
Journal of the
WATERWAYS AND HARBORS DIVISION
Proceedings of the American Society of Civil Engineers

WATERWAYS AND HARBORS DIVISION
EXECUTIVE COMMITTEE

Ben E. Nutter, Chairman; Robert J. Winters, Vice-Chairman;
Lester W. Angell; Mark S. Gurnee; Jay V. Hall, Secretary;
Carl E. Kindsvater, Board Contact Member

COMMITTEE ON PUBLICATIONS

James W. Dunham, Chairman; Eric Bottoms; Ellsworth I. Davis;
Donald R. Forrest; Rudolph P. Savage; John A. Stirton; Clarence F.
Wicker; Ben E. Nutter, Executive Committee Contact Member

CONTENTS

August, 1965

Papers

	Page
Beach Nourishment from Offshore Sources by Herbert C. Gee	1
Influence of Soil Types on Stabilization of the Savannah River by William J. Wall	7
Tidal Characteristics of Two Estuaries in Florida by William B. Stelzenmuller	25
A Study on Refraction of Waves in Prismatic Channels by Khalil I. Beitinjani and Ernest F. Brater	37
Wave Forces on Piling for Narrow-Band Spectra by Leon Emry Borgman	65
(over)	

Copyright 1965 by the American Society of Civil Engineers.

Note.—Part 2 of this Journal is the 1965-38 Newsletter of the Waterways and Harbors Division.

The three preceding issues of this Journal are dated November, 1964, February, 1965, and May, 1965.

	Page
Directional Spectra of Laboratory Wind Waves by Ismail El-Sayed Mobarek	91
Stability of Channels by Armorplating by Dasel E. Hallmark and George L. Smith	117

DISCUSSION

How a Waterway Improvement Changed Environment, by Robert B. Nichols. (November, 1963. Prior dis- cussion: February, May, November, 1964. Discussion closed.) errata	139
Hydraulic Aspects of Arkansas River Stabilization, by Margaret S. Petersen. (November, 1963. Prior discussion: February, May, November, 1964. Dis- cussion closed.) by Margaret S. Petersen (closure)	139
Long Wave Modification by Linear Transitions, by Robert G. Dean. (February, 1964. Prior discussion: November, 1964. Discussion closed.) by Robert G. Dean (closure)	141
Navigation Locks: TVA's Multiport Lock Filling and Emptying System, by Rex A. Elder, James T. Price, and Ward W. Engle. (February, 1964. Prior dis- cussion: May, 1964. Discussion closed.) Correction	143
Navigation Locks: End Filling and Emptying Systems for Locks, by Fred R. Brown. (February, 1964. Prior discussion: November, 1964. Discussion closed.) by Fred R. Brown (closure)	143
Small Craft Harbor Problems, by Charles E. Lee. (August, 1964. Prior discussion: February, 1965. Discussion closed.) by Charles E. Lee (closure)	144
Duplicate Locks for Illinois Waterway, by William J. Santina and George B. Wesler. (November, 1964. Prior discussion: None. Discussion closed.) by Doswell Gullatt	145

	Page
Nuclear Excavation of a Sea-Level Isthmian Canal, by Luke J. Vortman. (November, 1964. Prior dis- cussion: None. Discussion closed.)	
by Roland H. Carlson	148
High Lift Locks: Some Hydraulic Problems and Solutions, by Ernest Pariset and André Gagnon. (November, 1964. Prior discussion: None. Discussion closed.)	
by Paul Wisner and Teodor Stoicescu	151
"Placed-Stone" Jetty, Stone Weight Coefficients, by Harold A. Kidby, Samuel B. Powell, and Arthur L. Roberts. (November, 1964. Prior discussion: May, 1965. Discussion closed.)	
by Robert Q. Palmer	153
Rubble-Mound Breakwater Design for Refuge Harbor, by John R. Hyland. (November, 1964. Prior discussion: None. Discussion closed.)	
by John R. Hyland (closure)	155
Channel Stabilization of Alluvial Rivers, by the Committee on Regulation and Stabilization of Rivers. (February, 1965. Prior discussion: May, 1965. Discussion closed.)	
by Charles R. Neill	156