

# CONTENTS

<b>Second-Moment Combination of Stochastic Loads</b> <i>by Armen Der Kiureghian</i> . . . . .	1551
<b>Stability Analysis of Beam-Crosses by Finite Integral Method</b> <i>by Edward G. Lovell and Shitalkumar P. Morchi</i> . . . . .	1569
<b>Mean Wind Profiles and Change of Terrain Roughness</b> <i>by Jacques Biétry, Christian Sacré, and Emil Simiu</i> . . . . .	1585
<b>Elastomeric Bonded Wood Beams with Transverse Gaps</b> <i>by Rafik Y. Itani and Francisco A. Brito</i> . . . . .	1595
<b>Tornado Data Characterization and Windspeed Risk</b> <i>by Lawrence A. Twisdale</i> . . . . .	1611
<b>Analysis of Composite Beams</b> <i>by Peter Ansourian and Jack William Roderick</i> . . . . .	1631
<b>Design Formulas for Steel Folded Plate Roofs</b> <i>by Robert Mark Lawson</i> . . . . .	1647
<b>Bolted Repair of Fractured I-79 Girder</b> <i>by Louis P. Schwendeman and Arthur W. Hedgren</i> . . . . .	1657

→

---

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 to members is \$15.00. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. ST.

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

---

DISCUSSION

Proc. Paper 14048

---

**Torsion of Frame-Tube Structures**, by Alexander Coull and Bishwanath Bose (Dec., 1976. Prior Discussion: Dec., 1977).  
*closure* . . . . . 1673

**Strength and Stiffness of Corrugated Metal Shear Diaphragms**, by John T. Easley (Jan., 1977. Prior Discussion: Jan., 1978).  
*closure* . . . . . 1674

**Statistical Combination of Extreme Loads**, by Yi-Kwei Wen (May, 1977. Prior Discussion: Jan., 1978).  
*closure* . . . . . 1675

**Reliability of RC Beams Subjected to Fire**, by Bruce Ellingwood and James R. Shaver (May, 1977. Prior Discussion: Jan., 1978).  
*closure* . . . . . 1677

**Free Vibrations of Cable in Three Dimensions**, by William M. Henghold, John J. Russell, and Joseph D. Morgan, III (May, 1977. Prior Discussions: Feb., Mar., 1978).  
*closure* . . . . . 1678

**Curved I-Girder Bridge Design Recommendations**, by The Task Committee on Curved Girders of the ASCE-AASHTO Committee on Flexural Members of the Committee on Metals of the Structural Division (May, 1977. Prior Discussions: Nov., 1977, Jan., Mar., 1978).  
*closure* . . . . . 1679

**Test of Scale Model Post-Tensioned Flat Plate**, by Ned H. Burns and Roongroj Hemakom (June, 1977. Prior Discussion: Jan., 1978).  
*closure* . . . . . 1681

**Statistical Analysis of RC Beam-Column Interaction**, by Bruce Ellingwood (July, 1977. Prior Discussions: Jan., Feb., 1978).  
*closure* . . . . . 1683

**Simplified Diaphragm Analysis**, by J. Michael Davies (Nov., 1977).  
*errata* . . . . . 1684

**Design of Axially Loaded Stiffened Plates**, by Michael R. Horne and Rangachari Narayanan (Nov., 1977).  
*errata* . . . . . 1684

**Torsional-Balanced Steel in Concrete Beams,**\* by Madhusudan Chakraborty (Nov., 1977. Prior Discussion: June, 1978).  
*by Michael P. Collins and Denis Mitchell* . . . . . 1684

**Modulus of Elasticity of Timber Members,**\* by Robert K. Wen, Bruce F. Henley, and Frank Hsiu (Dec., 1977).  
*by Joseph H. Kaiserlik and Alan D. Freas* . . . . . 1687

**Models for RC Frames with Degrading Stiffness,**\* by James C. Anderson and William H. Townsend (Dec., 1977).  
*by Shunsuke Otani* . . . . . 1689

**Concrete Filled Structural Plastic Columns,**\* by Carl E. Kurt (Jan., 1978).  
*by Fred C. McCormick* . . . . . 1691

**Composite Bridge Decking by Stage-Deck Jacking,**\* by Gilbert H. Béguin (Jan., 1978).  
*by René Ryser* . . . . . 1692

**Prestressed Concrete Design by Linear Programming,**\* by David Morris (Mar., 1978).  
*by Alex Aswad* . . . . . 1693

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.

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