

MISCELLANEOUS PAPER CERC-90-8

WAVE RESPONSE OF PROPOSED IMPROVEMENTS TO THE SHALLOW-DRAFT HARBOR AT KAWAIHAE, HAWAII

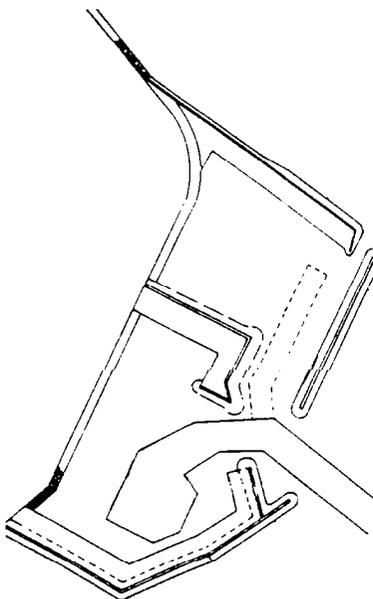
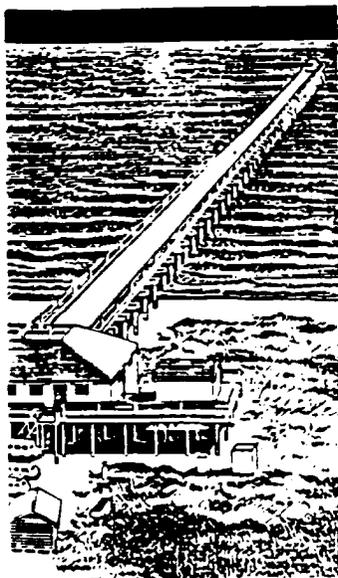
by

Linda S. Lillycrop, Steven M. Bratos, Edward F. Thompson

Coastal Engineering Research Center

DEPARTMENT OF THE ARMY

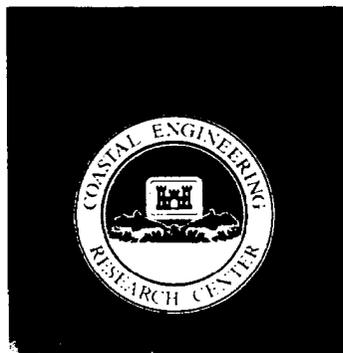
Waterways Experiment Station, Corps of Engineers
3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199



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PREFACE

This study was authorized by the US Army Engineer Division, Pacific Ocean (POD), and was conducted during the period October 1989 through March 1990 by the personnel of the Coastal Oceanography Branch (COB), Research Division (RD), Coastal Engineering Research Center (CERC), of the US Army Engineer Waterways Experiment Station (WES). Mr. John H. Lockhart, Jr., Headquarters, US Army Corps of Engineers (HQUSACE), provided project oversight on behalf of HQUSACE. Messrs. Stanley Boc, POD, and Lockhart also visited CERC to oversee progress of the study.

This report was prepared by Ms. Linda S. Lillycrop, Hydraulic Engineer, COB; Mr. Steven M. Bratos, Hydraulic Engineer, COB; and Dr. Edward F. Thompson, Research Hydraulic Engineer, RD. Ms. Panola Rivers, Civil Engineering Technician, COB, assisted in preparing various files and tables for this study. Ms. Lillycrop, Mr. Bratos, and Ms. Rivers were under the direct supervision of Dr. Martin C. Miiller, Chief, COB, and Mr. H. Lee Butler, Chief, RD, and under the general supervision of Mr. Charles C. Calhoun, Jr., Assistant Chief, CERC, and Dr. James R. Houston, Chief, CERC.

The assistance of Mr. Paul D. Farrar, Research Oceanographer, COB, is deeply appreciated. Dr. H. S. Chen, Marine Products Branch, Development Division, National Meteorological Center, National Oceanic and Atmospheric Administration, provided valuable suggestions for implementing the harbor model used in this study. Ms. Lori Copland, US Army Engineer District, Sacramento, and Mr. Steve Hatton, Information Technology Laboratory, WES, developed the initial finite element grid for the harbor model.

Commander and Director of WES during publication of this report was COL Larry B. Fulton, EN. Technical Director was Dr. Robert W. Whalin.

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