

CONTENTS

Papers	Page
BEAM ON TENSIONLESS FOUNDATION by Nien-chien Tsai and Russell A. Westmann	1
FINITE-ELEMENT BENDING ANALYSIS FOR PLATES by Leonard R. Herrmann	13
DYNAMIC INTERACTION OF A LAYER AND A HALF-SPACE by Jan D. Achenbach and Howard I. Epstein	27
STIFFNESS MATRIX FOR SHALLOW RECTANGULAR SHELL ELEMENT by Jerome J. Connor, Jr., and Carlos Brebbia	43
LIMIT ANALYSIS BY DIRECT METHOD OF VARIATION by Toshio Mura, Seng-Lip Lee, Robert H. Bryant, and Walid H. Rimawi	67
RANDOM RESPONSE OF HIGHWAY BRIDGES TO VEHICLE LOADS by Chi Chao Tung	79
ON THE ACCURACY OF SOME DYNAMIC SHELL THEORIES by Anthony E. Armenàkas	95
CHARACTERISTICS OF SEPARATION AT CONICAL AFTERBODIES by Sampathiengar Narasimhan	111
GROUND SHOCK DUE TO RAYLEIGH WAVES FROM SONIC BOOMS by Melvin L. Baron, Hans H. Bleich, and Joseph P. Wright	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.

 DISCUSSION

Proc. Paper 5478

EDGE LOAD SOLUTIONS FOR CONICAL SHELLS, by Jack R. Vinson (Feb., 1966. Prior Discussion: June, 1966). closure	165
EQUILIBRIUM METHOD FOR LIMIT CALCULATION OF FRAMES, by Douglas H. Clyde and Hans A. Einstein (Feb., 1966. Prior Discussion: Oct., Dec., 1966). closure	166
AERODYNAMIC STABILITY OF H SECTIONS, by Daniel Dicker (Apr., 1966. Prior Discussion: Apr., 1967). closure	167
FLUCTUATING TOTAL HEAD IN A VISCOUS SUBLAYER, by Calvin G. Clyde (Apr., 1966. Prior Discussion: Dec., 1966, Feb., 1967). closure	169
FLOW DIRECTION MEASUREMENT BY HOT-WIRE ANEMOMETRY, by Jacques W. Delleur (Aug., 1966. Prior Discussion: Apr., 1967). closure	170
COMPARISON OF STATIC AND DYNAMIC HYSTERESIS CURVES, by Robert D. Hanson (Oct., 1966. Prior Discussion: Apr., 1967). closure	171
METHOD FOR MINIMAL DESIGN OF AXISYMMETRIC PLATES ^a , by George J. Megarefs (Dec., 1966). by John F. Brotchie	173
SIMULATION OF NONSTATIONARY RANDOM PROCESSES ^a , by Masanobu Shinozuka and Y. Sato (Feb., 1967). by Roy Levy	176
DIFFERENCE SOLUTIONS OF SHALLOW-WATER EQUATIONS ^a , by James A. Liggett and David A. Woolhiser (Apr., 1967). by Terence E. Harbaugh	186
STOCHASTIC MODEL TO FATIGUE, by Octavio A. Rascón Chavez (June, 1967. Discussion closes November 1, 1967). by Alfred M. Freudenthal	190

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