Moffatt-Frank E. Nichol Harbor and Coastal Engineering Award (1987), the Gold Medal of the Florida Shore and Beach Preservation Association (1987), the ASCE International Coastal Engineer Award (1983) and the Outstanding Civilian Service Medal by the Department of the Army (1981 and 2008) among others. In 1980, he was elected to the National Academy of Engineering.



For a man of his professional stature and accomplishment, Bob was just as happy talking with the top people in the field as newcomers. He treated them all with the same graciousness. Even when someone he was listening to was saying something scientifically wrong, Bob would ask polite questions, such as “would your solution satisfy conservation of energy?” or “I don't understand where this term came from?” I know, because it happened to me on occasions.

Bob is survived by his wife Phyllis, his daughter Julie Dean Rosati (another contribution to coastal engineering), his son Tim, and five grandchildren.

Contributed by:

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