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

WATERWAYS AND HARBORS DIVISION
 EXECUTIVE COMMITTEE

Mark S. Gurnee, Chairman; Ben E. Nutter, Vice Chairman; Charles F. MacNish; Robert J. Winters; Jay V. Hall, Secretary; Carl E. Kindsvater, Board Contact Member

COMMITTEE ON PUBLICATIONS

James W. Dunham, Chairman; Eric Bottoms; Joseph M. Caldwell; Ellsworth I. Davis; Donald R. Forrest; Jay V. Hall, Jr., Ben E. Nutter, Executive Committee Contact Member

CONTENTS

May, 1964

Papers

	Page
Control Structures for Sand-Bed Channels by Frederick C. Stepanich, Daryl B. Simons, and Everett V. Richardson	1

Copyright 1964 by the American Society of Civil Engineers.

Note.--Part 2 of this Journal is the 1964-21 Newsletter of the Waterways and Harbors Division.

The three preceding issues of this Journal are dated August, 1963, November, 1963, and February, 1964.

 DISCUSSION

Offshore Mooring Island for Supertankers, by Virgil Blancato and Joseph H. Finger. (November, 1962. Prior discussion: May, 1963. Discussion closed.) by Virgil Blancato and Joseph H. Finger (closure)	21
Sliding of Composite-Type Breakwaters by Breaking Waves, by Shoshichiro Nagai. (February, 1963. Prior discussion: November, 1963. Discussion closed.) by Shoshichiro Nagai (closure)	27
Model Tests of Coastal Protective Structures in USSR, by Otakar W. Kabelac. (February, 1963. Prior discussion: November, 1963. Discussion closed.) by Otakar W. Kabelac (closure)	29
How a Waterway Improvement Changed Environment, by Robert B. Nichols. (November, 1963. Prior discussion: February, 1964. Discussion closed.) by Eric E. Bottoms	33
Hydraulic Aspects of Arkansas River Stabilization, by Margaret S. Petersen. (November, 1963. Prior discussion: February, 1964. Discussion closed.) by Shu-t'ien Li	35
by Harvill E. Weller	37
Flood Plain Management Improves Man's Environment, by James E. Goddard. (November, 1963. Prior discussion: None. Discussion closed.) by Tate Dalrymple	39