American Concrete Institute

60th Annual Convention March 2-5, 1964 Rice Hotel Houston, Texas



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* Address AMERICAN CONCRETE INSTITUTE

P.O. Box 4754, Redford Station Detroit, Michigan 48219

CONVENTION REGISTRATION

Monday – Thursday, March 2-5

8:00 a.m. - 5:00 p.m.

in Grand Foyer, Second Floor

Registration Fee – \$5.00

All ladies and **registered** nonmember visitors are welcome to attend technical sessions, Awards Luncheon, and social activities.

See bulletin board in registration area for special announcements.

TECHNICAL COMMITTEE CHAIRMEN BREAKFASTS

- 7:30 a.m. Monday Breakfast for chairmen of 100 and 200 Group Technical Committees (by invitation) in Neches Room.
- 7:30 a.m. Tuesday Breakfast for chairmen of 500 Group Technical Committees (by invitation) in Neches Room.

Note: No special breakfasts scheduled for chairmen of 300 and 400 Group Technical Committees

NOTES FOR PROGRAM PARTICIPANTS

7:30 a.m. Wednesday – Breakfast for program participants (by invitation) in Neches Room.

8:00 a.m. Thursday – Breakfast for Research Session participants (by invitation) in Neches Room.

Upon recognition by the Chairman, a discusser will please state his name distinctly and go to the nearest microphone so that he may be heard by all.

A "Convention Review" will be published in the News Letter section of the May 1964 ACI JOURNAL.

ACI CONVENTION AND PRESS HEADQUARTERS

Comal and Pecos Rooms

SPECIAL EVENTS

- Educational-Technical Exhibits . . . Monday through Thursday in exhibit hall. Have your program card (inside back flap) stamped to qualify for valuable door prizes.
- Photographic Exhibit of unusual and outstanding concrete structures, Monday through Thursday.
- Ladies' Program . . . See schedule elsewhere in this program book.
- Architectural Design Competition . . . Winning sketch and four honorable mention entries on display beginning Tuesday.
- Ice-Breaker Buffet . . . 6:30 p.m., Tuesday, Grand Ballroom. Buy your ticket, \$2.00 per person, from local committee, convention registration area.
- University of Illinois Alumni Breakfast . . . 7:45 a.m. Wednesday, Sabine Room. Tickets, \$2.35 per person, may be purchased in convention registration area from local committee.
- Awards Luncheon and Installation of new ACI Officers . . . 12:15 p.m. Wednesday, Grand Ballroom. Purchase tickets by 9:30 a.m. Wednesday at the convention registration desk. \$4.00 per person.
- Inspection Trip . . . 9:30 a.m. Friday. Conducted bus tour will leave main entrance of hotel for three-hour trip to construction projects of special interest. Included will be complex highway interchanges, a multi-story architectural concrete apartment, an office building with exposed aggregate exterior and 80' span prestressed beams, the Rice University campus, and the 66,000-seat capacity domed stadium—the world's largest air-conditioned sports stadium and new home of Houston's major league football and baseball teams. Tickets, \$1.50 per person, may be purchased from local committee. Ladies invited.

TECHNICAL COMMITTEE MEETINGS

All meetings are open except those indicated as executive or closed sessions. Meeting topics are in italics.

Sunday Afternoon, March 1 2:00 p.m. – 5:00 p.m.

Committee

441 Reinforced Concrete Columns (Executive Group only) Meeting Room

Gold

Monday Morning, March 2 9:00 a.m. – 12:00 Noon (except where noted)

- Board Committee on Coordination (Closed meeting) Board (9:30 a.m.)
- 201 Durability (2nd draft of "Guide to a Condition Survey of Concrete in Service") El Vaquero
- 213 Lightweight Aggregates (5 chapters of "Guide for Structural Lightweight Concrete") Trinity
- 315 Detailing Reinforced Concrete Structures (Final revisions to Detailing Manual; discussion of proposed prestressed-precast section) Stinson
- 333 Composite Structures (Research reports; revisions to Tentative Recommendations)

Neches (9:30 a..m)

- 334 Shell Structures (Closed meeting)
- 408 Bond Stress (Subcommittee progress; research) Cougar
- 421 Reinforced Concrete Slabs (Development of new design code) Persian
- 428 Limit Design (Subcommittee reports; program for Miami Symposium) Gold
- 504 Joint Sealants (Task Group only)
- 506 Pneumatically Applied Mortar (Draft of proposed recommended practice) Sabine
- 512 Precast Structural Concrete Silver

 These rooms are on upper floors of hotel. Please check bulletin board at registration desk for specific room number.

Monday Afternoon, March 2 2:00 p.m. - 5:00 p.m.

Committee	Meetin	g Room
— Boa	rd Committee on Chapter Activitie	es
(Ch	osed meeting)	Board
115 Res	earch (Executive Group Only)	•
213, Sub-		
committee 1	Lightweight Aggregates ("Guide j tural Lightweight Concrete")	for Struc- Trinity
214	Evaluation of Strength Tests (Re committee report; correlation of cylinders)	
311	Inspection (Revision of Inspection Code of Concrete Inspection)	Manual; Green
315	Detailing Reinforced Concrete S (Final revisions to Detailing Man cussion of proposed prestresse section)	nual; dis-
322	Structural Plain Concrete (Revised Recommended Building Code ments for Structural Plain Concret.	Require-
334	Shell Structures (Closed Meeting)	•
408	Bond Stress (Subcommittee prog search)	cougar
439	High-Strength Reinforcement El	Vaquero
441	Reinforced Concrete Columns (Prosubcommittees)	ogress of Persian
503	Adhesives for Concrete	Neches
504	Joint Sealants (Task Group only)	•
506	Pneumatically Applied Mortar (i proposed recommended practice)	Draft of Sabine

Monday Evening, March 2 7:00 p.m.

—	Board Committee on ties (Closed meeting)	International Activi- Gold
207	Mass Concrete	El Vaquero
213, Sub- committee 4	Lightweight Aggregate	es (Closed meeting) Trinity

*These rooms are on upper floors of hotel. Please check bulletin board at registration desk for specific room number.

Committee	•	Mee	ting Room
302	Concrete Floors		Neches
317	Reinforced Concrete (Closed meeting)	Design	Handbook Board
334	Shell Structures (Close	ed meetin	g) •
423	Prestressed Concrete (Closed m	eeting) •
441	Reinforced Concrete (subcommittees)	Columns (Progress of Persian

Tuesday Morning, March 3 9:00 a.m. – 12:00 Noon (except where noted)

Chapter Forum Trinity
Nomenclature (Progress of committee work)
Creep and Volume Changes (Creep and shrinkage of plain concrete; new research) •
Fireproofing Structures (Closed meeting) Green
Winter Concreting (Winter curing require- ments; use of calcium chloride) Persian
Reinforced Concrete Chimneys (Committee approval of draft of revised specification) *
Design of Concrete Pavements (Reports of Subcommittees 1 and 6) Silver
Arches (Research into elastoplastic beha- vior of arches) Stinson
Prestressed Concrete (Closed meeting) •
Shear and Diagonal Tension (Future work, subcommittee assignments) Cougar
Strength Evaluation of Structures (Closed meeting)
Coatings (Report on coatings for preven- tion of chemical attack) El Vaquero

*These rooms are on upper floors of hotel. Please check bulletin board at registration desk for specific room number.

Committee

Meeting Room

- 517 Low Pressure Steam Curing (Proposed recommended practice, committee report, steam-curing projects at PCA) Gold
- 531 Concrete Masonry Structures (Research needs, review of chapters in "Recommended Practice" on structural design and wall movements) Sabine
- 533 Precast Panels (Symposium program outline) Neches (9:30 a.m.)

Tuesday Afternoon, March 3 2:00 p.m. – 5:00 p.m.

Ad Hoc Committee on Computers Silver

- 103 Monographs (Closed meeting) Board
- 211 Proportioning Concrete Mixes (Revisions of 613-54; proposed standard, "Recommended Practice for Selecting Proportions for No-Slump Concrete") Trinity
- 212 Admixtures (Preparation of Recommended Practices) El Vaguero
- 216 Fireproofing Structures Green
- 344 Circular Prestressed Structures (Review of recommendation) Stinson
- 423 Prestressed Concrete (Closed meeting) *
- 435 Deflection of Structures (Revision of committee report; progress of committee questionnaire) Neches
- 437 Strength Evaluation of Structures (Closed meeting)
- 422 Lateral Forces on Multistory Frames (Discussion of reports, committee membership, approximate methods vs. computer method) Cougar
- 504 Joint Sealants (Final draft of committee paper, "Current Practices for Joint Sealants") Sabine
- These rooms are on upper floors of hotel. Please check bulletin board at registration desk for specific room number.

Committee

Meeting Room

- 516 High Pressure Steam Curing (Committee report) Persian
- 523 Insulating and Cellular Concretes (First draft of "Recommended Practice for Castin-Place Low Density Concrete"; proposed "Recommended Practice" for precast prodducts) Gold
- 543 Concrete Piles (Discussion of slip forms, temperature recording devices; expanding committee membership)

Tuesday Evening, March 3 6:30 p.m.

Ice-Breaker Buffet in Grand Ballroom. Buy your tickets, \$2.00 per person, from local committee in convention registration area.

Tuesday Evening, March 3 8:00 p.m.

ASCE Committee on Masonry and Reinforced Concrete (Administrative Committee and Task Committee chairmen only) Gold

Wednesday Afternoon, March 4 2:00 p.m. – 5:00 p.m.

318 ACI Building Code

Sabine

Wednesday Evening, March 4 7:00 p.m.

318 ACI Building Code Sabine

•These rooms are on upper floors of hotel. Please check bulletin board at registration desk for specific room number.

WEDNESDAY MORNING, MARCH 4

FIRST GENERAL SESSION 9:00 a.m. – 11:45 a.m. Grand Ballroom	CHAIRMAN H. E. Bovay, Jr. President Bovay Engineers, Inc. Houston, Texas
Invocation	
Presidential Address	Roger H. Corbetta President American Concrete Institute & Chairman of the Board Corbetta Construction Company, Inc. New York, New York
Proposed ACI Standard: Recommended Practice for Concrete Inspection	Samuel D. Burks Manager, Construction Chemicals Division W. R. Grace and Company Dewey and Almy Chemical Division San Leandro, California
1963 Skopje Earthquake	Walter E. Kunze Director of Promotion Planning and Engineering Services Portland Cement Association Chicago, Illinois
Structural Damage Caused by the 1963 Skopje Earthquake	Mete A. Sozen Professor of Civil Engineering University of Illinois Urbana, Illinois
The Cement and Concrete Reference Laboratory	J. R. Dise Manager Cement and Concrete Reference Laboratory U.S. Department of Commerce National Bureau of Standards Washington, D. C.
The New ACI Publications Policy	William A. Maples Executive Secretary American Concrete Institute Detroit, Michigan
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Wednesday, March 4

AWARDS LUNCHEON

12:15 p.m. GRAND BALLROOM

Presentation of Awards

HENRY C. TURNER MEDAL to

CHESTER P. SIESS

"For notable research and committee service on structural members and fundamental properties of reinforced concrete"

ALFRED E. LINDAU AWARD to

ALFRED L. PARME

"For important contributions to the development and American adoption of advanced design in reinforced concrete, especially for thin shells"

HENRY L. KENNEDY AWARD to

RAYMOND C. REFSE

"For outstanding leadership and technical contributions in the extensive and exacting revision of the ACI Building Code"

WASON MEDAL FOR RESEARCH to

I. J. HROMADIK

For his paper "Column Strength of Long Piles" published in the June 1962 ACI JOURNAL

WASON MEDAL FOR "THE MOST MERITORIOUS PAPER" to

PAUL FISCHER

For his paper "Differential Temperature Moments in Rigid Frames" published in the June 1962 ACI JOURNAL

CONSTRUCTION PRACTICE AWARD to

JOSEPH R. PROCTOR, JR.

For his paper "Economics of Formwork Planning" published in the June 1962 ACI JOURNAL

Announcement of Election to Honorary Membership

Ulrich Finsterwalder Kiyoshi Muto Byram W. Steele

Announcement of Student Winners in Architectural Design Competition

Presentation of ACI Charter to Houston and North East Texas Chapters

Recognition of Retiring Officers

Report of Tellers and Introduction of New Officers

Presentation of Memento to Retiring President

ROOM LOCATOR MAP FOR RICE HOTEL



WEDNESDAY AFTERNOON, MARCH 4		WEDNESDAY AFTERNOON, MARCH 4		
CONCURRENT SESSION (1) SYMPOSIUM ON CREEP OF CONCRETE 2:00 p.m. – 5:00 p.m. Crystal Ballroom–Trinity Room	CHAIRMAN Adam M. Neville Vice Chairman, ACI Committee 209	CONCURRENT SESSION (2) SYMPOSIUM ON PRECAST CONCRETE WALL PANELS 2:00 p.m. – 5:00 p.m. Grand Ballroom	CHAIRMAN William A. Cordon Chairman, ACI Committee 533 & Associate Professor of Civil and Irrigation Engineering Utah State University Logan, Utah	
Factors in Creep and Its Prediction	Bernard L. Meyers Assistant Professor of Civil Engineering University of Missouri Columbia, Missouri Adam M. Neville Chairman, Div. of Engineering	Activities and Objectives of Committee 533 Past and Future of Precast	Harry T. Swanson Manager, Atlas White & Lumnite Sales Universal Atlas Cement Division U. S. Steel Corporation New York, New York T. W. Hunt	
	University of Alberta Calgary, Alberta	Concrete Wall Panels	Decorative Concrete Specialist Portland Cement Association Chicago, Illinois	
Mechanisms of Creep in Concrete	Clyde E. Kesler Professor Department of Theoretical and Applied Mechanics College of Engineering	Design of Precast Concrete Wall Panels	Victor F. Leabu Chief Structural Engineer Giffels & Rossetti, Inc. Detroit, Michigan	
Some Factors in the Analysis	University of Illinois Urbana, Illinois Boris Bresler	Fabrication and Erection of Precast Concrete Wall Panels	Phillip W. Gutmann Manager, Technical Division Medusa Portland Cement Company Cleveland, Ohio	
of Time-Dependent Behavior of Reinforced Concrete	Chairman Division of Structural Engineering and Structural Mechanics College of Engineering Lawrence G. Selna	Bowing, Warpage and Movement of Precast Concrete Wall Panels	Sheng Pao Sheng Consulting Engineer Williamstown, West Virginia	
	College of Engineering University of California Berkeley, California	Materials and Tests	J. A. Hanson	

J. A. Hanson Senior Development Engineer Portland Cement Association Research and Development Laboratories Skokie, Illinois

Daniel P. Jenny Chief Engineer Expanded Shale Clay and Slate Institute Washington, D. C.

Adrian Pauw

Chairman & Professor

Department of Civil Engineering

Bernard L. Meyers

Assistant Professor

University of Missouri

Columbia, Missouri

Effects of Creep and Shrinkage

Reinforced Concrete Members

on the Behavior of

15

for Precast Concrete

Wall Panels

THURSDAY MORNING, MARCH 5

THURSDAY MORNING, MARCH 5

CONCURRENT SESSION (1) CONSTRUCTION SESSION 9:00 a.m. – 11:30 a.m. Grand Ballroom	CHAIRMAN G. E. Burnett Chief Research Scientist U. S. Bureau of Reclamation Denver, Colorado	CONCURRENT SESSION (2) DESIGN SESSION 9:00 a.m. – 12:00 Noon Crystal Ballroom–Trinity Room	CHAIRMAN James A. Morcom Structural Field Engineer Portland Cement Association Houston, Texas
Construction Features of Free Form Thin Concrete Shell for Eastman Kodak Pavilion, 1964-65 New York World's Fair	Lev Zetlin Consulting Engineer Lev Zetlin & Associates New York, New York	Design of Morrow Point Dam	Loyd R. Scrivner Technical Assistant to Head, Concrete Dams Section Office of the Chief Engineer U. S. Bureau of Reclamation Denver, Colorado
New Possibilities in the Construction of Prestressed Concrete Bridges	Ulrich Finsterwalder Chief Engineer and Director Dyckerhoff & Widmann K. G. Munich, West Germany	High Strength Reinforcing Steel in Bridges	E. L. Hardeman Senior Bridge Engineer Texas Highway Department Waco, Texas
Precast Barrel Shell Roof for Seattle Port Authority Transit Sheds	Robert F. Mast Structural Consultant Anderson, Birkeland, Anderson & Mast Tacoma, Washington	Development Length for Large High Strength Reinforcing Bars	Phil M. Ferguson Professor of Civil Engineering J. Neils Thompson Director, Balcones Research Center University of Texas Austin, Texas
15 Years of Slip-Form Concrete Paving	Gordon K. Ray Manager Harold J. Halm Construction Engineer Paving Bureau Portland Cement Association Chicago, Illinois	Column Details under the 1963 ACI Building Code	Donald E. Anderson Edward S. Hoffman The Engineers Collaborative Chicago, Illinois
16	NA STATISTICS IN STATISTICS	17	

THURSDAY AFTERNOON, MARCH 5

THURSDAY AFTERNOON (Continued)

RESEARCH SESSION 2:00 p.m 5:00 p.m.	CHAIRMAN Chester P. Siess (Chairman, ACI Committee 115) Professor of Civil Engineering	Evaluation of Static, Dynamic, and Fatigue Failure of Plain Concrete	Don A. Linger Professor of Civil Engineering University of Arizona Tucson, Arizona	
Grand Ballroom This annual open meeting of ACI Committee 115, Research, differs from general sessions in that the informa- tion is not released for publication, Request is made that the proceedings be regarded as CONFIDENTIAL.	University of Illinois Urbana, Illinois Stephen J. Chamberlin (Secretary, ACI Committee 115) Professor of Theoretical and Applied Mechanics Iowa State University Ames, Iowa	Shear Bond Strength between Aggregate and Paste: Effects on Microcracking and Fracture	Bengt B. Broms Associate Professor of Civil Engineering Michael A. Taylor Former Research Assistant George Winter	
Structural Shrinkage and Creep Properties of Lightweight Aggregates in Prestressed Concrete Beams	Michael A. Cassaro Department of Civil Engineering University of Florida Gainesville, Florida		Professor and Head Structural Engineering Department Cornell University Ithaca, New York	
Tests of a Prestressed Concrete Slab	John F. Brotchie Senior Research Officer Division of Building Research Commonwealth Scientific and Industrial Research Organization Highett, Victoria, Australia	Effects of Concrete Parameters on Crack Propagation	James E. Lott Research Associate Department of Theoretical and Applied Mechanics University of Illinois Urbana, Illinois	
Galvanized Reinforcement for Concrete	Boris Bresler Chairman Division of Structural Engineering and Structural Mechanics College of Engineering University of California Berkeley, California	Controlling Rapid Drying of Fresh Concrete by Evaporation Retardation	William A. Cordon Associate Professor of Civil and Irrigation Engineering J. Derle Thorpe Assistant Research Engineer Engineering Experiment Station Utah State University Logan, Utah	
Horizontal Shear Connection in Composite Concrete Beams	C. L. Hulsbos Research Professor of Civil Engineering Lehigh University Bethlehem, Pennsylvania	Properties of Fresh and Hardened Concrete in Bridge Decks as Affected by Finishing Methods	Howard Newlon, Jr. Highway Research Engineer Virginia Council of Highway Investigation and Research Charlottesville, Virginia	

19

LADIES' PROGRAM

Registration in Ladies' Hospitality Room: the Sam Houston Room, 2nd floor. The Hospitality Room is open daily from 9:30 a.m. to 3:30 p.m., Monday through Thursday.

Monday, March 2

9:30 a.m. Registration and Get-Acquainted Coffee in Hospitality Room.

Tuesday, March 3

6:30 p.m. Attend the Ice-Breaker Buffet with your husband, Grand Ballroom. \$2.00 per person.

Wednesday, March 4

12:15 p.m. Awards Luncheon in Grand Ballroom. Ladies invited. \$4.00 per person.

2:30 p.m. Bus tour for ladies immediately following the Awards Luncheon. \$3.00 per person.

Thursday, March 5

12:00 Noon. Ladies' luncheon at Houston Club. \$5.00 per person.

Friday, March 6

9:30 a.m. Ladies invited to Inspection Trip. Conducted bus tour leaves the Main Street entrance of the Rice Hotel for 3-hour tour of construction projects including new highway interchanges, apartment and office buildings, Rice University campus, and 66,000-seat domed stadium—world's largest air-conditioned sports stadium for major league baseball and football. \$1.50 per person.

LADIES COMMITTEE

MRS. H. E. BOVAY, JR., Chairman MRS. JAMES A. MORCOM MRS. R. O. GRIMES MRS. LUTHER E. BELL

HOUSTON CONVENTION COMMITTEES

GENERAL CHAIRMAN H. E. BOVAY, JR.

VICE CHAIRMEN JAMES A. MORCOM R. O. GRIMES

SECRETARY G. L. CUBBISON

TREASURER STRATO BATMANIS

PROGRAM COMMITTEE (ADVISORY) JAMES R. SIMS

PUBLICITY COMMITTEE LUTHER E. BELL, Chairman WILLIAM V. WARD PHIL D. BARNARD

MEMBERSHIP COMMITTEE WALTER P. EASTWOOD

INSPECTION TRIPS COMMITTEE Herbert M. Shilstone, Jr., Chairman Edward C. Jancik

LADIES' ENTERTAINMENT COMMITTEE

MRS. H. E. BOVAY, JR., Chairman MRS. JAMES A. MORCOM MRS. R. O. GRIMES MRS. LUTHER E. BELL

EDUCATIONAL CONTACTS COMMITTEE Ardis H. White, Chairman Nat W. Krahl

EXHIBITS & DISPLAYS COMMITTEE RONALD L. DE VIES, Local Coordinator

> FINANCE COMMITTEE A. J. MALLOY, Chairman John J. Day, Jr. V. S. Skinner

HOTEL & ENTERTAINMENT REGISTRATION COMMITTEE IAMES A. CUMMINS, Chairman

J. RICHARD BRODERICK GEORGE J. PAUL

ACI DOOR PRIZE CARD

To qualify for daily door prize drawings, visit the Educational-Technical Exhibits and have card rubber-stamped with corresponding booth numbers at each exhibit booth. Deposit card in Door Prize Drawing Box at registration desk. You need not be present at drawings to win, but give complete identification below.

1-2	3	4-5	6-7	8
9-10	11	12	13	14
15	16	17	18	19
20	21	22	23	24-25
26	27	28	29	30
31	32	33	34	

Home Address

Name

Hotel & Room No.

EXHIBIT HOURS

 Mon., Mar. 2-2:00 p.m.-6:00 p.m.
 Wed., Mar. 4-10:00 a.m.-6:00 p.m.

 Tues., Mar. 3-10:00 a.m.-6:00 p.m.
 Thurs., Mar. 5-9:00 a.m.-5:00 p.m.

NOTES

HOUSTON CONVENTION EXHIBITORS

The Educational-Technical Exhibits hold the answer to your concrete design construction problems. Visit the Exhibits daily to find out what's new in materials, equipment and services—and at the same time qualify for valuable door prizes.

Booth No(s)

1-2	Sika Chemical Corp., Passaic, N. J.
3	Protex Industries, Inc., Denver, Colo.
4-5	The Patent Scaffolding Co., Inc., Long Island City, N. Y.
6-7	United States Steel Corp., Pittsburgh, Pa.
8	Stressteel Corp., Wilkes-Barre, Pa.
9-10	National Gypsum Co., Buffalo, N. Y.
11	Architectural Concrete Consultants, Inc., Houston, Tex.
12	Rainhart Co., Austin, Tex.
13	Kwik-Mix Co., Port Washington, Wis.
14	Gateway Erectors, Inc., Chicago, III.
15	Thiokol Chemical Corp., Trenton, N. J.
16	The Prescon Corp., Corpus Christi, Tex.
17	Marathon, Division of American Can Co., Neenah, Wis.
18	The Master Builders Co., Cleveland, O.
19	Joseph T. Ryerson & Son, Inc., Chicago, Ill.
20	Sonoco Products Co., Hartsville, S. C.
21	Intrusion-Prepakt, Inc., Cleveland, O.
22	Griffolyn Co., Inc., Houston, Tex.
23	Erico Products, Inc., Cleveland, O.
24-25	W. R. Grace & Co., Dewey and Almy Chemical Division, Cambridge, Mass.
26	Mas Con Supply Co., Denver, Colo.
27	Vacuum Concrete Corporation of America, Philadelphia, Pa.
28	Molded Fiber Glass Co., Ashtabula, O.
29	True Gun-All Division, Detroit Tool Engineering Co., Lebanon, Mo.
30	Durox Management Co., Lake Elmo, Minn.
31	Richmond Screw Anchor Co., Inc., Brooklyn, N. Y.
32	Edoco Technical Products, Inc., Long Beach, Calif.
33	Jayhawk Fibre Form Co., Lawrence, Kans.
34	The Hausman Steel Co., Detroit, Mich.

CONTRIBUTOR

Hunt Process Corporation-Southern, Ridgeland, Miss.

EXHIBIT HOURS

Monday, March 2-2:00 p.m. - 6:00 p.m. Tuesday, March 3-10:00 a.m. - 6:00 p.m. Wednesday, March 4, 10:00 - 6:00 p.m. Thursday, March 5-9:00 a.m. - 5:00 p.m.