AMERICAN CONCRETE INSTITUTE

WELCOME TO Fabulous LAS VEGAS

Annual Convention
March 2-7, 1980

ALADDIN HOTEL
Program
76th Annual Convention
March 2-7, 1980
Las Vegas, Nevada

Registration fees cover attendance at all ACI technical and educational committee meetings, general session, symposia, and the Concrete Mixer. They do not cover the educational seminars on Monday, Tuesday, and Thursday nor the Awards Luncheon on Thursday for which there are separate charges.

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Sustaining Members of the American Concrete Institute

Master Builders
Division of Martin Marietta Corporation
Cleveland, Ohio

Portland Cement Association
Skokie, Illinois

Southwestern Portland Cement Company
Los Angeles, California

Marquette Company
Nashville, Tennessee

Martin Marietta Cement
Bethesda, Maryland

W.R. Grace & Company
Construction Products Division
Cambridge, Massachusetts
SCHEDULE

SUNDAY, MARCH 2
8:30 a.m.-6:00 p.m.
  Administrative and technical committee meetings

MONDAY, MARCH 3
8:30 a.m.-10:00 p.m.
  Administrative, technical, and educational committee meetings
9:00 a.m.-12:00 noon
  The Great Debate: Where Have All the Bubbles Gone?
    (ACI Committee 201)
2:00 p.m.-5:30 p.m.
  Seminar on Portland Cements (ACI Committee E-701)
    (Registration fees: $30 ACI Members; $35 NonMembers; $10 Students)

TUESDAY, MARCH 4
8:30 a.m.-10:00 p.m.
  Administrative, technical, and educational committee meetings
9:00 a.m.-12:00 noon
  Forming and Shoring (ACI Committee 347)
9:00 a.m.-12:00 noon
  Repair of Concrete (ACI Committee 546)
9:30 a.m.-5:00 p.m.
  Seminar: Design of Sanitary Engineering Structures
    (ACI Committees 350 and E-702) (Registration fees: $45
    ACI Members, $55 NonMembers; $10 Students)
2:00 p.m.-5:00 p.m.
  Cast-in-Place Architectural Concrete Can Be Practical
    (ACI Committee 303)
2:00 p.m.-5:00 p.m.
  Mideast Concrete Construction

WEDNESDAY, MARCH 5
8:30 a.m.-6:00 p.m.
  Administrative, technical, and educational committee meetings
9:00 a.m.-12:00 noon
  Dynamic Modeling of Concrete Structures
    (ACI Committee 444)
9:00 a.m.-5:00 p.m.
  Coatings and Waterproofing Barriers for Concrete
    (ACI Committee 515)
9:00 a.m.-5:30 p.m.
  The Verbeck Memorial Symposium on Sulfate Resistance
    (ACI Committee 201)
2:00 p.m.-5:00 p.m.
  Concrete Bridges (ACI Committee 343)

THURSDAY, MARCH 6
8:30 a.m.-9:30 a.m.
  Members' Rap Session
9:30 a.m.-12:00 noon
  General Session and Standards Presentation

12:00 noon-2:30 p.m.
  Awards Luncheon
2:30 p.m.-5:30 p.m.
  Research on Plain and Reinforced Concrete
    (ACI Committee 113)
2:30 p.m.-5:30 p.m.
  Premature Failure in Monolithic Refractory Constructions:
    Preventive and Remedial Treatment (ACI Committee 547)
    (1st of 2 sessions)
2:30 p.m.-6:30 p.m.
  Workshop Session: Major Changes in ACI 214 Document
    (ACI Committee 214)
2:30 p.m.-6:30 p.m.
  Seminar: Shear and Torsion (ACI Committees 445
    and E-702) (Registration fees: $30 ACI Members; $35
    NonMembers; $10 Students)
2:30 p.m.-10:00 p.m.
  Administrative, technical, and educational committee meetings
7:30 p.m.-10:00 p.m.
  Forum: Reevaluation of Recommended Practice for
  Mass Concrete (ACI Committees 114 and 207)

FRIDAY, MARCH 7
9:00 a.m.-12:00 noon
  Inspection-An Aid to Contractors (ACI Committee 311)
9:00 a.m.-12:00 noon
  Residential Concrete (ACI Committee 352)
9:00 a.m.-12:00 noon
  Premature Failure in Monolithic Refractory Constructions:
  Preventive and Remedial Treatment (ACI Committee 547)
    (2nd of 2 sessions)

Special Recognition
for ACI Fellows & Members

A gold lapel pin especially created to recognize ACI Fellows.
The pins are approximately of 1/2" in. size and feature the ACI emblem as well as Fellow indication. Price is $7.25 each.
A lapel pin in blue enamel is also available for members at $7.25 each.
Buy your lapel pin at the registration desk.
The American Concrete Institute is one of the cosponsors of the World of Concrete and this year, for the first time, the ACI Annual Convention is being held concurrently with this exposition. In addition to the ACI meetings, seminars, and forums, the Institute will have an exhibit situated in a prominent location at the World of Concrete show in the Las Vegas Convention Center.

Your ACI registration fee covers free entry to the World of Concrete exposition but it is necessary to have your badge validated at the ACI Badge Verification Booth at the Las Vegas Convention Center.

Shuttle bus service will be provided to facilitate travel between ACI headquarters at the Aladdin Hotel and the World of Concrete exposition in the Las Vegas Convention Center. The bus will be marked "Route A" and will also stop at the MGM, Dunes, and Maxim hotels. The schedule will be at 15-20 minute intervals during these hours:

- **Sunday**
  - 9:00 a.m.-8:00 p.m.

- **Monday through Wednesday**
  - 7:15 a.m.-6:00 p.m.

- **Thursday**
  - 7:15 a.m.-5:00 p.m.

Please note that all seminars held at the exposition have a separate registration fee.

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**SPECIAL EVENTS**

**Publications Display** . . . in Salon C all week. See the latest ACI publications now available. Orders are taken at the ACI Registration Desk, which is also in Salon C.

**Coffee Bar** . . . Monday through Wednesday and Friday morning, 9:00 a.m.-11:00 a.m. in Salon C. Coffee, tea, and Sanka will be available.

**Education at the Convention** . . . Four seminars are being presented, three of which require a separate registration fee. Since enrollment is limited, early registration is advised.

- **Seminar on Portland Cements** . . . Monday, 2:00 p.m.-5:30 p.m., in the Emerald 2. Designed to introduce participants to the various types of Portland cement available and their uses.

- **Creative Training for Committee Chairmen (by invitation only)** . . . Tuesday, 7:00 a.m.-8:30 a.m., in the Oasis room. Sponsored by the Educational Activities Committee and the Technical Activities Committee, the purpose of this session is to challenge the committee chairman to reach a higher level of performance in the administration and operation of his committee. A complimentary continental breakfast will be served at the beginning of this session.

- **Design of Sanitary Engineering Structures** . . . Tuesday, 9:00 a.m.-5:00 p.m., in the Emerald 2. Designed to assist participants in the application of design principles in accordance with ACI Committee Report, "Concrete Sanitary Engineering Structures (ACI 350-R-77)," including recently approved revisions.

- **Shear and Torsion** . . . Thursday, 2:30 p.m.-6:30 p.m., in the Emerald 3. Designed for practicing engineers and engineering students and will focus primarily on the new torsional provisions of the new 318-77 Code, "Building Code Requirements for Reinforced Concrete."

**Concrete Mixer** . . . Wednesday, 6:30 p.m.-8:00 p.m., in the Sapphire Ballroom. This traditional event will be held conveniently within the Aladdin Hotel and we’ve been promised elegant flowing fountains in our decor! Please wear your badge and bring your ticket.

**Breakfast Assembly and Members’ Rap Session** . . . Thursday morning in the Diamond Ballroom. A complimentary continental breakfast will be served from 8:00 a.m.-9:00 a.m. with the Rap Session starting at 8:30 a.m. The Rap Session is your chance to talk informally with ACI Officers and Staff.

**Awards Luncheon** . . . Thursday, 12:00 noon-2:00 p.m., in the Sapphire Room. Good food and drink and a multi-media presentation are combined into a pleasurable format. Get your tickets early, . . . they’re only $10 this year!

**Special Tours and Seminars** . . . have been planned for the women but are not exclusive to them. Check them out in the back of this booklet. There is something of interest there for everyone!

**Sports Program** . . . we’ve got both tennis and golf tournaments this year and they promise to be fun! Information on tickets, etc., is located in the back of this booklet. Get your tickets early and come and play with us!
COMMITTEE MEETINGS

Be sure to check the bulletin board for last minute changes or added meetings.

COMMITTEE

MEETING ROOM

SUNDAY
MARCH 2

8:30 a.m.-12:30 p.m.
- Technical Activities Committee Subgroup Casablanca
- Technical Activities Committee Subgroup Ibis
- Technical Activities Committee Subgroup Rubaiyat

2:00 p.m.-4:00 p.m.
- Technical Activities Committee Casablanca
- Architectural Concrete Genie

4:00 p.m.-6:00 p.m.
- Technical Activities Committee Casablanca
- Erosion of Concrete in Hydraulic Structures Sultan
- Architectural Concrete Genie

MONDAY
MARCH 3

8:30 a.m.-10:30 a.m.
- Technical Activities Committee Casablanca
- Educational Activities Committee Sultan
- Board Committee on Metrification Emerald 3
- Construction Review Committee Mediterranea

211 Task Group on Evaluating Concrete Mixtures Diamond C
301 Specifications for Structural Concrete Emerald 1
302 construction of Concrete Floors Diamond D
307 Subcommittee on Earthquakes Sapphire A
313 Concrete Bins and Silos Ibis
318 Standard Building Code Caravan
346 Cast-in-Place Pipe Diamond A
408 Bond and Development of Reinforcement Sapphire B
437 Strength Evaluation of Existing Concrete Salon A
516 High Pressure Steam Curing Oasis

9:00 a.m.-12:00 noon
THE GREAT DEBATE: WHERE HAVE ALL THE BUBBLES GONE?
Emerald 2

10:30 a.m.-12:30 p.m.
- Technical Activities Committee Casablanca
- Educational Activities Committee Sultan
- Institute and Industry Advancement Committee Salon A
- Construction Review Committee Mediterranea

211 Task Group on Evaluating Concrete Mixtures Diamond C
301 Specifications for Structural Concrete Emerald 1
307 Subcommittee on Wind Sapphire A
308 Curing Concrete Emerald 3
313 Concrete Bins and Silos Ibis
318 Standard Building Code Caravan
346 Cast-in-Place Pipe Diamond A
350 Sanitary Engineering Structures Diamond D
408 Bond and Development of Reinforcement Sapphire B
544 Fiber Reinforced Concrete Oasis
545 Concrete Railroad Ties Rubaiyat

MONDAY (continued)

2:00 p.m.-4:00 p.m.
- Educational Activities Committee Sultan
- Membership Recruitment Committee Diamond C
213 Lightweight Aggregates and Lightweight Aggregate Concrete Emerald 1
223 Expansive Cement Concretes Mediterranea
307 Subcommittee on Ultimate Design Sapphire A
308 Curing Concrete Emerald 3
313 Concrete Bins and Silos Ibis
318 Standard Building Code Caravan
355 Anchorage to Concrete Diamond D
358 Concrete Guideways Diamond A
445 Shear and Torsion Salon A
506 Shotcreting Genie
544 Fiber Reinforced Concrete Oasis
545 Concrete Railroad Ties Rubaiyat
546 Repair of Concrete Sapphire B

2:30 p.m.-5:30 p.m.
SEMINAR ON PORTLAND CEMENTS
Emerald 2

4:00 p.m.-6:00 p.m.
- Educational Activities Committee Sultan
- Membership Recruitment Committee Diamond C
212 Admixtures Emerald 3
313 Concrete Bins and Silos Ibis
318 Standard Building Code Caravan
355 Anchorage to Concrete Diamond D
358 Concrete Guideways Diamond A
435 Deflection of Concrete Building Structures Mediterranea
445 Shear and Torsion Salon A
504 Joint Sealants Sapphire A
506 Shotcreting Genie
544 Fiber Reinforced Concrete Oasis
545 Concrete Railroad Ties Rubaiyat
546 Repair of Concrete Sapphire B
E-701 Materials for Concrete Construction Emerald 1

7:30 p.m.-9:30 p.m.
- Subcommittee 7, Proportioning Mass Concrete Diamond C
222 Corrosion of Metals in Concrete Ibis
225 Hydraulic Cements Oasis
352 Joints and Connections in Monolithic Concrete Structures Genie
355 See Committee 550
362 Parking Structures Sultan
363 High Strength Concrete Casablanca
428 Inelastic Behavior of Reinforced Concrete Structures Salon A
512 See Committee 550
517 Accelerated Curing of Concrete at Atmospheric Pressure Emerald 3
550 Precast Structural Concrete Caravan
551 Tilt-Up Construction Sapphire A
E-701 Materials for Concrete Construction Emerald 1
TUESDAY
MARCH 4 8:30 a.m.—10:30 a.m.
117 Tolerances Caravan
122 Energy Conservation Sapphire A
215 Fatigue of Concrete Casablanca
216 Fire Resistance and Fire Protection of Structures Diamond C
221 Aggregates Ibis
309 Consolidation of Concrete Sultan
315 Details of Concrete Reinforcement Genie
318 Subcommittee 6, Flexure and Axial Loads Diamond A
318 Subcommittee 8, Two-Way Slabs Diamond D
318 Subcommittee 10, Seismic Provisions Emerlad 3
344 Circular Prestressed Concrete Structures Rubaiyat
345 Concrete Bridge Construction and Maintenance Salon A
E-902 Committee on Certification Diamond B

9:00 a.m.—12:00 noon
FORMING AND SHORING
Las Vegas Hilton Hotel, Rooms 7 & 8
REPAIR OF CONCRETE
Las Vegas Hilton Hotel, Rooms 9 & 10
SEMINAR: DESIGN OF SANITARY ENGINEERING STRUCTURES (first session)
Emerald 2
Board of Direction Mediterranea
115 Current Research Ibis
117 Tolerances Caravan
207 Mass Concrete Oasis
211 Subcommittee 1, Proportioning Lightweight Concrete Diamond C
215 Fatigue of Concrete Casablanca
301 Specifications for Structural Concrete Sapphire A
309 Consolidation of Concrete Sultan
315 Details of Concrete Reinforcement Genie
318 Subcommittee 6, Flexure and Axial Loads Diamond A
318 Subcommittee 8, Two-Way Slabs Diamond D
318 Subcommittee 10, Seismic Provisions Emerlad 3
344 Circular Prestressed Concrete Structures Rubaiyat
345 Concrete Bridge Construction and Maintenance Salon A
549 Ferrocement Emerald 1
E-902 Committee on Certification Diamond B

10:30 a.m.—12:30 p.m.
TUESDAY (continued) 2:00 p.m.—4:00 p.m.
344 Circular Prestressed Concrete Structures Rubaiyat
348 Structural Safety Sapphire B
351 Subcommittee 2, Foundations for Equipment and Machinery Casablanca
506 Shotcreting Genie
532 Concrete Masonry Salon A
E-601 Seminars and Workshops Oasis

1:00 p.m.—3:00 p.m.
SEMINAR: DESIGN OF SANITARY ENGINEERING STRUCTURES (second session)
Emerald 2
MIDWEST CONCRETE CONSTRUCTION
Emerald 3
CAST-IN-PLACE ARCHITECTURAL CONCRETE CAN BE PRACTICAL
Emerald 1

4:00 p.m.—6:00 p.m.
— Board of Direction Mediterranea
121 Quality Assurance Systems Diamond B
211 Proportioning Concrete Salon A
224 Cracking Ibis
307 Reinforced Concrete Chimneys Sapphire A
318 Subcommittee 3, Details, Development, and Splices of Reinforcement Diamond A
318 Subcommittee 4, Analysis and Safety Diamond C
318 Subcommittee 9, Prestressed, Precast and Composite Concrete Diamond D
344 Circular Prestressed Concrete Structures Rubaiyat
348 Structural Safety Sapphire B
351 Subcommittee 2, Foundations for Equipment and Machinery Casablanca
351 Subcommittee 3, Static Equipment Foundations Sultan
351 Subcommittee 4, Grouting of Equipment Foundations Caravan
506 Shotcreting Genie
E-601 Seminars and Workshops Oasis

7:30 p.m.—9:30 p.m.
114 Research and Development Sapphire B
118 Use of Computers Oasis
209 Creep and Shrinkage in Concrete Diamond C
211 Proportioning Concrete Salon A
225 Hydraulic Cements Diamond A
304 Measuring, Mixing, Transporting, and Placing Concrete Sapphire A
318 Task Group Liaison with Other Materials Groups Ibis
318 Task Group on Plain Concrete Rubaiyat
318 Task Group on Microlite Casablanca
336 Combined Footings and Pier Foundations Diamond D
351 Subcommittee 3, Static Equipment Foundations Sultan
351 Subcommittee 4, Grouting of Equipment Foundations Caravan
439 Steel Reinforcement Casablanca
444 Models of Concrete Structures Diamond B
515 Coatings for Concrete Emerald 1
E-801 Student Concrete Projects Mediterranea
WEDNESDAY  
MARCH 5  
8:30 a.m.-10:30 a.m.  
— Chapter Activities Committee  
— Standards Board  
214 Evaluation of Results of Tests Used to Determine the Strength of Concrete  
318 Subcommittee 2, Concrete Quality and Construction Requirements  
318 Subcommittee 5, Serviceability  
349 Working Group on Materials  
349 Working Group on Embedments  
349 Working Group on Impact and Impulse  
349 Working Group on Design  
351 Foundations for Equipment and Machinery  
360 Design of Slabs on Grade  
547 Refractory Concrete  
E-702 Designing Concrete Structures  

9:00 a.m.-12:00 noon  
DYNAMIC MODELING OF CONCRETE STRUCTURES  
EMERALD 2  

COATINGS AND WATERPROOFING BARRIERS FOR CONCRETE (first session)  
EMERALD 1  
9:00 a.m.-12:30 p.m.  
THE VERBECK MEMORIAL SYMPOSIUM ON SULFATE RESISTANCE (first session)  
EMERALD 3  
10:30 a.m.-12:30 p.m.  
— Planning Committee  
214 Evaluation of Results of Tests Used to Determine the Strength of Concrete  
305 Hot Weather Concreting  
318 Subcommittee 2, Concrete Quality and Construction Requirements  
318 Subcommittee 5, Serviceability  
349 Working Group on Materials  
349 Working Group on Embedments  
349 Working Group on Impact and Impulse  
349 Working Group on Design  
351 Foundations for Equipment and Machinery  
360 Design of Slabs on Grade  
523 Insulating and Cellular Concretes  
547 Refractory Concrete  
E-702 Designing Concrete Structures  

2:00 p.m.-4:00 p.m.  
— Convention Committee  
— Construction Liaison Committee  
— Planning Committee  
306 Cold Weather Concreting  
318 Subcommittee 1, General  
318 Subcommittee 7, Shear and Torsion  
318 Subcommittee 12, Performance Code Concept  
349 Working Group on Materials  
349 Working Group on Embedments  
349 Working Group on Impact and Impulse  

THURSDAY  
MARCH 6  
8:00 a.m.-9:00 a.m.  
BREAKFAST ASSEMBLY  
DIAMOND D  
8:30 a.m.-9:30 a.m.  
ACI MEMBERS’ RAP SESSION  
DIAMOND D  
8:30 a.m.-10:30 a.m.  
Strength Design Handbook  
MEDITERRANEAN  
441 Reinforced Concrete Columns  
CARAVAN  
9:30 a.m.-11:30 a.m.  
GENERAL SESSION  
DIAMOND D  
10:30 a.m.-12:30 p.m.  
— Ad Hoc Committee on Publications  
349 Strength Design Handbook  
441 Reinforced Concrete Columns  
11:00 a.m.-12:00 noon  
STANDARDS PRESENTATION  
DIAMOND D  
12:00 noon-2:30 p.m.  
AWARDS LUNCHEON  
SAPPHIRE  
2:30 p.m.-4:30 p.m.  
— New Board of Direction  
311 Inspection of Concrete  
318 Standard Building Code  
325 Concrete Pavements  
347 Formwork for Concrete  
442 Response of Buildings to Lateral Forces  
503 Adhesives for Concrete  
CARAVAN  
SAPPHIRE  
SAPPHIRE  
SAPPHIRE  
RUBAIYAT
THURSDAY (continued)

2:30 p.m.-5:30 p.m.
RESEARCH ON PLAIN AND REINFORCED CONCRETE
Oasis

PREMATURE FAILURE IN MONOLITHIC REFRATORY
CONSTRUCTIONS: PREVENTIVE AND REMEDIAL
TREATMENT (first session)
Emerald 1

2:30 p.m.-6:30 p.m.
WORKSHOP: MAJOR CHANGES IN ACI 214
DOCUMENT
Emerald 2

SEMINAR: SHEAR AND TORSION
Emerald 3

4:30 p.m.-6:30 p.m.
~ New Board of Direction
Mediterranea
311 Inspection of Concrete
Ibis
318 Standard Building Code
Caravan
347 Formwork for Concrete
Casa Blanca
442 Response of Buildings to Lateral Forces
Salon A
503 Adhesives for Concrete
Rubaiyat
533 Precast Panels
Sultan

7:30 p.m.-9:30 p.m.
503 Adhesives for Concrete
Rubaiyat
E-703 Concrete Construction Practices
Ibis

7:30 p.m.-10:00 p.m.
FORUM: REEVALUATION OF RECOMMENDED PRACTICE
FOR MASS CONCRETE
Emerald 1

FRIDAY

MARCH 7
8:30 a.m.-10:30 a.m.
201 Durability of Concrete
Caravan
343 Concrete Bridge Design
Oasis
346 Cast-in-Place Pipe
Sultan

9:00 a.m.-12:00 noon
INSPECTION—AN AID TO CONTRACTORS
Emerald 2
RESIDENTIAL CONCRETE
Emerald 3
PREMATURE FAILURE IN MONOLITHIC REFRATORY
CONSTRUCTIONS: PREVENTIVE AND REMEDIAL
TREATMENT (second session)
Emerald 1

10:30 a.m.-12:30 p.m.
343 Concrete Bridge Design
Oasis
346 Cast-in-Place Pipe
Sultan

2:00 p.m.-6:00 p.m.
343 Concrete Bridge Design
Oasis

TECHNICAL ACTIVITIES COMMITTEE

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*American Concrete Institute
P.O. Box 19150
Detroit, Michigan 48219
THE GREAT DEBATE: WHERE HAVE ALL THE BUBBLES GONE?
sponsored by ACI Committee 201


Air-Entraining Chemicals, Their Use and Application
Paul Kajeer, director, Concrete Materials Research Department, Portland Cement Association, Skokie, Illinois

Obtaining and Maintaining Prescribed Air Content Levels
Richard D. Gaynor, vice president of engineering and research, National Ready Mixed Concrete Association/National Sand and Gravel Association, Silver Spring, Maryland

Specifications for Air-Entrainment
Richard C. Mielenz, consultant, geologist and petrographer, Gates Mills, Ohio

Placing and Finishing Air-Entrained Concrete
Ralph Vincil, manager of technical activities, Materials Service Corporation, Chicago, Illinois

Performance, Serviceability, and Durability of Air-Entrained Concrete
William A. Cordon, consultant, Logan, Utah

Devil's Advocate
Bryant Mather, acting chief, Structures Laboratory, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi

Roving Panelist
Howard Newlon, Jr., associate head, Virginia Highway and Transportation Research Council, Charlottesville, Virginia

SEMINAR ON PORTLAND CEMENTS
sponsored by ACI Committee E-701

This seminar will introduce participants to the various types of portland cements available. The manufacturing process will be described, and the properties, specifications, and tests of the different types of cements will be covered in detail.

The seminar is aimed at educating the concrete technician but it will be of interest to ready-mixed producers, contractors, and others who have to select or specify materials for concrete.

Special registration fees:
ACI Member $30, NonMember $35, Student $10

Moderator: J. Francis Young, professor, Department of Civil Engineering, University of Illinois at Urbana-Champaign, Urbana, Illinois

Thomas Pollock, technical services engineer, Hercules Cement Company, Stockertown, Pennsylvania

FREEDOM OF CHOICE: A review of the various kinds of portland cement and their specifications.
Frank J. Lahm, vice-president, technical service, River Cement Company, St. Louis, Missouri

BACK TO BASICS: An understanding of the properties of portland cement.
Milton Wills, head, Concrete Section, Cement Laboratory, Martin Marietta Laboratories, Baltimore, Maryland

CHECKS AND BALANCES: The requirements and interpretations of standard tests.
Richard W. Kriner, manager, technical services, Lehigh Portland Cement Company, Allentown, Pennsylvania

QUESTIONS AND ANSWERS
FORMING AND SHORING SYMPOSIUM
sponsored by ACI Committee 347

Session Chairman: N.J. Gardner, professor of civil engineering, University of Ottawa, Ottawa, Ontario, Canada

Pressure of Concrete Against Formwork
N.J. Gardner, session chairman

Recent Developments in Wood Engineering
Robert G. Sexsmith, design engineer, Buckland and Taylor, Ltd, Consulting Engineers, Vancouver, British Columbia, Canada

Modular Forming Systems
Ronald M. Merritt, concrete forming field product manager, Patent Scaffolding Company, Kent, Ohio

Design Considerations in Shoring and Reshoring Multistory Buildings
M.K. Hurd, engineer-writer, consultant, Farmington, Michigan

REPAIR OF CONCRETE
sponsored by ACI Committee 546

Session Chairman: Myles A. Murray, director of technical services, Protex Industries Inc., Denver, Colorado

Evaluation of Repair Techniques for Concrete
Myles A. Murray, session chairman

Evaluation for Repair of Structural Concrete
Andrew Scanlon, senior structural engineer, E.A.B. Salse, manager, Structural Evaluation Section; W. Gene Corley, division director, Engineering Development Division; and R.A. Muenow, associate, Construction Technology Laboratories, Portland Cement Association, Skokie, Illinois

Epoxy Injection for Structural and Non-Structural Repairs
John Bukovatz, concrete research engineer; and F. Wayne Stratton, maintenance and materials development engineer, Research and Materials Laboratory, Kansas Department of Transportation, Topeka, Kansas

Patching Concrete—Partial Depth and Full Depth
Joseph F. Lamond, acting chief, Concrete Section, Engineering Division Civil Works, Office, Chief of Engineers, Washington, D.C.

Concrete Repair with Polymers
David W. Fowler, professor, Architectural Engineering Department, University of Texas, Austin, Texas

Repair of Concrete—Design vs. Construction
TUESDAY, MARCH 4
9:00 a.m.-5:00 p.m.  
Emerald 2

SEMINAR: DESIGN OF SANITARY ENGINEERING STRUCTURES
sponsored by ACI Committees 350 and E-702

The objective of this seminar is to assist participants in the application of design principles in accordance with ACI Committee Report, “Concrete Sanitary Engineering Structures (ACI 350R-77),” including recently approved revisions. Each participant will receive a copy of this report.

Special registration fees:
ACI Member $45, NonMember $55, Student $10

Moderator: Timothy J. Fowler, chairman, ACI Committee 350, and senior engineering fellow, Monsanto Company, St. Louis, Missouri

Concrete for Sanitary Engineering Structures
Carl R. Wilder, P.E., consultant, Escondido, California

Structural Design of Reinforced Concrete Sanitary Structures—Past, Present and Future
Anand B. Gogate, P.E., Elgar Brown Consulting Engineers, Worthington, Ohio

Application of Strength Design Methods to Sanitary Structures
Frank Klein, partner, Klein and Hoffman, Inc., Chicago, Illinois

Structural Details for Sanitary Engineering Structures
Roger H. Wood, vice-president, Camp, Dresser & McKee, Boston, Massachusetts

Constructibility for Profitability (Maximize Quality-Minimize Cost)
W. Robert Little, director of research and development, J.W. Bateson Company, Inc., Dallas, Texas

Circular Prestressed Concrete Tanks
James P. Archibald, vice-president, Natgun Corporation, Dallas, Texas

Question and Answer Period by Panelists

TUESDAY, MARCH 4
2:00 p.m.-5:00 p.m.  
Emerald 1

CAST-IN-PLACE ARCHITECTURAL CONCRETE CAN BE PRACTICAL
sponsored by ACI Committee 303

Moderator: David O. Lower, chief engineer, Southwestern Portland Cement Company, Fairborn, Ohio

Introduction to Practical Architectural Concrete
Eugene H. Roeke, Jr., vice-president, Beers Construction Company, Atlanta, Georgia

Consolidation
Gary D. Plehn, field engineer, Portland Cement Association, Cincinnati, Ohio

Mix Design and Placement
Allen R. Kenny, vice-president, The Concrete Associates, Dallas, Texas

Formwork and Liners

Surface Treatment
Joseph A. Dobrowolski, civil engineer-concrete consultant, Altadena, California

Contractor Profitability
Charles Wittmack, vice-president, Newmann Brothers Construction, Des Moines, Iowa
MIDEAST CONCRETE CONSTRUCTION

Session Chairman: Joseph A. Dobrowolski, civil engineer and concrete consultant, Altadena, California

Construction Aggregates for Ready-Mixed Concrete in Saudi Arabia
Reid H. Brown, general manager of marketing and material control, Saudi Arabian Vulcan Limited, Khobar, Saudi Arabia

Concrete Aggregates in the Middle East
Charles M. Scholer, professor, School of Civil Engineering, Purdue University, West Lafayette, Indiana

Concrete Construction in Jordan—As They Know It

Selection of Appropriate Concrete Systems in the Middle East
John Zils, associate partner and structural engineer, Skidmore, Owings and Merrill, Chicago, Illinois

Concrete Construction Operations Problems in the Middle East
Paul W. Burns, project manager, Gilbane Building Company, Providence, Rhode Island

Israeli Airbase Construction in the Negev
Robert K. Hughes, assistant director of military programs, Office of the Chief of Engineers, Washington, D.C.

DYNAMIC MODELING OF CONCRETE STRUCTURES

sponsored by ACI Committee 444

Session Chairman: Harry G. Harris, associate professor of civil engineering, Drexel University, Philadelphia, Pennsylvania

Similitude Requirements for Dynamic Models
H. Krawinkler, associate professor; and P.D. Moncarz, research assistant, Department of Civil Engineering, Stanford University, Stanford, California

Contribution of Model Testing to the Analysis of the Dynamic Behavior of Concrete Structures
G. Oberti, professor; A. Castoldi; and M. Casirati, Experimental Institute for Model and Structures, Bergamo, Italy

Seismic Experiments with Arch Dam Models
Ray W. Clough, professor of civil engineering; and Akira Niwa, assistant research engineer, Earthquake Engineering Research Center, University of California, Berkeley, California

Static and Dynamic Loading Tests on Two Model Three-Dimensional Reinforced Concrete Frames
R. Park, professor and head; A.J. Carr, senior lecturer; and G. Wilby, post-graduate student, Department of Civil Engineering, University of Canterbury, Canterbury, New Zealand

Scale Modeling of Buried Reinforced Concrete Structures Under Air Blast Loading
James K. Gran and John R. Bruce, research engineers; and James D. Colton, assistant director, Engineering Mechanics Department, Poulter Laboratory, SRI International, Menlo Park, California

Studies of the Response of Reinforced Concrete Structures to Short Duration Dynamic Loads
I.L. Davies, Taylor Woodrow Construction Ltd., Southall, Middlesex, United Kingdom

Seismic Modeling of Long-Span Bridges
W.G. Godden, Department of Civil Engineering, University of California, Berkeley, California
SYMPOSIUM ON COATINGS AND WATER-PROOFING BARRIERS FOR CONCRETE
sponsored by ACI Committee 515

Session Chairman: Byron I. Zolin, chairman, ACI Committee 515, and senior consultant, E.I. DuPont de Nemours & Company, Wilmington, Delaware

Session I

The Systems Concept to Describe Barriers
Byron I. Zolin, session chairman

Surface Preparation on Concrete for Barrier Systems
Robert W. Gaul, president, Adhesives Engineering Company, San Carlos, California

Protective Barriers for Concrete
Byron I. Zolin, session chairman; and Albert L. Hendricks, technical director, Wisconsin Protective Coatings Corporation, Green Bay, Wisconsin

Application Problems and Inspection of Protective Barriers
Kenneth A. Heffner, president, Electro Chemical Engineering and Manufacturing Company, Emmaus, Pennsylvania

Decorative Coatings for Concrete
James E. Kubanick, market development representative, Mobay Chemical Corporation, Pittsburgh, Pennsylvania

THE VERBECK MEMORIAL SYMPOSIUM ON SULFATE RESISTANCE
sponsored by ACI Committee 201

Session Chairman: Paul Kieger, director, Concrete Materials Research Department, Portland Cement Association, Skokie, Illinois

Session I

Introduction and Dedication to George Verbeck
Paul Kieger, session chairman

The Mechanisms of Sulfate Reactions
William L. Dolch, professor of engineering materials, Purdue University, West Lafayette, Indiana

Long Time Studies and Field Experiences with Sulfate Attack—U.S. Water and Power Resources Service
Edward M. Harboe, senior concrete engineer, U.S. Water and Power Resources Service, Denver, Colorado

Long Time Study of Concrete Durability in Sulfate Soils
David Stark, principal research petrographer, Portland Cement Association, Skokie, Illinois

Blended Cement Systems
Paul Brown, National Bureau of Standards, Washington, D.C.

A Spec Odyssey—Sulfate Resistant Concrete for the 1980's
Edwin R. Dunstan, Jr., civil engineer, U.S. Water and Power Resources Service, Denver Colorado
SYMPOSIUM ON COATINGS AND WATERPROOFING BARRIERS FOR CONCRETE

sponsored by ACI Committee 515

Session Chairman: Jere Rose, secretary, ACI Committee 515, and technical service engineer, Atlantic Cement Company, Stamford, Connecticut

Session II

Membrane Waterproofing—Design Criteria and Application Technique
Neil F. Thomas, executive vice-president, Gates Engineering Company, Inc., Wilmington, Delaware

Communication Between Waterproofing Contractor and Owner
Charles L. Bechtel, president, Harold J. Becker Company, Inc., Dayton, Ohio

How to Avoid Problems During Installation of Waterproofing Barriers
Dorothy M. Lawrence, technical director, Laurent Corporation, Twinsburg, Ohio; and Charles O. Pratt, Koppers Company, Inc., Monroeville, Pennsylvania

Panel Discussion
Speakers will remain to answer questions on barrier problems.

THE VERBECK MEMORIAL SYMPOSIUM ON SULFATE RESISTANCE

sponsored by ACI Committee 201

Session Chairman: Nathan R. Greening, director of research, Ideal Cement Company, Fort Collins, Colorado

Session II

Current Research at the Waterways Experiment Station: Development of a Reliable Test Method; ASTM C01.29 Interlaboratory Cooperative Program
Katharine Mather, chief, Engineering Sciences Division, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi

I Wonder Where the Sulfate Went?
Nathan R. Greening, session chairman

Group Discussions
Nathan R. Greening, session chairman

Reports from Group Leaders

Characterization of the Circumstances and Potential for Sulfate Attack
Howard Newlon, Jr., associate head, Virginia Highway Research Council, Charlottesville, Virginia

Physical-Chemical Characterization of Sulfate Resistance
James S. Pierce, head, Concrete Section, Concrete and Structural Branch, U.S. Water and Power Resources Service, Denver, Colorado

The Role of Blended Systems
Tarun R. Naik, assistant professor of structural engineering, Department of Civil Engineering, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin

Summation and Closure
Thomas J. Reading, concrete consultant, Omaha, Nebraska
WEDNESDAY, MARCH 5
2:00 p.m.-5:00 p.m.

CONCRETE BRIDGES
sponsored by ACI Committee 343

Session Chairman: Neil M. Hawkins, professor and chairman, Department of Civil Engineering, University of Washington, Seattle, Washington

Denny Creek Bridge—Staged Construction with Movable Scaffold
George T. Markich, bridge design engineer, Washington State Department of Transportation, Olympia, Washington

Design of the I-205 Columbia River Bridge
R. Jack Allen, vice president; and Fred P. Blanchard, project manager, Transportation Facilities, Sverdrup & Parcel and Associates, Bellevue, Washington

Parrots Ferry Bridge

The Intercity Bridge—A Half-Mile Long Concrete Girder
Arvid Grant, engineer, Arvid Grant and Associates, Inc., Olympia, Washington

THURSDAY, MARCH 6
9:30 a.m.-11:00 a.m.

GENERAL SESSION

Presidential Address
John F. McLaughlin, President, ACI, and assistant dean of engineering, Purdue University, West Lafayette, Indiana

Construction Failure Investigation of Natural Draft Cooling Tower at Willow Island, West Virginia

Presentation of the Delmar L. Bloom Distinguished Service Awards
Recipients: James T. DiKeou  
John R. Dine  
Elvind Hogestad

ACI Business*

*The presentation and discussion of Standards will be held immediately following the conclusion of the Business Session.

THURSDAY, MARCH 6
8:00 a.m.-9:30 a.m.

BREAKFAST ASSEMBLY AND RAP SESSION

A complimentary continental breakfast will be served from 8:00 a.m. to 9:00 a.m. with the Rap Session starting at 8:30 a.m.

WHAT DO YOU WANT TO KNOW
ABOUT ACI?

JOHN F. MCLAUGHLIN, PRESIDENT
CHARLES J. PANKOW, VICE-PRESIDENT
&
GEORGE F. LEYH, EXECUTIVE DIRECTOR

Invite YOU to Ask Them.

11:00 a.m.-12:00 noon

STANDARDS PRESENTATION

Moderator: John F. McLaughlin, President, ACI, and assistant dean of engineering, Purdue University, West Lafayette, Indiana

Presentation of Proposed Standard, “Details and Detailing of Concrete Reinforcement”
William C. Black, chairman, ACI Committee 315, and chief engineer, Reinforcing Bars, Piling and Construction Specialty Sales, Bethlehem Steel Corporation, Bethlehem, Pennsylvania

Presentation of Proposed Revisions to “Building Code Requirements for Reinforced Concrete (ACI 318-77)”
Chester P. Siess, chairman, ACI Committee 318, and professor emeritus of civil engineering, University of Illinois, Urbana, Illinois
BOARD OF DIRECTION

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*American Concrete Institute
P.O. Box 19150
Detroit, Michigan 48219

AWARDS LUNCHEON
Thursday, March 6
12:00 noon
Sapphire Room

Come meet the awardees and new ACI officers. Have fun, enjoy a good lunch, and watch the multi-media awards presentation show.

Honorary Memberships
Edward Cohen
W.C. Hansen
Robert L'Hermite

Charles S. Whitney Award:
Phil M. Ferguson Structural Engineering Laboratory of the University of Texas at Austin

Henry C. Turner Award:
William M. Avery

Roger Corbette Constructor Award:
Gerald M. Miller

Arthur R. Anderson Award:
Paul Kleger

Joe W. Kelly Award:
Edward L. Kawala

Cedric Wilson Award:
Truman R. Jones, Jr.

Wason Medal for Most Meritorious Paper:
Robert E. Tobin

Wason Medal for Materials Research:
H.S. Leu
T.W. Reichard

Raymond C. Reese Structural Award:
Anders Losberg

Construction Practice Award:
H.W. Chung

Henry L. Kennedy Award:
Samuel J. Henry

Chapter Activities Committee Award
Everette Osgood

Recognition of Retiring Officers

Introduction of New Officers

Presentation of Memento to Retiring President
THURSDAY, MARCH 6
2:30 p.m.-5:30 p.m.   Oasis

RESEARCH ON PLAIN AND REINFORCED CONCRETE
sponsored by ACI Committee 115

(Brief and confidential reports)

Session Chairman: James T. Dikeou, chairman, ACI Committee 115, and president, Dikeou Associates, Englewood, Colorado

Secretary: Charles F. Scholer, secretary, ACI Committee 115, and professor, Department of Civil Engineering, Purdue University, West Lafayette, Indiana

Concrete with High-Range Water-Reducing Admixtures for Rehabilitation of Bridge Decks and Highway Pavements
V. Ramakrishnan and W.V. Coyle, professors of civil engineering, South Dakota School of Mines and Technology, Rapid City, South Dakota; and Thomas J. Pasko, chief of paving and structural materials group, U.S. Department of Transportation, Washington, D.C.

Cracking Resistance of Concrete Reinforced with Expanded Metal
S.T. Mandelort, vice-president, Metalex Corporation, Libertyville, Illinois

Air Leakage Characteristics in Concrete
Sami H. Rizkalla, professor of civil engineering, University of Manitoba, Winnipeg, Manitoba, Canada

Assessment of E1 for Biaxially Loaded Reinforced Concrete Columns
M.T. Shoraka, P & H Engineering Development Company, Los Angeles, California; and W.F. Chan, professor of structural engineering, School of Civil Engineering, Purdue University, West Lafayette, Indiana

Field Measurements of Lateral Pressures on Concrete Wall Forms
Bruce M. Douglas, professor; Robert Hayes, graduate assistant; Mahi Saidi, assistant professor, University of Nevada, Reno, Nevada; and Grove Holcomb, president, Holcomb Construction Company, Inc., Reno, Nevada

A.J. BOASE AWARD OF THE REINFORCED CONCRETE RESEARCH COUNCIL

Alfred L. Parme has been selected by the Reinforced Concrete Research Council to receive the 1980 Arthur J. Boase Award "...in recognition of his accomplishments over more than forty years that have advanced the art and science of structural design and construction in concrete."

This award is presented immediately prior to the midpoint break at the session.

Mechanical Properties of Internally Confined Concrete
S. Somayaji and M. Hur, Department of Civil Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania

Vibration Testing of an Epoxy-Repaired Four-Story
Onder Kusiu, project engineer; C.K. Chen, R.E. Scholl, vice-president; and John A. Blume, president, URS/Blume & Associates, San Francisco, California

Properties of an Unusual Pozzolan Made From Clay
Vladimir Paulon, M. Saad, and W.P. deAndrade, Sao Paulo, S.P., Brazil

Low Tuned Reinforced Concrete Turbine Generator
Mohammed M. Ettouny, senior civil engineer; and Peter Kaska, civil engineer, Burns & Roe, Inc., Woodbury, New York

3L-Concrete—A Hydrophobic Lightweight Aggregate Concrete of Extremely Low Density Used as Structural Concrete Material
Anders Losberg, professor, Division of Concrete Structures, Chalmers University of Technology, Goteborg, Sweden
PREMATURE FAILURE IN MONOLITHIC REFRACTORY CONSTRUCTIONS: PREVENTIVE AND REMEDIAL TREATMENT
sponsored by ACI Committee 547

Session Chairman: David R. Lankard, chairman, ACI Committee 547, and Lankard Materials Laboratory, Inc., Columbus, Ohio

Session 1
Opening Remarks
David R. Lankard, session chairman

Recent Advances in Refractory Concrete Technology
Walter Bakker, Electric Power Research Institute, Palo Alto, California

Monolithic Refractory Design Requirements
Seymour A. Bortz, senior engineering advisor, Materials Technology Division, IIT Research Institute, Chicago, Illinois

Use of Finite Element Analyses to Define Critical Property Measurements Relative to the Design of Refractory Concrete Structures
Joseph Masaryk, Kaiser Refractories, Pleasanton, California

Advances in Nondestructive Evaluation Methods for Inspection of Refractory Concretes
William Ellingson, staff scientist, Argonne National Laboratory, Argonne, Illinois

Rational Design with Monolithic Refractories
Timothy Fowler, Monsanto Company, St. Louis, Missouri

General Discussion and Questions

WORKSHOP—MAJOR CHANGES IN ACI 214 DOCUMENT
sponsored by ACI Committee 214

Session Chairman: V.M. Malhotra, chairman, ACI Committee 214, and head, Construction Materials Section, CANMET, Department of Energy, Mines and Resources, Ottawa, Ontario, Canada

An Introduction to the Workshop
V.M. Malhotra, session chairman

Random Sampling Made Easy
Edward A. Abdun-Nur, consulting engineer, Denver, Colorado

The Rationale for Change to Standard Deviation Concept and How to Deal with Small Number of Test Results
Robert E. Phillee, chief, Structures Branch, Engineering Division, Civil Works, Office, Chief of Engineers, Washington, D.C.

How ACI 214 Should be Used by a Ready-mixed Concrete Producer
Richard E. Gaynor, director of engineering, National Ready Mixed Concrete Association/National Sand & Gravel Association, Silver Spring, Maryland

Detailed Step by Step Treatment of Examples Given in ACI 214
Tarun R. Naik, assistant professor of structural engineering, Department of Civil Engineering, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin

Detailed Step by Step Treatment for the Preparation of Control Charts
James P. Schwartz, Jr., manager, Quality Control Department, Jimco, Inc., Metairie, Louisiana
SEMINAR: SHEAR AND TORSION
sponsored by ACI Committees 445 and E-702
This seminar is designed for practicing engineers and engineering students and will focus primarily on the new torsional provisions of the new 318-77 Code, "Building Code Requirements for Reinforced Concrete." The background and application of the new provisions will be explained. Included in the list of topics to be covered are: Design for torsion in reinforced and prestressed concrete; and the effects of torsion in combination with bending and shear.

Special registration fees:
ACI Member $30, NonMember $35, Student $10

Moderator: William J. Wiithelm, dean, College of Engineering, Wichita State University, Wichita, Kansas

Background Philosophy of the ACI Method
J. Warwaruk, professor, Department of Civil Engineering, University of Alberta, Edmonton, Alberta, Canada

Designing for Combined Shear and Torsion
K.S. Rajagopalan, vice-president, Mullen and Powell, Inc., Dallas, Texas

Design for Equilibrium and Compatibility Torsion in Indeterminate Frames
Thomas T.C. Hsu, professor, Department of Civil Engineering, University of Houston, Houston, Texas

FORUM: REEVALUATION OF RECOMMENDED PRACTICE FOR MASS CONCRETE
sponsored by ACI Committees 114 and 207

Chairman: Robert L. Henry, chairman, ACI Committee 114, and chief engineer, Texas Testing Laboratories, Dallas, Texas

Moderator: Donald L. Houghton, chairman, ACI Committee 207, and head, Concrete Materials Design and Control, North Pacific Division, U.S. Army Corps of Engineers, Portland, Oregon

The objective of this forum is to bring concrete materials engineers, designers, suppliers, contractors, and owners together to consider current recommended practices for the use of mass concrete.

Introduction Donald L. Houghton, session moderator

Concrete Production, Transportation, Placing, and Joint Cleanup
a. Slump Requirement and Loss in Slump for Mass Concrete
b. Vibration and Revibration of Mass Concrete
c. Omission of Mortar from Construction Lift Joints

Lewis H. Tuthill, concrete engineering consultant, Sacramento, California

Construction Tolerances
a. Practical Allowable Difference in Tolerances for Exposed Versus Unexposed Mass Concrete
b. Use of Architectural Treatment and Practical Tolerance Limits in Mass Concrete

Woodrow L. Burgess, director of engineering services, Master Builders, Division of Martin Marietta, Cleveland, Ohio

Mix Design Considerations
a. Proposed Revision of 211.1.77 for Design of Mass Concrete
b. Practical Maximum Percentage of Pozzolan Replacement of Portland Cement in Mass Concrete


Roller Compaction Requires Reevaluation
a. Use of Roller Compacted Concrete in Permanent Massive Structures in Lieu of Conventional Concrete
b. Bond at Horizontal Lift Joints Constructed with Roller Compacted Concrete

Robert W. Cannon, principal civil engineer, Tennessee Valley Authority, Knoxville, Tennessee

Field Problems as They Relate to Design Parameters
a. Strength Versus Control of Internal Heat Requirements for Mass Concrete
b. Cavitation and Abrasion Resistance of Mass Concrete
c. Use of Small Size Aggregate Concrete in Mass Concrete

James A. Rhodes, chief, Concrete Section, Civil Works Directorate, Office, Chief of Engineers, Washington, D.C.

The forum will consist of short presentations and then the session will be open for discussion with speakers remaining as a panel.
FRIDAY, MARCH 7
9:00 a.m.-12:00 noon

Emerald 2

INSPECTION—AN AID TO CONTRACTORS
sponsored by the ACI Committee 311

Session Chairman: Bertold E. Weinberg, chairman, ACI Committee 311, and project manager, Special Projects, Dormitory Authority of the State of New York, Elsmere, New York

Control Charts Catch Changes, Can Cut Costs
Oswin Keiter, Jr., district materials engineer, Omaha District, U.S. Army Corps of Engineers, Omaha, Nebraska

Accelerated Strength Testing: Is it a Solution to a Contractor’s Dilemma?
V.M. Malhotra, head, Construction Materials Section, CANMET, Department of Energy, Mines and Resources, Ottawa, Ontario, Canada

So What Is New in Testing and Inspection?

Inspection Doesn’t Cost—It Pays
James Hanagan, chief engineer, Ernest F. Donley’s Sons, Inc., Cleveland, Ohio

FRIDAY, MARCH 7
9:00 a.m.-12:00 noon

Emerald 3

SYMPOSIUM ON RESIDENTIAL CONCRETE
sponsored by ACI Committee 332

Session Chairman: J.W. Meusel, chairman, ACI Committee 332, and technical director, Atlantic Cement Company, Inc., Ravenna, New York

Cellular Concrete in Residential Construction
Leo M. Legatski, professor emeritus of civil engineering, University of Michigan, Ann Arbor, Michigan

A Method for Insulating Concrete Walls
Richard R. Vandegriff, president, Vantage Construction Company, Noblesville, Indiana

Concrete Opportunities in Earth Sheltered Construction
Mario J. Catani, director, Buildings Division, Portland Cement Association, Skokie, Illinois

Underground Housing
Willard S. Norton, board chairman, Norton and Schmidt Consulting Engineers, Inc., Kansas City, Missouri

Minimizing Cracking in Slabs on Grade
Leo P. Nicholson, manager, Marketing and Technical Services, General Portland Inc., Los Angeles, California
FRIDAY, MARCH 7
9:00 a.m.-12:00 noon

PREMATURE FAILURE IN MONOLITHIC REFRACTORY CONSTRUCTIONS: PREVENTIVE AND REMEDIAL TREATMENT
sponsored by ACI Committee 547

Session Chairman: David R. Lankard, chairman, ACI Committee 547, and Lankard Materials Laboratory, Inc., Columbus, Ohio

Session II
Opening Remarks
David R. Lankard, session chairman

Analysis and Solution of Refractory Concrete Failure in Sinter Plant Mist Separator
Richard L. Shultz, senior research engineer, Armco, Inc., Middletown, Ohio

How to Make Quality Refractories Fail
Wesley C. Lueking, manager of product planning, A.P. Green Refractories Company, Mexico, Missouri

Performance of Refractory Concretes in Aluminum Melting and Holding Operations
Richard G. LaBar, manager, Ingot Casting Division, Alcoa Laboratories, Aluminum Company of America, Alcoa Center, Pennsylvania

Refractory Problems and Repair Techniques in Refining and Petrochemical Operations
Michael S. Crowley, material specialist, Standard Oil of Indiana, Naperville, Illinois

Premature Failure with Monolithic Refractories: The Manufacturers' Viewpoint

Repairing Monolithic Refractory Failures
I. Leon Glassgold, president, Masonry Resurfacing and Construction Company, Inc., Baltimore, Maryland; and Richard C. Olson, A.P. Green Refractories Company, Mexico, Missouri

General Discussion and Questions
Closing Remarks
David R. Lankard, session chairman

SATURDAY, MARCH 8
11:00 a.m.

Tennis Tournament: Tropicana Hotel Racquet Club
Every player will receive a can of tennis balls and there will be trophies to win! Four indoor courts have been reserved so tickets are limited. Reserve a space NOW by using the form on the back page. Some tickets may be available early at the women's registration desk in the Palm room. Cost includes court time, the professional referee, and trophies.
Cost: $12.00

Golf Tournament: Dunes Hotel Golf Course
Each player will receive 3 golf balls and there will be trophies. We've scheduled it late so you can sleep in but—tickets are limited so reserve NOW by using form on back page. Some tickets may be available early at the women's registration desk in the Palm room. Fees include greens fees, the two-person golf carts, and trophies. Clubs and shoes are available for rent, such rental is not included in the ticket price.
Cost: $40.00

NOTE: These sports events will be cancelled if attendance guarantees are not met. All monies for such cancelled events will be refunded.
SUNDAY, MARCH 2, 1980
1:00 p.m.-5:00 p.m.
Registration

MONDAY, MARCH 3
8:30 a.m.
Coffee and rolls
Registration
2:00 p.m.-3:00 p.m.
Seminar: "How to Gamble" by Sam Landy
Here's your chance to learn how it's done at the gaming tables.
No charge

TUESDAY, MARCH 4
9:30 a.m.-12:30 p.m.
Liberace Museum and Tour
Las Vegas is "home" to many show biz personalities. In this tour we will point out some areas where they reside and drive by some of their homes. Guides are thoroughly familiar with the area and will give you as much information as possible. You will enter two selected, outstanding homes of local residents. Then on to the new Liberace Museum to see the world's rarest piano collection, classic and customized automobiles, classic and bejeweled million dollar wardrobe. Cost: $12.50

2:30 p.m.-3:45 p.m.
Financial Self-Defense, Especially for Women:
"Every woman needs to mind her own business!" This seminar provides information on effective ways to manage your money. This is a revealing program for today's modern woman who has to cope with money management in the grocery store, credit in the department store and investments in the stock market.
Our lecturer, Donna Dahl, is a personnel director at one of Las Vegas' banks and is on the staff at the University of Nevada, Las Vegas, and Clark County Community College. She brings the big world of finance down to an everyday level.
Cost: $6.00

WEDNESDAY, MARCH 5
9:00 a.m.-3:00 p.m.
Hoover Dam Deluxe Tour:
This special "Land and Lake" tour includes a ground tour to the top of Hoover Dam, source of power for the southwestern United States, plus an excursion on Lake Mead aboard the Cruiser "Echo". A buffet luncheon is included.
Cost: $20.00 (includes $1.00 government fee)

6:30 p.m.-8:00 p.m.
"Concrete Mixer" social hour in the Sapphire Ballroom of the Aladdin Hotel. This traditional affair will be spectacular this year, complete with flowing fountains. Be sure to wear your badge.

THURSDAY, MARCH 6
9:30 a.m.-10:45 a.m.
Las Vegas Showgirl:
You will be entertained with a glimpse of the "behind the scenes life" of a Las Vegas Showgirl. She dazzles the audience with her appearance and her magnificent costume complete with headdress and then proceeds to detail her life on and off the stage. She is a most articulate and hilarious speaker.
Kathy Saxe is a retired showgirl who relives her career with her lectures. She has appeared for almost ten years before thousands of conventioners telling her story. She was your typical "girl-next-door", born in Chicago of Greek heritage, who found herself in Las Vegas, auditioned and became a glamorous queen of the stage. She is a college-trained speaker.
No charge.
(continued)
12:00 noon-2:30 p.m.

**Awards Luncheon**
Come meet the awardees and new ACI officers. Have fun, enjoy a good lunch, and watch the awards presentation show.

Cost: $10.00

NOTE: If you don't buy these tickets in advance you must purchase them at the regular registration desk, not in the hospitality room.

FRIDAY, MARCH 7
8:30 a.m.-12:00 noon

Coffee and rolls

NOTE: Tour operator reserves the right to cancel any offering for which attendance guarantees are not met. All monies for such cancelled events will be refunded.

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ACI
FUTURE
CONVENTIONS

1980 Fall Convention
September 21-26
Condado Beach/La Concha Hotels
San Juan, Puerto Rico

1981 Annual Convention
February 8-13
with World of Concrete
Hyatt Regency Dallas
Dallas, Texas

1981 Fall Convention
September 20-25
Quebec Hilton Hotel
Quebec, Quebec, Canada