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Twelfth Coastal Engineering Conference

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Volume I

Sponsored by the

Coastal Engineering Research Council Technical Council on Ocean Engineering Waterways, Harbors and Coastal Engineering Division National Capital Section of ASCE

American Shore and Beach Preservation Association International Association for Hydraulic Research



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> Waterways, Harbors, and Coastal Engineering Division, ASCE National Capital Section, ASCE Technical Council on Ocean Engineering, ASCE International Association for Hydraulic Research

FOREWORD

The Twelfth Conference on Coastal Engineering marks the twentieth year since the first conference was held at Long Beach, California, in October 1950 It appears appropriate at this time to present a brief history of the research councils which have sponsored these conferences over the years

In March 1949 the late Professor Boris A Bakhmeteff of Columbia University was invited to the University of California, Berkeley, to present a special lecture entitled. The Engineer in the World of Today At that time Professor Boris A Bakhmeteff was chairman of the Research Committees of both the American Society of Civil Engineers and The Engineering Foundation He observed in his discussions with Dean Morrough P O'Brien during his stay in Berkeley that there were numerous research councils in the country to sponsor and coordinate research in various fields, but none existed for studying waves and related problems Following this suggestion Dean O'Brien prepared a proposal for the formation of a Council on Wave Research and submitted it to The Engineering Foundation through the Hydraulics Division of the American Society of Civil The ASCE Committee on Research approved the proposal and Engineers recommended to The Engineering Foundation that a grant be made to establish a Council on Wave Research The Engineering Foundation Board at its semiannual meeting in June 1950 approved of the Council with the grant becoming effective in October 1950 The Council was thus formed with Dean O'Brien as Chairman and J W Johnson as Secretary

In 1963 The Engineering Foundation revised its policy on the support of Research Councils With approval of The Engineering Foundation the Council on Wave Research proposed to the Board of Direction of the ASCE that the Council be incorporated in the ASCE and be renamed the Coastal Engineering Research Council The ASCE approved of the establishment of the Council in May 1964 and designated the Waterways, Harbors, and Coastal Engineering Division to serve as haison between the Council and the ASCE Research Committee Dean M P O'Brien remains as Chairman of the Council with R L Wiegel as Vice-Chairman, and J W Johnson continuing as Secretary In October 1950 the University of California conducted an Institute on Coastal Engineering in Long Beach, California This was conceived as a local meeting of engineers and scientists interested in shoreline problems. The aim was to aid engineers by summarizing the present state of the art and science related to the design and planning of coastal works rather than to present a series of original scientific contributions. The program consisted of thirty five invited papers, copies of which were distributed to those in attendance. This series of papers represented a rather thorough summary of coastal engineering as then practiced. The quality and scope of the papers and the need for a comprehensive and modern treatment of the subject convinced the sponsors of the conference that publication in a single volume was desirable rather than piecemeal in the scientific and technical journals. The newly-formed Council on Wave Research secured funds to underwrite the publication costs from the Engineering Foundation and the publication was entitled The Proceedings of the First Conference on Coastal Engineering

Because of the success of the Long Beach Conference, invitations to cosponsor additional conferences were extended to the Council by various societies, universities, etc., with the result that subsequent conferences were held in Houston, Texas (1951), Cambridge, Massachusetts (1952), Chicago, Illinois (1953), Grenoble, France (1954), Gainesville, Florida (1957), The Hague, Netherlands (1960), Mexico City, Mexico (1962), Lisbon, Portugal (1964), Tokyo, Japan (1966), London, England (1968), and Washington, D C (1970) In addition, conferences on Ships and Waves (Hoboken, New Jersey, 1954), Coastal Engineering Instruments (Berkeley, California, 1955), and Civil Engineering in the Oceans I (San Francisco, California, 1967) also were sponsored by the research councils

The proceedings of the various conferences were published by the Council on Wave Research with assistance from The Engineering Foundation until the formation of the Coastal Engineering Research Council in 1964, after which the proceedings have been published and distributed by the ASCE

In view of the fact that the term coastal engineering appears to have been first used generally in connection with the Long Beach conference the following quotation from the preface of the proceedings of that conference is of interest

"A word about the term "Coastal Engineering" is perhaps in order here. It is not a new or separate branch of engineering and there is no implication in tended that a new breed of engineer, and a new society, is in the making Coastal Engineering is primarily a branch of Civil Engineering which leans heavily on the sciences of oceanography, meteorology, fluid mechanics, electronics, structural mechanics, and others However, it is also true that the design of coastal works does involve many criteria which are foreign to other phases of civil engineering and the novices in this field should proceed with caution Along the coastlines of the world, numerous engineering works in various stages of disintegration testify to the futility and wastefulness of disregarding the tremendous destructive forces of the sea Far worse than the destruction of insubstantial coastal works has been the damage to adjacent shorelines caused by structures planned in ignorance of, and occasionally in disregard of, the shoreline processes operative in the area "

It is believed that the proceedings resulting from the conferences held over that past twenty years have done much to improve the art and science related to the design and planning of coastal works throughout the world

> J W Johnson, Secretary Coastal Engineering Research Council

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