

PHILADELPHIA

1976

AMERICAN
CONCRETE
INSTITUTE

ANNUAL
CONVENTION



MARCH 28-APRIL 2
BENJAMIN FRANKLIN HOTEL



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

PROGRAM

72nd ANNUAL CONVENTION

March 28 - April 2, 1976
Philadelphia, Pennsylvania

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

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SCHEDULE

SUNDAY, MARCH 28

8:30 a.m. — 6:00 p.m.
Technical and administrative committee meetings

MONDAY, MARCH 29

8:30 a.m. — 10:00 p.m.
Administrative and technical committee meetings

TUESDAY, MARCH 30

8:30 a.m. — 10:00 p.m.
Administrative and technical meetings
9:00 a.m. — 5:00 p.m.
EAC Concrete Construction Education Conference
1:00 p.m. — 5:00 p.m.
Exhibits Open
2:00 p.m. — 6:00 p.m.
Chapter Forum

WEDNESDAY, MARCH 31

8:00 a.m.
General Session
10:00 a.m. — 5:00 p.m.
Exhibits Open
2:00 p.m. — 5:00 p.m.
ACI-CEB-PCI-FIP Symposium (1st of 3 sessions)
2:00 p.m. — 5:00 p.m.
Tolerances (Committee 117)
2:00 p.m. — 6:00 p.m.
Seminar on Formwork Design (registration fee: \$20.00)
2:00 p.m. — 6:00 p.m.
Technical and educational committee meetings
6:30 p.m. — 8:00 p.m.
Concrete Mixer

THURSDAY, APRIL 1

8:30 a.m. — 10:00 p.m.
Technical and educational committee meetings
9:00 a.m. — 12:00 noon
ACI-CEB-PCI-FIP Symposium (2nd of 3 sessions)
9:00 a.m. — 12:00 noon
Progress in Concrete Construction
9:00 a.m. — 5:30 p.m.
Seminar on Aggregates for Concrete (registration fee:
\$40.00 Members; \$60.00 Non-members)
10:00 a.m. — 5:00 p.m.
Exhibits Open
12:15 p.m.
Awards Luncheon
2:30 p.m. — 5:30 p.m.
ACI-CEB-PCI-FIP Symposium (3rd of 3 sessions)
2:30 p.m. — 5:30 p.m.
Living with Our Available Materials in the Energy
Shortage

FRIDAY, APRIL 2

8:30 a.m. — 12:30 p.m.
Technical and educational committee meetings
9:00 a.m. — 12:00 noon
Sealing Joints in Concrete Pavements (Committees 325
and 504)
9:00 a.m. — 12:00 noon
Research on Plain and Reinforced Concrete (Committee
115)

SPECIAL EVENTS

Publications Display...in the Franklin Suite all week. See the latest ACI publications now available. Orders are taken at the Registration Desk which is also in the Franklin Suite.

Photo Display...all week in the Franklin Suite. Take a good look at the innovative structures built by the concrete industry!

Education at the Convention...One half-day workshop and two full-day seminars are being presented. The all-day seminar on Tuesday is included in the convention registration fee; the half-day workshop on Wednesday and the all-day seminar on Thursday will each require a separate registration fee as noted below. Since enrollment is limited, early registration is advised.

Concrete Construction Education Conference...9:00 a.m. - 5:00 p.m., Tuesday, March 30, in the Garden Terrace. A number of organizations have been invited to discuss their programs as they relate to concrete construction education. The objective is to identify problems and solutions in construction education. . . especially those programs conducted by industry associations and professional and technical societies. There is no registration fee for this conference.

Formwork Design Workshop...2:00 p.m. - 6:00 p.m., Wednesday, March 31, in the Ballroom Foyer. Designers, engineers and constructors concerned with the safety of formwork for concrete construction will benefit from attendance at this program. Registration fee is \$20.00. Bona fide full-time students may register for \$2.00

Aggregates for Concrete Seminar...9:00 a.m. - 5:30 p.m., Thursday, April 1, in the Ballroom Foyer. Users in evaluating properties of aggregates in terms of their influence on the properties of concrete will be aided by attending this program. Registration fee is \$40.00 for ACI Members; \$60.00 for Non-members, \$5.00 for bona fide full-time students.

Educational-Technical Exhibits...Tuesday through Thursday in the Franklin Suite. See the latest tools and services available to the concrete industry.

Hospitality Suite...for Exhibitors only. Monday, March 29, 6:30 p.m. - 7:30 p.m.

Chapter Forum...2:00 p.m. - 6:00 p.m., Tuesday, March 30, in Betsy Ross A. An informal roundtable on chapter activities and programs. The emphasis will be placed on educational programs sponsored by chapters, and the problems and benefits inherent in such programs.

"Concrete Mixer"...Wednesday, March 31, 6:30 p.m. - 8:00 p.m. This traditional affair will be held at the University Museum at the University of Pennsylvania campus. The Local Convention Committee has rented buses for our use to get there and back. Departure times are 6:00 p.m. and 6:45 p.m. Please use your green ticket for boarding buses and wear your ACI badge for identification.

Awards Luncheon and New Officer Installation...Thursday, 12:15 p.m., in the Garden Terrace. Good food and drink and multi-media presentations are combined into a pleasing format. Get your ticket early!

Breakfasts (by invitation only):

Tuesday, March 30, 7:00 a.m.

Breakfast for newly appointed chairmen of technical committees. Philadelphia room.

Wednesday, March 31, 7:00 a.m.

Breakfast for program participants in the General Session, session on Tolerances, and the first session of the ACI-CEB-PCI-FIP Symposium. Philadelphia room.

Thursday, April 1, 7:00 a.m.

Breakfast for program participants in both remaining sessions of the ACI-CEB-PCI-FIP Symposium, the session on Progress in Concrete Construction, and the session on Living With Our Available Materials in the Energy Shortage. Betsy Ross suite.

Friday, April 2, 7:00 a.m.

Breakfast for program participants in the session on Sealing Joints in Concrete Pavements and the session on Research on Plain and Reinforced Concrete. Betsy Ross suite.

Special tours...have been planned by the Local Convention Committee. Be sure to check the Family Members' program in the back of this booklet for tours of interest to you. There will be at least one and probably several. Don't miss them!

Construction Tour...Friday, April 2, to the Philadelphia Electric Company Nuclear Power Station in Limerick, Pennsylvania. The buses will leave the Benjamin Franklin Hotel promptly at 8:30 a.m. and return at 1:30 p.m.

CONCRETE CANOE RACE...this special event has been planned for Saturday, April 3, starting at 10:00 a.m., at the Schuylkill River racing course in Fairmount Park. Twenty-three schools are competing and it promises to be an exciting race. Don't miss it!

AWARDS LUNCHEON
THURSDAY, APRIL 1, 12:15 P.M.
Garden Terrace

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

PROGRAM

| | |
|---|---|
| Honorary Memberships: | Paul W. Abeles Samuel D. Burks Eivind Hognestad W. Gordon Plewes Emilio Rosenbleuth John P. Thompson |
| Delmar L. Bloem Distinguished Service Awards: | Joseph A. Dobrowolski John M. Hanson T. E. Northrup |
| Henry C. Turner Medal: | Phil M. Ferguson |
| Alfred E. Lindau Plaque: | Hubert Rüsck |
| Henry L. Kennedy Award: | Thomas J. Reading |
| Charles S. Whitney Medal: | The Research and Development Division of the Cement and Concrete Association |
| Arthur R. Anderson Medal: | T. C. Powers |
| Roger H. Corbetta Concrete Construction Award: | Phillip R. Jackson |
| Joe W. Kelly Award: | Mete A. Sozen |
| Construction Practice Award: | William Rohde Kenneth D. Wheeler Jesse Schwartz Raymond C. Heun Charles ShimeI Joseph R. Wolf |
| Wason Medal for Most Meritorious Paper: | Milton H. Wills, Jr. |
| Wason Medal for Materials Research: | Colin D. Johnston Ronald A. Coleman |
| Raymond C. Reese Structural Research Award: | Denis Mitchell Michael P. Collins |
| Chapter Activities Committee Award: | Gajanan M. Sabnis |
| Recognition of Retiring Officers | |
| Report of Tellers | |
| Introduction of New Officers | |
| New President's Address | |
| Presentation of Memento to Retiring President | |

COMMITTEE MEETINGS

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

COMMITTEE

Meeting Room

Sunday

| | |
|---|-------------------------------|
| MARCH 28 | 8:30 a.m. - 12:30 p.m. |
| 318 Subcommittee G , Flexure and Axial Loads | Valley Forge A |
| 318 Subcommittee I , Slab Systems | Valley Forge B |
| 318 Subcommittee N , Earthquake Resistant Design Requirements | Jefferson A |
| | 2:00 p.m. - 6:00 p.m. |
| ----- Technical Activities Committee | Lafayette |
| 318 Subcommittee B , Concrete Quality, Mixing, and Placement | Jefferson A |
| 318 Subcommittee E , Analysis and Strength Requirements | Valley Forge B |
| 318 Subcommittee L , Prestressed Concrete Pipes, and Construction Joints | Jefferson B |
| | 7:30 p.m. - 9:30 p.m. |
| ----- Planning Committee | Independence |
| 318 Subcommittee A , General Building Code | William Penn |
| 318 Subcommittee C , Formwork, Embedded Pipes, and Construction Joints | Valley Forge A |
| 318 Subcommittee J , Footings | Valley Forge B |
| 318 Subcommittee M , Shells and Folded Plates | Jefferson A |
| 318 Task Group on Composite Construction | Jefferson B |
| 318 Task Group on Plain Concrete | Poor Richard B |
| 318 Task Group on Progressive Collapse | Poor Richard A |

Monday

| | |
|--|-------------------------------|
| MARCH 29 | 8:30 a.m. - 10:30 a.m. |
| ----- Technical Activities Committee | Lafayette |
| ----- Educational Activities Committee | Independence |
| ----- Chapter Activities Committee | William Penn |
| 313 Concrete Bins and Silos | Valley Forge B |
| 318 Subcommittee D , Details and Development of Reinforcement | Jefferson B |
| 318 Subcommittee F , Serviceability | Ballroom Foyer |
| 318 Subcommittee H , Shear and Torsion | Poor Richard A |
| 318 Subcommittee K , Precast and Composite Concrete | Room 438 |
| 318 Task Group on Code Simplification | Room 422 |
| 318 Task Group on Systems Building | Jefferson A |
| 340 Strength Design Handbook | Room 439 |
| 344 Circular Prestressed Concrete Structures | Room 423 |
| 351 Foundations for Equipment and Machinery | Betsy Ross B |
| 443 Concrete Bridge Design | Poor Richard B |
| 531 Masonry Structures | Betsy Ross A |
| 533 Precast Panels | Philadelphia |
| 546 Repair of Concrete | Garden Terrace |
| 547 Refractory Concrete | Valley Forge A |

10:30 a.m. - 12:30 p.m.

| | | |
|-------|--|----------------|
| ----- | Technical Activities Committee | Lafayette |
| ----- | Educational Activities Committee | Independence |
| ----- | Chapter Activities Committee | William Penn |
| ----- | Board Committee on International Activities | Garden Terrace |
| 313 | Concrete Bins and Silos | Valley Forge B |
| 318 | Subcommittee D , Details and Development of Reinforcement | Jefferson B |
| 318 | Subcommittee F , Serviceability | Ballroom Foyer |
| 318 | Subcommittee H , Shear and Torsion | Poor Richard A |
| 318 | Subcommittee K , Precast and Composite Concrete | Room 438 |
| 318 | Task Group on Code Simplification | Room 422 |
| 318 | Task Group on Systems Building | Jefferson A |
| 340 | Strength Design Handbook | Room 439 |
| 344 | Circular Prestressed Concrete Structures | Room 423 |
| 351 | Foundations for Equipment and Machinery | Betsy Ross B |
| 443 | Concrete Bridge Design | Poor Richard B |
| 531 | Masonry Structures | Betsy Ross A |
| 533 | Precast Panels | Philadelphia |
| 547 | Refractory Concrete | Valley Forge A |

12:30 p.m. - 2:00 p.m.

| | | |
|-------|---------------------------------------|------------------|
| ----- | Information Services Committee | Contact R. Wilde |
|-------|---------------------------------------|------------------|

2:00 p.m. - 4:00 p.m.

| | | |
|-------|--|----------------|
| ----- | Educational Activities Committee | Independence |
| ----- | General Activities Committee | William Penn |
| 222 | Corrosion of Metals in Concrete | Poor Richard B |
| 301 | Specifications for Structural Concrete | Room 422 |
| 302 | Concrete Floor Finishes | Room 438 |
| 303 | Architectural Concrete | Garden Terrace |
| 313 | Concrete Bins and Silos | Valley Forge B |
| 318 | Standard Building Code | Ballroom Foyer |
| 344 | Circular Prestressed Concrete Structures | Room 423 |
| 351 | Foundations for Equipment and Machinery | Betsy Ross B |
| 426 | Shear and Diagonal Tension | Philadelphia |
| 439 | Steel Reinforcement | Jefferson A |
| 442 | Response of Buildings to Lateral Forces | Lafayette |
| 516 | High Pressure Steam Curing | Poor Richard A |
| 531 | Masonry Structures | Betsy Ross A |
| 547 | Refractory Concrete | Valley Forge A |

4:00 p.m. - 6:00 p.m.

| | | |
|-------|---|----------------|
| ----- | Educational Activities Committee | Independence |
| ----- | General Activities Committee | William Penn |
| 114 | Research and Development | Poor Richard A |
| 301 | Specifications for Structural Concrete | Room 422 |
| 302 | Concrete Floor Finishes | Room 438 |
| 304 | Measuring, Mixing, Transporting, and Placing Concrete | Garden Terrace |
| 313 | Concrete Bins and Silos | Valley Forge B |
| 318 | Standard Building Code | Ballroom Foyer |
| 332 | Residential Concrete Work | Poor Richard B |
| 334 | Concrete Shell Design and Construction | Betsy Ross B |
| 344 | Circular Prestressed Concrete Structures | Room 423 |
| 426 | Shear and Diagonal Tension | Philadelphia |
| 439 | Steel Reinforcement | Jefferson A |
| 442 | Response of Buildings to Lateral Forces | Lafayette |
| 531 | Masonry Structures | Betsy Ross A |
| 547 | Refractory Concrete | Valley Forge A |

7:30 p.m. - 9:30 p.m.

| | | |
|-----|---|----------------|
| 211 | Subcommittee 7 , Proportioning Mass Concrete | Lafayette |
| 437 | Strength Evaluation of Existing Concrete Structures | Valley Forge A |
| 441 | Reinforced Concrete Columns | Independence |
| 531 | Masonry Structures | Betsy Ross A |

Tuesday

MARCH 30

8:30 a.m. - 10:30 a.m.

| | | |
|-------|---|----------------|
| ----- | Board of Direction | William Penn |
| 201 | Durability of Concrete | Betsy Ross B |
| 209 | Subcommittee II , (Creep and Shrinkage in Concrete) | Robert Morris |
| 209 | Subcommittee III , (Creep and Shrinkage in Concrete) | Room 422 |
| 211 | Proportioning Concrete Mixes | Lafayette |
| 212 | Admixtures | Poor Richard A |
| 313 | Concrete Bins and Silos | Valley Forge B |
| 315 | Detailing Reinforced Concrete Structures | Jefferson B |
| 318 | Standard Building Code | Ballroom Foyer |
| 358 | Concrete Guideways | Room 423 |
| 423 | Prestressed Concrete | Jefferson A |
| 438 | Torsion | Room 438 |
| 512 | Precast Structural Concrete | Independence |
| 515 | Coatings for Concrete | Poor Richard B |
| 531 | Masonry Structures | Betsy Ross A |
| 547 | Refractory Concrete | Valley Forge A |

9:00 a.m. - 5:00 p.m.

CONCRETE CONSTRUCTION EDUCATION

CONFERENCE (Sponsored by ACI Educational Activities Committee) See Page 14

Garden Terrace

10:30 a.m. - 12:30 p.m.

| | | |
|-------|---|----------------|
| ----- | Board of Direction | William Penn |
| 201 | Durability of Concrete | Betsy Ross B |
| 207 | Mass Concrete | Poor Richard A |
| 211 | Proportioning Concrete Mixes | Lafayette |
| 213 | Lightweight Aggregates and Lightweight Aggregate Concrete | Room 422 |
| 214 | Evaluation of Results of Tests Used to Determine the Strength of Concrete | Betsy Ross A |
| 216 | Fire Resistance and Fire Protection of Structures | Robert Morris |
| 313 | Concrete Bins and Silos | Valley Forge B |
| 315 | Detailing Reinforced Concrete Structures | Jefferson B |
| 318 | Standard Building Code | Ballroom Foyer |
| 423 | Prestressed Concrete | Jefferson A |
| 435 | Deflection of Concrete Building Structures | Independence |
| 438 | Torsion | Room 438 |
| 515 | Coatings for Concrete | Poor Richard B |
| 547 | Refractory Concrete | Valley Forge A |

12:30 p.m. - 2:00 p.m.

| | | |
|-------|---|------------------|
| ----- | Institute and Industry Advancement Committee | Contact R. Wilde |
|-------|---|------------------|

1:00 p.m. - 5:00 p.m.

EXHIBITS OPEN See Page 27

Franklin Suite

2:00 p.m. - 4:00 p.m.

| | | |
|-------|---|----------------|
| ----- | Board of Direction | William Penn |
| ----- | Specifications Review Committee | Robert Morris |
| 104 | Notation | Valley Forge B |
| 117 | Tolerances | Poor Richard B |
| 224 | Cracking | Independence |
| 306 | Cold Weather Concreting | Poor Richard A |
| 309 | Consolidation of Concrete | Lafayette |
| 318 | Standard Building Code | Ballroom Foyer |
| 348 | Structural Safety | Jefferson A |
| 352 | Joins and Connections in Monolithic Concrete Structures | Room 423 |
| 506 | Shotcreting | Valley Forge A |
| 517 | Accelerated Curing of Concrete at Atmospheric Pressure | Betsy Ross B |
| 544 | Fiber Reinforced Concrete | Jefferson B |

2:00 p.m. - 6:00 p.m.

CHAPTER FORUM See Page 4
Betsy Ross A
4:00 p.m. - 6:00 p.m.

| | | |
|-------|---|----------------|
| ----- | Board of Direction | William Penn |
| ----- | Specifications Review Committee | Robert Morris |
| 118 | Use of Computers | Poor Richard B |
| 224 | Cracking | Independence |
| 306 | Cold Weather Concreting | Poor Richard A |
| 309 | Consolidation of Concrete | Lafayette |
| 318 | Standard Building Code | Ballroom Foyer |
| 348 | Structural Safety | Jefferson A |
| 350 | Sanitary Engineering Structures | Valley Forge B |
| 352 | Joins and Connections in Monolithic Concrete Structures | Room 423 |
| 506 | Shotcreting | Valley Forge A |
| 517 | Accelerated Curing of Concrete at Atmospheric Pressure | Betsy Ross B |
| 544 | Fiber Reinforced Concrete | Jefferson B |

6:00 p.m. - 10:00 p.m.
7:30 p.m. - 9:30 p.m.

| | | |
|-----|--|----------------|
| 356 | Industrialized Concrete Construction | Philadelphia |
| 118 | Use of Computers | Poor Richard B |
| 223 | Expansive Cement Concrete | Jefferson A |
| 318 | Standard Building Code | Ballroom Foyer |
| 350 | Sanitary Engineering Structures | Valley Forge B |
| 355 | Anchorage to Concrete | Independence |
| 408 | Bond and Development of Reinforcement | Valley Forge A |
| 428 | Limit Design | Lafayette |
| 517 | Accelerated Curing of Concrete at Atmospheric Pressure | Betsy Ross B |
| 544 | Fiber Reinforced Concrete | Jefferson B |

Wednesday

MARCH 31

8:00 a.m.

GENERAL SESSION See Page 18 Ballroom

10:00 a.m. - 5:00 p.m.

EXHIBITS OPEN See Page 27 Franklin Suite

12:30 p.m. - 2:00 p.m.

103 Monographs Contact R. Wilde

2:00 p.m. - 4:00 p.m.

118 Use of Computers Poor Richard B

209 Creep and Shrinkage in Concrete Lafayette

311 Inspection of Concrete Jefferson A

325 Concrete Pavements Valley Forge B

345 Concrete Bridge Construction and Maintenance Robert Morris

349 Concrete Nuclear Structures (Working Group) Jefferson B

349 Concrete Nuclear Structures (Working Group) William Penn

349 Concrete Nuclear Structures (Working Group) Poor Richard A

548 Polymers in Concrete Valley Forge A

549 Ferrocement Philadelphia

E-601 Seminars and Workshops Independence

2:00 p.m. - 5:00 p.m.

TOLERANCES See Page 19 Betsy Ross Suite

ACI-CEB-PCI-FIP SYMPOSIUM (Sponsored by American Concrete Institute; Comité Européen du Béton; Prestressed Concrete Institute; and Fédération Internationale de la Précontrainte) (first session) Garden Terrace

See Page 19

2:00 p.m. - 6:00 p.m.

FORMWORK DESIGN SEMINAR (Sponsored by ACI Committee E-702) See Page 20 Ballroom Foyer

4:00 p.m. - 6:00 p.m.

118 Use of Computers Poor Richard B

215 Fatigue of Concrete Philadelphia

311 Inspection of Concrete Jefferson A

325 Concrete Pavements Valley Forge B

345 Concrete Bridge Construction and Maintenance Robert Morris

349 Concrete Nuclear Structures (Working Group) Jefferson B

349 Concrete Nuclear Structures (Working Group) William Penn

349 Concrete Nuclear Structures (Working Group) Poor Richard A

356 Industrialized Concrete Construction Lafayette

523 Insulating and Cellular Concretes Valley Forge A

E-701 Materials for Concrete Construction Independence

Thursday

APRIL 1

- 8:30 a.m. - 10:30 a.m.
- Standards Board Robert Morris
120 History of Concrete Lafayette
349 Concrete Nuclear Structures (Working Independence
Group)
349 Concrete Nuclear Structures (Working Valley Forge A
Group)
349 Concrete Nuclear Structures (Working Valley Forge B
Group) Jefferson B
421 Design of Reinforced Concrete Slabs Poor Richard B
503 Adhesives for Concrete Jefferson A
504 Joint Sealants

9:00 a.m. - 12:00 noon

ACI-CEB-PCI-FIP SYMPOSIUM (second session)

See Page 21 Ballroom

PROGRESS IN CONCRETE CONSTRUCTION

See Page 22 Betsy Ross Suite

SEMINAR ON AGGREGATES FOR CONCRETE

(Sponsored by ACI Committee E-701) (first session)

See Page 22 Ballroom Foyer

10:00 a.m. - 5:00 p.m.

EXHIBITS OPEN See Page 27 Franklin Suite

10:30 a.m. - 12:30 p.m.

- 349 Concrete Nuclear Structures (Working Independence
Group)
349 Concrete Nuclear Structures (Working Valley Forge A
Group)
349 Concrete Nuclear Structures (Working Valley Forge B
Group) Jefferson B
421 Design of Reinforced Concrete Slabs Jefferson A
444 Models of Concrete Structures Poor Richard B
503 Adhesives for Concrete Poor Richard A
E-702 Designing Concrete Structures

12:15 p.m. - 2:30 p.m.

AWARDS LUNCHEON See Page 6 Garden Terrace

1:30 p.m. - 5:30 p.m.

SEMINAR ON AGGREGATES FOR CONCRETE

(second session) See Page 22 Ballroom Foyer

2:30 p.m. - 4:30 p.m.

- New Board of Direction William Penn
----- Convention Committee Lafayette
303 Architectural Concrete Robert Morris
305 Hot Weather Concreting Philadelphia
307 Reinforced Concrete Chimneys Jefferson B
349 Concrete Nuclear Structures (Working Independence
Group)
349 Concrete Nuclear Structures (Working Valley Forge A
Group)
349 Concrete Nuclear Structures (Working Valley Forge B
Group) Poor Richard B
360 Design of Slabs on Grade Poor Richard A
E-703 Concrete Construction Practices Jefferson A
E-801 Student Concrete Projects

2:30 p.m. - 5:30 p.m.

ACI-CEB-PCI-FIP SYMPOSIUM (third session)

See Page 23 Ballroom

LIVING WITH OUR AVAILABLE MATERIALS IN THE ENERGY SHORTAGE

See Page 24 Betsy Ross Suite

4:30 p.m. - 6:30 p.m.

- New Board of Direction William Penn
----- Convention Committee Lafayette
120 History of Concrete Poor Richard A
305 Hot Weather Concreting Philadelphia
307 Reinforced Concrete Chimneys Jefferson B
349 Concrete Nuclear Structures (Working Independence
Group)
349 Concrete Nuclear Structures (Working Valley Forge A
Group)
349 Concrete Nuclear Structures (Working Valley Forge B
Group) Poor Richard B
360 Design of Slabs on Grade Jefferson A
E-801 Student Concrete Projects
- 7:30 p.m. - 9:30 p.m.
- 308 Curing Concrete Independence
357 Offshore Concrete Structures Garden Terrace
360 Design of Slabs on Grade Poor Richard B

Friday

APRIL 2

8:30 a.m. - 12:30 p.m.

- 426 Shear and Diagonal Tension Philadelphia

9:00 a.m. - 12:00 noon

SEALING JOINTS IN CONCRETE PAVEMENTS

(Sponsored by ACI Committees 325 and 504)

See Page 25 Ballroom

RESEARCH ON PLAIN AND REINFORCED

CONCRETE (Sponsored by ACI Committee 115)

See Page 25 Franklin Suite

Tuesday, March 30
9:00 a.m. - 5:00 p.m.

CONCRETE CONSTRUCTION EDUCATION CONFERENCE

sponsored by ACI Educational Activities
Committee

Garden Terrace

Moderator: William E. Brewer, vice president, Kuhlman Corporation, Toledo, Ohio, and member, ACI Educational Activities Committee

Welcome and Introductions

Emery Farkas, general manager, Rock Processing Chemicals, Construction Products Division, W. R. Grace and Company, Cambridge, Massachusetts, and chairman, ACI Educational Activities Committee

Keynote Address

Cornelius Wandmacher, professor of engineering education, College of Engineering, University of Cincinnati, Cincinnati, Ohio

Education in the Construction Industry

Speaking for the American Concrete Institute: Emery Farkas, chairman, ACI Educational Activities Committee

Speaking for the Portland Cement Association: Edward L. Kawala, director, Educational Services Department

Speaking for the National Board of Boiler and Pressure Vessel Inspectors: S. F. Harrison, executive director

Speaking for the National Concrete Masonry Association: Thomas B. Redmond, director of technical services

Speaking for the American Society for Concrete Construction: William M. Avery, executive director

Speaking for the American Society for Engineering Education: M. H. Jordan, chairman, Constituent Committee on Construction Education

Speaking for the Prestressed Concrete Institute: Fromy Rosenberg, director, Structural Precast Division

Speaking for the National Ready Mixed Concrete Association: Richard D. Gaynor, vice president of engineering and research

Speaking for the American Society of Civil Engineers: Boris Bresler, chairman, Structural Division, Executive Committee

Speaking for the American Concrete Paving Association: William A. Yrjanson, director of engineering

Speaking for the Wire Reinforcement Institute: Walter L. Manifold, managing director

Speaking for the American Society of Safety Engineers: William S. Wood

Speaking for the Concrete Reinforcing Steel Institute: Victor A. Walther, director of marketing

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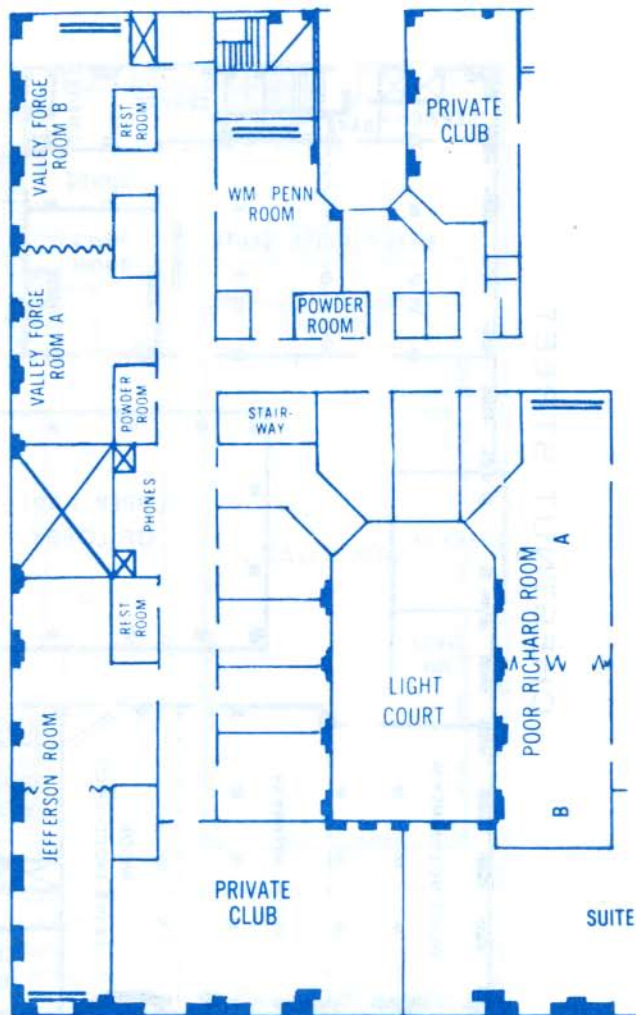
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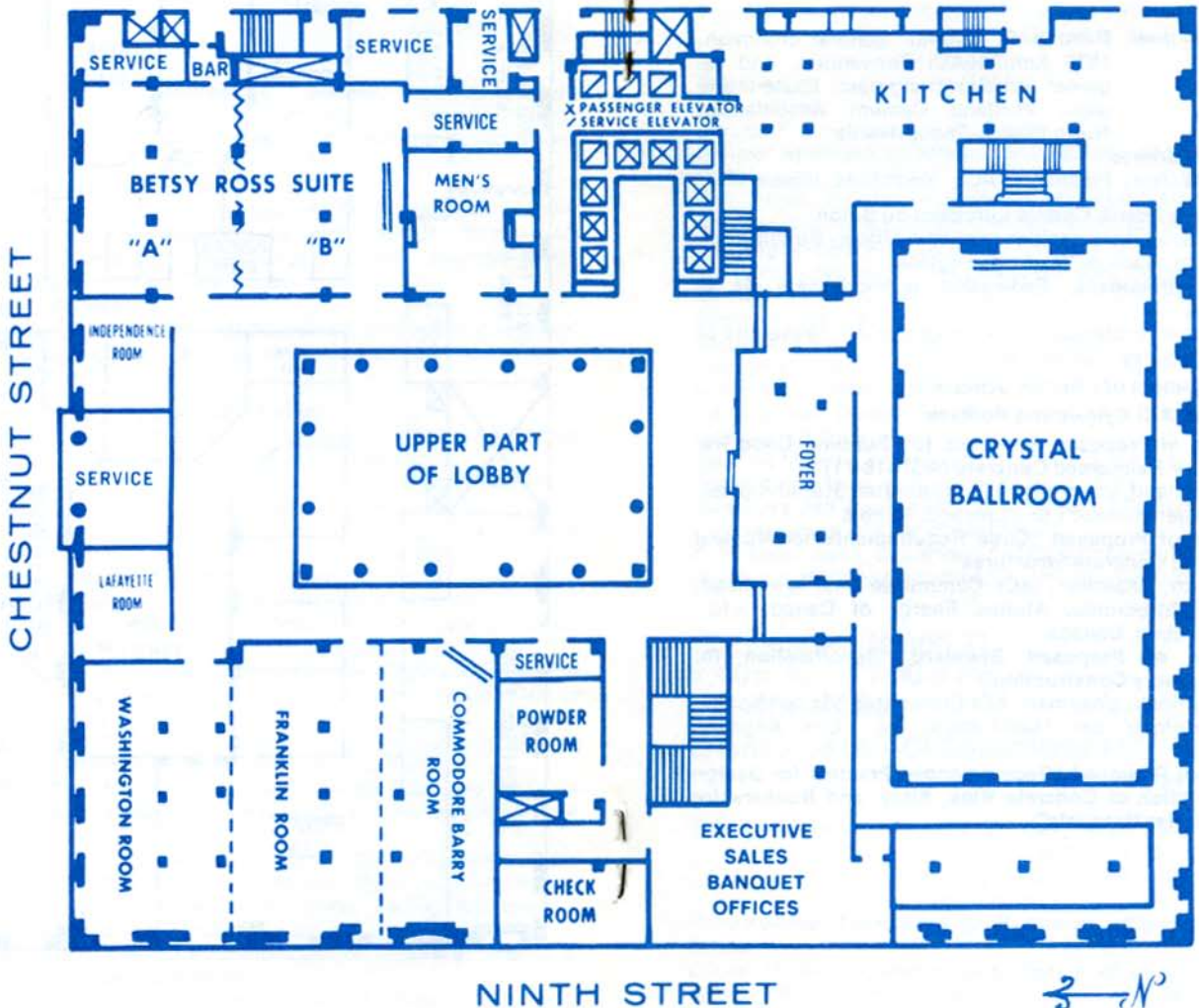
Speaking for the American Society of Safety Engineers: William S. Wood

Speaking for the Concrete Reinforcing Steel Institute: Victor A. Walther, director of marketing

2nd FLOOR PLAN



MEZZANINE FLOOR PLAN



March 31
8:00 a.m.
GENERAL SESSION

Ballroom

Session Chairman: Randall C. Cronin, general chairman, 1976 Annual ACI Convention, and regional structural engineer, Eastern Region, Portland Cement Association, North Wales, Pennsylvania

Presidential Address

Joseph H. Walker, President, ACI, Northfield, Illinois

Address by President, Comité Européen du Béton

Andrew Short, senior principal scientific officer, Building Research Station, Garson, Watford, England

Address by President, Fédération Internationale de la Précontrainte

Ben C. Gerwick, professor of civil engineering, University of California, Berkeley, California

Acknowledgement of Chapter Officers

Discussion of ACI Bylaws and Policies

Presentation of Proposed Revisions to "Building Code Requirements for Reinforced Concrete (ACI 318-71)"

Eugene P. Holland, chairman, ACI Committee 318, and president, Wiesinger-Holland Ltd., Chicago, Illinois

Presentation of Proposed "Code Requirements for Nuclear Safety Related Concrete Structures"

Eric C. Smith, chairman, ACI Committee 349, and head, Layout and Structures, Atomic Energy of Canada Ltd., Montreal, Quebec, Canada

Presentation of Proposed Standard "Specification for Concrete Masonry Construction"

Albyn Mackintosh, chairman, ACI Committee 531, and president, Mackintosh and Mackintosh, Inc., Los Angeles, California

Discussion of Proposed "Recommended Practice for Design and Construction of Concrete Bins, Silos, and Bunkers for Storing Granular Materials"

Wednesday, March 31
2:00 p.m. — 5:00 p.m.

ACI-CEB-PCI-FIP SYMPOSIUM

co-sponsored by American Concrete Institute, Comité Européen du Béton, Prestressed Concrete Institute, and Fédération Internationale de la Précontrainte

Garden Terrace

Session Chairman: George F. Leyh, executive director, American Concrete Institute, Detroit, Michigan

Session I: Limit States Design

Introduction

George F. Leyh, session chairman

General Approach to Safety, Serviceability, and Limit States Philosophy

R.E. Rowe, director of research and development, Cement and Concrete Association, Wexham Springs, England

Loadings—CEB Approach

M. Henri Mathieu, chief, Division des Ouvrages d'Art B, Service d'Etudes Techniques des Routes et Autoroutes, Bagneux, France

Safety and Serviceability—ACI Approach

George Winter, professor of structural engineering, Cornell University, Ithaca, New York

Limit States Design for Reinforced and Prestressed Concrete—CEB Approach

Giorgio Macchi, professor, Istituto di Scienza e Tecnica delle Costruzioni, Università di Pavia, Pavia, Italy

Summary and Comparison of CEB and ACI Provisions Concerning Safety and Serviceability

C.P. Siess, head, Department of Civil Engineering, University of Illinois at Urbana-Champaign, Urbana, Illinois

Wednesday, March 31
2:00 p.m. — 5:00 p.m.

TOLERANCES

sponsored by ACI Committee 117

Betsy Ross Suite

Session Chairman: Robert D. Bay, chairman, ACI Committee 117, and director of technical services, Laclede Steel Company, St. Louis, Missouri

Construction Tolerances in Reinforced Concrete Beams/Joists

Daniel M. Brown, associate professor of civil engineering, Vanderbilt University, Nashville, Tennessee; and Joseph P. Connolly, senior structural engineer, McDermott Hudson Engineering Division of J. Ray McDermott & Company, Inc., New Orleans, Louisiana

Establishing Tolerances in Concrete Construction

Dean E. Stephan, Jr., project manager, Charles Pankow, Inc., Altadena, California and Alan D. Murk, superintendent, Charles Pankow, Inc., San Francisco, California

European Concepts of Construction Tolerances

Kai Holbek, principal, Kai Holbek Associates Ltd., West Vancouver, British Columbia, Canada; and Povl R. Andersen, partner, Povl R. Andersen & Lars Gravesen, Consulting Engineers, Copenhagen, Denmark

Tolerances Involving Reinforcing Bars

A. Ernest Fisher, III, assistant chief engineer, Bethlehem Steel Corporation, Bethlehem, Pennsylvania

Wednesday, March 31

2:00 p.m. — 6:00 p.m.

FORMWORK DESIGN WORKSHOP

sponsored by ACI Committee E-702

Ballroom Foyer

Design and construction problems associated with a multi-story concrete building will constitute the workshop activity. A team of instructors will assist in solving some problems emphasizing safety and construction efficiency.

Enrollment is limited so early registration is advised.

Registration fee is \$20.00, students, \$2.00.

PROGRAM

Moderator:

William J. Wilhelm, chairman, ACI Committee E-702, and chairman, Department of Civil Engineering, West Virginia University, Morgantown, West Virginia

2:00 p.m. - 2:15 p.m.

Introduction

2:15 p.m. - 3:00 p.m.

Selection of Framing System

Economy of Materials

Economy of Placing and Forming

Instructor: James R. Cagley, Martin & Cagley, Washington, D.C.

3:00 p.m. - 4:00 p.m.

Selection of Forming System

Construction Schedule

Construction of Formwork

Shoring and Reshoring

Instructor: Carl Guse, Miller Davis Company, Melrose Park, Illinois

4:00 p.m. - 4:15 p.m.

Stretch break

4:15 p.m. - 5:15 p.m.

Formwork Design

Form Loads

Proper Loads for Shoring and Reshoring

Design of Shoring and Reshoring

Instructor: James P. Hanagan, Donley's, Cleveland, Ohio

5:15 p.m. - 6:00 p.m.

Discussion

Thursday

April 1

9:00 a.m. — 12:00 noon

ACI-CEB-PCI-FIP SYMPOSIUM

Ballroom

Session Chairman: Andrew Short, president, Comité Européen du Béton, and senior principal scientific officer, Building Research Station, Garston, Watford, England

Session II: Shear and Torsion

Introduction

Andrew Short, session chairman

Design of Beams, Deep Beams and Corbels for Shear — ACI 318-71 and Revisions Proposed by ACI Committee 426

James G. MacGregor, professor of civil engineering, University of Alberta, Edmonton, Alberta, Canada

Shear Strength of Reinforced and Prestressed Concrete Beams — CEB Approach

Bruno Thürlimann, professor, Eidgenössische Technische Hochschule, Zurich, Switzerland

Torsional Strength of Reinforced and Prestressed Concrete — CEB Approach

Bruno Thürlimann, professor, Eidgenössische Technische Hochschule, Zurich, Switzerland

Torsion Design and ACI 318-71

Alan H. Mattock, head, Division of Structures and Mechanics, University of Washington, Seattle, Washington

Comparison of Shear and Torsion Design in the ACI and CEB

Paul E. Regan, reader in civil engineering, Polytechnic of Central London, London, England

Shear in Slabs — ACI Approach

W. Gene Corley, director, Engineering Development Department, Portland Cement Association, Skokie, Illinois

Punching Shear Resistance

M.P. Nielsen, professor, Structural Research Laboratory, Technical University of Denmark, Lyngby, Denmark

Comparison of Design for Shear in Slabs in the ACI and CEB

Eugene P. Holland, president, Wiesinger-Holland, Ltd., Chicago, Illinois

Thursday, April 1
9:00 a.m. — 12:00 noon
**PROGRESS IN CONCRETE
CONSTRUCTION**

Betsy Ross Suite

Session Chairman: Charles J. Pankow, president and treasurer, Charles Pankow, Inc., Altadena, California

Making the Concrete Construction Process Work

James M. Shilstone, president, Architectural Concrete Consultants, a division of General Portland Inc., Dallas, Texas

Construction of Reinforced Concrete Buildings by Casting Interleaved Walls and Slabs as a Stack

Pablo Cortina, Structural engineer, Sistema Cortina de Construccion, Mexico, D.F., Mexico

Architectural Concrete in the City

Vincent G. Kling, managing partner, Vincent G. Kling and Partners, Philadelphia, Pennsylvania

Construction of the Birmingham-Jefferson Civic Center Coliseum

Frank A. Kozeliski, materials engineer, Law Engineering Testing Company, Birmingham, Alabama

Weathering of Concrete in an Industrial Atmosphere

C. Douglas Goode, senior lecturer in civil engineering, Simon Engineering Laboratories, University of Manchester, Manchester, England

Construction of a Precast Concrete Office Building in San Francisco

Alan D. Murk, superintendent, Charles Pankow, Inc., San Francisco, California

Thursday, April 1
9:00 a.m. — 5:30 p.m.

**AGGREGATES FOR CONCRETE
sponsored by ACI Committee E-701**

Ballroom Foyer

In the selection and use of aggregates in concrete you want to look at engineering properties and characteristics other than just strength and economy. This seminar will assist producers, specifiers, and users in evaluating characteristics of aggregates in terms of their influence on the engineering properties of concrete.

Do you have concrete related aggregate problems? Bring them with you and we'll discuss them and maybe solve them.

Enrollment is limited so early registration is advised.

Registration fee is \$40.00 for ACI Members, \$60.00 for non-members, \$5.00 for students.

PROGRAM

9:00 a.m. - 12:00 noon

Session One

Moderator: R.W. Kriner, chairman, ACI Committee E-701, and manager, Technical Services, Lehigh Portland Cement Company, Allentown, Pennsylvania

Basic Characteristics and Tests of Aggregates

Grading: maximum size, fineness modulus, absorption, standard test methods will be described as well as effects of aggregate characteristics upon concrete.

Dr. Ward R. Malisch, associate professor, University of Missouri-Rolla, Rolla, Missouri

Specifications of Aggregate Quality

Emphasis will be on the specifications contained in ASTM C33-74 and identifying why the specification is important.

Fred R. Allen, director of technical services, National Crushed Stone Association, Washington, D.C.

1:30 p.m. - 5:30 p.m.

Session Two

Practical Aspects of Selecting and Using Aggregate in Concrete

Properties of normal weight aggregates as they affect concrete performance will be discussed.

R.C. Meininger, assistant director of engineering, National Ready Mixed Concrete Association, Silver Spring, Maryland

Plant Production Control of Construction Aggregates

Organization of a quality control program, use of control charts, and use of test data will be discussed.

John T. Molnar, materials engineer, Standard Slag Company, Youngstown, Ohio

Meeting Concrete Specifications Using Lightweight Aggregates

Types of lightweight aggregate and their basic differences.

Design of structural lightweight concrete. Quality control. Job considerations.

John M. Albinger, assistant manager of quality control, Material Service Corporation, Chicago, Illinois

Problem and discussion session.

Thursday, April 1
2:30 p.m. — 5:30 p.m.

ACI-CEB-PCI-FIP SYMPOSIUM

Ballroom

Session Chairman: Arthur W. Hill, secretary general, Fédération Internationale de la Précontrainte, and technical director, Cement and Concrete Association, Wexham Springs, Slough, England

Session III: Prestressed Concrete: Special Concepts and New Applications

Introduction

Arthur W. Hill, session chairman

Fire Resistance: Rational Design

Armand H. Gustaferro, consulting engineer, The Consulting Engineers Group, Inc., Glenview, Illinois

Fire Resistance, A Rational Approach — Basic Philosophy

Jan Bobrowski, senior partner, Jan Bobrowski and Partners, London, England

Partial Prestressing Design Philosophy and Approach

T.Y. Lin, professor of civil engineering, University of California, Berkeley, California

Partial Prestressing Design Philosophies

Fritz Leonhardt, professor, Institut für Massivbau, Universität Stuttgart, Stuttgart, Germany

Code Provisions for Special Structures

Arthur R. Anderson, principal, ABAM Engineers, Inc., Tacoma, Washington; Eivind Hognestad, director, Technical and Scientific Development, Portland Cement Association, Skokie, Illinois; Ben C. Gerwick, Jr., professor of construction engineering and management, University of California, Berkeley, California

Design with Unbonded Tendons

C.L. Freyermuth, director, Post-Tensioning Division, Prestressed Concrete Institute, Chicago, Illinois

Design with Unbonded Tendons

Walter Thorpe, Simon Carves Ltd., Cheadle Heath, Stockport, Cheshire, England

Thursday, April 1

2:30 p.m. — 5:30 p.m.

LIVING WITH OUR AVAILABLE MATERIALS IN THE ENERGY SHORTAGE

Betsy Ross Suite

Session Chairman: Robert E. Philleo, chief, Concrete Branch, Engineering Division, Directorate of Civil Works, Office of the Chief of Engineers, Washington, D.C.

Energy and Environment — Problems and Solutions in the Cement Industry

K.D. Simmons, vice-president research, Martin Marietta Cement, Rockville, Maryland

Cementitious Properties from Low Energy Materials

R.H. Brink, consultant, McLean, Virginia

Maintaining the Availability of Conventional Aggregates

Frank P. Nichols, Jr., vice president - engineering, National Crushed Stone Association, Washington, D.C.

Quality Aggregates from Junk

S.A. Bortz, director, Mechanics of Materials Research Division, Illinois Institute of Technology Research Institute, Chicago, Illinois

Recycled Concrete as a Source of Aggregate

A.D. Buck, petrographer, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi

Notes

Friday

April 2

9:00 a.m. — 12:00 noon

SEALING JOINTS IN CONCRETE PAVEMENTS

sponsored by ACI Committees 325 and 504

Ballroom

Session Chairman: Thomas J. Pasko, chairman, ACI Committee 325, and highway research engineer, Federal Highway Administration, Annandale, Virginia

A Discussion of the Principles of Zero Maintenance Solutions as Applied to the Kinetics of Our Modern Bridges and Structures

Stewart C. Watson, president, Watson-Bowman Associates, Inc., Buffalo, New York

Performance of Transverse Joints in Prestressed and Reinforced Concrete Airfield Pavements

Michel A. Sargious, associate professor, Department of Civil Engineering, University of Calgary, Calgary, Alberta, Canada

Effect of Joint Design on Performance of Heavily Trafficked Concrete Pavements

Ernest J. Barenberg, professor, and Michael I. Darter, assistant professor, Department of Civil Engineering, University of Illinois at Urbana, Urbana, Illinois

Comparison of Automobile Tire/Pavement Noise Levels for Various PCC Surface Finishes

William R. Fuller, staff scientist, Science Applications, Inc., El Segundo, California

Steel Fiber Reinforced Concrete for Pavement Overlays

Amir N. Hanna, senior transportation engineer, Transportation Development Section, Portland Cement Association, Skokie, Illinois

Performance of Sealed Longitudinal Pavement-Shoulder Joints

Richard D. Barksdale, professor, School of Civil Engineering, Georgia Institute of Technology, Atlanta, Georgia; and R.G. Hicks, professor Department of Civil Engineering, Oregon State University, Corvallis, Oregon

Friday, April 2

9:00 a.m. — 12:00 noon

RESEARCH ON PLAIN AND REINFORCED CONCRETE

(Brief and confidential unpublished reports)

sponsored by ACI Committee 115

Franklin Suite

Session Chairman: Herbert K. Cook, chairman, ACI Committee 115, and vice-president of engineering, Master Builders, Cleveland, Ohio

Secretary: M.A. Ward, secretary, ACI Committee 115, and professor, Department of Civil Engineering, University of Calgary, Calgary, Alberta, Canada

Seismic Resistance of Precast Concrete Panel Buildings
J.M. Becker, assistant professor, and J.M. Biggs, professor, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts

Nonlinear Behavior of Reinforced Concrete Columns
S.A. Mahin, assistant research engineer, and V.V. Bertero, professor of civil engineering, University of California, Berkeley, California

Tests of Precast Concrete Slabs with Ineffective Internal Support

E.F.P. Burnett, visiting senior structural engineer, and N.W. Hanson, principal structural engineer, Structural Development Section, Engineering Development Department, Portland Cement Association, Skokie, Illinois

High Temperature Effects on Nuclear Concrete Structures in Accident Situations

Zdenek P. Bazant, professor of civil engineering, Northwestern University, Evanston, Illinois

Prevention of Shear Strength Decay in Reinforced Concrete Members During Earthquakes

James K. Wight, assistant professor of civil engineering, and Charles F. Scribner, research assistant, University of Michigan, Ann Arbor, Michigan

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

Dugald J. Cameron has been selected by the Reinforced Concrete Research Council to receive the 1976 Arthur J. Boase Award "... in recognition of a lifetime of untiring effort on behalf of concrete construction, as a driving force and catalyst in working with contractors and engineers for better use of concrete and reinforcing, and of his constant endeavour to obtain improvement in construction details."

Evaluation and Control of Steel Corrosion in Marine Concrete Structures

Odd E. Gjorv, associate professor, University of Trondheim, Trondheim, Norway

Strength and Behavior of Anchor Bolts

G.B. Hasselwander, research assistant, J.O. Jirsa, professor, and J.E. Breen, professor, Department of Civil Engineering, University of Texas at Austin, Austin, Texas

Microcracking and Macrocracking of Concrete under Compressive Stress Fields

W.W. Payne, professor of civil engineering, and K.N. Derucher, graduate student, Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Investigation of Properties and Performance of Styropor Concrete for Pavement Subbases

Amir N. Hanna, senior transportation engineer, Transportation Development Section, Portland Cement Association, Skokie, Illinois; and Arthur Rady-Penteck, Civil Engineering Applications, BASF Wyandotte Corporation, Parsippany, New Jersey

Steel Fiber Concrete Mix Proportioning

J.E.C. Moens, project manager, N.V. Bekaert, SA, Zwevegem, Belgium

EXHIBITION

Franklin Suite

hours:

Tuesday 1:00 p.m. to 5:00 p.m.
Wednesday 10:00 a.m. to 5:00 p.m.
Thursday 10:00 a.m. to 5:00 p.m.

Exhibitors:

Adhesive Engineering Company - Epoxy adhesive, coatings, and process for epoxy injection of cracked concrete.

American Society for Concrete Construction

Bekaert Steel Wire Corporation - Concrete reinforcement.

Concrete Reinforcing Steel Institute - General design aids, technical books.

Gifford-Hill & Company, Inc., Chemical Division - Concrete Admixtures, grouts.

Hercules Concrete Pumps, Inc. - Concrete pumping products.

Intrusion-Prepakt, Inc. - Pressure grouting, piles, erosion control, restoration of concrete and masonry structures.

Labrado Forms, Inc. - Form liners for architectural concrete.

Lammas Equipment - Reusable concrete cylinder mold.

National Ash Association, Inc. - Concrete aggregate products with ash.

Watson Bowman Associates, Inc. - Expansion joint sealing systems.

Windsor Probe Test Systems, Inc. - Test systems.

FAMILY MEMBERS' PROGRAM

Hospitality: Mezzanine Gallery, Chestnut Street

Morning coffee and light refreshments will be provided in the Hospitality room starting Monday morning at 9:00 a.m.

Bus Tours

"Circles & Squares" — Tuesday, Thursday 9:30-12:00
Introductory overview of Center City Philadelphia. Includes historic and cultural highlights of Society Hill, Independence Park, Old City and other areas between the Delaware and Schuylkill Rivers.

"Longwood/Brandywine" — Wednesday 9:30-4:00
A visit to Longwood Gardens in nearby Chester County with year-round conservatory, fountains, formal and informal gardens. A stop at Brandywine Museum in an old grist mill, with exhibits of Maxfield Parrish, the Wyeth family, and others. (Luncheon facilities at Longwood Gardens)

"Winterthur" — Friday 9:30-4:00
A trip to a duPont estate near Wilmington, housing 14 period rooms, internationally famous for quality and accuracy. Lovely grounds, shrubs and gardens featuring Delaware plants. (Luncheon included)

Guided Walking Tours — each 1 1/2 hours long—scheduled to permit maximum coverage:

"Independence" — Historic area around Independence Hall, Dolley Todd's house, historic mansions, restored and contemporary townhouses.

"Stars and Stripes" — Companion tour in area containing Christ Church, Elfreth's Alley, tiny Loxely Court and a Quaker Meeting House near Franklin's grave.

"Secret Gardens" — A walking visit to see many gardens (rooftop, window, 18th century, magnolia, rose) and flowering walkways.

"Olde Towne" — A quiet street reflecting Philadelphia of the 1840's. Lovely brownstone mansions, deep gardens, ornamental ironwork and architectural detail on mansions of the literary world of the Lippincotts, Agnes Repplier and Charles Dickens.

"Penn's Holy Experiment" — Many historic churches of varied denominations that live in harmony. A new insight into the place of the church in the minds of our forefathers.

"Candlelight Strolls" — Through historic streets and walkways to city mansions and tiny homes. Dolley Todd's house, an 18th century garden, an historic church, and contemporary townhouses.

TOUR SCHEDULE

WALKING TOURS

| | | |
|----------------|------------------------------|----------|
| Wed., Mar. 31 | Independence | 10-11:30 |
| | Secret Gardens | 10-11:30 |
| | Stars & Stripes | 1-2:30 |
| Thurs., Apr. 1 | Stars & Stripes | 10-11:30 |
| | Olde Towne | 10-11:30 |
| | Independence | 2-3:30 |
| | Penn's Holy Experiment | 2-3:30 |
| | Candlelight Stroll | 7-8:30 |
| Fri., Apr. 2 | Stars & Stripes | 10-11:30 |
| | Independence | 10-11:30 |
| | Secret Gardens | 2-3:30 |
| | Candlelight Stroll | 7-8:30 |

BUS TOURS

| | | |
|---------------|---------------------------|---------|
| Tues., Thurs. | Circles & Squares | 9:30-12 |
| Wed., Mar. 31 | Longwood/Brandywine | 9:30-4 |
| Fri., Apr. 2 | Winterthur | 9:30-4 |

Scheduled tours will go rain or shine, leave from the hotel, and return promptly.

ACI EDUCATIONAL SEMINARS

SCHEDULE FOR 1976

April 7

ACI Code and Strength Design (318-71)
Anchorage, Alaska

April 8

Concrete Materials
Anchorage, Alaska

April 9

Concrete Construction Practices
Anchorage, Alaska

April 15

ACI Code 318-71 and Strength Design
Ames, Iowa

May 21

ACI Code 318-71 and Strength Design
Los Angeles, California

May

Quality Assurance and Quality Control in Concrete
Construction
Washington, D.C.

May

High Strength Concrete
New Orleans, Louisiana

September 22, 23

Concrete Housing: Design, Specifications and
Construction
Detroit, Michigan

MEXICO

As a service to our membership, ACI has arranged roundtrip chartered flights to Mexico City. In order to qualify for the charter, one must have been a member of ACI for 6 months prior to the time of departure or be related to a member who is attending.

This represents a great opportunity to bring along the family for a South of the Border holiday. An enjoyable, though relaxing, program has been planned for wives and children alike while convention functions are in process.

Charters will depart from Chicago and New York City on October 23, according to the following table. Lunch, two complimentary drinks and a movie are included on the flight. Both aircraft will depart Mexico City for their original points on Sunday, October 31.

| City | Charter Cost* | Regular Airfare |
|---------------|---------------|-----------------|
| From Chicago | \$200 | \$290 |
| From New York | 217 | 356 |

Seat price is a pro rata share of total charter costs and is subject to increase or decrease depending on the number of participants.

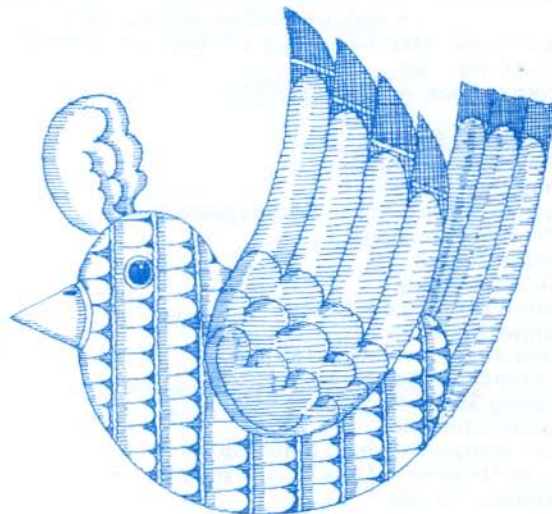
**\$50.00 per person must accompany the initial reservation, with the balance due by June 1, 1976. In the event of cancellation prior to July 23, ACI will keep the \$50 deposit. For cancellations after July 23, the entire air fare will be forfeited unless member can make arrangements with Kearney Travel Service for a seat replacement.*

Besides the money you can save over the cost of regular airfare, the charter offers several conveniences including transfers from the airport directly to their hotel, baggage handling, and arrangements for connecting flights to and from the charter departure points for those who wish it.

DEPARTURE INFORMATION:

| Location | Time | Arrival |
|---|--------------|--------------|
| O'Hare International (Chicago, Ill.) | 1:25 p.m. CT | 5:30 p.m. MT |
| JFK Airport (New York City) | 1:00 p.m. ET | 5:00 p.m. MT |

For further information: see Kearney Travel Service, Inc. at Booth 17 in the Exhibition Hall.



ACI FUTURE CONVENTIONS

1976 Fall Convention

Mexico City, Mexico
Co-Sponsor: Instituto Mexicano del
Cemento y del Concreto, A.C.
October 24-29

1977 Annual Convention

San Diego, California
March 13-18

1977 Fall Convention

New Orleans, Louisiana
October 16-21

1978 Annual Convention

Toronto, Ontario, Canada
April 9-14

1978 Fall Convention

Houston, Texas
October 29 - November 3

**UNIVERSITY OF PENNSYLVANIA'S FOURTH
ANNUAL CONCRETE CANOE RACE**

Date: Saturday, April 3, 1976

Time: 10:00 a.m. to 1:00 p.m.

Place: Schuylkill River racing course

Fairmount Park, Philadelphia

Type of Canoe: Class A - Hydraulic cement with no more than
1% additive; ferrous reinforcement

Size of Canoe: Maximum length 14'; Maximum width 3'

Size of Crew: Two

Length of Race: 1/4 mile straight run.

Participating Schools:

Penn State University

Rutgers University

United States Merchant Marine Academy

Princeton University

Union College

Tufts University

University of Rhode Island

Brown University

New Jersey Institute of Technology

University of Delaware

Spring Gardens College

Drexel University

University of Pittsburg at Johnstown

State University of New York at Buffalo

Widener College

West Virginia University

Lehigh University

Polytechnic Institute of New York

Swarthmore College

Roger Williams College

Villanova University

Lafayette University

University of Pennsylvania

PHILADELPHIA CONVENTION COMMITTEE

General Chairman

Randall C. Cronin

Publicity

Harry F. Irwin, Chairman

Jacob J. Creskoff

Leo Goldstein

Lloyd H. King, Jr.

Membership

George H. Ayres, Chairman

William D. Elton

Theodore D. Robinson

Construction Inspection Tours

Charles W. Fleming, Chairman

Frank R. Haus

Donald D. Meisel

John P. DiRenzo

Student Monitors

Ralph Koliner, Chairman

Nimitchai Smithband

Hyman Carroll

Richard E. Woodring

John L. Rumpf

Family Members' Program and Hospitality

Frederic Roll, Chairman

Frank G. Rennis

Hyman Carroll

Putinas V. Masalaitis

Charles A. Keelen

Christine Roll

Mary Rennis

Ethel Carroll

Anilora Masalaitis

Lois Keelen

Elizabeth Irwin

Mildred Creskoff

Sybil Goldstein

Emily King

Ruth Ayres

Marilyn Elton

Amy Robinson

Nancy Fleming

Alina Haus

Marilyn Meisel

Lee DiRenzo

Selma Koliner

Adeline Cronin

Marie Woodring

Patricia Rumpf

The officers, staff, and members of ACI would like to thank the Local Committee, the Hostesses, and the Delaware Valley Chapter for their part in the 1976 Annual Convention.

PHILADELPHIA CONVENTION COMMITTEE

1917
Philadelphia, Pa.

Chairman
George W. Fox
Secretary
John P. Dillinger

Executive Committee
George W. Fox
John P. Dillinger

Committee on Finance
George W. Fox
John P. Dillinger

Committee on Publicity
George W. Fox
John P. Dillinger

Committee on Literature
George W. Fox
John P. Dillinger

Committee on Art
George W. Fox
John P. Dillinger

Committee on Music
George W. Fox
John P. Dillinger

Committee on Drama
George W. Fox
John P. Dillinger

The officers, staff, and members of the Philadelphia Convention Committee are listed on the following pages. The names of the members of the Executive Committee are given in full in the list of names.