



U.S. Department of Transportation  
Federal Highway Administration



fédération internationale du béton

# HIGHLIGHTS

## ***of the PCI Convention and PCI/FHWA/fib International Symposium on High Performance Concrete, Orlando, Florida, September 24-27, 2000***



**T**here was no better way to celebrate PCI's 46th Annual Convention & Exhibition and the beginning of this century than to engage in a partnering effort with the Federal Highway Administration (FHWA) and the Fédération Internationale du Béton (*fib*). Together, PCI/FHWA/*fib* organized a major international conference on High Performance Concrete in Orlando, Florida from September 24 to 27. Also participating in the convention/sympo-

sium was the International Prestressed Hollowcore Association (IPHA) with whom the PCI Hollow-Core Slab Producers Committee held a joint session as well as joint committee meetings. The convention/symposium was held at the luxurious Orlando World Center Marriott.

The success of this convention/symposium was clearly reflected in the attendance. A near record 1500 members and guests from 45 countries were registered. In addition, close to eighty

exhibitors from North America and other parts of the world displayed their products, machinery and services.

A total of 24 sessions were held, nine of which covered high performance concrete. Titles and authors of papers in each session are listed in the July-August PCI JOURNAL, pp. 18-27. Each registrant was given a copy of the Symposium Proceedings, an 830-page volume containing 78 peer-reviewed papers. Note that there are still some Proceedings remaining





PCI Chairman **Bill Whitcher**, together with Executive Committee and Year 2000 Board of Directors, officially opens Exhibit Hall during ribbon-cutting ceremony.

at PCI Headquarters which can be purchased at \$30 each for PCI members (\$60 for non-PCI members).

The convention/symposium opened Sunday afternoon with the introduction of the new design guidelines based upon the 10-year PRESSS (Precast Structural Seismic Systems) study and the testing of a five-story precast concrete building at the University of California at San Diego. If there were any doubts about our Institute's global technological reach and influence, it was dissipated at this unprecedented symposium. PCI looks forward to hosting similar international events in order to stay on top of modern technology and to share our experiences with our partners and colleagues from around the world.

In-keeping with the general intent of the conference, the theme of the convention/symposium was "Reaching Out to the Next Generation." To reinforce

this concept, a special student education seminar was held Tuesday afternoon. About seventy civil engineering and architectural students as well as professors from various local universities in Florida attended the seminar. In addition to the seminar, the students viewed the exhibits, participated in a treasure hunt and also enjoyed a delicious lunch. Those responsible for the success of the seminar were **Al Ericson, Mark Fusani, Budd Hilgeman, Norm Lach, Richard Miller, Monica Schultes, Eric Steinberg** and **Bill Whitcher**.

About fifty PCI, CPCI, *fib* and IPHA administrative and technical committees met prior and during the convention/symposium. Some of the most important work involved seismic issues especially because many regions of the United States have been upgraded to higher seismic zones. Other issues centered around the new International Building Code, and how design provisions can be

## PRIZE MONEY AT EXHIBIT BOOTH

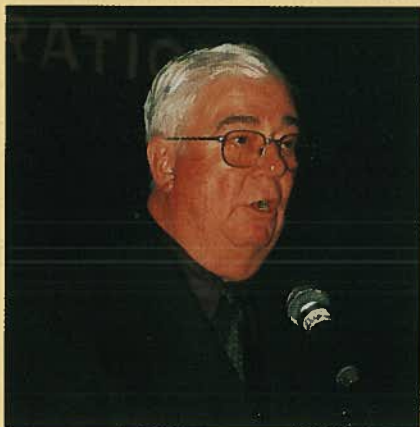
Over the years, in order to attract more people to the Exhibit area, the PCI has offered door prizes, treasure hunts and other special enticements. This year, High Concrete Accessories (one of the exhibitors at the convention/symposium) outdid itself in generosity! At its exhibit booth, HCA ran a scratch card contest in which it gave away both a \$10,000 and \$500 cash prize. **Harry Gleich** of Metromont won the \$10,000 first prize and **Jim Liddel** of Structural Concrete Products won the \$500 second prize.

We congratulate the winners and wish to express our appreciation to High Concrete Accessories for their generosity in creating interest and excitement in the Exhibit area.

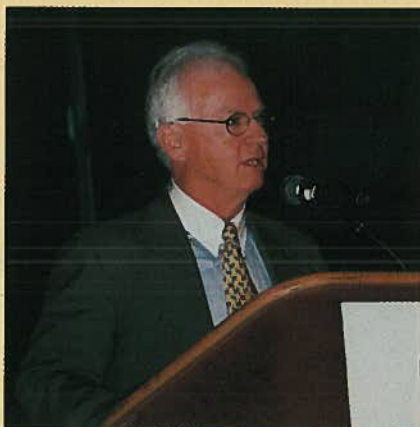
made more uniform around the world. In particular, fire testing of hollow-core slab assemblies needs to be standardized so that meaningful results can be obtained from different testing investigations.

Among the most popular sessions were topics on:

- Precast frame and wall systems
- Hollow-core slabs
- Architectural precast concrete



PCI Chairman **Bill Whitcher** addresses convention/symposium on the proposed new PCI Education Foundation and the need to reach out to the next generation.



FHWA Executive Director **Tony Kane** addresses the convention/symposium on the need to find a solution in lowering the maintenance cost of bridges.



*fib* President **Michel Virlogeux** addresses the convention/symposium on the importance of architecture and aesthetics in designing prestressed bridges.

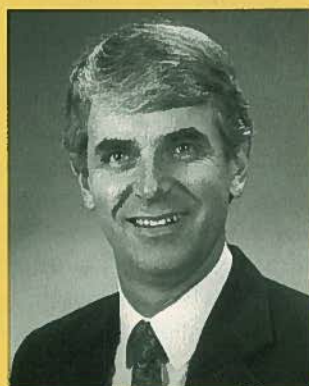


# PCI OFFICERS 2001



**Saul Shenkman**

*Chairman*



**Ron Schlerf**

*Chairman-Elect*



**Michael E. Quinlan**

*Secretary-Treasurer*



CPCI Chairman **William Avar** outlines a Canadian proposal for standardizing computer software and shop software in the precast concrete industry.

- Seismic design
- Research and development
- Innovative precast/prestressed concrete structures

Some of the above presentations and project reports will be published in forthcoming issues of the PCI JOURNAL.

The Exhibit Hall was officially opened Sunday morning by the PCI Board of Directors in a colorful ribbon-cutting ceremony. This was followed by a cocktail party and delicious luncheon generously provided by the exhibitors.

Following tradition, the Business Breakfast Meeting was held Monday morning. PCI Chairman **Bill Whitcher** opened the meeting, welcoming the large international audience to Orlando. In his remarks, Mr. Whitcher emphasized the importance of education, elaborating upon the newly proposed PCI Education Foundation, and the need to reach out to the next

generation for this industry to succeed. (See Chairman's Message for additional remarks.)

Next, CPCI (Canadian Prestressed Concrete Institute) Chairman **William Avar** delivered a very interesting presentation on the initiatives the Canadian producers are making in standardizing shop drawings and computer software in the precast concrete industry.

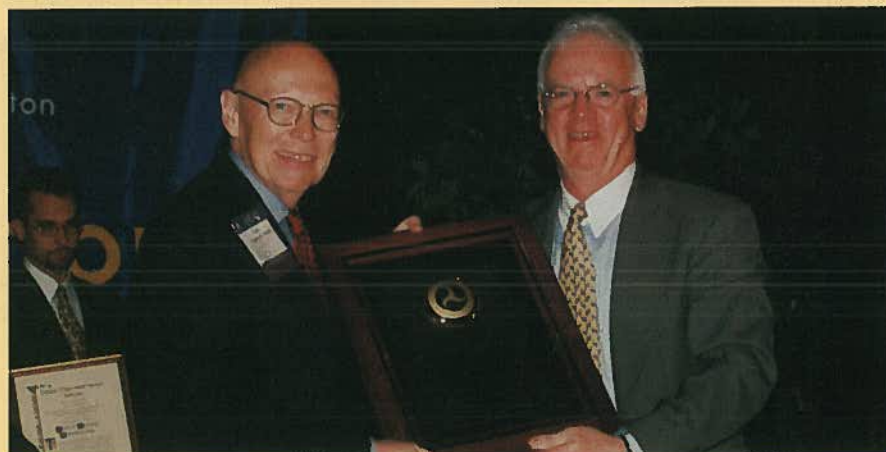
Subsequently, two keynote speakers were given by **Tony Kane**, FHWA Executive Director, and **Michel Virlogeux**, *fib* President:

Mr. Kane spoke on "High Performance Materials – An Integral Part of FHWA's Vision for the Future." After giving his top ten predictions for the future, he said the current most pressing need was to find a durable material that would reduce the maintenance costs of bridge structures.

Dr. Virlogeux's talk was on "The Importance of Architecture and Aesthetics in the Design of Prestressed Concrete Bridges." In his presentation, he showed several examples of grotesque looking bridges while also showing many examples of elegant, beautifully proportioned bridges.

At the end of his address, he presented three *fib* Medals of Merit for outstanding contributions to structural concrete and service to *fib*:

- **Dr. Julio Appleton** is Professor, Instituto Superior Técnico, Lisbon, Portugal. He is also the president of the Research Center for Structures and Construction for the same Institute and serves as President of the



FHWA Executive Director **Tony Kane** (right) presents PCI President **Thomas B. Battles** with a special plaque. The inscription reads, "In recognition of the contribution to the advancement of technology made by the Institute and its staff in organizing and presenting the 2000 PCI/FHWA/*fib* International Symposium on High Performance Concrete."





## The 2001 PCI Board of Directors

Bottom row (left to right): **R. Wayne Lyle** (Zone 6), ConArt, Inc., Cobb, Georgia; **W. Michael McConochie** (Allied Organization Member Director) Georgia/Carolinas PCI Region, Statesville, North Carolina; **Michael E. Quinlan** (Secretary-Treasurer), Gate Concrete Products Company, Oxford, North Carolina; **Ron Schlerf** (Vice Chairman), Central Pre-Mix Prestress Co., Spokane Washington; **Saul Shenkman** (Chairman), Unistress Corporation, Pittsfield, Massachusetts; **William E. Whitcher** (Immediate Past Chairman), Coreslab Structures (Miami), Inc., Medley, Florida; **Thomas B. Battles** (PCI President), Precast/Prestressed Concrete Institute, Chicago, Illinois; **Milo J. Nimmer** (Associate Member Director), Spancrete Industries, Inc., Waukesha, Wisconsin; **David J. Hellyer** (Zone 2), Coreslab Structures (OKLA) Inc., Oklahoma City, Oklahoma.

Middle row (left to right): **Michael L. Boykin** (Zone 6), Boykin Brothers Inc., Baton Rouge, Louisiana; **Bruce Taylor** (CPCI Chairman) RES Precast, Inc., Stroud, Ontario, Canada; **David A. Nesius** (Zone 3), Wells Concrete Products Co., Wells, Minnesota; **William F. Simmons** (Zone 5), The Shockey Precast Group, Winchester, Virginia; **Scott M. Waldron** (Zone 2), Basic Precast Company, Salt Lake City, Utah; **Thomas J. D'Arcy** (Chairman, Research and Development Committee), The Consulting Engineers Group, Inc., San Antonio, Texas; **C. Douglas Sutton** (Chairman, Technical Activities Committee), Purdue University, West Lafayette, Indiana; **Robert S. McCormack** (Zone 4), Spancrete Industries, Inc., Waukesha, Wisconsin; **William Lovell, Jr.** (Professional Member Director), Precast Technical Assistance Corp., Pensacola, Florida; **James R. Clark** (Zone 1), Clark Pacific, West Sacramento, California.

Top row (left to right): **Degan G. Hambacher** (Professional Member Director), FDG, Inc., Arvada, Colorado; **Charles P. O'Leary** (Market Plans Committee Chairman), Northeast Concrete Products LLC, Plainville, Massachusetts; **James Sautter** (Zone 3), CSR Wilson Concrete Company, LaPlatte, Nebraska; **Thomas R. Hailey** (Zone 4), Prestress Services, Inc., Lexington, Kentucky; **Alvin C. Ericson** (Student Education Chairman) Splice Sleeve North America, Inc., Bonita Springs, Florida; **Brian J. Conway** (Zone 1), Yakima Precast, Inc., Yakima, Washington; **H. W. Reinking** (Chairman, Management Activities Committee), Stresscon Corporation, Colorado Springs, Colorado; **Tony Mazzeo** (Zone 5), Oldcastle Precast, Inc., South Bethlehem, New York; **Skip Francies** (Associate Member Director), Dayton/Richmond Concrete Accessories, Miamisburg, Ohio; **Stanley J. Ruden** (Chairman, Quality Assurance Committee), Coreslab Structures (ARIZ), Inc., Phoenix, Arizona.



# Participation – The Key to Our Future

by



**Saul Shinkman**

Chairman-Elect  
Precast/Prestressed Concrete Institute

General Manager  
Unistress Corporation  
Pittsfield, Massachusetts

---

*Excerpts of remarks made at PCI's Convention in Orlando, Florida, September 27, 2000.*

---

**A**s I stand here today, I am excited and honored by the opportunity of serving as your next PCI Chairman. My term of service on the executive committee has given me a new perspective on both the complexity...and the potential of our association. I thank you for your confidence, and I will do my best to carry on our traditions, promote our programs and to continue urging us forward.

I would like to share two areas that I feel are vital to all of our interests in the days ahead. First, that we build upon the good work that has been started in reaching out to the next generation. We've started with some great tools, and I urge you to take advantage of them. Second, that we all take advantage of the recently refocused PCI Strategic Plan.

Today, there is a common drumbeat in the business world. For our industry, we see it in a serious shortage of professional, managerial,

skilled technician, and production personnel.

Last year, Bill Whitcher asked a very pointed question: "Where is our next generation?" Bill's question presents a perplexing problem for all of us. But at the same time, it holds incredible potential if we respond. And I am here today to tell you that respond is exactly what we're doing. PCI staff and the Student Education Committee, under Chairman Al Ericson, have set a very ambitious program directed at engineering and architecture students. This program included posting resumes on the PCI website, as well as producing the new Career Opportunity CD. In addition, we had a wonderful Student's Day Program with more than 50 students in attendance. We are confident these efforts will help attract young people to our industry. However, once we get them, how do we keep them? Certainly, competitive salaries are a

given but there is so much more we can do to keep our staff motivated and enthused about our industry.

Immersing these folks in PCI activities offers an extraordinary growth tool for their skills, their networking, and their knowledge of this industry and its products.

Zone meetings are a great opportunity to learn first-hand about your association's current programs, as well as upcoming plans. Reports from PCI are only part of the experience of zone meetings. The opportunity to discuss products and processes with our strong contingent of associate members, as well as producers and professionals, can be invaluable.

Each year, PCI hosts a sales training school. These schools are staffed by industry professionals and outside training experts, all skilled in sales and marketing. At the schools, personnel sharpen their sales and marketing skills, in part by having



their presentations critiqued by their peers and the professional trainers.

Another fantastic series of schools is offered at various times across the country. These are the Quality Control Levels I and II and the Q.C. Level III schools. How many of your engineers and drafters are qualified to pass the Level III examination? And what about our new Certified Field Auditor program? When you think about it, don't these schools seem like great ways to further your people's knowledge of production procedures and requirements?

Finally, in addition to zone meetings and schools, attending committee meetings and the PCI Convention is far more than a perk to our new young recruits. Combining committee meetings with sessions offers a wide variety of new learning experiences, not to mention the opportunity to network with their peers.

We've made a great start to reach out to this next generation. But as industry leaders, we need to make a proactive decision to turn our people loose. I believe that as they grow, so do we.

My second area of concern derives from PCI's Strategic Plan. At its last meeting, the PCI Strategic Planning Committee, under the chairmanship of Buck Reinking, significantly changed the direction of our plan to focus on how the Institute can best serve its membership.

I encourage you to become familiar with our refocused Strategic Plan and to actively pursue those strategies and objectives you identify as high priority items to be tackled by PCI. The Strategic Plan presents opportunities that can benefit all of us. Although many of the objectives, such as code and technical issues, have long range implications, there are areas that can benefit us in the coming year. I suspect many of us are not taking advantage of the opportunities available.

For example, Goal 1 states: "Provide opportunities to our CEOs to

become visionary leaders for their companies and for the industry."

PC-21 has been a great educational tool for those who have participated. In fact, the original PCI Strategic Plan was developed in the early PC-21 sessions. Subjects presented ranged from developing strategic plans in our own organizations to setting up marketing programs to design-build and partnering sessions.

A summary of PC-21 topics is available on the Members-Only section of the PCI website, and a printed summary should be available for distribution next year. Our PC-21 committee, led by Chairman John Nanna is planning a business-to-business seminar using e-commerce next year. I would encourage you to watch for Tom Battles' Update as well as the PCI website for more information.

You have yet another opportunity under Goal 1 for leadership growth. This is the chance to network with other producers, especially those outside your market area. Today, there are a number of focus groups that have been established where small groups of three to five CEOs have shared information, discussed problems and manufacturing techniques, and in general have created a forum for open and frank discussion. These groups are made up of non-competitive members.

Also under Goal 1, you are presented with a relatively easy opportunity to exercise growth in visionary leadership. Each year, the R&D committee challenges our industry with an array of projects for consideration. You can provide input for selection of projects by responding to the questionnaire they mail out. So be sure to watch for their next questionnaire.

Now, Goal 2 states that we are to "Encourage and assist our companies to achieve high levels of customer satisfaction and Quality performance."

Our new Field Certification Program is our initial step toward what we believe will be a program similar

in scope and acceptance to our nationally recognized Plant Certification Program. Classes are now being held regularly across the country to train Certified Field Auditors. This is a vital step in establishing our Qualified Erectors Program, which you can read more about in Ascent's yearbook issue available from PCI. Sending your field personnel and project managers to these classes will help assure a higher quality of our finished product.

Finally, Goal 3 states: "Encourage and assist our companies to dramatically reduce costs and increase the speed of all processes."

Each year we are asked to submit financial and cost data information to an independent auditor. This information provides valuable benchmarks whereby we can gauge our company's performance against others of comparable size within and outside our PCI zone. Unfortunately, fewer than 60 companies, representing less than 50 percent of our producer members, are responding to the survey. A better response from you will provide a deeper database and greater accuracy of the results.

Again, taking advantage of the PCI Strategic Plan is an important leadership decision for your company. You will find it a positive return on your time and effort investment. Throughout our PC-21 experience, we have heard that if you can't measure it, it's doubtful you can do it.

Today, I've touched on just a few of the opportunities available to all of us just by getting involved in PCI programs. It touches every part of our business from personal development, to increasing market share, to helping us create our tomorrows. I challenge all of you to take advantage of the incredible range of PCI programs to the best benefit of your company, your staff, and especially the next generation, your young engineers.

Again, I thank you for this opportunity to serve you. I hope that all of you feel the same sense that I do of the possibilities before us.





PCI Chairman **Bill Whitcher** (right) presents to FHWA Executive Director **Tony Kane** a plaque expressing PCI's appreciation for the partnership of the two organizations in holding the HPC Symposium. PCI is privileged and proud to participate with the FHWA in advancing the state-of-the art of HPC.



PCI Chairman **Bill Whitcher** (right) hands to *fib* President **Michel Virlogeux** a plaque of appreciation for the working relationship that made the PCI/FHWA/*fib* International Symposium on High Performance Concrete possible. Dr. Virlogeux then invited the audience to attend the 2001 and 2002 *fib* Symposium and Congress to be held in Berlin, Germany, and Osaka, Japan, respectively.



**Terry Treanor** (left), President of the International Prestressed Hollowcore Association (IPHA), accepts from PCI Chairman **Bill Whitcher** a plaque of appreciation. IPHA and PCI's Hollowcore Producers Committee have worked closely in recent years culminating in joint meetings during the 2000 PCI Convention.

Portuguese Group of *fib* as well as the Portuguese representative for the CEN Commission in charge of Eurocode 2. A long-time PCI member, he is also a designer and consultant for some important bridges and buildings, including the record span Vasco da Gama Bridge and the elegant Twin Towers St. Rafael-St. Gabriel, both in Lisbon.

- **Dr. Walter Podolny** is recently retired from the Federal Highway Administration after 30 years of dedicated service. A long-time PCI member, as well as being active in *fib*, he has been a consultant on many famous bridges around the world, including the Pasco Kennewick Bridge, Bubiyan Bridge

and Sunshine Skyway Bridge. For more background information on his professional career, see special section of Industry News.

- **Dr. Manfred Wicke** is Professor at Innsbruck University, Innsbruck, Austria. In addition to his more than 30 years of teaching and research, Dr. Wicke has been a consultant on several significant projects including the recent Bangkok Expressway Project. He also has been active as a member of the CEB (Comité Européen du Béton) and *fib* developing model code provisions for Europe and other countries.

After the *fib* medal presentations, Dr. Virlogeux invited the audience to attend the next two important *fib* events:

- *fib* Symposium – Concrete and the Environment, Berlin, Germany, October 3 to 5, 2001.
- The First *fib* Congress – Concrete Structures in the 21st Century, Osaka, Japan, October 13 to 19, 2002.

At the Breakfast Business Meeting, special awards were given for Plant Certification, Safety, Associate Member, Educator of the Year, PCI JOURNAL, and PCI Fellows. Details of these awards and the recipients follow later in this article.

The proceedings of the convention/symposium were officially brought to a close at the Membership Luncheon on Wednesday. In his farewell address, Chairman **Bill Whitcher** reflected upon his year of office and the challenges that



**Dr. Julio Appleton**, Professor at Instituto Superior Técnico, Lisbon, Portugal, accepts *fib* Medal of Merit from *fib* President **Michel Virlogeux**.

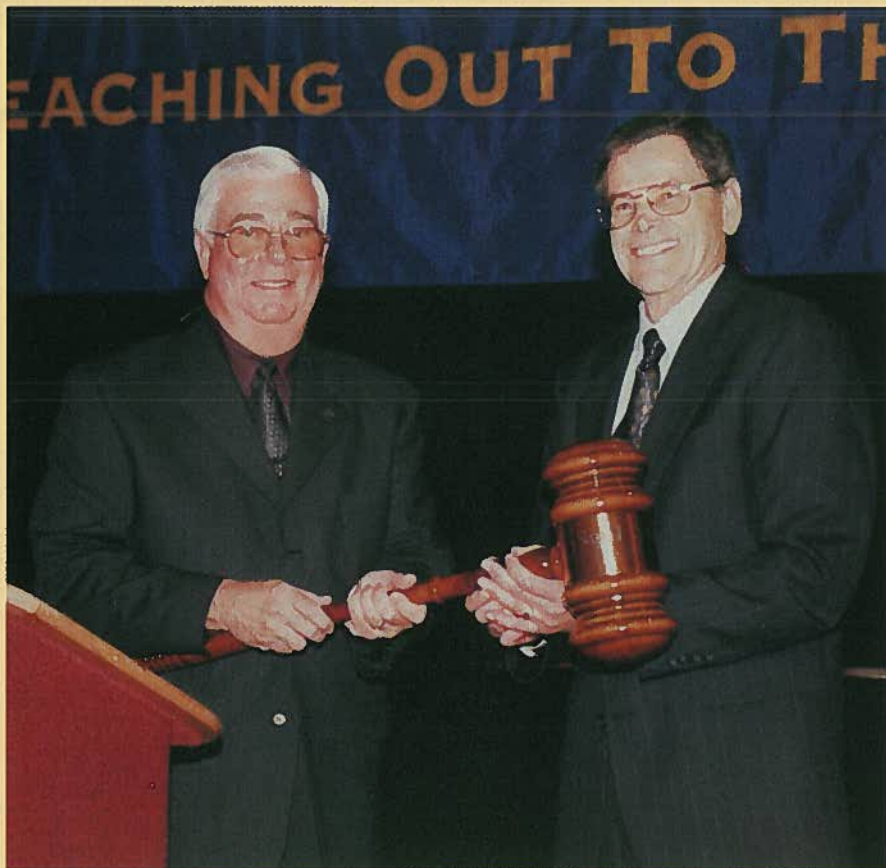


**Dr. Walter Podolny**, recently retired from the Federal Highway Administration, Washington, D.C., accepts *fib* Medal of Merit from *fib* President **Michel Virlogeux**.



**Dr. Manfred Wicke**, Professor at Innsbruck University, Innsbruck, Austria, accepts *fib* Medal of Merit from *fib* President **Michel Virlogeux**.





PCI Chairman **Bill Whitcher** passes on traditional gavel to incoming Chairman **Saul Shenkman**.

lay ahead. But he felt confident he was leaving the chairmanship in good hands.

Elected as 2001 PCI Chairman of the Board of Directors is **Saul Shenkman**, General Manager of Unistress Corporation, Pittsfield, Massachusetts. In accepting the chairmanship, Mr. Shenkman spoke about the need to implement the PCI strategic plan and for increased involvement by the membership. For details of his address, see the accompanying article, "Participation –

The Key to Our Future."

Mr. Shenkman holds a BS degree in civil engineering from the City College of New York and a MS degree in civil engineering from the Illinois Institute of Technology. A past chairman of PCI New England, he has previously served as Vice Chairman and a member of the PCI Board of Directors. He has, also, served as a member of the Justice Facilities and Glass Fiber Reinforced Concrete committees.

Serving with Saul Shenkman on the 2001 Executive Committee is **Ron Schlerf**, **Michael E. Quinlan**, **Bill Whitcher**, and **Thomas B. Battles**.

**Ron Schlerf** is president of Central Pre-Mix Prestress Co., Spokane, Washington. He has held this position for the past 11 years. In 1971, he obtained his Bachelors degree in business administration from Boise State University. Active in PCI administrative and technical committee work, he served on the PCI Board of Directors in 1994-1995. He also has been a member of the Sandwich Wall Panel Committee, Parking Marketing/Promotion Committee, and the Media, Public Relations & Publications Committee.

New to the Executive Committee is Secretary Treasurer **Michael E. Quinlan**, who for the past two years has served so capably as the chairman of the Market Plans Committee. Mr. Quinlan is Vice President/General Manager of Gate Concrete Products Company, Oxford, North Carolina. Previously, he had worked in sales/marketing for Coreslab Structures (Miami) Inc., and Southern Prestressed Concrete, Inc. Mr. Quinlan has a BS in civil engineering from Northeastern University and an MBA from the University of New Haven. He served on the PCI Board of Directors in 1991 to 1994 and 1999 to 2000. He is the past chairman of the PCI Marketing Council (1991 to 1994), Georgia Carolinas PCI, and Florida Precast Concrete Association.

Terms of office for the new board members begin January 1, 2001. Other incoming members are:



PCI support staff at convention/symposium (left to right): **Gary Munstermann**, **David Jablonsky**, **George Nasser**, **Paul Johal**, **Cindy Poole**, **Liz Martino**, **John Lishamer**, **Steve Lindee**, **Jason Krohn**, **Sidney Freedman**, **John Dick**, **Brian Goodmiller** and **Phillip Iverson**.



# MEMORIES OF PCI'S 46<sup>TH</sup> ANNUAL





# CONVENTION & EXHIBITION ...







**Skip Francies**, Director of Precast Operations for Dayton/Richmond accepts from Chairman **Bill Whitcher** the PCI Associate Member Award for the year 2000.

#### **Producer Member Zone Directors**

- **James R. Clark** (Zone 1)  
Clark Pacific  
West Sacramento, California
- **David J. Hellyer** (Zone 2)  
Coreslab Structures (OKLA) Inc.  
Oklahoma City, Oklahoma
- **James A. Sautter** (Zone 3)  
CSR Wilson Concrete Company  
LaPlatte, New England
- **Thomas R. Hailey** (Zone 4)  
Prestress Services, Inc.  
Lexington, Kentucky
- **Tony Mazzeo** (Zone 5)  
Oldcastle Precast, Inc.  
South Bethlehem, New York
- **Michael L. Boykin** (Zone 6)  
Boykin Brothers, Inc.  
Baton Rouge, Louisiana

#### **Associate Member Director**

**Skip Francies**  
Dayton/Richmond Concrete Accessories  
Miamisburg, Ohio

#### **Chairman, Technical Activities Committee**

**C. Douglas Sutton**  
Purdue University  
West Lafayette, Indiana

#### **Professional Member Director**

**William (Adrian) Lovell, Jr.**  
Precast Technical Assistance Corp.  
Pensacola, Florida

#### **Chairman, Market Plans Committee**

**Charles P. O'Leary**  
Northeast Concrete Products LLC  
Plainville, Massachusetts

#### **Chairman, Quality Assurance Committee**

**Stanley J. Ruden**  
Coreslab Structures (ARIZ) Inc.  
Phoenix, Arizona

#### **Allied Organization Member Director**

**W. Michael McConochie**  
Georgia/C Carolinas PCI Region  
Statesville, North Carolina

#### **CPCI Chairman**

**Bruce Taylor**  
RES Precast, Inc.  
Stroud, Ontario, Canada

#### **Chairman, Education Committee**

**Alvin C. Ericson**  
Technical Consultant  
Splice Sleeve North America, Inc.  
Bonita Springs, Florida

### **AWARDS PRESENTATIONS**

Awards presentations for plant certification participation, plant safety, associate member recognition, outstanding PCI JOURNAL papers, distinguished educator honors and special recognitions

## **ON TO RENO 2001**

All work and energy are now being devoted into organizing the sessions and programs for the 2001 PCI Convention & Exhibition to be held at John Ascuaga's Nugget Convention Center in Reno, Nevada, to be held October 21 to 24, 2001. Mark these dates on your calendar now and be on the lookout for more details from PCI in the next few months.

were made at the Business Meeting Breakfast on Monday, September 25.

### **PCI PLANT CERTIFICATION ANNIVERSARY RECOGNITIONS**

Each year, the Institute recognizes those plants in the PCI Plant Certification Program that have reached anniversary milestones. This year, PCI recognizes the plants that have achieved 20 and 25 years of plant certification:

#### **20 Years**

- Atlanta Structural Concrete Co.  
Buchanan, Georgia
- Basic Precast Company  
Salt Lake City, Utah
- Coreslab Structures (MIAMI) Inc.,  
Medley, Florida
- Egyptian Concrete Company  
Salem, Illinois
- Gulf Coast Pre-Stress, Inc.  
Pass Christian, Mississippi
- Illinois Concrete, Ltd.  
Champaign, Illinois
- Manufactured Concrete, Ltd.  
(Manco)  
San Antonio, Texas
- Prestress Engineering Corporation  
Blackstone, Illinois

#### **25 Years**

- CSR Wilson  
Bellevue, Nebraska
- Spancrete Industries, Inc.  
Waukesha, Wisconsin
- Spancrete, Inc.  
Valders, Wisconsin

### **PLANT SAFETY AWARDS**

Each year, PCI's Safety Committee collects and analyzes the Producer Members' accident data from the previous year (1999). All of the winners this year had "0" rating for incident, frequency and severity. The Safety Awards are given in categories based on the number of employees in the company.



## 49 Employees or Fewer

- Lafarge Canada, Inc.  
Calgary, Alberta, Canada
- Rocky Mountain Prestress Hawaii  
Kapolei, Hawaii
- Hollow Core, Inc.  
Detroit, Michigan

## ASSOCIATE MEMBER AWARD

**Dayton Richmond Concrete Accessories** began its long and storied existence in Brooklyn, New York in 1911 when Julian Richmond began marketing the original screw anchor. Richmond was incorporated in 1918 and, in effect, started the concrete accessory industry.

In 1924, the Dayton Sure-Grip & Shore Company was established in Dayton, Ohio by the Kinneger brothers, Art and Carl. At the time, Dayton Sure-Grip & Shore's main product interest was in the sale of snap ties, shores and hangers.

In 1939, Dayton Sure-Grip & Shore relocated to Miamisburg, Ohio and expanded their manufacturing capabilities to include some welded items. In 1959, Dayton Sure-Grip again expanded its manufacturing capabilities to include bar supports. As the manufacturing capability increased, Dayton Sure-Grip was able to expand operations into other areas of the country, e.g., in 1962 operations began in Birmingham, Alabama, in 1968, operations were started in Folcroft, Pennsylvania, in 1971 in Hialeah, Florida, and in 1976, the Dallas, Texas operation was started.

In 1982 a major acquisition was accomplished when Dayton Sure-Grip purchased the Superior Concrete Accessory Company of Santa Fe Springs, California. This prompted a name change of the company to "Dayton Superior Corporation." In the ensuing years, operations were started in Orlando, Florida; Toronto, Ontario; Montreal, Quebec; Denver, Colorado; Houston, Texas and Seattle, Washington.

Dayton Superior Corporation has continued to grow through sales and acquisitions and in 1997 purchased the Symons Corporation of Pasadena, California. Part of the Symons Group was

the same Richmond Screw Anchor Company that had originally started the accessory industry. This acquisition allowed Dayton Superior Corporation to merge its concrete accessory functions with those of the newly acquired Richmond Screw Anchor Company to form what is now called Dayton/Richmond Concrete Accessories.

Many key Dayton/Richmond employees have been involved for years in PCI programs, including PC-21 workshops, Committee Days, active committee membership and PCI Zone activities. Continuing this involvement, **Skip Francies**, Director of Precast Operations for Dayton/Richmond has been elected to the 2001 PCI Board. The company also has placed a high priority on development of new, innovative products and engineering services to assist in increasing the productivity of producer members. Dayton/Richmond remains committed in promoting the advantages of its precast products and services to the construction industry.

## JOURNAL AWARDS

Each year, the PCI bestows three awards to authors for outstanding papers published in the PCI JOURNAL during the previous 12 months (September-October through July-August). The award-winning papers are selected by the JOURNAL Awards Committee (**Leslie D. Martin**, chairman).

### Martin P. Korn Award

The Martin P. Korn Award (named in honor of PCI's first executive director) recognizes the paper that offers the greatest contribution to the advancement of precast and prestressed concrete in the area of design and research. This year, the award was

presented to **M. J. Nigel Priestley, S. (Sri) Sritharan, James R. Conley**, and **Stefano Pampanin** for their paper, "Preliminary Results and Conclusions From the PRESSS Five-Story Precast Concrete Test Building," which was published in the November-December 1999 PCI JOURNAL.

This paper presents the preliminary results of the testing of a 60 percent scale five-story precast, prestressed concrete frame and shear wall building at the University of California at San Diego. Five specific building systems were tested under severe seismic lateral loads.

**M.J. Nigel Priestley** is the principal coordinator of the 10-year PRESSS (Precast Seismic Structural Systems) research program. He directed the PRESSS program while he was professor of structural engineering, Department of Structural Engineering, University of California at San Diego, La Jolla, California. In recognition of his innovations and leadership, he was named as one of the "Top Newsmakers of 1999" by *Engineering News-Record*, for "proving the practicality of making economical, seismically safe buildings with precast concrete." He is the author of numerous technical papers (several of which have been published in the PCI JOURNAL) including a book on Seismic Design and Retrofit of Bridges. In 1996, he won PCI's Charles C. Zollman Award for his state-of-the-art paper, "The PRESSS Program - Current Status and Proposed Plans for Phase III." Upon his return to New Zealand, Dr. Priestley will be a consultant living near Christchurch.

**S. (Sri) Sritharan** is assistant professor, Department of Civil and Construction Engineering, Iowa State University, Ames, Iowa. He obtained

**M. J. Nigel Priestley** (left), co-winner of the Martin P. Korn Award for the paper, "Preliminary Results and Conclusions from the PRESSS Five-Story Precast Concrete Test Building."

**James R. Conley** (right), co-winner of the Martin P. Korn Award for the paper, "Preliminary Results and Conclusions from the PRESSS Five-Story Precast Concrete Test Building."







**S. (Sri) Sritharan**, accepts from Chairman **Bill Whitcher** the 2000 Martin P. Korn Award for co-authoring the paper, "Preliminary Results and Conclusions from the PRESS Five-Story Precast Concrete Test Building."



**Robert F. Mast** accepts from Chairman **Bill Whitcher** on behalf of **Arnfinn Rusten** and **Janice Zahn** the Robert J. Lyman Award for the paper "Design-Construction of a Breakwater/Pier Structure at U.S. Naval Station Everett."

his ME with distinction in civil engineering from the University of Auckland, New Zealand, and his Ph.D. in structural engineering from the University of California at San Diego. While at UCSD, Dr. Sritharan served as project manager in the instrumentation and testing of the PRESS five-story precast concrete test building. Dr. Sritharan is the author of 15 technical papers in various engineering publications, three of which have appeared in the PCI JOURNAL. A specialist in the finite

element method, in 1999, he was a finalist in the Eleventh Melosh Competition. Since 1998, he has been a member of the PRESS Researchers and Industry Advisory Group. Currently, he is analyzing the test data from the PRESS building test.

**James R. Conley** is a graduate research assistant in the Department of Structural Engineering, University of California at San Diego, La Jolla, California. He received his BS in civil engineering from Georgia Institute of Technology and his MS in structural engineering from the University of California at San Diego. At UCSD, Mr. Conley worked closely in the instrumentation and testing of the PRESS five-story precast concrete test building which culminated in the publication of this special report.

**Stefano Pampanin** obtained his BS degree in civil engineering (structural), cum laude (1997), from the University of Pavia in Italy, where his thesis was on a "Study of the Boundary Conditions of the Leaning Tower of Pisa." He entered the University of California at San Diego on a Fulbright scholarship, where he participated in the PRESS research program, earning an MS degree in engineering science (structural engineering) and publication of this special report. Currently, Mr. Pampanin is engaged in doctoral studies on alterna-

tive design philosophies and seismic response of precast concrete buildings at the Politecnico di Milano, Italy. The latter part of this dissertation is related to the PRESS program.

### Robert J. Lyman Award

The Robert J. Lyman Award (named in honor of PCI's eighth president and third executive director) recognizes the one paper that offers the greatest contribution in the area of plant production, site erection, or general construction using precast and prestressed concrete. This year's award was bestowed on **Arnfinn Rusten** and **Janice Zahn** for their paper, "Design-Construction of a Breakwater/Pier Structure at U.S. Naval Station Everett," which was published in the March-April 2000 PCI JOURNAL.

This article discusses the role that precast, prestressed concrete played in the design-construction of this \$25.8 million berthing facility.

**Arnfinn (Arnie) Rusten** is vice president, BERGER/ABAM Engineers, Inc., Federal Way, Washington. He obtained both his BS (1975) and MS (1976) in civil engineering from the University of Idaho. Mr. Rusten has worked for BERGER/ABAM since 1977. A registered civil and structural engineer, he has been responsible for the design and construction of numerous precast, prestressed concrete structures. In addition to his regular duties, he has taught a class on prestressed concrete design at the University of Washington and has also presented seminars on prestressed concrete, and project management and cost control for his company's employees.

**Janice Zahn** is project engineer, BERGER/ABAM Engineers, Inc., Federal Way, Washington. She received her BS in civil engineering (1989) and MS in structural engineering and mechanics (1990), both from the University of Washington. Ms. Zahn has worked for BERGER/ABAM from 1992 to 1995 and again from 1996 to the present. For about a year she was with Truss Joist MacMillan in Idaho. A registered civil engineer in the state of



**Stefano Pampanin** accepts from Chairman **Bill Whitcher** the 2000 Martin P. Korn Award for co-authoring the paper, "Preliminary Results and Conclusions from the PRESS Five-Story Precast Concrete Test Building."



Washington, she has been a field engineer for several precast, prestressed concrete projects.

### Charles C. Zollman Award

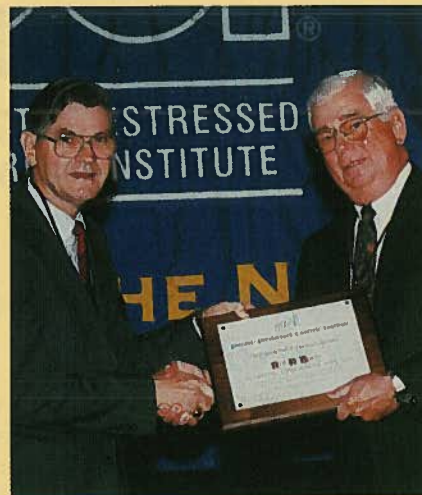
The Charles C. Zollman Award (named in honor of the engineer who played a major role in the design of the Walnut Lane Memorial Bridge – the first major prestressed concrete bridge in the United States) recognizes a special meritorious paper that advances the general understanding and knowledge of precast and prestressed concrete by bringing together available information in a single state-of-the-art report. The 2000 award was presented to **Donald W. Pfeifer** for his paper, "High Performance Concrete and Reinforcing Steel with a 100-Year Service Life," which was published in the May-June 2000 PCI JOURNAL.

This state-of-the-art paper reviews chloride permeability issues as well as the FHWA study on the performance of various types of reinforcing bars in saltwater environments.

**Donald W. Pfeifer** is affiliated consultant, Wiss, Janney, Elstner Associates, Inc., Northbrook, Illinois. During his nearly 25 years at WJE he carried out numerous investigations (many on durability issues) on precast, prestressed concrete. He is the author of 70 technical papers, many of which have been published in the PCI JOURNAL. He obtained his BS in civil engineering (1959) and MS in theoretical and applied mechanics (1960), both from the University of Illinois at Champaign – Urbana. He has contributed to PCI technical committee work by serving as chairman of the Connection Details Committee and a member of the Energy and GFRC committees. In 1998-1999, he served



**Donald W. Pfeifer** accepts the Charles C. Zollman Award from Chairman **Bill Whitcher** for his paper, "High Performance Concrete and Reinforcing Steel with a 100-year Service Life."



**Ned H. Burns**, Zarrow Centennial Professor of Civil Engineering at the University of Texas at Austin accepts from **Bill Whitcher** the PCI Distinguished Educator Award for the Year 2000.

on the PCI Board of Directors. The recipient of many awards, Mr. Pfeifer was elected a Fellow of the PCI in 1994 and was a co-winner of the Charles C. Zollman Award in 1997 for the state-of-the-art paper, "Durability Aspects of Precast Prestressed Concrete – Part 1: Historical Review."

### DISTINGUISHED EDUCATOR AWARD

**Ned H. Burns**, Zarrow Centennial Professor of Civil Engineering at the University of Texas at Austin, Austin, Texas, was conferred with the PCI Distinguished Educator Award for 2000. The award, developed by the Student Education Committee, recognizes distinguished educators in the fields of engineering, architecture and construction technology who have made significant contributions to the precast, prestressed concrete industry.

A fellow of PCI, ACI, and ASCE, Dr. Burns is the author of more than

50 technical papers and reports, many of which have been published in the PCI JOURNAL. He has won numerous awards including the Martin P. Korn Award (1993) and T.Y. Lin Award (1994) and is co-author (with T.Y. Lin) of the popular book on *Design of Prestressed Concrete Structures*. The University of Texas has honored him with teaching awards from General Dynamics, Amoco and the Zarrow Centennial Professorship. Recently, Dr. Burns was elected to the prestigious National Academy of Engineering for "important contributions to engineering theory and practice." Currently, he is a member of the PCI Bridges and Prestressing Steel committees.

### SPECIAL THANKS TO OUR PCI CONVENTION EXHIBITORS

The Institute acknowledges with gratitude the support and sponsorships provided by the convention exhibitors. In particular, thanks are due to Fister Quarries Group, Helser Industries, JVI, Inc., and Sika Corporation.

We hope to see you all at the 2001 PCI Annual Convention & Exhibition in Reno, Nevada, October 21-24, 2001.



**Arnfinn (Arnie) Rusten** (left), co-winner of the Robert J. Lyman Award for the paper, "Design-Construction of a Breakwater/Pier Structure at U.S. Naval Station Everett."

**Janice Zahn** (right), co-winner of the Robert J. Lyman Award for the paper, "Design-Construction of a Breakwater/Pier Structure at U.S. Naval Station Everett."



# FELLOWS OF THE PRECAST/PRESTRESSED CONCRETE INSTITUTE

***For recognition of members of the PCI for their distinguished contributions to the precast, prestressed concrete industry and to the PCI, within the areas of education, research, design, production, quality, erection, marketing and management.***

On Monday, September 25, 2000, eight new PCI members were honored as PCI Fellows.

## BRICE F. BENDER

Brice F. Bender was the first PCI producer to recognize the potential of precast, prestressed segmental construction for long span bridges in the United States. The groundwork was formed in 1971 when eight PCI members toured England, Holland and France to view long span bridge construction. Shortly afterwards, the first U.S. bridge using segmental construction was built in Corpus Christi, Texas. Soon after that project, three bridges were built in Indiana, two in Kentucky, and one in Illinois. These six bridges were followed by many such bridges nationwide. Today, it is a multi-billion dollar industry. Mr. Bender obtained his BS in civil engineering (1949) from Purdue University. From 1957 to 1963, he worked as a district engineer for American Marietta, Martin Marietta. For the next several years, he was vice president and general manager of Construction Products Corporation. In 1972, he co-founded and served as president of BVN/STS Consulting Engineers for 10 years. From 1982-1992, he was president of Pre-Post Engineers-Consultants. Mr. Bender was chairman of the Bridge Committee (1959-1979) and chairman of the Marketing Committee in the 70's. He also served on the PCI Board of Directors (1973-1974 and 1978-1979). He is the author of three articles in the PCI JOURNAL.



## ARNOLD L. BROWN

Arnold L. Brown has made significant contributions in the development and production of piles, railroad ties and segmental construction. Mr. Brown received his BS in civil engineering (1950) from the University of California. He gained his early experience with piling while working for Ben C. Gerwick, Inc., as an engineer in the Petaluma plant. He rose from plant superintendent, plant manager, to senior vice president of the precast division. After the company was purchased by Pomeroy Corporation in the late 60's, he became president of POMCO, Inc. a subsidiary of Pomeroy. In 1959, he spearheaded the development of concrete railroad ties which led to their use in the BARTD system for the San Francisco Bay area (1976) and the Northeast Corridor, Boston to Washington, D.C. (1978). More than one million precast ties were used. At the same time, he also developed the use of multi-cavity forms for piling and cross-ties in long-line casting beds. While at POMCO, he was involved in the production of precast segments for the Seven Mile Bridge and Sunshine Skyway Bridge, Jacksonville Detention Center and Tropicana Dome. He was on the PCI Board of Direction from 1978 to 1982, serving the last year as President of the Institute.



## CHARLES W. DOLAN

Charles W. Dolan is chairman and professor, Department of Civil Engineering, University of Wyoming, Laramie, Wyoming. He obtained his BS in civil engineering (1965) from the University of Massachusetts, and his MS in civil engineering (1967) and Ph.D. (1989), both from Cornell University. Dr. Dolan worked for ABAM Engineers from 1967 to 1986, where he was responsible for the design of the Walt Disney World Monorail, Detroit People Mover and Dallas Fort Worth Airport People Mover. He is the author of more than 50 technical papers, several of which have been published in the PCI JOURNAL. In 1973, he won the T.Y. Lin Award, for the best paper in prestressed concrete. Active in PCI technical committee work, and a regular reviewer for PCI JOURNAL papers, he was chairman of the former High Strength Committee and is a current member of the Research and Development Committee. Currently, he is also chairman of the ACI Technical Activities Committee. His area of specialization is in fiber reinforced plastic tendons for prestressed concrete members, high performance concrete and monorail structures.



## CHARLES L. FISTER

Charles (Chuck) L. Fister is founder and president of Fister Quarries Group, Inc., Downers Grove, Illinois. He established his company in 1968 which serves as a broker for the precast concrete industry for securing different types of aggregates, pigments, color and texture, together with sandblasting equipment. He attended the University of Minnesota. Mr. Fister has been involved in the precast concrete industry since 1959. Active in PCI committee work, he has contributed significantly to the development of the Architectural Precast Concrete Manual (Blue Book) and the Architectural Precast Concrete Color and Texture Selection Guide. He has served on the PCI Board of Directors and has been a member of the Architectural Precast Concrete Services Committee for more than 20 years. Over the years, he has also been a strong supporter (and advertiser) for the PCI JOURNAL.



## RAY A. MCCANN

Ray A. McCann is a consulting engineer in Napa, California, specializing in precast and prestressed concrete services. He obtained his BS in civil engineering with emphasis in structural engineering (1954) from the University of California





at Berkeley. Mr. McCann worked almost his entire professional career (40 years) for Basalt Rock Company (later acquired by Dillingham Construction), where he rose to be chief engineer of the Precast Division. A registered civil and structural engineer in California, he has been a PCI Professional member for nearly 50 years. In 1957, he co-chaired the committee which developed the first PCI Recommended Post-Tensioning Specification. Over the years, he has contributed enormously as a member of the Column, Glass Fiber Reinforced Concrete, Post-Tensioning, and Seismic committees. He has also been a contributor to the PCI JOURNAL both as a reviewer of technical papers and as an author.

## DONALD C. RATHS

Donald C. Raths is a consultant with Raths, Raths & Johnson, Inc., Willowbrook, Illinois. Prior to semi-retiring earlier this year from RRJ, he was principal of the firm. Mr. Raths obtained his BS in civil engineering (1964) from Michigan State University. After graduation, he received his early experience and enthusiasm for precast concrete while working for Precast/Schokbeton in Kalamazoo, Michigan (1964 – 1966). He spent the next three years with Carl Walker Engineers designing a variety of buildings including precast, prestressed parking structures. In 1969, he formed a partnership with RRJ, a firm specializing in the design, investigation, testing and repair of major building structures. Over the years, several buildings designed by RRJ have received special recognition in the PCI Awards Program. Among the significant projects he has been associated with are the modular substations for Bell Laboratories, the settlement/restoration of Wacker Drive columns at Drop Shaft 54 in Chicago, the Metra University Park Station in Chicago, and the restoration of the U.S. Embassy in Moscow. In the last 10 years, he has devoted himself to PCI administrative and technical committee work. He has been chairman of the JOURNAL Advisory Committee since 1992 and chairman of the Professional Member Committee since 1998. He has also served on the PCI Board of Directors (1992-1993) and is currently a member of the Technical Activities Committee, the Student Education Committee, and the TMRD Executive Committee 2000. His initiatives have resulted in growth and progress in obtaining the objectives of these committees.



## KIM SEEBER

Kim Seeber is a consulting engineer in Cantonment, Florida, specializing in precast, prestressed concrete services. He obtained his BS in civil engineering (1972) and MS in structural engineering (1974), both degrees from the University of Illinois at Champaign-Urbana, Illinois. Prior to establishing his own practice, Mr. Seeber was chief engineer (1991 to 1993) and general manager (1994-1995) for Southern Prestressed Concrete in Pensacola, Florida. Earlier, he was chief engineer (1981 to 1983 and 1986 to 1991) for Tindall Corporation and, in between, project engineer for T.Y. Lin International. As chairman of the PCI Committee on Precast Sandwich Wall Panels, he was the principal author of the report, "State-of-the-Art of Precast/Prestressed Sandwich Wall Panels," which was published in the March-April and May-June 1997 PCI JOURNALS. In the last 15 years, he has also been a member of the Building Code, Fire, and Seismic committees. As a result of his contributions to technical committee work, he has been awarded four PCI Certificates of Merit. In 1978, he received the Outstanding Structural Engineering Award from Illinois. Currently, he is the chairman of the PCI Industry Handbook Committee which is developing the Sixth Edition of the Handbook.



## GEORGE L. SOUTHWORTH

George L. Southworth is president and chief executive officer of LEAP Associates International, Inc. (LEAP), headquartered in Tampa, Florida. He joined LEAP in 1977 as a project engineer. The firm's activities include design-build services, project cost estimations, forensic investigations, and restoration engineering services for precast concrete structures. Recognizing the industry's need for computer software, he founded LEAP Software, Inc., to provide design software for precast buildings and bridges. With his strong belief in the value of education, he conducts numerous seminars on precast concrete and has served as adjunct professor at the University of South Florida's College of Engineering. He is a certified building inspector and a registered engineer in many states. Highly involved in PCI committee work, he has served as chairman of the Emerging Markets Committee and as a member of the Bridge Producers, Education, Justice Facilities, Hollow-Core Slab Producers, Metrication, Structural Precast Concrete, and Soundwall committees. In 1987-1988, he served on the PCI Board of Directors. He has also contributed both as a reviewer and author for the PCI JOURNAL.



Newly conferred PCI Fellows for the year 2000 (left to right): **George L. Southworth, Arnold L. Brown, Charles (Chuck) Fister, Charles W. Dolan, Donald C. Raths, Brice F. Bender** and **Kim Seeber**. Missing from photograph is **Ray A. McCann** who was away on a pre-scheduled world cruise.