
Journal of the
ENGINEERING MECHANICS DIVISION
Proceedings of the American Society of Civil Engineers

**ENGINEERING MECHANICS DIVISION
EXECUTIVE COMMITTEE**

Dan H. Pletta, Chairman; Egor P. Popov, Vice Chairman; Bruce G. Johnston
Merit P. White; Edward Wenk, Jr., Secretary

COMMITTEE ON PUBLICATIONS

Egor P. Popov, Chairman; Hans H. Bleich; Jack E. Cermak;
Albert G. H. Deitz; William J. Hall; John D. Haltiwanger; Ernest F. Masur;
Herbert S. Suer

CONTENTS

August, 1960

Papers

	Page
Stresses in Layered Elastic Solids by M. M. Lemco	1
Lateral Stability of Frames by Energy Method by Donald E. Johnson	23
Seepage Losses from Parallel Canal Systems by H. Y. Hammad	43
Vibrations of Structural Systems by Component Mode Synthesis by Walter C. Hurty	51
Irrational Motion of Two Fluid Strata Towards a Line Sink by D. G. Huber	71
Underground Structures Subject to Air Overpressure by Ernest T. Selig, Keith E. McKee, and Eben Vey	87
Geometry of Moire' Fringes in Strain Analysis by Stanley Morse, August J. Durelli, and Cesar A. Sciammarella	105

(over)

	Page
Arch Dam Analysis with an Electric Analog Computer by Richard H. MacNeal	127
Elastic Model Design of the B-58 Airplane by J. W. Wells and H. B. England	153
<hr/>	
DISCUSSION	
<hr/>	
Shrinkage, Swelling and Creep in Cement, by A. Hrennikoff. (July, 1959. Prior discussion: January, 1960.) Discussion closed.) by A. Hrennikoff (closure)	183
Comparative Study of a Segmental Arch Ring, by O. C. Zienkiewicz. (January, 1960. Prior discussion: None.) Discussion closed.) by J. A. Veltrop	185
White Noise Representation of Earthquakes, by G. N. Bycroft. (April, 1960. Prior discussion: None.) Discussion closes September 1, 1960.) by D. E. Hudson, G. W. Housner and T. K. Caughey	193
Strength and Efficiency Aspects of Plate Structures, by George Gerard. (April, 1960. Prior discussion: None.) Discussion closes September 1, 1960.) by George Pincus and George Winter	197
<hr/>	
Errata	201