Journal of the

WATERWAYS AND HARBORS DIVISION

Proceedings of the American Society of Civil Engineers

WATERWAYS AND HARBORS DIVISION EXECUTIVE COMMITTEE Charles F. MacNish, Chairman; Joseph F. Friedkin, Vice-Chairman; Evan W. Vaughan; Mark S. Gurnee; Robert J. Winters, Secretary Roger H. Gilman, Board Contact Member

COMMITTEE ON PUBLICATIONS Jay V. Hall, Jr., Chairman; Eric Bottoms; Joseph M. Caldwell; Ellsworth I. Davis; James W. Dunham; Donald R. Forrest

CONTENTS

November, 1962

Papers

Offshore Mooring Island for Supertankers by V. Blancato and J. H. Finger	1
Evaluation of Mooring Forces by Shu-t'ien Li	19
Soil Conservation Measures in River Basin Planning by C. J. Francis and R. G. Andrews	39
Control of Alluvial Rivers by Steel Jetties by E. J. Carlson and R. A. Dodge, Jr	53

Copyright 1962 by the American Society of Civil Engineers.

The three preceding issues of this Journal are dated February 1962, May 1962, and August 1962.

DISCUSSION

Page

Marine Oil Terminal for Rio de Janeiro, Brazil, by H. W. Reeves. (February, 1961. Prior discussion: August, November, 1961. Discussion closed.) by H. W. Reeves (closure)	85
Deep Water Wave Generation by Moving Wind Systems,by Basil W. Wilson. (May, 1961. Prior discussion:February, August, 1962. Discussion closed.)by Basil W. Wilson (Addendum to Closure)	95
Economic Evaluation of Inland Waterway Projects, by Shu-t'ien Li and Eric E. Bottoms. (August, 1961. Prior discussion: February, May, 1962. Discussion closed.) by Shu-t'ien Li (closure)	97
Columbia River Ship Channel Improvement and Maintenance, by Robert E. Hickson. (August, 1961. Prior discussion: February, May, 1962. Discussion closed.) by Robert E. Hickson (Addendum to Closure)	111
 Stabilization of the Middle Rio Grande in New Mexico, by Robert C. Woodson. (November, 1961. Prior discussion: May, 1962. Discussion closed.) by Robert C. Woodson (closure)	113
Bank and Levee Stabilization, Lower Colorado River, by John S. McEwan. (November, 1961. Prior discussion: May, 1962. Discussion closed.) by John S. McEwan (closure)	115
Land and Water Resource Planning in Texas, by Charles D. Curran and Forney W. Fleming. (November, 1961. Prior discussion: None. Discussion closed.)	
by William Whipple, Jr by Forney W. Fleming (closure) by Charles D. Curran (closure)	117 119 120
Hurricane Studies of New York Harbor, by Samuel Gofseyeff and Frank L. Panuzio. (February, 1962. Prior discussion: August, 1962. Discussion closed.) by Basil W. Wilson	127
Berthing and Mooring Forces, by Glenn B. Woodruff. (February, 1962. Prior discussion: August, 1962. Discussion closed.)	121
by B. F. Saurinby Basil W. Wilson	133 133

	Page
Formulas for Design of Rubble-Mound Breakwaters, by Roald Svee. (May, 1962. Prior discussion: None. Discussion closed.) by Robert Q. Palmer and Clarence S. Fujii	135
Hovering Breakwaters, by R. L. Wiegel, H. W. Shen, and J. D. Cummings. (May, 1962. Prior discussion: None. Discussion closed.) by J. F. Ripken.	137
Channel Stabilization on the Arkansas River, by John L. Bush. (May, 1962. Prior discussion: None. Discussion closed.) by R. F. Buffington	139
Laboratory Determination of Littoral Transport Rates, by Rudolph P. Savage. (May, 1962. Prior discussion: None. Discussion closed.) by Thorndike Saville, Jr by Madhav Manohar	141 144
 Wave Force Coefficients for Offshore Pipelines, by by Herbert Beckmann and Murphy H. Thibodeaux. (May, 1962. Prior discussion: None. Discussion closed.) by I. Alterman	149