

CONTENTS

Papers	Page
FLOW OVER AND THROUGH ROCKFILL BANKS by Robin P. Curtis and John D. Lawson	1
TRANSITIONS IN SUPERCRITICAL OPEN-CHANNEL FLOW by Gunnar Bagge and John B. Herbich	23
SOLUTION OF A DIFFUSION EQUATION by Rameshwar Singh	43
WASTEWATER RECHARGE AND DISPERSION IN POROUS MEDIA John A. Hoopes and Donald R. F. Harleman	51
ANALYSIS OF RESISTANCE IN FLUVIAL CHANNELS Arvid J. Raudkivi	73
TIDAL VELOCITIES ACROSS A PARTLY-COMPLETED BARRAGE by A. Roy Halliwell	85
RECIRCULATION AND SAND-FEED TYPE FLUME EXPERIMENTS by Harold P. Guy, Ronald E. Rathbun, and Everett V. Richardson	97
HYDROLOGIC ENGINEERING PRIOR TO 600 B. C. by Asit K. Biswas	115
WALL EFFECTS IN PERMEAMETERS by Colin R. Dudgeon	137

(over)

This Journal is published bi-monthly 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 \$8.00 per year with discounts to members and libraries. Second-class postage paid at Ann Arbor, Michigan. EM, HY, SA, SM, ST.

	Page
TRANSVERSE FLOW IN A RIVER DUE TO EARTH'S ROTATION by Hans A. Neu	149
TIDAL INLETS HOUSEKEEPING by Per Bruun	167
WATER-HAMMER ANALYSIS OF DISTRIBUTION SYSTEMS by Victor L. Streeter	185
STOCHASTIC MODEL OF MOTION OF SOLID PARTICLES by Chao-Lin Chiu	203
COMPUTER-DETERMINED UNIT HYDROGRAPH FROM FLOODS by Donald W. Newton and J. W. Vinyard	219
DISPERSION IN LAYERED POROUS MEDIA by Uri Y. Shamir and Donald R. F. Harleman	237
EXTENDED CONTINUOUS INTERPOLATION by Willard M. Snyder	261

DISCUSSION

Proc. Paper 5408

CONSIDERATIONS IN PRESERVING RESERVOIR SITES, by James E. Goddard (Jan., 1965. Prior Discussion: Sept., 1965). closure	283
FLOW VISUALIZATION ACROSS MAIN FLOW, by A. Kumar (Jan., 1966. Prior Discussion: Sept., 1966). closure	283
WAVE-PLAN ANALYSIS OF UNSTEADY FLOW IN CLOSED CONDUITS, by Don J. Wood, Robert G. Dorsch, and Charlene Lightner (Mar., 1966. Prior Discussion: Sept., 1966, Mar., 1967). closure	290
DIVIDING FLOW IN AN OPEN CHANNEL, by Shiu Wai Law and Alan J. Reynolds (Mar., 1966. Prior Discussion: Sept., Nov., 1966, Mar., 1967). closure	294
SEDIMENT TRANSPORTATION MECHANICS: INITIATION OF MOTION, by Task Committee on Preparation of Sedimentation Manual, Vito A. Vanoni, Chmn. (Mar., 1966. Prior Discussion: Sept., Nov., 1966, Jan., July, 1967). closure	297

	Page
GRAPHICAL DETERMINATION OF CONFINED AQUIFER PARAMETERS, by George J. Kriz, Verne H. Scott, and Robert H. Burgy (Sept., 1966). errata	303
BED-LOAD TRANSPORT AT HIGH SHEAR STRESS ^a , by Kenneth C. Wilson (Nov., 1966. Prior Discussion: July, 1967). by David I. H. Barr and John G. Herbertson	303
COASTAL PARALLEL CANALS WITH INTERMEDIATE DRAINS ^a , by Srisakdi Charmonman (Jan., 1967. Prior Discussion: May, 1967). by V. M. Shestakov	307
IMPROVED METHOD OF FLOOD ROUTING ^a , by Eugene A. Graves (Jan., 1967. Prior Discussion: May, 1967). by Michael Amein	310
SEDIMENTATION RESEARCH NEEDS IN SEMIARID REGIONS ^a , by Kenneth G. Renard and Robert B. Hickok (Jan., 1967). by Frederick S. Witzigman	312
by Harold P. Guy	313
by Mohammad Akram Gill	315
EXPERIMENTAL AND NUMERICAL STUDY OF COLUMN DRAINAGE ^a , by Keith K. Watson (Mar., 1967). by Uri Shamir	317
GENERALIZED PROFILES OF GRADUALLY VARIED FLOW ^a , by Harold R. Vallentine (Mar., 1967). by N. S. Lakshmana Rao and K. Sridharan	318
HYDROLOGIC INFLUENCES OF A FLOOD CONTROL PROGRAM, by Monroe A. Hartman, William O. Ree, Russell R. Schoof, and Bruce J. Blanchard (May, 1967. Discussion closes Oct. 1, 1967). by Shu-t'ien Li	319

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