CONTENTS

Papers	I	Page
MIXED TECHNIQUE FOR COMPUTING SURGES IN CHANNELS by J. Ian Collins and Samuel N. Fersht		349
AUTOCORRELATION AND SPECTRAL ANALYSES IN HYDROLOGY by Rafael G. Quimpo		363
SURFACE WATER RESOURCES PLANNING IN HUDSON BASIN by Gerald T. McCarthy and Nicholas L. Barbarossa		375
ARE INDIVIDUAL CURRENT-METER RATINGS NECESSARY? by George F. Smoot and Rolland W. Carter		391
SUBMARINE SPRING DISCHARGE USING RADIOACTIVE TRACERS by C. J. Braudo, F. Mero, and A. Mercado		399
MEASUREMENT OF TURBULENCE IN WATER by Everett V. Richardson and Raul S. McQuivey		
FREE SURFACE SHEAR FLOW OVER A WAVY BED by Yoshiaki Iwasa and John F. Kennedy		431
INTERIOR DRAINAGE FOR HURRICANE PROTECTION PROJECTS by Donald Van Sickle		455
HYDRAULIC JUMPS BELOW ABRUPT SYMMETRICAL EXPANSIONS	• • • • •	100
by Nallamuthu Rajaratnam and Kanakatti Subramanya	• • • • •	481
(over)		

This Journal is published bimonthly 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.

	Page
MIXING OF TWO CONCENTRIC JETS by D. C. Kotwal, Y. R. Reddy, and Subir Kar	505
FIELD TEST OF AN X-RAY SEDIMENT-CONCENTRATION GAGE	
by Carl E. Murphree, Gerald C. Bolton, J. Roger McHenry, and Donald A. Parsons	515
DISCUSSION	
Proc. Paper 5825	
FLOW IN CULVERTS AND RELATED DESIGN PHILOSOPHIES, by Fred W. Blaisdell (Mar., 1968. Prior Discussion: Sept., 1966, Jan., May, 1967). closure	531
DISTRIBUTION OF HEAD AT A RECTANGULAR CONDUIT OUTLET, by Satya Prakash Garg (July, 1966. Prior Discussion: Mar., 1967). closure	540
FLOOD PROOFING IN A FLOOD PLAIN: A STOCHASTIC MODEL, by Viraf S. Bhavnagri and George Bugliarello (July, 1966. Prior Discussion: Mar., 1967).	542
RESISTANCE RELATIONSHIPS FOR ALLUVIAL CHANNEL FLOW, by R. J. Garde and K. G. Ranga Raju (July, 1966. Prior Discussion: Jan., Mar., May, 1967).	
FLOW MEASUREMENTS WITH FLUORESCENT TRACERS, by John A. Replogle, Lloyd E. Myers, and Kenneth J. Brust (Sept., 1966. Prior Discussion: Jan., May, July, 1967).	545
ANALYSES OF PARAMETERS OF AN UNCONFINED AQUIFER, by George J. Kriz, Verne H. Scott, and Robert H. Burgy (Sept., 1966. Prior Discussion: Mar., July, 1967).	552
closure	
DISTRIBUTION SYSTEM EQUALIZING STORAGE HYDRAULICS, by Murray B. McPherson and Ramanand Prasad (Nov., 1966. Prior Discussion: July, 1967).	557
closure	558

Page

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

Page

INFORMATION RETRIEVAL

The key words, abstract, and reference "cards" for each article in this Journal represent part of the ASCE participation in the EJC information retrieval plan. The retrieval data are placed herein so that each can be cut out, placed on a 3 x 5 card and given an accession number for the user's file. The accession number is then entered on key word cards so that the user can subsequently match key words to choose the articles he wishes. Details of this program were given in an August, 1962 article in CIVIL ENGINEERING, reprints of which are available on request to ASCE headquarters.

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