

# *Program*

**AMERICAN  
CONCRETE  
INSTITUTE**

## **18th Fall Convention**

**CLEVELAND**

**November 2-5, 1965**  
*Statler Hilton Hotel*  
**Cleveland, Ohio**



*progress through knowledge*

## BOARD OF DIRECTION

### President

A. ALLAN BATES

### Vice-Presidents

ARTHUR R. ANDERSON AND CLYDE E. KESLER

### Directors

DELMAR L. BLOEM

A. A. BRIELMAIER

S. D. BURKS

G. E. BURNETT

CLAYTON L. DAVIS

SAMUEL HOBBS

RICHARD C. MIELENZ

GEORGE H. NELSON

THOMAS J. READING

PAUL F. RICE

J. J. SHIDELER

A. CARL WEBER

### Past Presidents

RAYMOND C. REESE

ROGER H. CORBETTA      BRYANT MATHER

### Executive Secretary \*

WILLIAM A. MAPLES

## TECHNICAL ACTIVITIES COMMITTEE

(In charge of convention program and of technical publications)

J. J. SHIDELER, *Chairman*

A. ALLAN BATES, *Ex-Officio*

WILLIAM A. MAPLES, *Secretary \**

ARTHUR R. ANDERSON

S. D. BURKS

G. E. BURNETT

WILLIAM A. CORDON

A. T. HERSEY

PAUL F. RICE

### \* Address

**AMERICAN CONCRETE INSTITUTE**

P.O. Box 4754, Redford Station

Detroit, Michigan 48219

## ACI REGISTRATION: \$5.00

Registration daily November 2-5 on the mezzanine of the Statler Hilton. Registration fee payable at the convention registration desk covers all the general sessions, workshops, and the ACI technical and administrative meetings other than those indicated as closed.

## NOTE FOR PROGRAM PARTICIPANTS

A program breakfast is planned for Thursday at 7:30 a.m. in the John Glenn Room. Breakfast is by invitation only.

\*

Please note throughout this program folder the various arrangements that have been made to make your stay here in Cleveland a pleasant and memorable experience.

\*

## FOR THE LADIES

A full and varied ladies' program is planned (Details on page 8). Be sure to check this schedule daily.

\*

On Wednesday evening starting at 6:00 a theatre party has been planned at the Cleveland Playhouse now celebrating its golden anniversary. Program includes dinner, cocktails, and show. NOTE: In the event this party has a popular attendance, the sequence of the program of events may be staggered to include all of those wishing to attend. For example, some may have dinner first, others may first attend the show. Details will be announced.

\*

ACI Convention and Press Headquarters  
in Parlors J and K on the second floor.

**TUESDAY, November 2****— 9:00 A.M. to 12:00 NOON —**

COMMITTEE	ROOM
— Long Range Planning Committee (closed meeting)	Tavern
408 Bond Stress (closed meeting)	Parlors F, G, H

**— 2:00 P.M. to 5:00 P.M. —**

COMMITTEE	ROOM
— Technical Activities Committee (closed meeting)	John Glenn
213 Lightweight Aggregate Concrete	Tavern
408 Bond Stress (closed meeting)	Parlors F, G, H

**8:00 P.M. to MIDNITE**

COMMITTEE	ROOM
— Board Executive Committee (closed meeting)	Parlors F, G
318 Subcommittee 8 of Committee	Forest City B

**WEDNESDAY, November 3****— 9:00 A.M. to 12:00 NOON —**

COMMITTEE	ROOM
— Technical Activities Committee (closed meeting)	John Glenn
118 Use of Computers	Parlor M
214 Evaluation of Strength Tests	Forest City B
223 Expansive Cement Concretes	Parlor 2
309 Consolidation of Concrete	Tavern
332 Residential Concrete Work	Parlor 1
333 Composite Construction (closed meeting)	#641
349 Nuclear Containment Vessels	#643
408 Bond Stress	Ohio
428 Limit Design	Parlor L
437 Strength Evaluation of Existing Structures	Euclid
515 Coatings for Concrete	Parlor 3
523 Insulating and Cellular Concretes (closed meeting)	#645
543 Concrete Piles	Pine

**WEDNESDAY, November 3****— 2:00 P.M. to 5:00 P.M. —**

COMMITTEE	ROOM
— Board of Direction	John Glenn
118 Use of Computers	Parlor M
302 Concrete Floors (closed meeting)	#641
305 Hot Weather Concreting	Forest City B
307 Reinforced Concrete Chimneys	Parlor L
316 Pavement Specifications	Tavern
340 Ultimate Strength Design (closed meeting)	#643
351 Machinery Foundations (closed meeting)	Parlor 2
423 Prestressed Concrete	Parlor 1
436 Combined Footings and Caissons (closed meeting)	Parlor 3
437 Strength Evaluation of Existing Structures	Euclid
438 Torsion (closed meeting)	Ohio
503 Adhesives (closed meeting)	#645
543 Concrete Piles	Pine

**6:00 P.M., THEATRE PARTY  
at the Cleveland Playhouse  
(See page 1)**

**— 7:00 P.M. to 12:00 MIDNITE —**

COMMITTEE	ROOM
— Ad Hoc Committee on Cracking (closed meeting)	Parlor M
— Ad Hoc Committee on Effect of Temperature Change on Concrete (closed meeting)	Parlor L
302 Concrete Floors (closed meeting)	#641
318 Building Code	Pine
436 Combined Footings and Caissons (closed meeting)	Parlor 3
442 Lateral Forces on Multistory Frames	Forest City B
503 Adhesives (closed meeting)	#645
506 Shotcrete	Ohio
516 High Pressure Steam Curing . .	Parlors F, G, H

— 7:30 A.M. —

PROGRAM BREAKFAST - John Glenn Room  
(Invitation only)

— 9:00 A.M. to 12:00 NOON —

FIRST GENERAL SESSION — Ballroom B  
SESSION CHAIRMAN: George B. Southworth,  
general chairman, and director  
of sales development,  
Master Builders, Cleveland

PRESENTATION OF A NEW COLD WEATHER  
CONCRETING STANDARD—by Committee 306,  
Lewis H. Tuthill, chairman, and concrete engineer,  
California Department of Water Resources,  
Sacramento

## CONSTRUCTION TOUR REPORTS:

**Recent Impressions of Concrete in the Soviet Union** — A. Allan Bates, president of ACI, and chief of the Division of Building Research, National Bureau of Standards, Washington, D.C.

**Precast Concrete Construction Techniques in the USSR**—Arthur R. Anderson, ACI vice-president, and partner in the firm of Anderson, Birkeland, Anderson and Mast, consulting engineers, Tacoma, Wash.

**Concrete — Sweden's Building Material** — Clyde E. Kesler, ACI vice-president, and professor of theoretical and applied mechanics, University of Illinois, Urbana

REPORT ON THE REINFORCED CONCRETE RESEARCH COUNCIL — C. P. Siess, RCRC secretary, and professor of civil engineering, University of Illinois, Urbana

2:00 P.M. to 5:00 P.M. . . . . CONCURRENT SESSIONS . . . . . 2:00 P.M. to 5:00 P.M.

## DESIGN OF CONCRETE STRUCTURES

Ballroom A

Session Chairman: R. M. Gensert, consulting engineer, R. M. Gensert & Associates, Cleveland

**Automated Optimum Cost Design of Building Girders** — Louis Hill, assistant professor, Arizona State University, Tempe

Effects of Column Exposures in Tall Structures —

Mark Fintel, senior structural engineer, Structural Bureau, Portland Cement Association, Chicago  
F. R. Khan, engineer, Skidmore, Owings & Merrill, Chicago

Behavior of Shear Walls with Various Opening Arrangements —

Uldis Kirsis, associate; and Lyle Amiet, structural designer, R. M. Gensert & Associates, Cleveland

**Influence of Embedded Service Ducts on the Strength of Continuous Reinforced Concrete T-Beams** —

Kenneth T. Burton, development engineer, Structural Development Section, Research & Development Division, Portland Cement Association, Skokie, Ill.

**Axial- and Shearing-Strain Effects on Design Stresses of a Reinforced Concrete Vierendeel Truss** —

Shu-t'ien Li, professor of civil engineering, South Dakota School of Mines and Technology, Rapid City  
Jaw-Ji Shen, research associate, South Dakota School of Mines and Technology

## BEHAVIOR OF PLAIN &amp; REINFORCED CONCRETE

Ballroom B

Session Chairman: John F. McLaughlin, professor and assistant head, School of Civil Engineering, Purdue University, Lafayette, Ind.

**A Reaction Involving Non-Dolomitic Limestone Aggregate in Concrete** — A. D. Buck, petrographer, Concrete Division, U.S. Army Corps of Engineers Waterways Experiment Station, Jackson, Miss.

W. L. Dolch, professor of civil engineering, Purdue University, Lafayette, Ind.

**Studies of Volume Change in Expansive Cements** — T. J. Aylward, project engineer, Master Builders, Cleveland

W. L. Dolch, professor of civil engineering, University, Lafayette, Ind.

The Effect of the Addition of Short Lengths of Wire on the Strength and Deformation of Concrete —

R. E. Untrauer, professor of civil engineering, Iowa State University, Ames  
R. E. Works, captain, U.S. Army Corps of Engineers

Shrinkage and Creep in Prestressed Concrete —

Perry H. Petersen, director of engineering, Master Builders, Cleveland  
David Watstein, chief, Structural Engineering Section, Building Technology Division, National Bureau of Standards, Washington, D.C.

**Performance of Aluminum in Concrete Containing Chlorides** — F. L. McGeary, research engineer, ALCOA Research Laboratory, New Kensington, Pa.

— 9:00 A.M. to 12 NOON —

## WORKSHOP ON USE OF COMPUTERS

Parlors 1, 2, 3

Session Chairman: George G. Goble, associate professor, Engineering Division, Case Institute of Technology, Cleveland

**Application of Computers in the Quality Control of Concrete** — George B. Southworth, director of sales development, Master Builders, Cleveland, is the discussion leader.

**Automatic Design of Reinforced Concrete Building Frames** — Louis Hill, assistant professor, Arizona State University, Tempe, is the discussion leader.

2:00 P.M. to 5:00 P.M. . . . . RESEARCH

SESSION CHAIRMAN: Richard C. Mielenz, vice-president for product development, Master Builders, Cleveland

**Partially Compacted Weight of Concrete as a Measure of Workability** — Bryant Mather, chief of the Engineering Sciences Branch of the Concrete Division, U.S. Army Engineer Waterways Experiment Station, Jackson, Miss.

**The Effect of Surface - Active Agents and the Resulting Entrained Air on the Time of Set and Strength Development of Portland Cement Pastes and Concrete** — K. R. Lauer, associate professor, Department of Civil Engineering, Notre Dame University, Notre Dame, Ind.

**Influence of Evaporation Retardation on the Quality of Concrete Surfaces** — W. A. Cordon, associate professor and director of structural materials research laboratory, Department of Civil Engineering, Utah State University, Logan

**Effects of Continued Vibration on the Strength and Hardening of Concrete** — D. A. Linger, professor of civil engineering and engineering mechanics, University of Arizona, Tucson

**HANDLING, PLACING AND CONTROL OF CONCRETE** Ballroom A

Session Chairman: Richard D. Ellsworth, vice-president, Charles F. Campbell General Contractors, Pittsburgh

**Concrete Placement By Use of Pumps**—J. E. Waggoner, president, Concrete Placement Distributing Co., Central City, Iowa

**Concrete Placement By Use of Tandem Conveyors** —A. E. Schreck, superintendent, the Albert M. Higley Co., Cleveland

**Concrete Lining of the McCloud - Pit Tunnels** — G. E. Broderson, construction consultant; and W. K. Flint, supervisor of concrete and soils, McCloud - Pit project, Pacific Gas and Electric Co., Burney, Calif.

**Novel Structural Frame Combined with Slipform Construction Result in Record - Breaking Construction Time** — V. J. De Simone, associate, Lev Zetlin Associates, New York  
J. Camellerie, partner, J. F. Camellerie, consulting engineers, New York

**Concrete Design and Control for the Skylon**—L. R. Lauer, assistant chief engineer, Canada Cement Co., Ltd., Toronto, Ontario, Canada  
Richard Rigby, Queens University, Kingston, Ontario, Canada

SESSION . . . . . Ballroom A

**Fast-Setting Shotcrete** — T. G. Clendinning, senior engineer, Hydro Electric Power Commission of Ontario, Toronto, Ontario, Canada

**Time-Dependent Performance of Reinforced Lightweight and Normal Weight Concrete Columns** — D. W. Pfeifer, research engineer, Research & Development Division, Portland Cement Association, Skokie, Ill.

**Transverse Reinforcement Stresses in the Anchorage Zone of Prestressed Concrete Beams** — W. A. Welsh, Jr., research assistant, University of Illinois, Urbana

**Flexural Bond Tests of Members Prestressed with 207K Strand** — D. A. Van Horn, associate professor of civil engineering, Lehigh University, Bethlehem, Pa.

**Continuous Reinforced Concrete Beams Using Concrete Reinforced with Short Lengths of Steel Wire** — R. E. Untrauer, professor of civil engineering; and R. E. Montag, Iowa State University, Ames

**Development Length for Anchor Bolts**—J. E. Breen, assistant professor of civil engineering, University of Texas, Austin

## LADIES PROGRAM

### WEDNESDAY, November 3

- 9:00 A.M.—Registration and a “Get Acquainted”  
Brunch Parlor E
- 10:00 A.M. - 5:00 P.M.—“On the Town” for shopping or Bridge in the Hospitality Suite Parlor E

### — THEATRE PARTY —

6:00 P.M. - (Details to be announced)

### THURSDAY, November 4

- 9:00 A.M.—Registration and “Get Acquainted”  
Brunch Parlor E
- 10:00 A.M.—Chartered Bus to Severance Center  
(Ohio's largest enclosed shopping mall)
- 12:00 NOON — Cocktails and Lunch  
PLACE: Sirloin and Saddle Restaurant at Severance
- 1:30 P.M.—Chartered Bus to Cleveland Art Museum
- 2:00 P.M.—Tour of Art Museum featuring the History of Interior Decorating
- 3:30 P.M.—Chartered Bus to Statler Hilton
- 6:30 P.M.—Hospitality Hour with Husbands

### FRIDAY, November 5

- 9:00 A.M.—Brunch Parlor E
- 10:00 A.M.—Chartered Bus Tour
- 1:00 P.M.—Lunch and Cocktails at Statler Hilton John Glenn Room
- 2:30 P.M.—After-luncheon talk by Mrs. Bell . . .  
“New Ideas for an Old Fashioned Christmas” . . . John Glenn Room

### LADIES ENTERTAINMENT COMMITTEE

Chairman: MRS. P. W. GUTMANN (Barbara)

MRS. G. P. CHACOS (Eileen)

MRS. R. C. MIELENZ (Jessie)

MRS. J. H. SPROUSE (Virginia)

MRS. G. B. SOUTHWORTH (Viola)

## CLEVELAND CONVENTION COMMITTEES

### COMMITTEE OFFICERS

G. B. SOUTHWORTH, *General Chairman*  
P. W. GUTMANN, *Vice-Chairman*  
RAYMOND C. REESE, *Secretary-Treasurer*

### PROGRAM COMMITTEE

GEORGE G. GOBLE, *Chairman*  
G. P. CHACOS  
R. C. MIELENZ

### FINANCE COMMITTEE

C. MERRILL BARBER, *Chairman*  
JAY C. EHLE  
R. G. HARLEY

### PUBLICITY COMMITTEE

JOHN R. CHERRY, *Chairman*  
E. J. MILLER  
LOUIS C. OSWALD  
B. R. WELLEK

### HOUSING COMMITTEE

DONALD R. JOHNSTON, *Chairman*  
JOHN MACDOUGALL  
FRED TRIGGS

### ENTERTAINMENT COMMITTEE

GEORGE R. RACKLE, JR., *Chairman*  
ROBERT J. CROUSE  
R. W. WILLIAMS

### REGISTRATION COMMITTEE

GEORGE J. FREY, *Chairman*  
BRUCE A. LAMBERTON  
P. J. RUSSO

### MEMBERSHIP COMMITTEE

GEORGE BIGHAM, *Chairman*  
STANLEY G. BARTON  
JAMES R. CRUMP  
FRANCIS W. STAFFORD  
JACK NELSON STEKETEE

### EDUCATIONAL CONTACTS COMMITTEE

ROBERT G. SHIVELY, *Chairman*  
A. M. RICHARDS  
MICHAEL SHUGA

N O T E S