## **CONTENTS**

Papers	Page
COASTAL EMBANKMENT PROJECT FOR EAST PAKISTAN by Shafiqul Haq and Joseph I. Burns	1
LIMITS TO NAVIGATION BY ICE IN THE PORT OF CHURCHILL by T. Milne Dick	11
ELASTIC CHARACTERISTICS OF MOORINGS by Basil W. Wilson	27
ABSTRACTS OF PAPERS, TENTH CONFERENCE ON COASTAL ENGINEERING by Coastal Engineering Research Council	57
SEDIMENT TRANSPORT IN A COASTAL PLAIN ESTUARY by Maynard M. Nichols and George Poor	83
WATER-LEVEL FLUCTUATIONS AND FLOW IN TIDAL INLETS by Jacobus van de Kreeke	97
BERTH PLANNING BY EVALUATION OF CONGESTION AND COST by Stavros N. Nicolaou	107
PRESERVATION OF ESTUARIES BY TIDAL INLETS by Mason G. Lockwood and Henry P. Carothers	133
MATHEMATICAL MODEL OF BARGE TOW PERFORMANCE by Charles W. Howe	153
(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
SEDIMENT TRANSPORT AND DIFFUSION: COLUMBIA ESTUARY AND ENTRANCE by John B. Lockett	167
GRAPHIC ANALYSIS OF WATERWAY CAPACITY by Richard P. Shultz	177
IMPROVEMENT OF COASTAL INLETS BY SIDECAST DREDGING by Edwin G. Long, Jr	185
TSUNAMI SURGE FORCES by Ralph H. Cross	201
DISCUSSION	
Proc. Paper 5546	
OPTIMUM SIZE SEAPORT, by Carl H. Plumlee (Aug., 1966. Prior Discussion: May, 1967). closure	235
May, 1967). closure	237
FLEXIBILITY IN CYLINDER GROUPS OSCILLATED IN WATER, by Alan D. K. Laird (Aug., 1966. Prior Discussion: May, 1967). closure	239
HURRICANE FLOOD PROTECTION IN THE UNITED STATES, by Harry S. Perdikis (Feb., 1967).  by Frederic M. Chatry	240 241
SYSTEMATIC EVALUATION OF RIVER REGIME, <sup>a</sup> by Charles R. Neill and Victor J. Galay (Feb., 1967. Prior Discussion: Aug., 1967). by Ronald K. Deeprose	<b>24</b> 3
CLASSIFICATION SYSTEM FOR ESTUARIES, a by Bard Glenne (Jan., 1967).  by Richard H. F. Cóllarby Chintaman V. Gole and Pazhayannur P. Vaidyaraman	24 <sup>1</sup> 24 <sup>6</sup>

<sup>&</sup>lt;sup>a</sup> Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.

	Page
STABLE CHANNELS WITH GRAVEL-PAVED BEDS; a by Rolf Kellerhals (Feb., 1967).	
by Gerald Lacey	248
by Victor J. Galay	250
by John G. Herbertson	251
by Thomas Blench	253
by Saburo Komura	260
NATURAL INDICATORS OF ESTUARINE SEDIMENT MOVEMENT, a by John V. Byrne and LaVerne D. Kulm (May, 1967). by James Neiheisel and Charles E. Weaver	263
HURRICANE FLOOD PROTECTION FOR TEXAS CITY, TEXAS, a by Wayne M. Murphy and Charles W. Geelan (May, 1967).	
by Herbert S. Saffir	265

 $<sup>^{\</sup>rm a}$  Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.