

# CONTENTS

Papers	Page
WATERHAMMER ANALYSIS BY ANALOG COMPUTERS by Don J. Wood . . . . .	1
COASTAL PARALLEL CANALS WITH INTERMEDIATE DRAINS by Srisakdi Charmonman . . . . .	13
IMPROVED METHOD OF FLOOD ROUTING by Eugene A. Graves . . . . .	29
SEDIMENTATION RESEARCH NEEDS IN SEMIARID REGIONS by Kenneth G. Renard and Robert B. Hickok . . . . .	45

---

## DISCUSSION

Proc. Paper 5059

---

HORIZONTAL JETS IN STAGNANT FLUID OF OTHER DENSITY, by Gerrit Abraham (July, 1965. Prior Discussion: Mar., July, 1966). closure . . . . .	63
COMPUTER SIMULATION OF ESTUARIAL NETWORKS, by Robert P. Shubinski, James C. McCarty, and Marvin R. Lindorf (Sept., 1966. Prior Discussion: May, 1966). closure . . . . .	68

(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
COMPREHENSIVE PLANNING IN THE SOUTHEAST, by George E. Tomlinson (Sept., 1965. Prior Discussion: May, 1966). closure .....	69
THE HYDRAULIC JUMP AS A WALL JET, by Nallamuthu Rajaratnam (Sept., 1965. Prior Discussion: May, 1966). closure .....	74
TURBULENT NON-NEWTONIAN VELOCITY PROFILES IN PIPES, by Iraj Zandi and Ronald H. Rust (Nov., 1965. Prior Discussion: May, 1966). closure .....	76
SINGLE-PORT SUCTION MANIFOLDS, by Ronald E. Nece, Peter P. Goldstern, and Jared L. Black (Jan., 1966). errata .....	78
USE OF BAFFLES IN OPEN CHANNEL EXPANSIONS <sup>a</sup> , by Clifford D. Smith and James N. G. Yu (Mar., 1966. Prior Discussion: Sept., Nov., 1966). by Jonas M. K. Dake .....	78
by Subir Kar and S. Raghunathan .....	79
by V. C. Kulandaiswamy and M. Narayanan .....	81
FLOW IN CULVERTS AND RELATED DESIGN PHILOSOPHIES <sup>a</sup> , by Fred W. Blaisdell (Mar., 1966. Prior Discussion: Sept., 1966). by John L. French .....	85
HYDROGRAPHS OF EPHEMERAL STREAMS IN THE SOUTHWEST <sup>a</sup> , by Kenneth G. Renard and Robert V. Keppel (Mar., 1966. Prior Discussion: Nov., 1966). by H. C. Riggs .....	91
INLAND DELTA BUILDING ACTIVITY OF KOSI RIVER <sup>a</sup> , by Chintaman V. Gole and Shrikrishna V. Chitale (Mar., 1966. Prior Discussion: Sept., Nov., 1966). by Claude C. Inglis .....	93
SEDIMENT TRANSPORTATION MECHANICS: INITIATION OF MOTION <sup>a</sup> , by the Task Committee on Preparation of Sedimentation Manual, Committee on Sedimentation (Mar., 1966. Prior Discussion: Sept., Nov., 1966). by Joe C. Willis .....	101
HYDRAULIC RESISTANCE OF ALLUVIAL STREAMS <sup>a</sup> , by Frank Engelund (Mar., 1966. Prior Discussion: Nov., 1966). by Thomas Blench .....	108
by John F. Kennedy and A. M. Z. Alam .....	111
ABSTRACTED BIBLIOGRAPHY ON EROSION OF COHESIVE MATERIALS <sup>a</sup> , by the Task Committee on Erosion of Cohesive Materials, Committee on Sedimentation (Mar., 1966. Prior Discussion: Sept., Nov., 1966). by Henry W. Anderson .....	117

---

<sup>a</sup> Discussion period closed for this paper. Any other discussion received during this period will be published in subsequent Journals.

	Page
FLUCTUATION OF PRESSURE IN CONDUIT EXPANSIONS <sup>a</sup> , by Hunter Rouse and Vladimir Jezdinsky (May, 1966).	
by Jacob H. Douma .....	125
NOMENCLATURE FOR BED FORMS IN ALLUVIAL CHANNELS <sup>a</sup> , by the Task Force on Bed Forms in Alluvial Channels, Committee on Sedimentation (May, 1966).	
by Shrikrishna V. Chitale .....	127
by Victor J. Galay and Charles R. Neill .....	130
IMPROVED DESIGN OF FLUID NETWORKS WITH COMPUTERS <sup>a</sup> , by Thomas A. Marlow, R. Logan Hardison, Henry Jacobson, and Gilbert E. Biggs (July, 1966).	
by Charles D. D. Howard .....	133
RESISTANCE RELATIONSHIPS FOR ALLUVIAL CHANNEL FLOW <sup>a</sup> , by R. J. Garde and K. G. Rangan Raju (July, 1966).	
by Thomas Blench .....	134
FLOW MEASUREMENTS WITH FLUORESCENT TRACERS <sup>a</sup> , by John A. Replogle, Lloyd E. Myers, and Kenneth J. Brust (Sept., 1966. Discussion closes Feb. 1, 1967).	
by Hugo B. Fischer .....	139

---

<sup>a</sup> Discussion period closed for this paper. Any other discussion received during this period will be published in subsequent Journals.