49th Annual Convention

AMERICAN CONCRETE INSTITUTE

Hotel Statler
Boston, Massachusetts
February 17, 18, 19, 1953
BOARD OF DIRECTION

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A. T. Goldbeck

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TECHNICAL ACTIVITIES COMMITTEE

(In charge of convention program and of technical publications)

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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
Committee 315
Committee 621
Parlor E
Parlor F
Parlor C

2:00 p.m.—Committee 207
Committee 321
Committee 323 (Steering Comm.)
Committee 611
Committee 613
Parlor B
Parlor A
Parlor D
Parlor F
Parlor E

8:00 p.m.—Committee 314
Committee 323
Committee 326
Committee 711
Parlor E
Parlor A
Parlor C
Parlor F

(See also meetings scheduled for Tuesday)

Tuesday, February 17

9:00 a.m.—Subcommittee 6, Committee 318
Subcommittee 9, Committee 318
Committee 716
Parlor F
Parlor E
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
Committee 324
Hancock Room
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 con-
sideration for JOURNAL publication.
● Upon recognition by the Chairman a discusser will please
state his name and convention registration number dis-
trictly 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—Ball-
room

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 Con-
struction 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. Menefee, Chairman
See ACI Journal, November 1952. Proposes to change
existing Standard by adding descriptions of assembled con-
crete 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 Rein-
forced 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 OTTERTSON
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.
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

**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 Gunit 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.
BOSTON CONVENTION COMMITTEE

Henry L. Kennedy, General Chairman
Emil A. Gramstorff, Treasurer
Robert J. Gray, Secretary

Executive Committee

Henry L. Kennedy       Myron A. Howe
Emil A. Gramstorff     F. E. Votaw
R. J. Gray

Coordinating Committees

John Allen—Government Agencies
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
A. B. MacMillan—Building Contractors
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

Mrs. Howard Simpson, Chairman
Mrs. Hugh S. Ferguson       Mrs. Emil A. Gramstorff
Mrs. Henry L. Kennedy

AMERICAN CONCRETE INSTITUTE

18263 W. McNichols Road
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.”