

LETTERS

March-April PCI JOURNAL Receives Accolades

Thank you for your kind note and the copies of the March-April 1997 PCI JOURNAL containing the article on the Jackson Boulevard Bridge project. The new bridge in Garfield Park is a beautiful and much needed replacement for the old bridge. I enjoyed reading the article and appreciate your taking the time to send me this information.

Richard M. Daley
Mayor
City of Chicago
Chicago, Illinois

Not only is your March-April issue of unusual length, but also noteworthy for the manner of presentation of the two technical reports. Use of full color photographs and tint blocks for tables and line art undoubtedly enhances the readability (and appeal) for what might, in the hands of another society, have been pedestrian and dull. Keep up the good work.

Mary K. Hurd
Engineer-Writer/Consultant
Farmington Hills, Michigan

PCI COMMITTEE DAYS

More than 300 enthusiastic participants gathered at the Swissôtel in Chicago on April 16 to 20 for PCI Committee Days. During some 50 committee meetings over the course of four days, committee members addressed myriad topics related to the technical, marketing and administrative affairs of the Institute.

Among the highlights of Committee Days were:

- The Bridge Design Manual seminar rehearsal introducing the teaching aids used by presenters at the seminars accompanying publication of this new manual later this year.
- A Seismic Design/Research Workshop that brought together NIST, ATLSS and PRESS re-

New Appointments to PCI Committees

The following individuals have recently accepted appointments to PCI committees. We appreciate their interest and voluntary participation.

- *PCI JOURNAL Advisory Committee*

Richard R. Imper
Morse Bros. Inc.
Harrisburg, Oregon

Leslie D. Martin
Industry Consultant
Bella Vista, Arkansas

- *PCI Committee on Prestressed Concrete Piling*

Raju R. Penmasta
Site Blauvelt Engineering
Richmond, Virginia

Steven Seguirant
Concrete Technology Corp.
Tacoma, Washington

- *PCI Committee on Concrete Railroad Ties*

Richard Mogel
Pomeroy Corporation
Petaluma, California

William Pilesi
KSA
Sciotoville, Ohio

Sergio Rosengaus
ITISA
Mexico City, Mexico

Peter Urquhart
Rocla Concrete Tie, Inc.
Denver, Colorado

- *PCI Committee on Parking Marketing/Promotion*

Howard Albrecht
Coreslab Structures (Texas) Inc.
Cedar Park, Texas

- *PCI Committee on Sales and Marketing Training*

Dennis L. Nemenz
Concrete Technology, Inc.
Springboro, Ohio

- *PCI Committee on Ascent Magazine*

Peter Perera
Willis Construction Co., Inc.
San Juan Bautista, California

Gregory C. Van Arsdale
Coreslab Structures (Atlanta) Inc.
Jonesboro, Georgia

- *PCI Committee on Emerging Markets*

John Dobbs
Hamilton Form Company, Inc.
Fort Worth, Texas

searchers with members of the design community for a beneficial exchange of information.

- A decision to put the entire (1956 to present) listing of abstracts, titles, authors and keywords of PCI JOURNAL articles on PCI's website in a searchable format.

As always, the energy and com-

PCI/FHWA International Symposium Update

Because of the large turnout expected, it is critical that you make hotel room reservations as soon as possible for the PCI/FHWA International Symposium on High Performance Concrete, scheduled for October 20-22, 1997, in New Orleans, Louisiana. This world event, held in conjunction with the 43rd PCI Annual Convention and Exhibition, will be headquartered at the Hyatt Regency New Orleans.

To reserve a room at the Hyatt Regency New Orleans, call Hyatt's Central Reservation System at 800-233-1234 or call the Hyatt directly at (504) 561-1234. Room rates are as follows: Single \$139/Double \$159/Club Level Rate add \$35/Suites start at \$305. Sales tax 11% plus \$3 per room/night occupancy tax. All major credit cards are accepted. While the cut-off date for room reservations is September 14, it is expected that all rooms will be reserved well before that date. **Assure yourself a reservation by calling today!** Be certain to mention that you are attending the Convention/Symposium.

United Airlines is the official airline for the Convention/Symposium. United can be contacted at 800-521-4041 and be sure to mention the meeting plus #561ZB to take advantage of the Special Meeting Saver Fare. Budget Rent a Car Systems, Inc. is the official car rental company for the event and can be reached toll free at 800-527-0700 or at (504) 467-2277.

The International Symposium will address the research, design, construction, performance and benefits of high performance concrete. Associated technologies will also be covered. Papers, presentations and participants will converge from all corners of the world representing all facets of the concrete industry. For additional information on the Symposium, contact **Paul Johal** or **John Dick** at PCI.

mitment exhibited by the committee members was outstanding and their investment of time and effort is a major contribution to our industry.

R&D COUNCIL NEWS

Daniel P. Jenny Research Fellowships Awarded for 1997-98

Earlier this year, PCI solicited proposals for Daniel P. Jenny Research Fellowships from the civil engineering departments of universities in the United States and Canada. Out of 17 high quality proposals received on topics pertinent to PCI's interests, the R&D Committee (**Helmuth Wilden**, chairman) selected three fellowships at the PCI Committee Days meeting in Chicago.

The selection process was based on the timeliness of the proposed research and its potential benefit to the precast/prestressed concrete industry as well as on the research capabilities of the investigator and additional industry support available from producers or state associations. The following three fellowships have been approved for an award of \$10,000 each:

- *"Testing and Evaluation of Pocketed Spandrel Beams"* at North Carolina State University, Raleigh, North Carolina. The research will be conducted by **Jeffrey Morrison** under the direction of **Professor John Hanson**. The objective is to carry out a limited test program on full-size pocketed spandrels representing good current industry practice and use the results

of these tests to make recommendations for design and detailing of spandrel beams. Additional support in terms of funding and test specimens will be provided by North Carolina State University and Metromont Materials Corporation, Greenville, South Carolina. If anyone would like to submit a detail to be considered for testing, send the material to **Paul Johal** at PCI headquarters.

- *"Validation and Acceptance Criteria for the Bond of Prestressing Strand"* at the University of Oklahoma, Norman, Oklahoma. The research will be conducted under the supervision of **Professor Bruce Russell**. The objective is to evaluate the Moustafa Pull-out Test as a performance standard for assuring the bond capability of prestressing strands in pretensioned applications. This research is a continuation of previous work done by Professor Russell and **Donald R. Logan** of Stresscon Corporation. Additional industry support in terms of test specimens and technical guidance will be provided by Coreslab Structures, Inc., Oklahoma City, Oklahoma.

- *"Structural Design of Insulated Wall Panels"* at the University of Alberta, Edmonton, Alberta, Canada. The study will be conducted by **Keith Stang** under the guidance of **Professors David Rogowsky** and **A. E. Elwi**. The program includes testing of nine flat insulated wall panels subject to in-plane axial forces at variable eccentricities and under lateral wind loads to assess structural characteristics including the degree of composite behavior.

The PCI Research Fellowship program was established in 1972 to support graduate students in civil engineering interested in research related to precast and prestressed concrete. Fellowships generally conclude with an MS degree thesis and a summary paper published in the PCI JOURNAL. For further information regarding the PCI Daniel P. Jenny Fellowship program, contact PCI's Research Director, **Paul Johal**.

ACI Spring Convention Highlights

The American Concrete Institute (ACI) held its Spring Convention in Seattle, Washington, April 6-11. The theme of the convention was "Concrete and the Environment" with sessions focusing on such diverse topics as seismic retrofit of bridges and buildings, jobsite quality control, concerns regarding delayed ettringite formation of aged concrete, the prospective role of concrete in the colonization of space, and other important issues.

Richard N. White, professor of civil engineering, Cornell University, Ithaca, New York, was installed as ACI's 74th president. Professor White, who served a two-year term as vice president, has been on the Cornell faculty for 36 years.

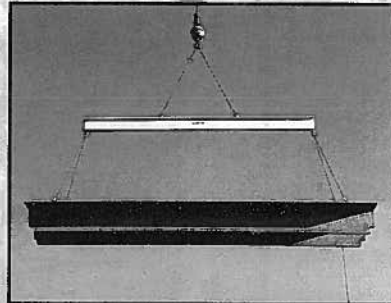
ACI's Annual Awards presentation honoring the achievements of its members in a wide range of fields was held on Thursday, April 10. This year's presentation recognized the accomplishments of several PCI Professional Members.

W. Burr Bennett received Honorary Membership "for his numerous contributions to the development and promotion of the prestressed concrete industry worldwide and for his dedicated service to the Institute as a member, and as ACI president." Mr. Bennett is head of W. Burr Bennett, Ltd., Northbrook, Illinois, a management consulting firm that he founded in 1979. Prior to establishing his own company, he served as PCI's executive vice president for 11 years. He is an ACI and PCI Fellow and also received the Reinforced Research Council's Arthur J. Boase Award in 1983.

Robert Park was granted Honorary Membership "in recognition of his worldwide contributions to the understanding of reinforced and prestressed concrete, particularly in regards to its resistance to earthquakes." Dr. Park is professor of civil engineering and deputy vice chancellor of the University of Canterbury, Christchurch, New Zealand. A Fellow of ACI, he has authored two books and more than 240 technical papers, many of which have appeared in the PCI JOURNAL. Among his honors are PCI's Martin P. Korn Award, ASCE's T. Y. Lin Award and ACI's Charles S. Whitney Medal.

M. J. Nigel Priestley received both the Arthur R. Anderson Award and the Wason Medal for Most Meritorious Paper. The Anderson Award was bestowed "for contributions to the development of a new philosophy of seismic design based on mathematical analysis and large-scale experimental research, and its application to new concrete construction, precast concrete structures, and the retrofit of existing concrete bridges." Dr. Priestley is professor of structural engineering at the University of California, San Diego, California, where he has been on the faculty for 10 years. A Fellow of

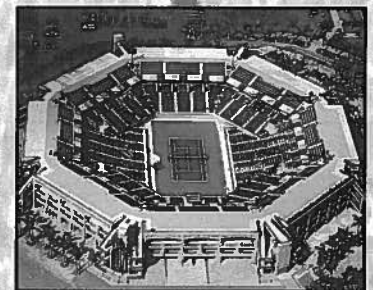
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Accepting the OSHA award for Spancrete Industries, Inc. were **Robert Nagy**, president and CEO, **Tamara Williams**, laborer — Plant 1, and **Kevin Shea**, labor foreman. Shown at right is **Gerald Cunningham**, area director—Milwaukee, OSHA.

SPANCRETE RECEIVES SAFETY IMPROVEMENT AWARD FROM OSHA

Spancrete Industries, Inc., Waukesha, Wisconsin, recently received a prestigious award for safety improvement from the Occupational Safety and Health Administration (OSHA). Spancrete had been listed in the Wisconsin 200 Program, a compilation of companies with more than 100 employees that OSHA considered below standard in following its safety guidelines. The award recognizes Spancrete's successful efforts at improving that record and being removed from the list, in addition to demonstrating exceptional cooperation with OSHA. This is only the second time this award has been given in this area.

ACI, he has authored numerous papers for the PCI JOURNAL and won PCI's Charles C. Zollman Award in 1996.

Dr. Priestley received the Wason Medal "for his paper 'Myths and Fallacies in Earthquake Engineering — Conflicts Between Design and Reality' examining aspects of current philosophy and procedures of seismic analysis and design."

Anthony E. Fiorato received the Henry C. Turner Medal "for contributions to concrete technology through development of innovations and improvements in reinforced concrete design procedures for seismic and high performance applications, as well as dedicated service to the Institute as an active member of both technical and ad-

ministrative committees." Dr. Fiorato is vice president of research and technical services for the Portland Cement Association, Skokie, Illinois, and is a former member of ACI's board of direction. He is an ACI Fellow and has authored more than 50 publications on concrete technology, high strength concrete, lightweight concrete, fire and thermal performance and other subjects.

William C. Stone, Geraldine S. Cheok, and John F. Stanton received the ACI Structural Research Award for their paper "Performance of Hybrid Moment-Resisting Precast Beam-Column Concrete Connections Subjected to Cyclic Loading," which appeared in the March-April 1995 *ACI Struc-*

tural Journal. An article on this ground-breaking research, titled "A Hybrid Reinforced Precast Frame for Seismic Regions," was published in the March-April 1997 PCI JOURNAL, pp. 20-32. Dr. Stone and Ms. Cheok are research structural engineers with the National Institute of Standards and Technology in Gaithersburg, Maryland. Dr. Stanton is professor of engineering at the University of Washington, Seattle, Washington.

Basile G. Rabbat received the Delmar L. Bloem Award for Distinguished Service "for his distinguished service as secretary of ACI Committee 318, Standard Building Code." Dr. Rabbat is manager of transportation structures and structural codes, Engineering

Services, Codes and Standards Department, Portland Cement Association. He was elected ACI Fellow in 1987, PCI Fellow in 1995 and has won PCI's Charles C. Zollman and Martin P. Korn Awards.

Robert F. Mast received the Reinforced Concrete Research Council's Arthur J. Boase Award "in recognition of his notable state-of-the-art contributions to reinforced and prestressed concrete design including the shear-friction modeling concept and unified provisions for flexural and compression members." Mr. Mast is senior principal and director of engineering development at BERGER/ABAM Engineers, Inc., Federal Way, Washington. A Fellow of ACI and PCI, he served as ACI president in 1995. He has won ASCE's T. Y. Lin Award (twice) and PCI's Martin P. Korn and Charles C. Zollman Awards.

Several PCI Professional Members were named Fellow at the awards presentation. Among them are: **Steven R. Close**, JHC Engineers, Inc., Lakewood, Colorado; **Edward K. Rice**, consultant in Los Angeles, California, and **John F. Stanton**, University of Washington.

Among the new directors elected to the ACI Board of Direction are two PCI Professional Members: **Catherine E. French**, associate professor of civil engineering, University of Minnesota, Minneapolis, Minnesota, and **Sharon L. Wood**, associate professor of civil engineering, University of Texas, Austin, Texas.

Our congratulations to all these men and women on reaching these significant career milestones.

Construction Congress V

Construction Congress V, sponsored by the American Society of Civil Engineers Structural Division, will be held October 5-7, 1997, in Minneapolis, Minnesota. The theme of the Congress is Managing Engineered Construction in Expanding Global Markets. The Congress will proceed along six tracks on the topics of: Trends in



PC-21 Plant Automation Tour in Germany

Thirty PCI members joined PCI President **Thomas B. Battles** in Germany for the PC-21 Plant Automation Tour in the last week of April. With stops in Leipzig and Heidelberg, the tour group was shown some of the advanced plant automation techniques used in Europe involving computer-aided robotics as well as the interesting history and culture of Germany. Shown in the photograph above are (Front row): **Lou Franciosa**, Coreslab International Inc.; PCI President **Thomas B. Battles**; **Dennis A. Blauser**, Marietta Structures Corp.; and **Edwin McDougle**, Ross Bryan Associates, Inc. (Second row): **James R. Clark**, Clark Pacific; **William F. Daily**, Hamilton Form Company; **Q. D. Spruill**, Gulf Cost Pre-Stress, Inc.; **George Heusel**, Rotondo Precast-Oldcastle; **Stanley J. Ruden**, Coreslab Structures (ARIZ); **James R. Voss**, JVI, Inc.; and **Robert Konoske**, Coreslab Structures (L.A.). (Third row) **Michael Flynn**, Concrete Products of WA, Inc.; **Donald G. Clark**, Clark Pacific; **Byron O. Freeby**, Coreslab Structures (Texas) Inc.; **Andrew H. Kneuker**, Finrock Industries, Inc.; **Charles Magnesio**, JVI, Inc.; and **James E. Sorenson**, EuroPartners/Stresscon. (Top row): **Scott Waldron**, Buehner Corporation; **Mathias Reymann**, RATEC GmbH & Co.; **David A. Nesius**, Wells Concrete Products; **Chris Pastorius**, Oldcastle/Eastern Prestressed Concrete; **Johnny R. Flynn**, Concrete Products of WA, Inc.; **Carl S. Buchman**, Oldcastle/Spancrete Northeast; **William E. Whitcher**, Coreslab Structures (Miami); **David W. Hanson**, industry consultant; **Robert D. Finrock**, Finrock Industries, Inc.; and **Steve Johnson**, JVI, Inc.

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For more information, contact **Jeffrey S. Russell**, University of Wisconsin-Madison, 2304 Engineering Hall, 1415 Engineering Drive, Madi-

son, Wisconsin 53706. Tel.: (608) 262-7244; fax: (608) 262-5199.

New Location for WJE Chicago Office

The downtown Chicago, Illinois, offices of Wiss, Janney, Elstner Associates, Inc., are now located at 120 LaSalle Street, Suite 2000, Chicago, Illinois 60602. Tel.: (312) 372-0555; fax: (312) 372-0873.

CTL Conducts Thermal Mass Research

The development of R-values for insulating buildings, a result of the energy crisis of the 1970s, has been found over the years to be inappropriate for concrete and masonry construction due to the effects of thermal mass. This concept, which describes how massive walls absorb, retain and later release heat, is the subject of recent research by Construction Technology Laboratories (CTL). Their studies of heat absorption and energy consumption in concrete and other high mass building materials, and the role that thermal mass can play in building design, are described in an information bulletin titled *Thermal Mass — The Energy Saver in Concrete and Masonry Buildings*. Published by the Environmental Council of Concrete Organizations (ECCO), the informa-

tion sheet describes the energy saving benefits of this process as well as the impact of thermal mass research on the evolution of energy conservation standards.

For information on receiving this and other ECCO materials, please call 800-994-ECCO or write to ECCO, 5420 Old Orchard Road, Skokie, Illinois 60077.

CRSI Announces New Soft Metricated Reinforcing Bars

During 1995-96, the Concrete Reinforcing Steel Institute (CRSI) worked with ASTM, AASHTO and numerous state departments of transportation throughout the United States to achieve the adoption of soft metricated reinforcing steel as the metric standard for reinforcing bar usage in the United States. That effort has been successful and specifications for soft metric reinforcing bars are now available from ASTM.

CRSI recently polled its reinforcing bar producer members and learned that the new soft metricated reinforcement is now available from

various producers. The majority of the producers have had such products available during the first quarter of 1997. Soft metricated reinforcing bars are simply the existing inch-pound bar sizes with new soft metric designations as follows:

Inch-pound* bar size	Metric† bar size
#3	#10
#4	#13
#5	#16
#6	#19
#7	#22
#8	#25
#9	#29
#10	#32
#11	#36
#14	#43
#18	#57

* Nominal diameter expressed in 1/8-in. increments.

† Nominal diameter expressed in mm.

CRSI is in the process of developing soft metric design/construction aids for use by architects, engineers, and contractors. For more information, contact CRSI at: (847) 517-1200; fax: (847) 517-1206; e-mail: info@crsi.org.

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Shown in front of a new highway bridge in Mexico City, Mexico, are: **Constancio Rodríguez Cabello** of the Riobóo Group, PCI President **Thomas B. Battles**, **Ahmad M. Abdel-Karim** of LoBuono, Armstrong & Associates, **Scott E. Olson** of Elk River Concrete Products, **Richard R. Imper** of Morse Bros. Inc., **José María Riobóo Martín** and **José Carlos Arce** of the Riobóo Group, **Chuck Prussack** of Central Pre-Mix Prestress Co., and **Raúl Verduzco** of the Riobóo Group.

PCI Bridge Experts Visit Mexico

PCI President **Thomas B. Battles** and four PCI members involved in bridge construction were guests of the Riobóo Group, a major Mexican consulting engineering firm, for a tour of their new construction projects in Mexico City, Mexico, on March 17-18, 1997. **Ing. José María Riobóo Martín**, president of the Riobóo Group, led the tour of precast prestressed concrete urban bridges and the newly erected el-

evated Metro line, which features 24 ft (7.3 m) wide prestressed box beams throughout its 3 mile (4.8 km) length.

Mr. Battles was joined by **Richard R. Imper** of Morse Bros. Inc., **Scott E. Olson** of Elk River Concrete Products, **Chuck Prussack** of Central Pre-Mix Prestress Co., and **Ahmad M. Abdel-Karim** of LoBuono, Armstrong & Associates.

In addition to their site tours, the PCI group also participated in



Thomas B. Battles (right) congratulates **Oscar Espinosa Villarreal**, mayor of Mexico City, on the success of the Metro line project.

a full-day seminar for more than 300 attendees organized by the Mexico City Department of Transportation, the National Center for the Prevention of Disasters (CENAPRED) and the Riobóo Group. The PCI speakers made presentations on current American bridge projects and the new PCI Bridge Design Manual. The mayor of Mexico City, **Oscar Espinosa Villarreal**, and Federal Transportation Secretary **Daniel Ruiz Fernández** also spoke at the seminar and welcomed the PCI group to the city.

The PCI Summer Board of Directors meeting will be held in Mexico City on June 20 and the members of ANIPPAC, the Mexican prestressers organization, have been invited to attend the meeting and social events.

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On hand for the Ironworking Contractors Insurance Program (ICIP) awards were **Richard Holton**, president of Holton and Associates, **Steven L. Rank**, ICIP national safety coordinator, **William R. Miller**, owner of Building Erection Services Company, Iron Workers International president **Jake West**, and **Stephen D. Cooper**, executive director of safety and health for Iron Workers International.



Mary Farrar, Building Erection Services division manager of pre-engineering metal, and company owner **William R. Miller** accepted the Subcontractor of the Year Award from the American Subcontractors Association in March 1997.

BUILDING ERECTION SERVICES GARNERS TWO PRESTIGIOUS AWARDS

PCI Associate Member Building Erection Services Company, Olathe, Kansas, was recently presented with two distinguished awards from the contracting industry. In November 1996, the firm received the 1995-1996 ICIP Contractor of the Year Award from the Ironworking Contractors Insurance Program (ICIP). **William R. Miller**, owner of Building Erection Services, was acknowledged by industry leaders for achieving outstanding safety performance in the ICIP program. The program was developed for union ironworking contractors to provide worker's

compensation, general liability, auto and bonding coverages on a national basis.

In March of this year, Mr. Miller was presented with the Subcontractor of the Year Award from the American Subcontractors Association (ASA). Building Erection Services, which marked its 20th year in business in February, provides precast concrete erection, steel erection, pre-engineered metal erection, specialty products and a wide variety of crane services throughout the midwestern area of the United States.

Concrete Solutions Available from PCA

More than 450 concrete and cement related titles, including 73 new and revised products, are included in the Portland Cement Association's catalog *Concrete Solutions '97-98*. Featured titles include the Building With Insulating Concrete Forms video series, a revised Portland Cement Plaster Manual, a Cement and Concrete Education Module, a training video on Surface Defects in Formed Concrete and PCA-Build, a computer program for the analysis and design of reinforced concrete structures.

For a free copy of *Concrete Solutions '97-98*, contact PCA Order

Processing, 5420 Old Orchard Road, Dept. C., Skokie, Illinois 60077 or call 800-868-6733. The entire catalog plus other titles can also be found on the PCA website at <http://www.portcement.org>.

Rizkalla Receives Professional Service Award

PCI Professional Member **Sami Rizkalla**, professor of engineering at the University of Manitoba, Winnipeg, Canada, received the 1996 Meritorious Award for Professional Service from the Canadian Council of Professional Engineers. Dr. Rizkalla was cited for his work with advanced composite materials and fiber reinforced plastics for structural engineering.

Gleich Named Engineer of the Year by South Carolina Professional Organization

Harry A. Gleich, director of engineering for Metromont Materials Corp., Prestress Division, has been named 1997 Engineer of the Year by the South Carolina Association of Professional Engineers, Piedmont Chapter.

Mr. Gleich supervised the precast concrete engineering in the Ericsson Stadium (Charlotte, North Carolina), Centennial Olympics Stadium (Atlanta, Georgia), the Jacksonville Jaguar Stadium (Jacksonville, Florida) and numerous other stadium projects throughout the southeastern United States. He has been with Metromont Materials



Harry A. Gleich



Mark F. Noble



Larbi Sennour



Timothy Selhorst



Stephen Husak



Jan Istok

in Greenville, South Carolina, for the past 11 years, serving as director of the company's Prestress Division since October 1996.

Noble Named Head of Sika's Construction Products Division

Mark F. Noble was recently named executive vice president of the Construction Products Division of Sika Corporation, Lyndhurst, New Jersey. Mr. Noble now manages all sales, marketing, and technical activities for the construction products, admixtures and export departments of the Swiss-based manufacturer of specialty chemicals and adhesives. Along with his responsibilities for this division, which produces annual sales of more than \$65 million, he is also a member of the Sika Finanz corporate marketing team. Prior to moving to Sika's United States corporate headquarters, Mr. Noble served as vice president of the company's automotive and transportation division in Southfield, Michigan. There he established an aftermarket group for new products that became the company's most profitable business center worldwide in 1994 and 1995.

Sennour Joins PTAC

Larbi Sennour has joined the Pensacola, Florida, office of PTAC Consulting Engineers as project manager and associate. Dr. Sennour's background includes precast concrete design work with The Consulting Engineers Group and work at the University of

Texas at Austin materials laboratory. Currently, he serves as chairman of PCI's Durability Committee.

Personnel Changes at ASW

American Spring Wire Corporation (ASW), Bedford Heights, Ohio, recently announced the promotion of one employee and the addition of two new employees.

Timothy Selhorst has been promoted to vice president, sales and marketing. Mr. Selhorst has more than six years of experience with ASW and has served in several key positions, including general sales manager since 1993. His responsibilities include facilitation and implementation of the company's sales and marketing strategies.

Stephen Husak has been ap-

pointed plant manager of ASW's Kankakee, Illinois, manufacturing facility. His new responsibilities include managing quality, production, process improvement, cost control and training and development. He has more than 27 years of experience with Armstrong World Industries, serving in positions ranging from plant manager to chief chemist and human resources manager.

Jan Istok has been appointed corporate manager of information systems. He will lead the coordination of the information system changes needed for progressive long-term growth. Prior to his new appointment, Mr. Istok spent more than 20 years developing and managing information systems, most recently for Hall Chemical Company of Wickliffe, Ohio.

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Ecole de Formation Professionnelle Pierre-Dupuy

Longueuil, Québec, Canada

In designing this 100,000 sq ft (9290 m²) addition to the Ecole de Formation Professionnelle Pierre-Dupuy, a trade school specializing in construction trades, architectural precast concrete sandwich wall panels proved to be the solution of choice in meeting several design challenges posed by the structure's location and purpose.

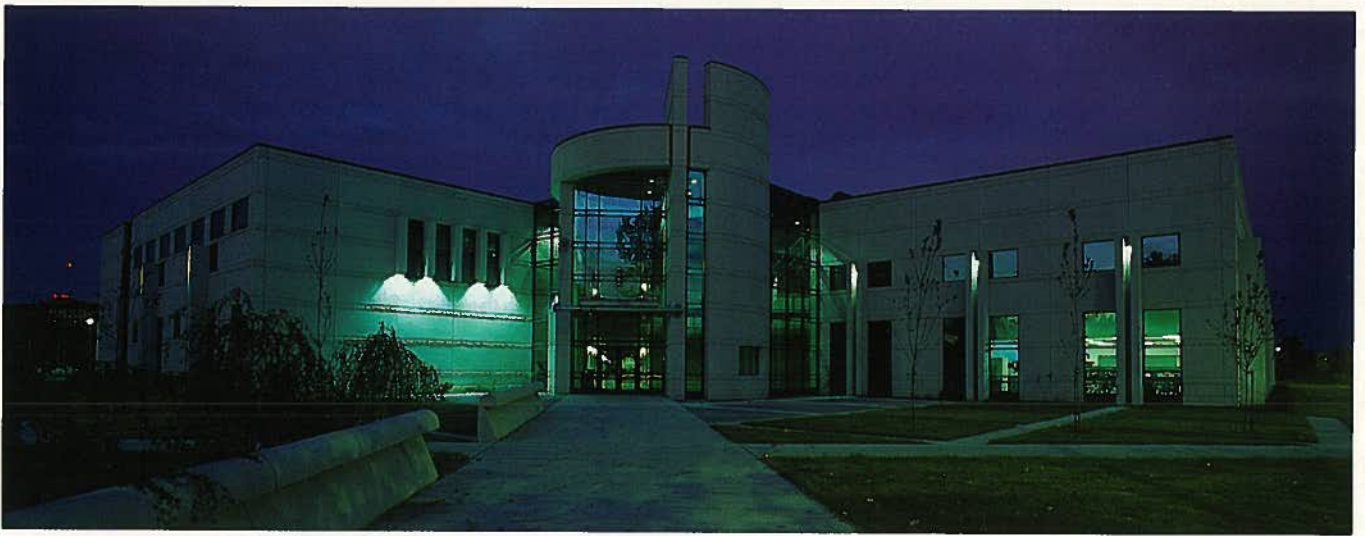
Before beginning the design process, the architects for the project examined several exterior wall compositions that would suit both the project's requirements and local by-laws. Because of the school's propinquity to the regional courthouse and the site of the future city hall, the by-laws allow only masonry and concrete as cladding materials. Precast concrete sandwich wall panels met this criterion at a cost that fit well within the project's budget.

Another advantage in using sandwich wall panels was the speed of erection of the building's envelope. Because the starting date of certain teaching courses had to be set many months in advance, no delays in the building schedule could be accommodated. The use of plant-produced precast concrete guaranteed that weather conditions would not set back the erection process.

At the main entrance and at the circulation crossroad with the original school, two impressive rotundas, 47 ft (14.3 m) in height, identify the entrances to the construction trade school. The rotundas are clad with curved, window-punctured precast concrete panels.

The facade of the addition features a light beige color with tex-





ured horizontal bands and reveals. The color was chosen in order to match the adjacent courthouse and was achieved by mixing white cement with appropriate amounts of sand. Free-standing precast concrete pilasters stand out from the structure to balance the horizontal striping.

Another unique design concept for this structure stems from the nature of the trades taught at the school. Construction features that are normally hidden from view are left out in the open, making the entire structure a teaching tool. Once again, precast concrete provided an optimal solution in that the imperfectionless inner surfaces could be left exposed in both the workshops and classrooms.

Completed in February 1995, the addition to the Ecole de Formation Professionnelle Pierre-Dupuy has proven to be a valuable adjunct that will serve students for years to come.

CREDITS

Owner: Commission Scolaire Jacques-Cartier, Longueuil, Québec, Canada

Engineer: Soprin, experts-conseils, Longueuil, Québec, Canada

General Contractor: Construction Château St-Marc Inc., Montréal, Québec, Canada

Precast Concrete Manufacturer: Béton Bolduc, Sainte-Marie, Québec, Canada



Kobe Earthquake Slides Available from EERI

Two new sets of slide presentations on the reconstruction of Kobe City, Japan, which was devastated by the Great Hanshin Earthquake of January 17, 1995, are now available from the Earthquake Engineering Research Institute (EERI).

Kobe V, Recovery and Reconstruction — The 40 annotated slides in this presentation document the rebuilding efforts in Kobe, depict the repair process over time for several large buildings, and illustrate various aspects of recovery. The slides are from four periods: September 1995, March 1996, June 1996 and October 1996. Cost for this slide presentation is \$70.00 (\$60.00 for EERI members).

Kobe VI, Repair and Reconstruction of Historic Landmarks — The 20 slides in this presentation document damage and repair to various temples, shrines and cul-

tural landmarks. Three periods of reconstruction are represented: March, June and October 1996. Cost for this slide presentation is \$35.00 (\$30.00 for EERI members).

To purchase the slides or to obtain a free publications catalog, contact EERI at 499 14th Street, Suite 320, Oakland, California 94612-1934. Tel.: (510) 451-0905; fax: (510) 451-5411.

Hartsfield Appointed President of Concrete Technology Inc.

Marvin F. Hartsfield was recently appointed president and chief operating officer of Concrete Technology Inc., Springboro, Ohio. Mr. Hartsfield joined Concrete Technology in 1978, moving up the position of vice president-manufacturing in 1986 and director of the company in 1989. He holds an MS degree from the University of Cincinnati and is a registered professional engineer.

Hamilton Form Acquires Four Stadium Contracts

Hamilton Form Company, Inc., Fort Worth, Texas, a leader in the design and manufacturing of steel forms for athletic stadium construction projects, recently acquired new contracts for four stadium projects. Hamilton Form will engineer and produce steel forms for concrete components for new NFL stadiums in Tampa Bay, Florida, and Baltimore, Maryland, and for stadiums on the campuses of Youngstown State and Princeton universities.

Hamilton Form has provided steel tread and riser forms for more than 50 stadiums in the United States, including Joe Robbie Stadium in Miami, Florida; Comiskey Park and the United Center in Chicago, Illinois; and the Olympic Stadium in Atlanta, Georgia. And as stadium and arena construction continues to increase, so does the use of precast/prestressed concrete. "Over the past eight years, Hamilton has been involved in 95 percent of the stadiums we have worked on," said **Harry Gleich**, director of engineering for Metromont Materials Corp., Greenville, South Carolina. "They not only provide engineering expertise, but also a commitment to price and delivery."

International Building Code Update

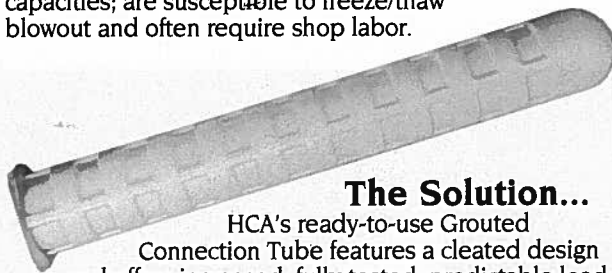
The working draft of the International Building Code (IBC) is currently being developed by the IBC technical subcommittees. The International Building Code Council plans to publish the working draft document in May 1997.

There will be a public comment forum in August 1997 at which interested parties can provide feedback to the technical subcommittees on the working draft. This forum is not intended to be a code development hearing, but rather is an opportunity for all parties to discuss written comments submitted to the subcommittees for consider-

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ation. The subcommittees will incorporate suggested revisions as they deem appropriate, and these revisions will be reflected in the IBC First Draft to be published in December 1997. Additional public hearings for comments on the first draft, second draft and challenges are scheduled for May 1998, January 1999 and September 1999, respectively.

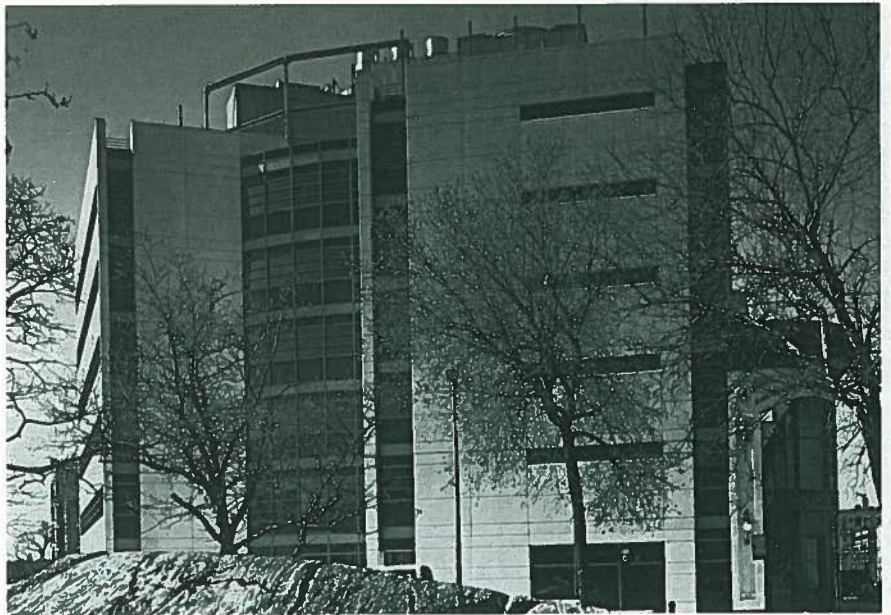
The ICBO code development committees will conduct a meeting in June 1997 to develop comments to the IBC working draft. The purpose of the meeting is to exchange information and develop comments to submit it for the ICC public comment forum in August. This will be an open meeting, not a formal hearing.

Full-Scale Testing Facility Opens in Nebraska

A new concrete test bed located near Omaha, Nebraska, is now available for use by the industry for full-scale testing of bridge girders, beams and other structural components. The outdoor facility is a joint project between local concrete producers and the University of Nebraska. Test results from the facility have already been used to develop a more durable girder for an interstate bridge construction project in Omaha.

The test facility can handle specimens up to 150 ft (45.7 m) long and 70 tons (63.5 t) in weight. The test bed is 30 ft wide and 150 ft long (9.1 and 45.7 m), extending 10 ft (3 m) below ground. Computer and electronic instrumentation is housed adjacent to the test bed. On top of the bed, two rows of anchors hold structural components in place while concentrated forces of up to 1 million lbs (453600 kg) can be applied.

The capacity of the test bed is unique among other structural test facilities in the United States, according to university engineers. For more information, contact **Dr. Maher Tadros** at the University of Nebraska at (402) 554-2985 or e-mail at mtadros@unomaha.edu.



Columbia University's Audubon Business and Technology Center in New York, New York.

Universal Wins Award of Merit for Audubon Ballroom Addition

Columbia University's Audubon Business and Technology Center in New York City recently received an Award of Merit in the Concrete Industry Board's 1996 Roger H. Corbetta Awards program. Universal Concrete Products Corp. of Douglassville, Pennsylvania, produced the precast concrete cladding used on the building.

Universal Concrete was cited for its work as precast concrete subcontractor on the six-story addition to the historic Audubon Ballroom in the Harlem neighborhood of New York City. The finished structure is an eclectic combination of a two-story neoclassical building designed in 1913 and a modern six-story precast concrete clad building, together forming the 100,000 sq ft (9290 m²) science and technology center.

The project consisted of 152 precast panels of white cement, sand and stone with a light sandblast finish and exposed aggregate bands. Concrete was chosen for the facade of the addition for aesthetics, economics and durability. The Awards Jury cited the project as a "superior use of cast-in-place and precast concrete to rehabili-

tate a historic building and expand the structure for laboratory use."

Northridge Earthquake Research Conference

The Northridge Earthquake Research Conference, funded by the National Science Foundation, will take place August 20-22, 1997, in Los Angeles, California. The conference will highlight results obtained in research projects funded by NEHRP (National Earthquake Hazards Reduction Program) agencies and by others spanning a wide spectrum of disciplines, including earth science, engineering and social science and emergency management. Specially commissioned presentations in individual topic areas will review technical findings and comment on the implementation of research results.

For more information on the Northridge Earthquake Research Conference, contact California Universities for Research in Earthquake Engineering, 1301 S. 46th Street, Richmond, California 94804. Tel.: (510) 231-9557; fax: (510) 231-5664; e-mail: curee@nisee.ce.berkeley.edu.



The new parking garage for Delaware Technical and Community College in Wilmington, Delaware.

Concrete Building Systems and Universal Concrete Products Corp. Complete Delaware Parking Structure

Concrete Building Systems, Delmar, Delaware, recently completed erection of a new parking garage for Delaware Technical and Community College in Wilmington, Delaware.

The new 150,000 sq ft (13935 m²), four-level parking structure provides an additional 450 student parking spaces for the growing community college. Concrete Building Systems produced all of the precast concrete structural members of the garage, including the stairs and elevator towers.

Universal Concrete Products Corp. of Douglassville, Pennsylvania, provided the architectural precast concrete facade for the project. Exterior spandrels, columns and walls feature a buff color with light sandblast and exposed aggregate finishes.

According to **Tom Higley**, principal at the design firm Anderson, Brown, Higley & Associates, precast concrete was chosen for several reasons. "The owner wanted a very cost efficient structure that would hold up well over time," Mr. Higley said. "Precast concrete was more competitively priced than tilt-up concrete or steel, plus it offered low long-term maintenance costs.

It also provided a pleasant appearance and helped the structure fit comfortably onto the campus."

High Performance Concrete Bridge Showcase

The Strategic Highway Research Program High Performance Concrete Bridge Showcase will be held August 18-20, 1997, in Bellevue,

Washington. The showcase will include sessions on high performance concrete (HPC) girder mix design, testing, fabrication and transportation; HPC material properties and long-term performance; HPC deck mix design and construction; benefits and applications of HPC; and HPC bridge projects in the United States. In addition, the Federal Highway Administration's HPC Mobile Laboratory will be on display for the duration of the showcase.

For more information, contact **William P. Carr**, Chair, Showcase Steering Committee, Office of Technology Applications, Washington State Department of Transportation, P.O. Box 47350, Olympia, Washington 98504. Tel.: (360) 705-7802; fax: (360) 705-6889; e-mail: bcarr@wsdot.wa.gov.

Grace Construction Products Expands Operations in China

Grace Construction Products (GCP) has recently taken a significant step in expanding its presence in the burgeoning construction market in China. The firm has opened a manufacturing facility for concrete admixtures in Guangzhou and announced plans to launch

