

# Robert J. Lyman

The Prestressed Concrete Institute, along with the prestressing industry, was shocked and saddened with the tragic death of its Executive Director in an automo-



**Robert J. Lyman**

Sept. 17, 1917—July 16, 1968

bile accident in the early evening of July 16 just a few miles from his boyhood home of Port Allegany, Pennsylvania.

Bob had become well known as one of the most energetic and active of association executives in the concrete and construction in-

dustry. In the short period of his service with PCI, since September 1963, he directed the Institute to new highs of activity and involvement for the betterment of the industry.

Prior to his service on the PCI Staff, Mr. Lyman represented Atlas Structural Concrete, Inc., El Paso, Texas, an active member company, and served on the PCI Board of Directors, in various officer capacities, and finally as PCI President 1962-63. 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, Albuquerque District.

Bob was a Civil Engineer graduate of Ohio Northern University, Ada, Ohio; a registered professional engineer in Texas and New Mexico; a fellow of the American Society of Civil Engineers; a member of the National Society of Professional Engineers, the American Concrete Institute, the Society of American Military Engineers, the Construction Specifications Institute, the American Society for Testing and Materials, and the American Railway Engineering Association. He was named Engineer of the Year, 1962, by the Engineering and Technical Societies of El Paso, Texas.

Bob Lyman was a resident of Barrington, Illinois, and is survived by his wife, Colletta, his mother in Pennsylvania, two daughters, Kathy and Ellen, and a son, Greg.

# Industry Items

## Proceedings of the Fifth Congress of FIP

A hard-bound proceedings volume contains the reports of Session I and the reports and discussions of Sessions II, III and IV of the Fifth Congress of FIP held in Paris, France, June 1966. Volumes are available in English, French and German at £5 (\$11.99 at the current rate) from Proceedings, Federation International de la Precontrainte, Terminal House, Grosvenor Gar-

dens, London SW 1, England. Be sure to specify the language when ordering.

## Name Change for Institute Member

Rockwin Corporation is the new name for the wholly owned subsidiary of U. S. Pipe and Foundry Co. Its western division will continue the operations of its predecessor, Rockwin Prestressed Concrete Corp., under the direction of Execu-

*(Cont. on page 98)*

## New Members

**The Board of Directors has approved applications for the following new members—Welcome to PCI**

### ASSOCIATE

Suzuki Metal Industry Co., Ltd., 1-18-1, Akabene-Kita, Kita-Ku, Tokyo, Japan, H. Igarashi, Representative.

### PROFESSIONAL

George B. Cropper, George Bert Cropper, Inc., N. 1st St. and BAM, Ocean City, Maryland 21842.

Stanley E. Goodwin, Portland Cement Association, 1514 Cavell Ave., Highland Park, Illinois 60035.

Eugene Hamilton, Le Messurier Associates, 711 Boylston Street, Boston, Massachusetts 02116, Engineer.

Israrul Haq, Superintending Engineer, Pakistan PWD, Chittagong, Pakistan.

Richard L. Hegle, 16121 Windemeir Lane, Huntington Beach, California, Chief Engineer, Rockwin Prestressed Concrete Corporation.

R. W. Hutchinson, Dominion Bridge Co., P.O. Box 895, Winnipeg 2, Manitoba, Canada, Manager, Re-Bar Dept.

Lawrence E. Klepper, 6443 Ridings Road, Syracuse, New York 13206, Partner, Eckerlin-Klepper-Hahn.

Howard A. Lewis, P.E., Pinter Contracting Co., Inc., 230 Park Avenue, New York, New York 10017, Vice President.

Richard M. Libbey, 808 Hunakai Street,

Honolulu, Hawaii 96816, Owner, Richard M. Libbey.

William J. McLay, Day & Zimmerman, Inc., 1700 Sansom Street, Philadelphia, Pennsylvania 19101.

F. Robert Preece, Testing Engineers, Inc., 2811 Adeline Street, Oakland, California 94608.

Manuel Bienvenido Troncoso C., Beningno F. Rojas #23, Santo Domingo, R.D., Santo Domingo, Dominican Republic.

Frank H. Whelan, Frank H. Whelan, Inc., 1616 Soldiers Field Road, Boston, Massachusetts 02135, President.

### AFFILIATE

Anastasio Labropulos M., Apartado 10240, Caracas, D.F., Venezuela.

Anatole Milunas, 1920 S. 51st Court, Cicero, Illinois, 60650, Structural Designer, De Leuw Cather & Co.

Basil A. Petricca, Transit-Mixed Concrete Corp., P.O. Box 1145, Pittsfield, Massachusetts 01201, Vice President.

Jesus R. Tamargo, Sacmag of Puerto Rico, Inc., P.O. Box 9684, Santurce, Puerto Rico 00908, Partner.

### STUDENT

Julia Birkel, New York University School of Engineering and Science, 1285 Avenue of the Americas, New York, New York 10019.

K. Krishnan, Department of Civil Engineering, University of New Brunswick, Fredericton, New Brunswick, Canada, Graduate Student.

The PCI JOURNAL is cooperating in a program of information retrieval sponsored by the Engineers Joint Council. Abstracts and key words of articles are presented so that they may be clipped and filed for easy reference.

---

**KEY WORDS:** prestressed concrete, connection, research, shear, axial load, anchorage, precast beams.

**ABSTRACT:** Tests were conducted to determine the behavior, ultimate capacity and design criteria for a simplified end connection for precast concrete beams. The test simulated the axial force which is developed in a connection due to shrinkage or temperature change or to lateral loads.

**REFERENCE:** Looy, Robert, "A Precast Beam Connection Designed for Shear and Axial Load," *Journal of the Prestressed Concrete Institute*, Vol. 13, No. 3, June 1968, pp. 12-27.

---

**KEY WORDS:** prestressed concrete, bridges, design, analysis, computer, composite design, box girders, I-girders, slabs, channels, T-girders.

**ABSTRACT:** Describes a computer program that applies to either highway or railroad bridges with various types of prestressed concrete units on simple spans, either with or without a composite deck. It is based on conventional design procedures and it mechanizes all the routine calculations.

**REFERENCE:** Freyermuth, Clifford L., "Computer Program for Analysis and Design of Simple-Span Precast Prestressed Highway or Railway Bridges," *Journal of the Prestressed Concrete Institute*, Vol. 13, No. 3, June 1968, pp. 28-39.

---

**KEY WORDS:** prestressed concrete, containment structure, nuclear power plant, post-tensioning, design, construction.

**ABSTRACT:** Current design and construction practices in the United States for prestressed concrete containment structures in connection with nuclear power plants are thoroughly detailed. New trends and concepts in design are also presented.

**REFERENCE:** Kulka, Felix and Wahl, Howard W., "American Practices in the Design of Prestressed Concrete Containment Structures," *Journal of the Prestressed Concrete Institute*, Vol. 13, No. 3, June 1968, pp. 40-61.

---

**KEY WORDS:** prestressed concrete, slabs, design, continuity.

**ABSTRACT:** A direct method for design of slabs is introduced considering the necessary distribution of prestressing in the slabs. Direct design equations are developed and the procedure is outlined using typical design examples.

**REFERENCE:** Wang, Chen-Hwa, "Direct Design Method for Prestressed Concrete Slabs," *Journal of the Prestressed Concrete Institute*, Vol. 13, No. 3, June 1968, pp. 62-72.

---

**KEY WORDS:** prestressed concrete, design, analysis, computer, programming.

**ABSTRACT:** A description of an engineer oriented computer language specifically applicable to prestressed concrete takes into account the considerable number of important factors and variables, many of which are time dependent. The suggested program is sufficiently versatile to handle the many possibilities that arise in prestressed concrete design.

**REFERENCE:** Stubbs, Ian R., "An Engineer Oriented Computer Language for the Design of Prestressed Concrete," *Journal of the Prestressed Concrete Institute*, Vol. 13, No. 3, June 1968, pp. 73-82.

## Industry Items (cont.)

tive Vice President Steven Galezewski. The eastern division under Lloyd A. Compton, Executive Vice President, will operate the plant of Eastern Schokbeton Corp., at Bound Brook, New Jersey, recently acquired from American Metals Climax Corp.

### Young Engineer Killed on the Job

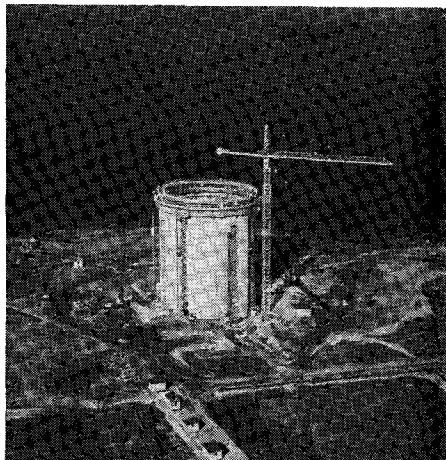
Raymond Hahl, a 32-year old engineer for Conesco-Midcontinent, Inc., Brookfield, Illinois, was killed in a freak accident on July 12 while helping in the casting of a concrete test panel. Sympathies are extended to his family and to his business associates.

### Exposed Aggregate Guide Available

The Terrazzo & Marble Supply Companies have recently published a useful guide for the selection by color and size of special aggregates for exposed aggregate work. The 16-page handbook is available through Terrazzo & Marble Supply Companies, P.O. Box 1198, Roanoke, Virginia 24006.

### New Post-Tensioning Manual

VSL Corporation has recently published a new 20-page combination catalog of materials and engineering data on its strand system for post-tensioned prestressed concrete. VSL Corporation is the U. S. Licensor of the Swiss system. The catalog/manual is available from VSL Corporation, 236 North Santa Cruz Avenue, Los Gatos, California 95030.



## HYDRO-QUEBEC

### ACTION IDEA:

It stands there like any overgrown silo. Yet construction of the 148.5-ft-high wall of the 120-ft-dia containment vessel was unique . . . engineers for the Gentilly nuclear power station in Quebec employed a first-of-its-kind combination of techniques for a nuclear structure in North America.

"By conventional, cast-in-place methods", says Atomic Energy of Canada Limited, "concreting would have taken three to six months". But the designers, AECL, Surveyer, Nenniger et Chênevert Inc., and Montreal Engineering Co. Ltd., had different ideas. Action ideas.

#### Action idea #1: Slip for speed . . . post-tension for 'muscle'

AECL and Hydro-Quebec couldn't wait for a half-year concreting job. So the designers went to slipforming to trim the erection timetable. Then, to get the strong, air-tight structure specified to meet strict leakage restrictions, they called for post-tensioning.

#### Action idea #2: Concrete on cue paces steel-setting crew

Slipping is fast. But all trades can't do everything fast. Not on a project as critical, or as complicated, as Gentilly.