



november 1-6
chase-park plaza
in St. Louis

1970 FALL



2 p.m. to 5 p.m.

COMMITTEE	Meeting Room
209 Subcommittee III, Creep and Shrinkage in Concrete (Outline for report)	Crown
213 Subcommittees A and B, Lightweight Aggregate Concretes (Revision of ACI 213 Guide)	Regency
222 Corrosion of Metals in Concrete (Draft of Guide)	Palladian
340 Ultimate Strength Design Handbook (Revision of Handbook)	Stockholm
345 Concrete Bridge Decks (Draft of Recommended Practice)	Coach
351 Foundations for Equipment and Machinery (Gathering information)	Tiara Lounge North
423 Prestressed Concrete (Tentative Recommendations)	Park
426 Shear and Diagonal Tension (Committee Report)	Lido
533 Precast Panels (Review)	Colonial

7 p.m. to 10 p.m.

..... Ad Hoc Committee on Institute Activities	Empire
214 Evaluation of Results of Strength Tests of Concrete (Rough draft of Revised Recommended Practice)	Tiara Lounge North
301 Specifications for Structural Concrete (Final revision of ACI 301-66)	Regency
340 Ultimate Strength Design Handbook (Revision of Handbook)	Stockholm
345 Concrete Bridge Decks (Draft of Recommended Practice)	Coach
350 Sanitary Engineering Structures	Crown
441 Concrete Columns (Summary report)	Lido
503 Adhesives for Concrete (Review of draft)	Colonial
512 Precast Structural Concrete (Draft of Recommended Practice)	Park
517 Accelerated Curing of Concrete at Atmospheric Pressure	Palladian

TUESDAY, Nov. 3 9 a.m. to 12 noon

118 Use of Computers (Committee reports)	Lido
201 Durability of Concrete (Committee report)	Empire
213 Subcommittee D, Lightweight Aggregate Concretes (Revision of ACI 213 Guide)	Regency
223 Expansive Cement Concretes (Recommended Practice)	Tiara Lounge North
303 Architectural Concrete (Draft, State-of-the-art report)	Crown
318 Standard Building Code (Final amendments, commentary, nomenclature)	Zodiac Roof Lounge
348 Structural Safety (Denver symposium, position statement, subcommittee reports)	Coach
438 Torsion (Design recommendations and current research)	Park
533 Precast Panels (Review)	Colonial
543 Concrete Piles (Design, Chapter 2)	Stockholm
546 Repair of Concrete (Content of report; outline of topics)	Palladian

2 p.m. to 5 p.m.

COMMITTEE	Meeting Room
224 Cracking (Proposed committee report)	Crown
309 Consolidation of Concrete (Draft of Recommended Practice; Research on vibration)	Colonial
318 Standard Building Code (Final amendments, commentary, nomenclature)	Zodiac Roof Lounge
332 Residential Concrete Work (Proposed recommended practice)	Stockholm
333 Composite Construction (Committee report)	Palladian
348 Structural Safety (Denver symposium, position statement, subcommittee reports)	Coach
349 Criteria for Nuclear Containment Vessels (Chapter 2 of Design Criteria)	Lido
442 Response of Buildings to Lateral Forces (Symposium)	Empire
532 Lightweight Concrete Masonry (Sound transmission and fire test data)	Park
E-703 Manuals of Instruction — Construction (Mission and organization of committee)	Venetian

7 p.m. to 10 p.m.

302 Concrete Floor Finishes (Coordination with Committee 301 specifications)	Park
309 Consolidation of Concrete (Draft of Recommended Practice; research on vibration)	Colonial
315 Detailing Reinforced Concrete Structures	Coach
350 Sanitary Engineering Structures	Crown
352 Joints and Connections in Monolithic Concrete Structures (Recommendations for Design)	Lido
435 Deflection of Concrete Building Structures (Draft reports)	Regency
503 Adhesives for Concrete (Review of draft)	Empire
546 Repair of Concrete (Content of report; outline of topics)	Palladian

The Wednesday committee meetings run concurrently with the Symposium listed on pages 4 and 5

WEDNESDAY, Nov. 4 9 a.m. to 12 noon

..... Concrete — Year 2000	Tiara Lounge North
114 Research and Development (Research and Development statements and programs)	Colonial
213 Lightweight Aggregate Concretes (Revision of ACI 213 Guide)	Regency
303 Architectural Concrete (Draft, State-of-the-art report)	Crown
304 Measuring, Mixing, Transporting, and Placing Concrete (Revision of Recommended Practice; Symposium)	Lido
305 Hot Weather Concreting (Final draft)	Palladian
318 Standard Building Code (Final amendments, commentary, nomenclature)	Zodiac Roof Lounge
347 Formwork for Concrete (Lateral pressures)	Empire
428 Limit Design (Committee report)	Coach
439 High-Strength Reinforcement in Concrete (First draft, committee report)	Park
543 Concrete Piles (Design, Chapter 2)	Stockholm
E-701 Manuals of Instruction — Materials (Organization of committee)	Venetian

2 p.m. to 5 p.m.

COMMITTEE

Meeting Room

- Board Committee on Chapter Activities Crown
- 211 Proportioning Concrete Mixes Colonial
(Symposium and Workshop)
- 215 Fatigue of Concrete (Committee report) Park
- 311 Inspection of Concrete (Upgrading of Manual on Concrete Inspection) Empire
- 318 Standard Building Code (Final amendments, commentary, nomenclature) Zodiac Roof Lounge
- 336 Combined Footings and Pier Foundations Palladian
(Report discussion and review)
- 421 Design of Reinforced Concrete Slabs Regency
(Subcommittee reports)
- 428 Limit Design (Committee report) Coach
- 531 Concrete Masonry Structures (Masonry prism testing and committee assignments) Lido
- 543 Concrete Piles (Design, Chapter 2) Stockholm

7 p.m. to 10 p.m.

- 212 Admixtures (Draft of Guide) Coach
- 215 Fatigue of Concrete (Committee report) Park
- 444 Models of Concrete Structures Lido
(Progress of subcommittees)
- 515 Coatings for Concrete Palladian

The Thursday morning committee meetings run concurrently with the Building Code Explanation and Preview listed on page 8

THURSDAY, Nov. 5 9 a.m. to 12 noon

- Board Committee on Coordination in the Concrete Industry Stockholm
- 308 Curing Concrete Regency
(Recommended Practice for Curing)
- 516 High Pressure Steam Curing (Cooperative testing; writing recommended practices) Coach
- 523 Insulating and Cellular Concretes (Discussion of Guide for Concretes over 50 pcf) Lido

This Symposium runs concurrently with Wednesday's committee meetings

WEDNESDAY, Nov. 4, 1970

SYMPOSIUM ON THE IMPACT OF COMPUTERS ON THE PRACTICE OF STRUCTURAL ENGINEERING IN CONCRETE by ACI Committee 118

... Starlight Roof

9 a.m.

techniques

Introductory Remarks

V. M. Malhotra, Chairman, ACI Committee 118, senior scientific officer, Construction Materials Section, Mineral Processing Division, Department of Energy, Mines and Resources, Ottawa, Ontario, Canada

Computer Aided Design of Reinforced Concrete Buildings

John M. Biggs, professor; Robert D. Logcher, associate professor, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts; and Harry N. Wenke, senior structural engineer, Portland Cement Association, Skokie, Illinois

A Problem-Oriented-Language for the Design of Reinforced Concrete Structures

R. J. Allwood, Director, GENESYS Centre, University of Technology, Loughborough, Leicestershire, England

Command Language Interface for Automatic Design of Structures in Three Dimensions

Andre A. Palejs, assistant chief structural engineer, Parsons Jurden Corporation, New York, New York

Time Sharing and Remote Job Entry Concepts in the Concrete Industry

A. M. Lount, chief structural engineer, Associated Engineering Services, Ltd., Edmonton, Alberta, Canada

2 p.m.

applications

CHAIRMAN: A. M. Lount, chief structural engineer, Associated Engineering Services, Ltd., Edmonton, Alberta, Canada

On Limit Analysis of Concrete Structures and Linear Programming

A. M. Protsenko and V. V. Vlasov, GOSSTROY (Concrete and Reinforced Concrete Research Institute), Moscow, U.S.S.R.

Interactive Design of Concrete Structures

Stanley D. Lindsey, president; and Jack R. Horner, Stanley D. Lindsey and Associates, Nashville, Tennessee

Computer Applications in Analysis and Concrete Design

William C. Cowan, structural engineer, Bureau of Reclamation, U.S. Department of the Interior, Denver, Colorado

Applications of a Digital Computer to the Design of Concrete Mixes for Large Projects

V. M. Malhotra, senior scientific officer; and P. D. Hibbert, Construction Materials Section, Mineral Processing Division, Department of Energy, Mines and Resources, Ottawa, Ontario, Canada

7 p.m.

graphics and review of analysis and design papers

CHAIRMAN: Milo Ketchum, vice-president, Ketchum, Konkell, Ryan and Hastings, Old Saybrook, Connecticut

Automatic Design and Drafting of Reinforced Concrete Bridge Structures

Stanley W. Woods, bridge development engineer; and Leon J. Schuchardt, bridge computer engineer, Wisconsin Department of Transportation, Madison, Wisconsin

State of the Art on Computer Graphics Applications

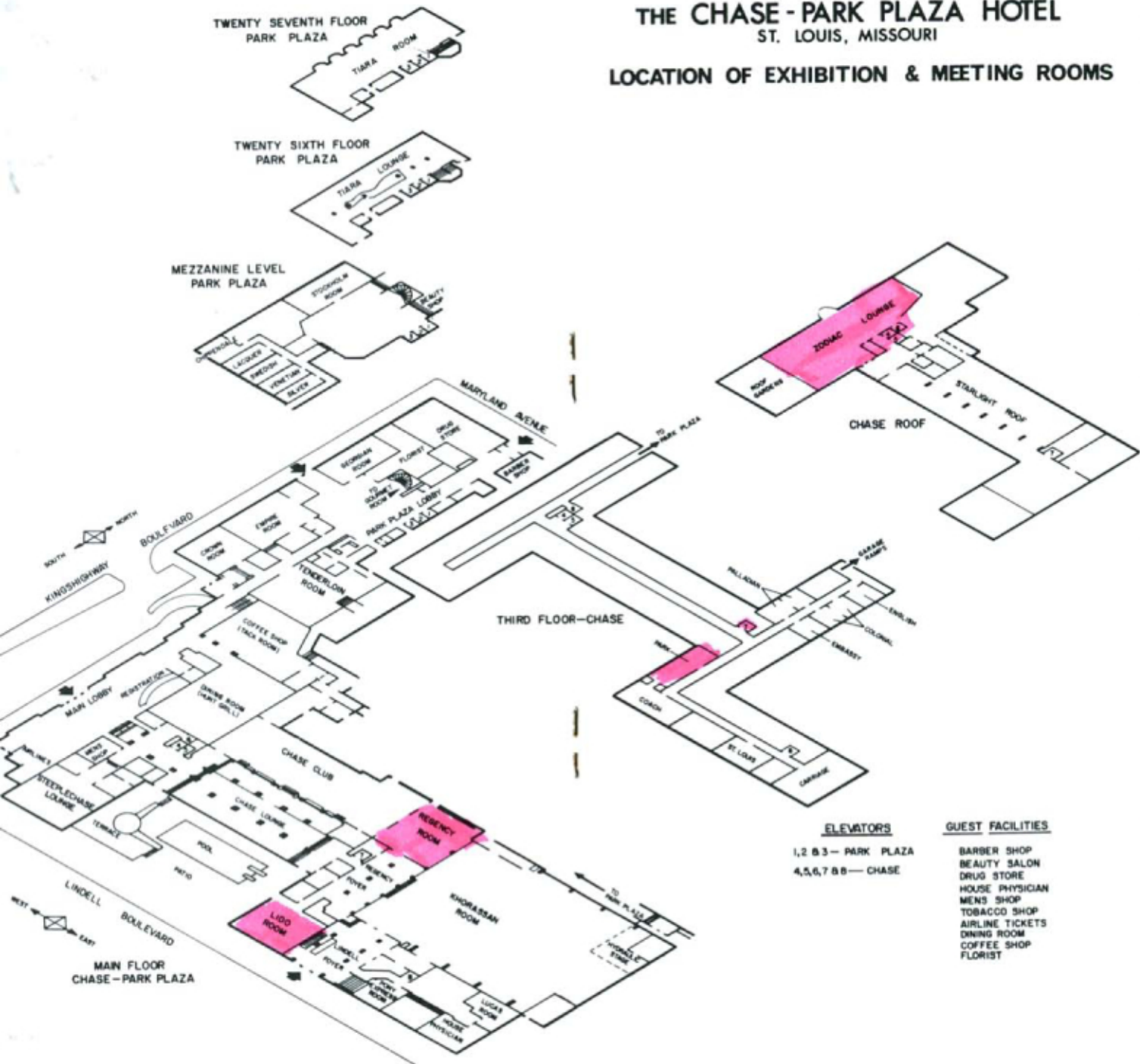
Subcommittee IV, ACI Committee 118, to be presented by John E. Sadler, Subcommittee Chairman, and design engineer, Fling and Eeman, Inc., Columbus, Ohio

General Report on Analysis and Design Papers Submitted for Symposium Volume

V. Ramakrishnan, professor, Department of Civil Engineering, South Dakota School of Mines and Technology, Rapid City, South Dakota

THE CHASE - PARK PLAZA HOTEL ST. LOUIS, MISSOURI

LOCATION OF EXHIBITION & MEETING ROOMS



THURSDAY, Nov. 5, 1970 9 a.m.

**BUILDING CODE
EXPLANATION AND PREVIEW
by ACI Committee 318**

... Khorassan Room

CHAIRMAN: Robert E. Philleo, Chairman, ACI Technical Activities Committee, and chief, Research and Development and Standards Section, Office, Chief of Engineers, Washington, D.C.

Introduction and General Discussion

Edward Cohen, Chairman, Committee 318, and partner, Ammann and Whitney, New York, New York

Explanation of Proposed Code, as Published in February 1970 ACI JOURNAL

George F. Leyh, Secretary, Committee 318, and associate technical director, Concrete Reinforcing Steel Institute, Chicago, Illinois

Discussion of Amendments to Proposed Code, as Published in September 1970 ACI JOURNAL

Ashby Gibbons, Committee 318 Editorial Task Group, and manager, Codes and Specifications, Portland Cement Association, Skokie, Illinois

Discussion of New Amendments Proposed by Committee 318

W. Gordon Plewes, Committee 318 Editorial Task Group, and senior research officer, Division of Building Research, National Research Council of Canada, Ottawa, Ontario, Canada

Commentary, Handbooks, Notation

Samuel J. Henry, Ex Officio Member, Committee 318 Editorial Task Group, and director of engineering, American Concrete Institute, Detroit, Michigan

Question and Answer Period

Chairman Edward Cohen presiding, answers to be supplied by Committee 318 Subcommittee Chairmen:

William C. E. Becker — Formwork, Embedded Pipes, and Construction Joints

W. Burr Bennett — Prestressed Concrete; Computer Coordination

Delmar L. Bloem — Materials; Concrete Quality; Mixing and Placing Concrete

Frank B. Brown — Walls

T. Z. Chastain — Shells and Folded Plate Members

Noel J. Everard — Composite Concrete Flexural Members

Phil M. Ferguson — Development of Reinforcement

William A. Heitmann — General Requirements

Eivind Hognestad — Shear and Torsion

Fritz Kramrisch — Footings

W. Gordon Plewes — Strength Evaluation of Existing Structures

Raymond C. Reese — Analysis and Design; Strength and Serviceability Requirements; Flexure and Axial Loads

Theodore O. Reyhner — Special Provisions for Seismic Design

Paul F. Rice — Details of Reinforcement

Morris Schupack — Precast Concrete

Chester P. Siess — Slab Systems with Multiple Square or Rectangular Panels

John P. Thompson — Definitions

George Winter — Analysis and Design; Strength and Serviceability Requirements; Flexure and Axial Loads

Question cards will be passed out for your convenience.

2:30 p.m.

GENERAL SESSION

... Khorassan Room

CONVENTION CHAIRMAN AND WELCOME TO ST. LOUIS: **A. Carl Weber**, consultant, Laclede Steel Company, St. Louis, Missouri

PRESIDING OFFICER: S. D. Burks, President, ACI, and western regional manager, W. R. Grace and Company, San Leandro, California

Presentation of Code by Committee 318

Floor Discussion

Vote — Whether or Not Code, as Amended, Should Go to Letter Ballot of ACI Membership

NOTE TO ACI MEMBERS

Each ACI member will be given a packet of ballots at registration. It is the only set that will be issued you at this meeting. It is therefore important to protect them from loss and to bring them with you to the General Session at which matters will be presented for vote.

FRIDAY, Nov. 6, 1970

9 a.m.

**RESEARCH ON PLAIN AND
REINFORCED CONCRETE
by ACI Committee 115**

... Khorassan A

CHAIRMAN: J. H. Walker, chairman, ACI Committee 115, and vice-president for research and development, Portland Cement Association, Skokie, Illinois

SECRETARY: Herbert K. Cook, Secretary, ACI Committee 115, and vice-president for research and engineering, Master Builders, Cleveland, Ohio

Ten brief confidential reports will be featured on research in progress. Since this material will not be published until the research programs are completed, here is an ideal opportunity to learn of the latest results from ongoing research programs.

plain concrete

Low Cycle Fatigue Behavior of Plain Concrete Subjected to Compressive Stresses

M. E. Awad, research assistant; and H. K. Hilsdorf, professor of civil engineering, Department of Civil Engineering, University of Illinois, Urbana, Illinois

Effect of Prolonged Saturation of Concrete with Certain Monomers

Adrian Pauw, Robert Lee Tatum professor of engineering; and Louis Hemphill, associate professor engineering, College of Engineering, University of Missouri, Columbia, Missouri

Moisture Movement through Low Density Concrete

F. C. McCormick, associate professor, department of civil engineering, University of Virginia, Charlottesville, Virginia

Time Dependent Behavior of Concrete Under Cyclic Humidity and Sustained Loading

H. R. Alusi, graduate student; V. Bertero, professor of civil engineering; and M. Polivka, professor of civil engineering, University of California, Berkeley, California

A Cold-Formed Mechanical Splicing System for Reinforcing Bars

Adrian Pauw, Robert Lee Tatum professor of engineering; and Charles N. McKinnon, Jr., associate professor of engineering, College of Engineering, University of Missouri, Columbia, Missouri

reinforced concrete

Strength of Prestressed Concrete Pressure Vessels

B. I. Karlsson, research assistant, University of Illinois, Urbana, Illinois

On Stress-Strain Relations for Random Wire

Reinforced Concrete and Load Carrying Capacity

W. F. Chen, assistant professor; and J. L. Carson, senior student, Department of Civil Engineering, Lehigh University, Bethlehem, Pennsylvania

The Reinforced Concrete Beam-Column Connection

E. Burnett, associate professor, Department of Civil Engineering, University of Waterloo, Waterloo, Ontario, Canada

Response of Reinforced Concrete Frames to Dynamic Excitation

P. Gulkan; and S. Otonari, research assistants in civil engineering, University of Illinois, Urbana, Illinois

Ferrocement as a Structural Material at Cryogenic Temperatures

H. F. Shaw, graduate student, Massachusetts Institute of Technology, Cambridge, Massachusetts; and S. P. Shah, associate professor, Department of Materials Engineering, University of Illinois at Chicago Circle, Chicago, Illinois

FRIDAY, Nov. 6, 1970

9 a.m.

CONSTRUCTION SESSION

... Starlight Roof

CHAIRMAN: M. J. Holland, district engineer, Portland Cement Association, St. Louis, Missouri

Dimensional Tolerances in a Tall Concrete Building

Philip W. Birkeland, associate partner, ABAM Engineers, Inc., Tacoma, Washington; and Leonard J. Westhoff, project engineer, Donald M. Drake Company, Portland, Oregon

Use of Time-Lapse Photography to Evaluate Slipform Paving and Concrete Bridge Deck Construction

John A. Havers, professor of construction and engineering management; and O. Olateju, graduate student, School of Civil Engineering, Purdue University, Lafayette, Indiana

Integrating Architecture and Structure:

Galleria Post Oak — Houston

D. Wade Madeley, vice-president; and Elmer Ellisor, owner, Ellisor Engineers, Inc., Houston, Texas

Expansion of Concrete on a Bridge Deck

E. L. Fowler, associate professor of civil engineering, Department of Civil Engineering, University of Alberta; E. F. Holmgren, concrete consultant, Materials Testing Laboratories Ltd., Edmonton, Alberta, Canada

Boundaries of Responsibilities in the Design and Construction Stages

C. Donald Johnson, construction engineer, Pacific Crane and Construction, Inc., Tacoma, Washington; Theodore G. Steimer, senior project coordinator, State University Construction Fund, Albany, New York; and Halvard W. Birkeland, president, ABAM Engineers, Inc., Tacoma, Washington

FRIDAY, Nov. 6, 1970

2 p.m.

DESIGN AND ANALYSIS SESSION

... Khorassan A

CHAIRMAN: E. J. Peltier, president, Sverdrup and Parcel and Associates, Inc., St. Louis, Missouri

Post-Tension Concrete as a Building Material

Peter E. Ellen, managing director, Elstress Pty. Ltd., Hornsby, N.S.W., Australia

Behavior of Continuous Prestressed Beams Composed of Precast Segments Joined by Special Scarf Connections

Alfred G. Bishara, associate professor of civil engineering, Department of Civil Engineering, Ohio State University, Columbus, Ohio

A Simplified Vibration Analysis of Tall Building Frames with Shear Walls

Rudolph Szilard, professor of civil engineering, University of Hawaii, Honolulu, Hawaii

Analysis and Design of a Concrete Plate Supported on Flexible Prestressed Concrete Piles

Joseph F. Thelen, director of computer services; and Charles H. Thornton, associate, Lev Zetlin Associates, Inc., New York, New York

The Effect of Load Placement on Stresses in Rigid Pavement

B. F. McCullough, assistant professor of civil engineering; W. R. Hudson, associate dean of engineering; and Harvey J. Treybig, research engineer; Center for Highway Research, University of Texas at Austin, Austin, Texas

ST. LOUIS CONVENTION COMMITTEE

This convention would not have been possible without the complete cooperation and dedicated work of the members of the St. Louis area concrete and construction industry and the St. Louis area members of the American Concrete Institute.

General Chairman

A. CARL WEBER
Consultant

Laclede Steel Company
St. Louis, Missouri

Co-Chairman

WM. C. E. BECKER

Inspection Tour Committee

MERLIN J. HOLLAND, Chairman
WILLIAM BECKER, JR.
CHARLES ELDER, JR.
ROBERT BAY

Publicity and Arrangements Committee

REAR ADMIRAL EUGENE PELTIER (ret.), Chairman
FRANK LAHM
ROBERT WEST
A. H. LAMACK
JOHN C. THEISS
LARRY J. STALLINGS

Ladies Program Committee

HOWARD COLEMAN, Chairman
EDWIN E. RIPPSTEIN
E. J. CRITZAS
BRUCE KESTER
B. F. FRIBERG

PROGRAM

Ladies Registration and Headquarters

Georgian Room

Monday, November 2

9:00 a.m.—Registration; Hospitality
Registration Fee: \$10.00

Tuesday, November 3

8:30 a.m.—Hospitality
10:00 a.m.—St. Louis Tour
12:15 p.m.—Luncheon, Demenil House, Historic Homes, Climatron, Gateway Arch, Riverfront, Midtown, Clayton Shopping Centers

Wednesday, November 4

8:30 a.m.—Hospitality
11:00 a.m.—Ladies are invited to participate in the Metro-St. Louis Inspection Trip

Thursday, November 5

8:30 a.m.—Hospitality
6:30 p.m.—"Concrete Mixer" Cocktail Party
Khorassan Room

Friday, November 6

9:00 a.m.—Hospitality

Wednesday, November 4

INSPECTION TOUR

\$6.00 per person, includes luncheon

11:00 a.m.—Leave Chase-Park Plaza
Tour Riverfront, Gateway Arch, Cathedral, Spanish Pavilion, Busch Stadium

12:15 p.m.—Luncheon, Stadium Club, Priory Chapel, Planetarium, Ralston Purina Buildings, Monsanto Complex, Washington University

4:00 p.m.—Return to Chase-Park Plaza

The 1970 ACI Convention Committee acknowledges and is grateful for the cooperation and contributions of the following corporations and individuals who made possible the entertainment features and Ladies Program for the meeting.

AHAL Contracting Company, Inc.
J. S. Alberici Construction Company, Inc.
Boyle Building Materials Company
Becker, Becker and Pannell, Inc.
Sidney Bierman
Donald A. Bopp
Earl Bumiller
Neal J. Campbell
Christian Contracting, Inc.
Concrete Transport Mixer Company
Howard Coleman
E. J. Critzas
William T. Daly
H. B. Deal Constructon Company
Drilling Service Company
Bengt F. Friberg
Fruco & Associates
Heinicke & Theiss
Horner & Shifrin, Inc.
William D. Howard, Jr.
Bruce E. Kester
Laclede Steel Company
A. H. Lamock
Lange-Schmidt Company
LeMessurier Associates, Inc.
Fred M. Luth & Sons, Inc.
Marquette Cement Manufacturing Company
Miklas & Associates
Millstone Associates, Inc.
Portland Cement Association
Rear Admiral Eugene J. Peltier
Reinforcing Steel Installation Company
Edwin E. Rippstein
River Cement Company
Sverdrup & Parcel and Associates, Inc.
Larry Stallings
G. L. Tarlton Contracting Company
Trap Rock Material Company
Henry J. Vonder Bruegge
A. Carl Weber
Robert C. West
O. H. Wuelfing

CONVENTION SCHEDULE

- | | | |
|------|---|---|
| 1971 | * | March 6-12, Denver Hilton Hotel, Denver, Colorado. |
| | * | October 30 - November 5, Statler Hilton Hotel, Buffalo, New York. |
| 1972 | * | March 4-10, Statler Hilton Hotel, Dallas, Texas |