Name Pattullo to PCI Journal Staff

Gerald W. Pattullo has been named Assistant Editor of the PCI JOURNAL. In his new post, Mr. Pattullo will assist George D. Nasser, editor-in-chief, in producing the JOURNAL. In addition, he also will assist in the production of *PCItems*.

Mr. Pattullo is a former managing editor of *Concrete Products*, where he handled the production and editing of that publication. He also was responsible for the magazine's departments, and in addition, wrote numerous concrete industry feature articles.

A veteran newspaperman, Mr. Pattullo previously served as managing editor of a chain of suburban newspapers, and as a reporter for the *Chicago Daily News*. He also has been a writer for CNA Financial Corp., and an associate editor of the *Journal of American Insurance*, a national trade association publication representing more than 100 mutual insurance companies.

Articles written by Mr. Pattullo



Gerald W. Pattullo

have appeared in such publications as Nation's Business, Science and Mechanics, The Reader's Digest, The National Underwriter, and Pageant Magazine.

Anderson Elected to National Academy

Former PCI President (1970-71) Arthur R. Anderson, ScD, of Tacoma, Washington, has been elected to membership in the National Academy of Engineering of the United States of America.

Courtland D. Perkins, president of the Academy, announced the election, April 1, citing Dr. Anderson for "leadership in prestressed concrete construction and in the design and construction of engineering structures."

Election to the Academy is the highest professional distinction that can be conferred on an engineer, and honors those who have made important contributions to engineering theory and practice or who have demonstrated unusual accomplishments in the pioneering of new and developing fields of technology.

Dr. Anderson has long been recognized as an outstanding pioneer in the use of precast and prestressed concrete in the design and construction of major structures. With his brother, Thomas W. Anderson, he co-founded Concrete Technology Corporation, of Tacoma, in 1951. This was one of the first prestressed concrete plants in the United States, and Dr. Anderson now serves as senior vice president of the firm.

Currently, he is chairman of the board of ABAM Engineers, Inc., a

Tacoma consulting engineering firm (also co-founded by the Anderson brothers). Dr. Anderson has been accorded many personal honors and awards for his individual contributions to engineering design and construction techniques. And of course, he has played an important role in the several projects for which ABAM Engineers has received industry awards and recognition.

The Fédération Internationale de la Précontrainte awarded him the FIP Medal for his work in prestressed concrete and recently he became the first foreigner to be elected an Honorary Member of the Japan Concrete Institute.

Dr. Anderson, a PCI Honorary Member, is active in numerous professional societies and serves on many technical committees. The holder of several patents, he is also the author of over 50 technical papers including several in the PCI JOURNAL.

PCI JOURNAL Construction Award Renamed Robert J. Lyman Award

To commemorate the contributions of the late **Robert J. Lyman** to the precast prestressed concrete industry, the PCI Board of Directors has renamed the PCI JOURNAL Construction Award the Robert J. Lyman Award in his honor.

Mr. Lyman, a former PCI President (1962-63), was Executive Director of the PCI when he died in a tragic automobile accident July 16, 1968. During his 5 years of service to the PCI, he led the industry to new highs of activity and development.

Prior to his PCI service, Mr. Lyman represented Atlas Structural Concrete, Inc., El Paso, Texas, an active member company, and served on the PCI Board of Directors, in various



Arthur R. Anderson

officer capacities, and finally as President. He was chief engineer and vice president of Atlas in the period 1956-63. Before that he spent 15 years with the Corps of Engineers in the Albuquerque District.

The PCI Construction Award was established in 1976 to recognize and encourage PCI JOURNAL articles of particular interest in the areas of overall construction using prestressed concrete, plant production technology, and site erection of precast products.

PCI Technical Committee News

In a further up-date of the 15 technical committees under its su-



Robert J. Lyman

pervision, the Technical Activities Committee is pleased to report that James R. Gaston, Arnold Stone Co., has been appointed chairman of the PCI Committee on Fire. This change came about when Walter J. Prebis relinquished his chairmanship due to an increase in his Colorado state association duties.

The PCI Committee on Fire is continually active, and a good example of its efforts is the recently published manual, PCI Design for Fire Resistance of Precast Prestressed Concrete. This authoritative design manual was prepared by A. H. Gustaferro and L. D. Martin under committee direction. See p. 124 for a complete summary of this manual.

▶ The PCI Committee on Bridges (H. Kent Preston. chairman) met in February to finalize two proposed additions to the AASHTO Standard Specifications for Highway Bridges. One relates to precast segmental bridges and the other to splicing of prestressed concrete piles.

As usual each year, committee members will assist in presenting these proposals at the four Regional Meetings of the AASHTO Committee on Bridges and Structures. A future specification addition is being developed on precast prestressed concrete deck panels.

▶ Eight technical committees held meetings during the PCI Committee Days, April 13-14, 1977. Three regrouped their efforts to aim at revised, up-dated committee reports, one held an initial, organizational meeting, and the remaining four met to move ahead with their on-going programs.

▶ Two major technical publications are being developed at present—the Second Edition of the PCI Design Handbook and the new Structural Design Manual for Architectural Precast Concrete. As various sections are being developed by consultants and others, selected technical committees are asked to review and comment to ensure technical accuracy.

Well along in this review process are up-dates of previous Institute reports: two Guide Specifications for Precast Prestressed Concrete and for Architectural Precast Concrete; and two reports on Thermal Properties and Acoustical Properties. Other topics under development include sandwich panels, connections for cladding, earthquake design, torsion design, volume changes and partial fixity.

▶ The PCI Committee on Research (Charles H. Knight, Jr., chairman) has proceeded early this year with a request for Research Fellowship proposals. Proposals will be reviewed and evaluated by the committee and, hopefully, PCI Fellowships will be placed for the 1977-78 academic year.

TAC summarized seven Research Fellowships completed in the period 1972-1975 (available free on request) and recently received final reports on three more studies: Development Length of Prestressing Strands, North Carolina State University; Corbels With Headed Stud Reinforcement, University of Wisconsin-Milwaukee; Shear Strength of Prestressed Concrete Double Tee Beams, University of Colorado.

▶ The PCI Seismic Committee (Joseph Manning, chairman) has been largely involved in reviewing reports by others. However, the committee is embarking on a long-term study, the first phase of which will summarize current design solutions for precast, prestressed concrete in zones of high seismicity. Its eventual goal—an industry recommended practice for seismic design.

Howard Opens Consulting Office

PCI Member Len L. Howard, P.E., has opened his own consulting engineering office at 808 First Southern Tower, Mobile, Alabama. This consulting office will specialize in cost management for the concrete products industry.

Initial emphasis on cost reduction will be "energy conservation" in the accelerated heat curing of precast and prestressed concrete products. New techniques are being developed to drastically reduce energy consumption but still accomplishing high early strengths with rapid form turnover.

Mr. Howard has been working for prestressed concrete producers for over 22 years. For the last 17 years he has been with Southern Prestressed Concrete of Pensacola, Florida, and the acquiring Westinghouse Prestressed Concrete Division, where he held positions as sales engineer, chief engineer, general manager, and lastly as manager engineering/marketing services.

Currently, he is chairman of the PCI Committee on Precast Concrete Bearing Wall Buildings.

Navratil Joins Dresser Industries

PCI Member **Drahos Navratil** has joined Lodge Cottrell Division of Dresser Industries in Houston, Texas, as project engineer.

Specializing in structural engineering, Mr. Navratil has had over 30 years of diversified design and construction experience throughout the world. Recently he served on the board of directors of ASCE—Reading Branch, while working as a project engineer for Sanders and Thomas.

As a research engineer in Europe, he developed a prestressed concrete



Len L. Howard

pile and established a factory line for fabrication. He also served on various European committees on standardization of prestressed concrete products.

Arctic Ocean Engineering

The fourth international conference on port and ocean engineering under arctic conditions will be held at St. John's, Newfoundland, Canada, Sept. 26-30, 1977. The theme of the conference is all aspects of ocean engineering in high latitudes.

For further information contact: G. R. Peters, chairman, POAC Organizing Committee, Faculty of Engineering and Applied Science, Memorial University, St. Johns, Newfoundland, Canada.



Drahos Navratil



The building award went to the 4646 Needmore Road Building, Dayton, Ohio.

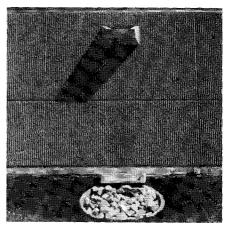
Ohio Prestressers' Award Winners

The Ohio Prestressed Concrete Association has announced the winners of its annual awards competition.

The awards are given to structures completed in 1976 on the basis of excellence in design using precast and/or prestressed concrete. Two awards were presented: one for first place in buildings, and one for first place in bridge construction.

The winner of the building competition was the 4646 Needmore Road Building, Dayton, Ohio. This office building was constructed for the Argonaut Division of General Motors Corp. The building's entire framing system of columns, beams and hollow-core floor and roof members were all prestressed concrete manufactured and installed by Price Brothers Co., Dayton, Ohio.

The bridge competition was won for the Calumet Street viaduct over Glen Echo, Columbus, Ohio. Prestressed concrete beams were made and installed by Reliance Universal, Inc., Columbus, Ohio.



Close-up shows the "fractured fin" precast concrete wall panels and roof drain scuppers of the Needmore Road **Building, Dayton,** Ohio.

The award winning bridge was this viaduct on Calumet St., Columbus, Ohio.

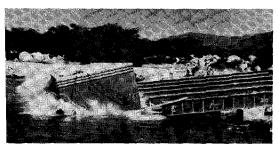




Building Award winners are (l-r); **A. F. Lizee**, Argonaut Div., General Motors Corp. (owner of the project); **Charles E. Hilgeman**, OPCA president; **Robert W. Lecklider**, AIA, Lecklider and Jay, architects, Dayton, Ohio; and **Thomas B. Sharkey**, P.E., B. G. Danis Co., Dayton, Ohio, structural engineer on the project.



Bridge Award winners are (I-r); Russell J. Mason, R. J. Mason, Inc., contractor; Charles E. Hilgeman, OPCA president; Robert C. Parkinson, public service director, City of Columbus, Ohio (owner of the bridge); Theodore L. Wallace, Columbus City engineer; Carl E. Eriksson, Carl E. Eriksson Engineering Ltd.; James J. Olausen, City of Columbus bridge engineer; and Edwin A. Hower, Eriksson Engineering, Ltd.



300-ton Honolulu-made concrete barge being launched.

Honolulu-Made Concrete Barge

A 300-ton concrete barge was manufactured and launched recently at Barbers Point Barge Harbor by Hawaiian Dredging & Construction Company, working under contract with the U.S. Navy.

The barge, designed by PCI Member **Alfred A. Yee,** is 105 ft long, 15 ft wide, and 9 ft high. It is already in service as a float landing at the Arizona Memorial.

The former floating platform which this barge is replacing was made of structural steel and the maintenance cost was extremely high. With this new concrete barge no dry-docking is needed for at least 30 years.

1977 PCI Awards Program— Call for Entries

PCI Headquarters has issued a "call for entries" for the 1977 PCI Awards Program. This annual event recognizes excellence in design using precast and/or prestressed concrete.

Any kind or type of structure in the United States or Canada using prestressed concrete or architectural precast concrete may be entered. The Awards Program is open to all architects and engineers practicing professionally in the U.S., its possessions, and Canada, and to interested government agencies.

Attention in judging will be given to the use of these materials to achieve esthetic expression, function, and economy. Emphasis will be placed on the use of the structural system as an expression of design intent and enhancement of the project's function.

Two distinguished juries will evaluate entries, one concerned with buildings and miscellaneous structures, the other with bridges.

The jury of awards for buildings and structures will be chaired by John M. McGinty, FAIA, president, American Institute of Architects. Serving with Mr. McGinty will be: Albert J. Blaylock, S.E., president, Structural Engineers Association of California; Charles H. Cullum, FRAIC, president, The Royal Architectural Institute of Canada; and Leland J. Waiker, FASCE, president, American Society of Civil Engineers.

The jury for bridges will be chaired by Lester A. Herr, P.E., chief, Bridge Division, Federal Highway Administration, U.S. Department of Transportation. Serving with Mr. Herr will be Harold R. Sandberg, FASCE, president, Alfred Benesch & Company; and Carl E. Thunman, Jr., Engineer of Bridge & Traffic Structures, Illinois Department of Transportation.

Winners will receive their awards at special ceremonies on November 1, during the PCI Convention in St. Louis.

Deadline for entries to be received at PCI is August 8, 1977.

Simple entry rules and additional information are available from PCI Headquarters.

78 Bridge Conference Planned in St. Louis

The Transportation Research Board has announced a Bridge Engineering Conference to be held September 25-27, 1978, at St. Louis, Missouri. The purpose of the Conference is exchange of information on the design, construction, rehabilitation, and maintenance of vehicular bridges. Problems and solutions of interest to bridge engineers and administrators of highway, railroad, and transit agencies will be emphasized.

For further information and submission of papers, contact: Bridge Engineering Conference, Transportation Research Board, 2101 Constitution Ave., N. W., Washington, D.C. 20418.

Appointments at American Spring Wire

Several important appointments were recently made at American Spring Wire Corporation (a PCI Associate Member) based in Cleveland, Ohio.

Joseph A. Tatalick was named vice president of engineering. James R. McDonald will take over as vice president of operations, and Joseph L. Kwasny as vice president of sales.

A major aspect of their new responsibilities will be the marketing of "2001" Strand, a newly developed prestressing steel for the precast prestressed concrete industry.

Everman Corp. Names New Officers

New officers have been named at Everman Corporation (a PCI Producer Member), Fort Worth, Texas.

Cecil F. Smith Jr., associated with Everman since its founding in 1957, has been named vice president for engineering.

Tom Magoffin, formerly sales manager, is vice president for sales.

Carl Holliman Jr., employed in the company's manufacturing plant since 1962, has been named vice president for operations.

Phyllis Holcomb, executive secretary and office manager, is secretarytreasurer.



Michael Carrigan

Carrigan Named Production Manager at RMP

PCI Member **Michael Carrigan** has been named production manager of the Denver, Colorado plant of RMP Prestress Group, Inc., (a PCI Producer Member).

Mr. Carrigan, a native of London, England, came to RMP from a prestress manufacturing company located outside Washington, D.C., after working in London, Andover (England), Copenhagen, and Toronto for a builder of precast concrete building systems.

A graduate of the University of London, he still maintains his membership in the Concrete Society of England.

Kudos for Morse's Safety Record

Morse Bros. Prestress, Inc. (a PCI Producer Member) Harrisburg, Oregon, has set an industry record for safety! A total of 296,113 man-hours were worked without a lost-time accident. State Accident Insurance Fund and the Oregon Workman's Compensation Board have each presented Morse Bros. with awards for this achievement. Inspectors from various agencies, including OSHA, have noted that Morse Bros. has one of the cleanest yards in the industry.



J. M. Crom, Sr.



Ben C. Gerwick, Sr.



R. "Mike" Dubois

J. M. Crom, Sr., Dies

John Maurice Crom, a pioneer in circular and linear prestressing and gunite applications, died February 6, 1977, at the age of 90 in Hawthorne, Florida.

Mr. Crom obtained a BS in civil engineering from the University of Idaho in 1911.

He was one of the first to recognize the need for high strength steels in circular prestressing about 1935. In that year he published the first useful design information on circular prestressed concrete tanks. Then in 1942 he invented and employed the now widely used wire winding method of circular prestressed concrete tank construction.

The Preload Company, organized by J. M. Crom, introduced linear prestressing to the United States in 1950 with construction of the Walnut Lane Bridge in Philadelphia.

In 1952, J. M. Crom, with T. R. Crom, Frank Bertie, and Jack Crom founded The Crom Corporation, which developed the wire-wound composite diaphragm-shotcrete prestressed circular tank and the wirewound prestressed concrete structural beam.

J. M. Crom's career with concrete began in 1912 as engineer of Cash-

mere, Washington, when he precast and erected concrete posts for street lighting in that city. His experience with gunite started in 1919 as a sales engineer with the Cement Gun Company. He introduced gunite for underground support in mines, refractory application in steel mills, canal linings, irrigation projects, tunnel linings, and of course, tanks.

J. M. Crom was the author of many technical papers published in ASCE, Engineering News Record, and various trade journals. He held more than 40 U.S. Patents.

Ben C. Gerwick, Sr., Dies

Ben C. Gerwick, Sr., a major pioneer in foundation and marine construction during this past half century, died March 27, 1977, at the age of 94 in Oregon.

A native of Ohio, he graduated in civil engineering from Ohio State University in 1906. From 1910 to 1915 he helped design and build (working for Ernest L. Ransome) the early precast concrete warehouses and factories in Boston.

During this period he also designed, manufactured and drove the first precast concrete pile. In 1915, he went to California where he supervised building the Yolo Causeway, the first large precast concrete bridge in America.

Mr. Gerwick joined Healy-Tibbetts Construction Co. as construction engineer for the Dumbarton crossings of San Francisco Bay, both the highway bridge and the Hetch Hetchy Aqueduct. Here, he developed and used his patent for progressive construction of deep cofferdams in swift currents.

In 1926, he founded his own firm in San Francisco, Ben C. Gerwick, Inc., specializing in marine and foundation construction. During World War II, he was very active in drydock, shipyard, and pier construction.

After the war, his work spread to other parts of the United States and overseas. He helped build the substructure of the Richmond-San Rafael Bridge, for which he applied his invention of precast concrete pier shells acting compositely with tremie concrete, a method subsequently used on several bridges in California and Oregon.

He received many honors during his lifetime and in 1975 the American Society of Civil Engineers named him among the "Top Ten Construction Men of the Past Half Century."

Ben Gerwick was always interested in the future and new and better ways to integrate engineering and construction. When prestressed concrete first emerged, he stated "I will never live to see it used, but it is a good idea and we should get into it." He did in fact live to see and help prestressing grow into a major construction material and industry.

R. M. Dubois Dies

Randall "Mike" Dubois, PCI President from 1959 to 1960, died March 10, 1977, at the age of 61, in Long Island, New York. Mr. Dubois began his career with the Vick Chemical Company after graduating (in 1938) from Rochester University's College of Engineering.

In 1951, he left to become president and director of Freyssinet Company, remaining there till 1961. These were the early formative years of prestressed concrete in the United States and Mr. Dubois played a major role in constructing the Pontchartrain Causeway, the Chesapeake Bay Bridge-Tunnel, and the Hampton Roads Bridge-Tunnel. In 1961, he went into his own consulting engineering practice.

ACI's '77 Officers and Award Winners

Several prominent PCI Members were elected and honored at the American Concrete Institute's annual convention in San Diego, California, March 13-18, 1977.

Richard C. Mielenz, vice president, Research and Development, Master Builders, Division of Martin Marietta, Cleveland, Ohio, was elected president of the ACI for a one-year term. (Master Builders is a PCI Associate Member.)

The following PCI Professional Members were elected directors of ACI.

Francis J. Jacques, vice president of engineering and research, Stanley Structures, Denver, Colorado.

Paul Klieger, director, Concrete Materials Research Department, Portland Cement Association, Skokie, Illinois.

Edward Pfrang, chief, Structures, Materials and Safety Division, U.S. National Bureau of Standards, Washington, D.C.

These two PCI Professional Members received special awards:

Arvid Grant, principal, Arvid Grant and Associates, Inc., Olympia, Washington, was awarded the ACI Construction Practice Award for his paper "Incremental Launching of Concrete Structures," published in the August 1975 ACI Journal.

Eivind Hognestad, director of technical and scientific development, Portland Cement Association, Skokie, Illinois, was awarded the Alfred E. Lindau Award for his notable research work and its application to practical design of concrete structures.

In addition, the consulting firm of Wiss, Janney, Elstner and Associates, Inc., Northbrook, Illinois, was awarded the Charles S. Whitney Medal "for the development of imaginative and effective methods for the study of behavior of concrete structures and for interpretation of the results of such studies." Several engineers from WJE are long-time PCI Members and contributors.

Precast Used as Forms Booklet

The latest in the new series of PCI Project Reports is titled "Architectural Precast Concrete Used as Forms for Cast-in-Place Concrete" (PR-18).

The eight-page booklet discusses feasibility, design considerations, and construction techniques. Pictures illustrate precast formwork for walls, columns, and spandrel beams. Price to PCI Members is only 50¢.

Tadros Joins West Virgínia University

PCI Member Maher K. Tadros has been appointed assistant professor at West Virginia University, Morgantown. Prior to this appointment, he was associated with the consulting firm Cosentino Bruyer Partnership in Calgary, Alberta, Canada.

Since 1967, Dr. Tadros has been active in research, teaching and design of steel and concrete structures, with special interest in prestressed concrete.

He received, jointly with Drs. A.

Ghali and W. H. Dilger of the University of Calgary, ASCE's prestigious T. Y. Lin Award for their PCI JOUR-NAL paper on prestress loss and deflection which was published in the May-June 1975 issue.

This current issue of the PCI JOURNAL contains a follow-up article by Dr. Tadros (with Drs. Ghali and Dilger) on prestress loss and deflection.

Colorado Prestressers Enter 8th Year

The Colorado Prestressers Association (a PCI Organization Member) is celebrating its eighth year in the construction industry and is getting stronger each year. Currently, the Association (consisting of all Colorado producers) geographically manufactures the largest volume of prestressed concrete products in North America.

The following new officers were recently elected:

President: **Bill Richardson**, Stresscon Corp., Colorado Springs.

Vice-President **Howard Albrecht**, RMP Prestress Group, Englewood.

Secretary: **Bill Hartline**, Stanley Structures, Denver.

Treasurer: Mike Sample, Winfrey Structural Concrete, Boulder.

Wally Prebis continues to serve as executive director of this Association.

Dressler Named President of Master Builders

David C. Dressler has been named to succeed retiring Thomas M. Kelly as president of Cleveland-based Master Builders, Division of Martin Marietta Corporation. Master Builders (a PCI Associate Member) is a world wide developer and marketer of admixtures to improve concrete, non-shrink grouts and other chemicals for the construction industry.