

49th Annual Convention



Hotel Statler

Boston, Massachusetts

February 17, 18, 19, 1953

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†Address

AMERICAN CONCRETE INSTITUTE
18263 W. McNichols Road, Detroit 19, Michigan

Program Time Table

Saturday, February 14 and Sunday, February 15

Meetings of Finance Committee, Executive Committee, Technical Activities Committee, and Board of Direction

Monday, February 16

TECHNICAL COMMITTEE MEETINGS

10:00 a.m.—	Committee 214	Parlor E
	Committee 315	Parlor F
	Committee 621	Parlor C
2:00 p.m.—	Committee 207	Parlor B
	Committee 321	Parlor A
	Committee 323 (Steering Comm.)	Parlor D
	Committee 611	Parlor F
	Committee 613	Parlor E
8:00 p.m.—	Committee 314	Parlor E
	Committee 323	Parlor A
	Committee 326	Parlor C
	Committee 711	Parlor F

(See also meetings scheduled for Tuesday)

Tuesday, February 17

9:00 a.m.—	Subcommittee 6, Committee 318	Parlor F
	Subcommittee 9, Committee 318	Parlor E
	Committee 716	Parlor C
9:00 a.m.—	Registration begins—Mezzanine	
10:00 a.m.—	First general session—New Standards and publications—Motion picture on quality concrete—Georgian Room	
12:00 noon—	Institute Officers reception and luncheon for scheduled program participants (by prior invitation)—Parlor C	
2:00 p.m.—	General convention session—Georgian Room	
8:00 p.m.—	Motion pictures on concrete—Georgian Room	
8:00 p.m.—	Committee 318	Hancock Room
	Committee 324	Parlor C

Wednesday, February 18

9:00 a.m.—	Convention session—Vibration of Concrete—Ballroom	
	Convention session—Design—Ballroom Assembly	
12:15 p.m.—	Awards Luncheon—Ballroom	

Continued on p. 4

9 a.m.—5 p.m., DAILY

TUESDAY, WEDNESDAY, and THURSDAY

FEBRUARY 17, 18, 19, 1953

CONVENTION REGISTRATION

in charge of
ETHEL B. WILSON, Assistant Treasurer

Registration fee—\$2.00

(All registered nonmember visitors are welcome at general sessions)

Buy your tickets for the Wednesday noon AWARDS LUNCHEON at time of registration.

See bulletin board for special notices.

12 noon sharp, Tuesday—Luncheon for all scheduled program participants in the general convention sessions. (By invitation)

TECHNICAL COMMITTEE MEETINGS

See p. 3 and bulletin board at registration desk for time and location.

NOTES FOR PROGRAM PARTICIPANTS

- Participants in the program should not fail to leave with the stenotype reporter manuscripts from which papers or discussions are presented. The ACI Secretary will later provide opportunity for manuscript revision before consideration for JOURNAL publication.
- Upon recognition by the Chairman a discussor will please state his name and convention registration number distinctly and go to a microphone so he may be heard by all. If presented from manuscript, it should be left with the stenotype reporter.
- A "Convention Review" will be published in the News Letter section of the April ACI JOURNAL.

Program Time Table

(Continued from p. 3)

2:30 p.m.—Convention session—Precast Concrete—Ballroom
Convention session—General—Ballroom Assembly

Thursday, February 19

9:00 a.m.—Annual Research Session—Open meeting of ACI Committee 115, Research—Ballroom

2:00 p.m.—Final convention session—Panel discussion—Ballroom

10:00 a.m., TUESDAY, FEBRUARY 17

Georgian Room

President A. T. GOLDBECK, Presiding

Opening remarks

Appointment of tellers to canvass annual election ballots

STANDARDS

Proposed Standard Specifications for the Design and Construction of Reinforced Concrete Chimneys

Report of Committee 505

E. A. DOCKSTADER, Chairman

See ACI JOURNAL, January 1953. Proposed standard gives criteria for the design of reinforced concrete chimneys and outlines construction procedures.

Proposed Revision of Minimum Standard Requirements for Precast Concrete Floor Units (ACI 711-46)

Report of Committee 711

F. N. MENEFEY, Chairman

See ACI JOURNAL, November 1952. Proposes to change existing Standard by adding descriptions of assembled concrete block, precast inverted T-beam joist with precast filler block, and inverted precast slab and T-joist types of floor units.

Proposed Manual of Standard Practice for Detailing Reinforced Concrete Highway Structures

Report of Committee 315

RAYMOND C. REESE, Chairman

Brief description of contents of proposed companion manual to present *Detailing Manual*.

PUBLICATION

Manual of Concrete Inspection

Report of Committee 611

J. W. KELLY, Chairman

RODERICK B. YOUNG, a member of Committee 611, will discuss changes to be incorporated in a proposed new edition of this popular and widely used ACI publication.

MOTION PICTURE

"Quality Concrete"

This new ACI-PCA film on proper techniques in making good concrete will be introduced by Prof. JAMES A. MCCARTHY, Notre Dame University, Chairman of the ACI Film Advisory Committee which passed on the technical details of the film.

2:00 p.m., TUESDAY, FEBRUARY 17

Georgian Room

Vice-President HENRY L. KENNEDY, *Chairman*

GENERAL

Building Foundations on Soft Ground

ARTHUR CASAGRANDE
Harvard University, Cambridge, Mass.

Development of a Device for Direct Measurement of Compressive Stress

ROY W. CARLSON and DAVID PIRTZ
Consulting Engineer, Berkeley, Calif.,
and University of California, Berkeley, respectively

Ten-Year Report on Long-Time Study of Cement Performance in Concrete

FRANK H. JACKSON
Bureau of Public Roads, Washington, D. C.

Recent Changes in Concrete Construction Specifications for the Corps of Engineers, Department of the Army

GEORGE OTTERSON
Office, Chief of Engineers, Washington, D. C.

Structural Refractory Concrete

HERMAN G. PROTZE
Materials Technologist, Boston, Mass.

8:00 p.m., TUESDAY, FEBRUARY 17

Georgian Room

MOTION PICTURES

"Operation Concrete"

"Prefabrication of Prestressed Concrete Roof Joists"

"We Call it Big Creek"

"Operation Greenhouse"

"Keep Progress Rolling in Texas"

9:00 a.m., WEDNESDAY, FEBRUARY 18

Concurrent sessions will be held morning and afternoon in the Ballroom and Ballroom Assembly

Ballroom

Vice-President C. H. SCHOLER, *Chairman*

VIBRATION OF CONCRETE

Compacting Concrete by Vibration

H. S. MEISSNER, *Session Leader*
Bureau of Reclamation, Denver, Colo.

Laboratory Tests on Vibration of Concrete

SVEN G. BERGSTROM
Swedish Cement and Concrete Research Institute, Stockholm, Sweden

Effect of Vibration on Air Content of Mass Concrete

W. O. CRAWLEY
Concrete Research Division
Waterways Experiment Station, Jackson, Miss.

Vibration of Mass Concrete

L. H. TUTHILL
Bureau of Reclamation, Denver, Colo.

Application of Vibration to Concrete Pavement Construction

A. G. TIMMS
Bureau of Public Roads, Washington, D. C.

Vibration Practices in Pipe, Precast and Block Manufacture

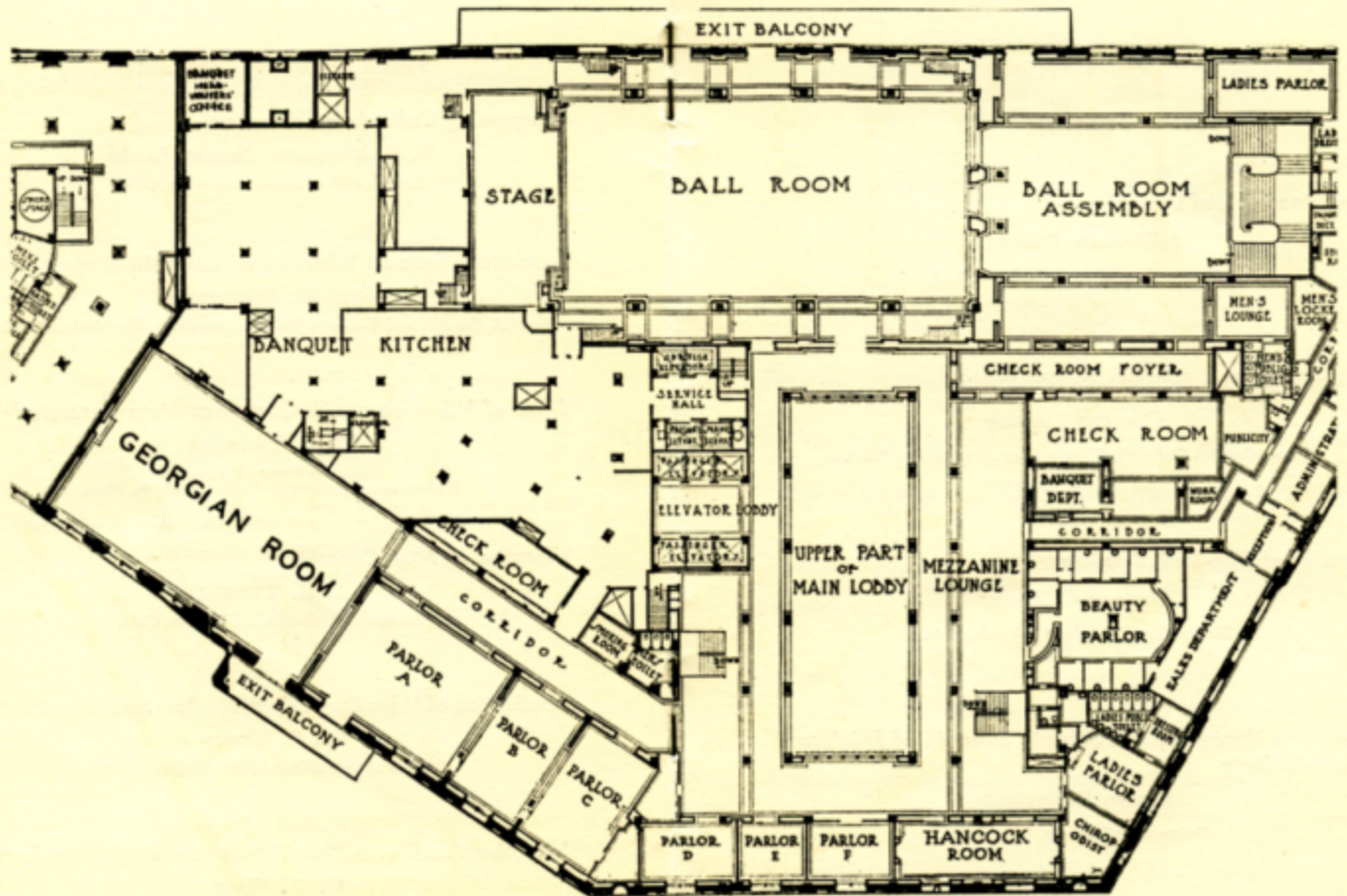
G. W. WASHA
University of Wisconsin, Madison

Vibration Practices in Structural Work

JOHN BANKER
Portland Cement Assn., Chicago, Ill.

ACI CONVENTION AREA

STATLER HOTEL, BOSTON



9:00 a.m., WEDNESDAY, FEBRUARY 18

Concurrent sessions morning and afternoon in Ballroom and Ballroom Assembly

Ballroom Assembly

Director CHARLES S. WHITNEY, *Chairman*

DESIGN

Limit Analysis and Design

WILLIAM PRAGER

Brown University, Providence, R. I.

Design Equations for Ultimate Strength

HOWARD SIMPSON

Massachusetts Institute of Technology, Cambridge, Mass.

Stability of Thin-Shell Structures

GEORGE C. ERNST

University of Nebraska, Lincoln, Neb.

Yield-Line Theory for the Ultimate Strength of Reinforced Concrete Slabs

EIVIND HOGNESTAD

University of Illinois, Urbana, Ill.

Static and Dynamic Behavior of Reinforced Concrete Beams

JOSEPH PENZIEN and ROBERT J. HANSEN

Consolidated Vultee Aircraft Corp.,
Fort Worth, Texas, and Massachusetts
Institute of Technology, Cambridge, Mass., respectively

12:15 p.m., WEDNESDAY, FEBRUARY 18

AWARDS LUNCHEON

Ballroom

Presentation of Awards

President GOLDBECK on behalf of the Board of Direction

ALFRED E. LINDAU Award to

FRANKLIN R. McMILLAN

"for his many years of labor in the development of standards of practice for reinforced concrete design."

LEONARD C. WASON Medal for the "Most Meritorious Paper" of ACI Proceeding V. 48 (September 1951 JOURNAL) to

CHARLES S. WHITNEY, BOYD G. ANDERSON,
and MARIO G. SALVADORI

for their paper

"Comprehensive Numerical Method for the Analysis of Earthquake Resistant Structures"

LEONARD C. WASON Medal for "Noteworthy Research" to

C. H. SCHOLER and GERALD M. SMITH

for the work reported in their paper (*Proceedings V. 48, February 1952 JOURNAL*)

"Use of Chicago Fly Ash in Reducing Cement-Aggregate Reaction"

American Concrete Institute CONSTRUCTION PRACTICE AWARD for a "paper of outstanding merit" on concrete construction practice to

F. THOMAS COLLINS

for his paper in the ACI JOURNAL (October 1951) entitled

"Tilt-Up Construction in Western United States"

Announcement of election to Honorary Membership:

RODERICK B. YOUNG

Report of Tellers and Introduction of New Officers

Recognition of Retiring Directors and Officers

Retiring President's Address

A. T. GOLDBECK

National Crushed Stone Assn., Washington, D. C.

2:30 p.m., WEDNESDAY, FEBRUARY 18

Concurrent sessions in Ballroom and Ballroom Assembly

Ballroom

A. AMIRIKIAN, *Chairman*

THIN-SHELL PRECAST CONCRETE

Thin-Shell Rib Panels Site Fabricated in Plastic Molds

M. R. MONTGOMERY and T. G. ATKINSON

Gunther-Shirley-Trepte Contractors, San Diego, Calif., and
Civil Engineer Corps, USN, Miramar NAS, Calif., respectively

*Factory Production and Handling Problems of Thin-Shell
Rib Panels*

C. D. WAILES, JR.

C. D. Wailes Corp., Los Angeles, Calif.

Precast Buildings for Ammunition Storage

BENTON H. PROCK

Prock Construction Co., Camden, Arkansas

*Four Million Square Feet of Thin-Shell Rib Panels for Roof
Framing*

CHARLES ZOLLMAN

Vacuum Concrete Corp., Philadelphia, Pa.

*Fabrication and Erection of Precast Enclosure Framing for
One-Story Barracks*

FORD TWAITS and MARTIN M. DENN

Twaits-Morrison-Knudsen-Maeco, Los Angeles, Calif.

2:30 p.m., WEDNESDAY, FEBRUARY 18

Concurrent sessions in Ballroom and Ballroom Assembly

Ballroom Assembly

Vice-President HENRY L. KENNEDY, *Chairman*

GENERAL

Concrete for Radiation Shielding

EDWIN J. CALLAN

Waterways Experiment Station, Jackson, Miss.

Accidental Air in Concrete

M. F. MACNAUGHTON and J. B. HERBICH

Milton Hersey Co., Ltd., Montreal, Quebec, and
Aluminum Co. of Canada, Kitimat, B. C., Canada, respectively

*Strength and Durability of Concrete Containing Chicago
Fly Ash*

GEORGE W. WASHA and NORMAN H. WITHEY

University of Wisconsin, Madison, and
Consulting Engineer, Madison, Wis., respectively

*Correlation Between Laboratory Freezing and Thawing
and Weathering at Treat Island, Maine*

THOMAS B. KENNEDY and KATHARINE MATHER

Concrete Research Division, Waterways
Experiment Station, Jackson, Miss.

Guniting the Hayden Planetarium Dome

JOHN H. HESSION

National Gunitite Corp., Boston, Mass

Ballroom

ANNUAL OPEN SESSION OF ACI COMMITTEE 115, RESEARCH

STEPHEN J. CHAMBERLIN, *Chairman*

GEORGE W. WASHA, *Secretary*

This convention feature differs from general sessions in that the information is not released for publication. Request is made that proceedings be regarded as CONFIDENTIAL. A group of short papers will be presented on research techniques and preliminary results.

Evaluation of silicone and certain other colorless waterproofers on concrete

Prestressed concrete for highway bridges

Model study of load distribution in short span highway bridges with steel stringers and concrete pavement

Effect of polyvinyl acetate additions to portland cement

Determination of shrinkage and plastic flow of concrete under constant stress

Characteristics of cement grouts

Post-stressed floor beams using lightweight masonry units and glass cable as the tensioning member

Experimental investigation of the hydraulic pressure hypothesis

Strength of T-beams under combined shear and torsion loading

Effect of gap grading of aggregate on the various properties of concrete

ATTENDANCE AT THE SESSION IS THE ONLY SURE WAY OF BEING IN ON THESE PREVIEWS OF FUTURE DEVELOPMENTS IN CONCRETE.

Ballroom

PANEL DISCUSSION

STANTON WALKER, *Moderator*

MILES N. CLAIR

President
The Thompson and Lichtner Co., Inc.
Brookline, Mass.

M. H. CUTLER

Assistant Chief Structural Engineer
Stone and Webster Engineering Corp.
Boston, Mass.

MYLE J. HOLLEY, JR.

Associate Professor of Structural Engineering
Massachusetts Institute of Technology
Cambridge, Mass.

FRANK H. JACKSON

Principal Engineer of Tests
Bureau of Public Roads
Washington, D. C.

FRANK KEREKES

Assistant Dean of Engineering
Iowa State College
Ames, Iowa

E. B. OBERLY

Construction Superintendent
Portland Cement Assn.
New York, N. Y.

WALTER H. PRICE

Head, Materials Laboratory
Bureau of Reclamation
Denver, Colo.

C. H. SCHOLER

Professor of Applied Mechanics
Kansas State College
Manhattan, Kans.

M. A. SWATZE

Director of Research
Lone Star Cement Corp.
New York, N. Y.

GEORGE W. WASHA

Professor of Mechanics
University of Wisconsin
Madison, Wis.

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ROBERT J. GRAY, *Secretary*

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MYRON A. HOWE

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D. J. CAMERON—Reinforcing Steel Industries

MILES N. CLAIR—Testing Laboratories

JOSEPH DEVANEY—Construction Equipment

PAUL A. DUNKERLEY—Colleges

JACK FREEDMAN—Concrete Products

WILLIAM L. GALVIN—Architects

ALBERT HAERTLEIN—Colleges

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F. A. McADAM—Building Specialties Industries

PAUL NORTON—Structural Engineers

WILLIAM NYE—Building Contractors

MAURICE A. REIDY—Structural Engineers

HOWARD SIMPSON—Colleges

ERNEST L. SPENCER—Colleges

WALTER C. VOSS—Colleges

RODERICK B. YOUNG—Canadian Societies

MYRON A. HOWE—Ready Mixed Concrete

Ladies' Committees

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MRS. HUGH S. FERGUSON

MRS. EMIL A. GRAMSTORFF

MRS. HENRY L. KENNEDY

AMERICAN CONCRETE INSTITUTE

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DETROIT 19, MICHIGAN

—an engineering society whose chartered object is "to organize the efforts of its members for a nonprofit public service in gathering, correlating and disseminating information for the improvement of the design, construction, manufacture, use, and maintenance of concrete products and structures."