CONTENTS

Effects of Turbulence on Bridge Flutter Derivatives by Robert H. Scanlan and Wen-Huang Lin	719
Nonlinear Behavior of Cable-Reinforced Membranes by Vijay K. Verma and John W. Leonard	735
Post-Buckling Analysis of Cylindrical Shells by Ömer K. Kiciman and Egor P. Popov	751
Cyclic Shear Yielding of Wide-Flange Beams by Charles W. Roeder and Egor P. Popov	763
Spectrum-Consistent Time-History Generation by Maharaj K. Kaul	781
Compliance Monitoring of Crack Growth in Concrete by Stuart E. Swartz, Kuo-Kuang Hu, and Gary L. Jones	789
Plane Waves in Anisotropic Plates by Stanley B. Dong and Kenneth E. Pauley	801
Circular Plates on Linear Viscoelastic Foundations by Keiichiro Sonoda, Harutoshi Kobayashi, and Toshimitsu Ishio	819
Structural Safety Indices for Repeated Loads by Mircea Grigoriu and Carl Turkstra	829
Generalized Stress-Strain Relations for Concrete by Michael D. Kotsovos and John B. Newman	845
	\rightarrow

This Journal is published bimonthly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, N.Y. 10017. Address all ASCE correspondence to the Editorial and General Offices at 345 East 47th Street, New York, N.Y. 10017. Allow six weeks for change of address to become effective. Subscription price to members is \$10.00. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. EE, EM, TE.

The Society is not responsible for any statement made or opinion expressed in its publications.

Incipient Joint Motion Due to Spherical Explosion by James N. Johnson and Dave R. Schmitz	857
Exact Analysis of Class of Ring Segments by James Ting-Shun Wang	. 871
Porous Medium Deformation in Multiphase Flow by Jacob Bear and George F. Pinder	. 881
Finite Element Weighted Residual Methods: Axisymmetric Shells by Sushil K. Sharma and Arthur P. Boresi	. 895
Adhesion of Bimaterial Elastic Strips by David B. Bogy	. 911
Experimental Identification of Aerodynamic Forces by Sadao Komatsu and Hiroshi Kobayashi	. 921
Inelastic Buckling of Circular Tubes in Bending by Robert M. Korol	. 939
TECHNICAL NOTES Proc. Paper 13914	
Dynamic Soil Reactions for Plane Strain Case by Milos Novak, Toyoaki Nogami, and Fakhry Aboul-Ella	. 953
Initial Post-Buckling of Hingeless Circular Arch by Robert Schmidt	. 959
Snap-Through of Arch Model under Multiple Loads by Robert H. B. Welton, III	. 964
DISCUSSION	
Proc. Paper 13909	
Torsional Response of Rigid Embedded Foundation, by Randy J. Apsel and J. Enrique Luco (Dec., 1976. Prior Discussion: Dec., 1977). closure	97 1

T. Chon and Paul S. Symonds (Feb., 1977. Prior Discussion: Dec.,	
1977). closure	973
Extremes of Autocorrelated Load Model, by Luis Valadares Tavares (Aug., 1977).	
errata	977
Variable Order Finite Elements for Plate Vibration, by James R. Hutchinson and John J. Benitou (Oct., 1977).	
by Mark P. Rossow, Chung-Ta Tsai, and Barna A. Szabo	977
First Yield Analysis of Rectangular Levy Plates, by Geoffrey John Turvey (Dec., 1977).	
by Perumal Samy N. Balaguru	070

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 3×5 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.

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