

CONTENTS

PAPERS FROM THE OCTOBER, 1965 COASTAL ENGINEERING CONFERENCE IN SANTA BARBARA, CALIFORNIA

	Page
FOREWORD	1
PROBABILITY DISTRIBUTION OF WAVE FORCE by Charles L. Bretschneider	5
PLANNING AND DESIGN OF A LOW-WEIR SECTION JETTY by Nels C. Magnuson	27
NEW ESTUARINE MEASUREMENT EQUIPMENT AND TECHNIQUES by Edmund A. Prych, David W. Hubbell, and Jerry L. Glenn . .	41
WAVE STATISTICS FROM HURRICANE DORA by J. Ian Collins	59
VARIATIONS IN GROIN DESIGN by Dennis W. Berg and George M. Watts	79
BY-PASSING AND BACK-PASSING WITH REFERENCE TO FLORIDA by Per M. Bruun	101
SPECTRAL ANALYSIS OF OCEAN WAVE FORCES ON PILING by Leon Emry Borgman	129
HURRICANE FLOOD PROTECTION FOR TEXAS CITY, TEXAS by Wayne M. Murphy and Charles W. Geelan	157

(over)

This Journal is published quarterly by the American Society of Civil Engineers. Publications office is at 2500 South State Street, Ann Arbor, Michigan, 48104. Editorial and General Offices are at 345 East 47th Street, New York, N. Y. 10017. Subscription price is \$6.00 per year with discounts to members and libraries. Second-class postage paid at Ann Arbor, Michigan. IR, WW.

	Page
NATURAL INDICATORS OF ESTUARINE SEDIMENT MOVEMENT by John V. Byrne and LaVerne D. Kulm	181
RESEARCH AND WATER RESOURCES PLANNING by Joseph P. Murtha	195
SOME FACTORS IN PLANNING FOR MARINAS by Glenn D. Ward and Marjorie M. Cushman	203
HYDRAULICS OF MEANDERING RIVERS WITH FLOOD PLAINS by Gerrit H. Toebes and Attila A. Sooky	213
SHALLOW WATER WAVES IN CANALS OF VARIABLE SECTION by E. V. Laitone.	237

DISCUSSION

Proc. Paper 5216

IRREGULAR WAVE FORCES ON A PILE, by Willard James Pierson, Jr., and Patrick Holmes (Nov., 1965. Prior Dis- cussion: May, Aug., Nov., 1966). closure.	251
CONTROL OF OBNOXIOUS PLANTS IN THE SOUTHEAST, by Otis M. Jernigan, Angelo Tabita, and William E. Wunderlich (Nov., 1965. Prior Discussion: Aug., 1966). errata	253
SNAKE RIVER BANK STABILIZATION, by Leland B. Jones (Feb., 1966. Prior Discussion: Aug., 1966). closure.	253
PRACTICAL TONNAGE CAPACITY OF CANALIZED WATERWAYS, by Eric E. Bottoms (Feb., 1966. Prior Discussion: Aug., Nov., 1966). closure.	254
COMPREHENSIVE RIVER STABILIZATION, by Walter C. Carey (Feb., 1966. Prior Discussion: Nov., 1966). closure.	261
LABORATORY CONTRIBUTIONS TO CHANNEL STABILIZATION, by Margaret S. Petersen (Feb., 1966. Prior Discussion: Aug., Nov., 1966). closure.	263
FLOW MEASUREMENT TECHNIQUES FOR HYDRAULIC DREDGES, by Ernest P. Fortino (Feb., 1966. Prior Discussion: Aug., Nov., 1966). closure.	263

	Page
OPTIMUM SIZE SEAPORT ^a , by Carl H. Plumlee (Aug., 1966). Dieter Voigt	264
DIFFRACTION OF OCEAN WAVES ABOUT A BREAKWATER ^a , by Charles T. Morrow (Aug., 1966. Prior Discussion: Feb., 1967). Robert E. Loudon James W. Dunham	266 267
MOVABLE BED MODEL FOR RIVER STRUCTURE DESIGN ^a , by Howard E. Christian, Warren J. Mellema, and Walter M. Linder (Aug., 1966. Prior Discussion: Feb., 1967). David I. H. Barr and John G. Herbertson	270
FLEXIBILITY IN CYLINDER GROUPS OSCILLATED IN WATER ^a , by Alan D. K. Laird (Aug., 1966). K. Seetharamiah and A. S. Ramamurthy	273

^a Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.