

CONTENTS

| Papers | Page |
|--|------|
| ANALYSIS OF SPACE TRUSS AS EQUIVALENT PLATE by William R. Flower and Lewis C. Schmidt | 2777 |
| ANALYSIS OF INELASTIC SUSPENSION STRUCTURES by Thomas M. Murray and Nicholas Willems | 2791 |
| TEMPERATURE RISES IN LOW-HEAT CEMENT CONCRETE by Barry P. Hughes | 2807 |
| MAIN CABLES OF NEWPORT SUSPENSION BRIDGE by Blair Birdsall | 2825 |
| MECHANICAL PROPERTIES OF STRUCTURAL CABLES by John B. Scalzi and William K. McGrath | 2837 |
| FIELD SOLUTIONS FOR SHEAR GRIDS by Donald L. Dean | 2845 |
| MODEL ANALYSIS OF CURVED BOX-BEAM HIGHWAY BRIDGE by Ish K. Aneja and Frederic Roll | 2861 |

(over)

This Journal is published monthly 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 is \$20.00 per year with discounts to members and libraries. Second-class postage paid at New York, N.Y. and at additional mailing offices. ST.

DISCUSSION
Proc. Paper 8557

| | |
|---|------|
| BEHAVIOR OF SIMPLY SUPPORTED SLABS, by Murray A. Muspratt (Dec., 1969. Prior Discussions: June, Aug., 1970, Mar., 1971). closure | 2881 |
| ANALYSIS OF FOOTINGS SUBJECTED TO BIAxIAL BENDING, by German Gurfinkel (June, 1970. Prior Discussions: Oct., 1970, Feb., 1971). closure | 2882 |
| SHRINKAGE AND SHRINKAGE RESTRAINTS IN CONCRETE PAVEMENTS, by Shigeyoshi Nagataki (July, 1970. Prior Discussion: May, 1971). closure | 2883 |
| RATIONAL DESIGN OF LIGHT GAGE BEAMS, by Jeffrey L. Bleustein and Atle Gjelsvik (July, 1970. Prior Discussions: Dec., 1970, Mar., Apr., May, 1971). closure | 2884 |
| BOUNDING OF FRAME BUCKLING LOADS, by Alfred Korn (Aug., 1970. Prior Discussions: Dec., 1970, May, 1971). closure | 2885 |
| ANALYSIS OF CURVED GIRDER BRIDGES, by Lansford C. Bell and Conrad P. Heins (Aug., 1970. Prior Discussions: Feb., June, 1971). closure | 2886 |
| BEHAVIOR OF CONCRETE UNDER VARYING STRAIN GRADIENTS, by I. Demir Karsan and James O. Jirsa (Aug., 1970. Prior Discussions: Dec., 1970, May, 1971). closure | 2888 |
| FLEXIBLE PLATE FINITE ELEMENT ON ELASTIC FOUNDATION, by Henry T. Y. Yang (Oct., 1970. Prior Discussion: May, 1971). closure | 2888 |
| NONSYMMETRIC VIBRATIONS OF THIN CYLINDRICAL SHELLS, by Chi-Wen Lin (Oct., 1970. Prior Discussions: Apr., May, 1971). closure | 2889 |

| | Page |
|---|------|
| RELIABILITY ANALYSIS OF FRAME STRUCTURES, by John Stevenson and Fred Moses (Nov., 1970). | |
| errata | 2891 |
| CREEP DEFLECTION OF REINFORCED CONCRETE BEAMS, by Charles A. Miller and Sidney A. Guralnick (Dec., 1970). | |
| errata | 2891 |
| COST-EFFECTIVE MATCHING OF TASK AND COMPUTING DEVICE, by Ralph E. Miller, Jr. and John McCaslin (Jan., 1971). | |
| errata | 2892 |
| FORMULATION OF DECISION LOGIC TABLES, ^a by Jimmy L. Noland and Chuan C. Feng (Jan., 1971). | |
| by Surendra K. Goel | 2892 |
| TESTS OF GUSSET PLATE MODELS, by Desi D. Vasarhelyi (Feb., 1971). | |
| errata | 2894 |
| BEHAVIOR OF LATERALLY REINFORCED CONCRETE COLUMNS, ^a by Edwin G. Burdette and Hubert K. Hilsdorf (Feb., 1971. Prior Discussion: July, 1971). | |
| by V. Malakonda Reddy, K. Nagi Reddy, and S. Ramaswamy Reddy | 2894 |
| NONLINEAR ANALYSIS OF CABLE AND TRUSS STRUC- TURES, ^a by Frank Baron and Mahadeva S. Venkatesan (Feb., 1971). | |
| by John J. Jonatowski and Charles Birnstiel | 2895 |
| ECCENTRICALLY LOADED BOLTED CONNECTIONS, ^a by Sherwood F. Crawford and Geoffrey L. Kulak (Mar., 1971). | |
| by Y. W. Leung and D. J. Laurie Kennedy | 2900 |
| by Neil M. Hawkins | 2902 |
| FINITE ELEMENT ANALYSIS OF REINFORCED CON- CRETE SLABS, ^a by Jan C. Jofriet and Gregory M. McNeice (Mar., 1971). | |
| by Alex E. Cardenas | 2905 |
| by Dan E. Branson | 2907 |
| NEED FOR DIAPHRAGMS IN CONCRETE BOX GIRDERS, ^a by Denison Campbell-Allen and Raymond J. L. Wedgwood (Mar., 1971). | |
| by Richard M. McClure | 2911 |
| by A. Rajaraman | 2915 |
| by Vladimír Krístek | 2916 |

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

| | Page |
|---|------|
| BOLTED JOINTS UNDER SUSTAINED LOADING, ^a by Verl Lobb and Floyd Stoller (Mar., 1971). by Geoffrey D. Base, Christopher V. J. Simpson, Lewis C. Schmidt, Donald S. Mansell, and Leonard K. Stevens | 2920 |
| HYPOTHESIS FOR SHEAR FAILURE OF BRICKWORK, ^a by Bryan Stafford Smith and Clifford Carter (Apr., 1971). by Ganpat S. Pandit | 2922 |
| SUSTAINED AND CYCLIC LOADING OF CONCRETE COLUMNS, ^a by Jostein Hellesland and Roger Green (Apr., 1971. Prior Discussion: Oct., 1971). by Narayana K. Raju | 2923 |
| NUMERICAL ERROR IN STRUCTURAL SOLUTIONS, ^a by John R. Roy (Apr., 1971). by Robert W. Gerstner, Raymond M. Puzerewski, and Donald M. Schultz | 2924 |
| TORSION, BENDING, AND SHEAR IN PRESTRESSED CONCRETE, ^a by Priya R. Mukherjee and Joseph Warwaruk (Apr., 1971). by Ganpat S. Pandit | 2926 |
| STRUCTURAL RESPONSE TO SONIC BOOMS, ^a by Roland L. Sharpe and Garrison Kost (Apr., 1971. Prior Discussion: Oct., 1971). by David H. Cheng and Jacques E. Benveniste | 2928 |
| BEHAVIOR OF CONTINUOUS CRANE RAILS, ^a by Pavel J. Marek and J. Hartley Daniels (Apr., 1971). by Robert W. Dannemann | 2929 |

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.

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