



# E – LETTER

THE OFFICIAL E-MAIL NEWSLETTER OF  
THE PILE DRIVING CONTRACTORS ASSOCIATION

## GEORGE GOBLE HONORED – TERZAGHI LECTURE

One of the highest honors in geotechnical engineering, the Terzaghi Lecture is an annual lecture given by and honoring a distinguished engineer. In 2007, George Goble was selected to present the Terzaghi Lecture at the ASCE, GeoInstitute's, GeoDenver, in Denver, CO on Tuesday, February 20.

George's lecture is titled, "*Applications of Dynamic Methods to the Design and Installation of Driven Piles*". George Goble has been a life-long advocate and champion of driven piles and a true friend to the PDCA. On February 20, he will once again place the driven pile industry in the limelight.

George G. Goble, PhD., PE received a B.S. degree in Civil Engineering from the University of Idaho in 1951 and an M.S. and Ph.D. in Civil Engineering specializing in structures from the University of Washington, Seattle. He studied at the Technical University of Stuttgart (Germany) as a Fulbright Student.

George worked as a Structural inspector for the Oregon DOT and as a Structural Designer for Marshall Barr and Associates of Seattle, WA. In 1961, he joined the faculty of Case Institute of Technology (now Case Western Reserve University), Cleveland, Ohio. During the next 15 years, he taught structures and mechanics courses there and was active in research on the dynamics of pile driving, structural optimization, bridge testing, and experimental structural behavior. He was Chairman of the Civil Engineering Department from 1975-77. He joined the faculty of the University of Colorado, Boulder as Department Chairman of Civil and Environmental Engineering. He retired from the University in Colorado in 1992.

He has published extensively in the areas of structural optimization, structural laboratory testing, dynamics and field testing of pile driving, field testing of bridges, determination of soil properties from dynamic measurements, geotechnical centrifuge testing, and safety evaluation of foundation and structures using probability analysis.

George first began field testing bridges in 1972 in a research project funded by the Ohio DOT. After extensive field testing experience, he founded Bridge Diagnostics, Inc. in 1988 to commercialize the concepts that were developed.

He received the ASCE Collingwood Prize in 1965, the fifth Award of the Lincoln Arc Welding Foundation Professional Structures Design Competition of 1966, and the ASCE Martin S. Kapp Foundation Engineering Award of 1988.

The PDCA would like to acknowledge George Goble and his contribution to the Pile Driving industry and congratulate him as the Terzaghi Lecture.

**PDCA PRESENT EDUCATIONAL PROGRAMS**  
**SIGN UP ON-LINE TODAY**

The PDCA, in conjunction with Foundation QA will hold three seminars at the Crowne Plaza – Orlando Airport, Orlando, Florida in March 2007.

The first seminar, titled, ***“Every Thing You Ever Wanted to Know About PDA Testing . . . But Were Too Afraid to Ask”*** will be held Wednesday, March 7, 2007. This seminar will provide the participants with a deeper understanding of the principles of PDA testing, and will cover the advantages and limitations of dynamic pile testing. The audience will be guided through this field in a ‘non-threatening’ way, with liberal use of graphics and animation, and by frequent analogy to static load testing.

The second seminar, titled, ***“PDA Test Interpretation and CAPWAP Analysis Skills Development”*** will be held on Thursday and Friday, March 8-9, 2007.

Dynamic Pile Testing (PDA) is a powerful technique for evaluation of pile capacity and pile construction control. The PDA has been progressively developed to provide the test engineer with real-time assistance and warnings which assist with identification of data quality and pile condition issues. These developments have made PDA testing very simple to perform.

However, what makes the PDA really powerful is being under the control of a test engineer who can properly recognize, understand and interpret the test signals by visual assessment and simple analysis. To perform testing at this level requires training and practice.

CAPWAP is the industry-standard signal matching analysis which is applied to PDA data on completion of the pile testing. It is accepted as the definitive assessment of the dynamic testing signals. However, the analysis does not provide a unique solution, and there are no definitive rules for what is or is not an acceptable analysis.

In this seminar, PDA Testers will have the opportunity to develop their skills in interpretation of PDA test signals, and in CAPWAP analysis.

The PDA interpretation skills development component of the course will directly assist participants in improving their performance in the High-Strain Dynamic Pile Testing Examination and Certification program.

The third program is the ***“High-Strain Dynamic Pile Testing (HSDPT) Certification Examination”***. The new HSDPT Certification system is a two-tiered system with 5 levels. The first tier is designated "PDA Tester" - and is awarded either at Basic or Intermediate level, on the basis of their performance in Part A of the examination alone. Part A tests skills in data acquisition and on-site testing. The second tier is designated "PDA Signatory" - and is awarded either at Advanced, Master or Expert level on the basis of their separate performance in Parts A and B. Part B tests skills in data interpretation and engineering knowledge.

This program will be administered on Saturday, March 10, 2007, and will include both first and second tier tests for certification.

You can find obtain more information about these programs and a Registration Forms on the PDCA website, [www.piledrivers.org](http://www.piledrivers.org). For more information, contact the PDCA office at 888.311.7322.

## PDCA 11<sup>TH</sup> ANNUAL INTERNATIONAL CONFERENCE AND EXPOSITION



The Gaylord Opryland Resort and Conference Center, Nashville, TN, is the home of the PDCA 11<sup>th</sup> Annual International Conference and Exposition. The PDCA is extremely excited about the upcoming conference and is sure that all participants will find the 2007 conference the best that PDCA has assembled yet.

**Pre-Conference Course:** The PDCA will sponsor a pre-conference course, titled “Deep Foundations: Design, Construction, and Quality Control. The purpose of this course is to present modern techniques for the design, installation and verification of deep foundations.

- Find out the latest subsurface investigation methods for deep foundation design
- Understand the design process for deep foundations
- Learn the new standards and procedures for the design and installation of deep foundations
- Learn the use of wave equation analysis as applied to both the design and installation of driven piles including driving problems
- Understand the various capacity determination methods including both static and dynamic methods

This course is designed for pile driving contractors, suppliers, geotechnical engineers, construction engineers, owners, structural engineers, or any professional involved in design, construction, inspection, testing and specification of deep foundations.

**Conference Programs:** The conference will include six to seven technical presentations, a hammer manufacturer’s forum, and an industry roundtable on “Evolving Specifications and Design Criteria and Their Impact on Driven Pile Costs.”

**Social Programs:** The conference will include several receptions with hors d'oeuvres and an open bar, an expanded continental breakfast each morning, AM & PM Breaks and the Annual Dinner. The Annual Dinner will feature a Country-Western theme and dress, a buffet dinner, open bar, a band for dancing and entertainment, and a line dance instructor (for the carefree and brave).



The PDCA’s 1<sup>st</sup> Annual Golf Tournament will be held at the Gaylord Springs Golf Links – a Larry Nelson Scottish-links designed course that was host to several Senior PGA tournaments. The course’s scenery is spectacular with the Cumberland River on one side and limestone bluffs on the other. Participants will be treated to 72 holes of golf for all levels of play. The tournament will include golf, cart, drink tickets, proximity prizes, lunch, and awards. Callaway clubs are available for rent as indicated on the Registration Form.

Finally, the PDCA will have a night at the “Grand Ole Opry”, one of the true icons of American entertainment. The Grand Ole Opry showcases the best in country music from new stars, superstars and legends live on the Opry stage.

**Companion’s Program:** **– Sponsored by Piling, Inc.** The Companion’s Program continues to evolve into a very special program for companions, spouses and guests. The 2007 Companion’s Program is one you won’t want to miss. The PDCA has lined up a great program, including a continental breakfast each morning in the Presidential Suite with white glove service, a tour of the Ryman Auditorium (original home of the Grand Ole



Opry), lunch at the Wild Horse Saloon – a Nashville must, with a line dance instructor (to give the ladies a jump on the guys at the annual dinner), and a trip on the General Jackson Showboat, featuring music theater show, along with a elegant lunch on the 300-foot paddlewheel riverboat on a slow cruise down the Cumberland River. Relache, the Spa at Gaylord Orpyland is a world-class spa, with a state-of-the-art fitness center and salon featuring 12 enchanting treatment rooms dedicated to pampering, peace and renewal. Access to the fitness center is included in the conference fee.

**Exhibitor:** The PDCA will have space for 39 exhibitors in 10’ x 10’ booths. The Exhibitors will be located in two Ballrooms’ with over 12,000 square feet of open floor meeting space. All Continental Breakfasts, AM and PM breaks, luncheons, and receptions during conference programs will be located in the Exhibitor’s Ballroom, allowing all exhibitors to meet, socialize and promote their products during the conference. All technical programs, forums and roundtables will be in a connecting ballroom with the exhibitors. The exhibitor’s exposure to conference participants could not be greater.

**Sponsors:** The PDCA is seeking multiple sponsors for the following programs:

- ◆ Annual Dinner and Band
- ◆ Luncheons
- ◆ Receptions
- ◆ AM & PM Breaks
- ◆ Continental Breakfasts
- ◆ Golf
- ◆ Companion’s Program

**The PDCA would like to thank our current Sponsors:**

<p><b>Piling, Inc.</b>  <b>Carpenter Pole &amp; Piling</b>  <b>Naylor Pipe</b>  <b>Pile Equipment</b>  <b>Sun Pile Driving Equipment</b>  <b>Link-Belt Construction Equipment</b>  <b>Pileco, Inc.</b>  <b>Applied Foundation Testing</b>  <b>J. D. Fields &amp; Company</b>  <b>Junttan Oy</b>  <b>Link-Belt Construction Equipment</b>  <b>Sun Pile Driving Equipment</b>  <b>Birmingham</b>  <b>GRL Engineers, Inc.</b>  <b>International Construction Services, Inc.</b></p>	<p><b>Companions’ Program</b>  <b>Gold</b>  <b>Gold</b>  <b>Gold</b>  <b>Gold</b>  <b>Receptions</b>  <b>Annual Dinner and Band</b>  <b>Continental Breakfasts</b>  <b>Continental Breakfasts</b>  <b>Continental Breakfasts</b>  <b>Continental Breakfasts</b>  <b>Golf</b>  <b>AM &amp; PM Breaks</b>  <b>AM &amp; PM Breaks</b>  <b>Golf Hole</b></p>
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**PDCA CONTINUES TO SEE SPONSORSHIP FOR PROFESSORS’ INSTITUTE**

The Professors’ Institute, at Utah State University in Logan, UT, is an intensive week-long program designed to instruct engineering educators in all aspects of driven pile installation, design and quality control.

This program is extremely important to the pile driving industry. To quote a PDCA member, “This may be the single most important program PDCA offers!” Why? Because this program reaches the professors and educators who teach driven pile advantages and benefits to those students who eventually turn into the engineers that decide which deep foundation system will be used on a project. The more educators know about the driven pile industry, the more they can adequately convey its attributes to the students.

If you have not made a contribution to the Professors' Institute, please consider doing so at either the "Corporate" or "Driving Sponsor" level; and if you have made a "Corporate" contribution and would like to become a "Driving Sponsor", contact the PDCA office for more information.



The PDCA would like to acknowledge Build, Inc., who once again will be a "Driving Sponsor" to the Professors' Institute by contributing their field crew, hammers, piles and enthusiasm to the program.

When the PDCA and Utah State University started planning this year's event, Joe Caliendo, Professor, USU and USU's lead coordinator for the program requested PDCA try and find several different steel beams for use in the practical exercises during the Professors' Institute. USU needed one WF36x280 (25' long), two WF36x150 (25' long) and two WF12x22 (25' long) and they need them delivered to Logan, UT.

PDCA went out on the internet highway to our members seeking these beams. It wasn't long before **Ford Pile Foundations** (Woody and Trey Ford) got back to the PDCA and said they had just the right material in their yard and could contribute it to the Professors' Institute. Shortly after that, PDCA got a call from Richard Gilbert, **Skyline Steel** indicating Skyline Steel would provide the transportation of the material from Virginia Beach, VA to Logan, UT at no cost. A very big "THANKS!" goes out to Ford Pile Foundation and Skyline Steel for their support and contribution.

### PROFESSORS' INSTITUTE "DRIVING SPONSORS"

**Piling, Inc.**  
**Mandal Pipe Company**  
**Build, Inc.**

### PROFESSORS' INSTITUTE CORPORATE SPONSORS

Boh Bros. Construction Co., Cajun Constructor, C. S. Marine Constructors, DeWitt Construction, E. C. Korneffel Company, Ed Waters and Sons Contracting Co., Herbert F. Darling, Inc., L.G. Barcus and Sons, Inc., Loftus Construction, Inc., M.J. Lee Construction Co., Max J. Kuney Co., Midlantic Piling, Inc., O'Quinn Marine Construction, Palmetto Pile Driving, Richard Goettle, Saddlebrook Construction, Shoreline Foundation, Inc., Sun Marine Maintenance, West Construction Co., Atlantic Wood Industries, Birmingham Foundation Solutions, Chapparral Steel, GRL Engineers, Hercules Machinery Corp., International Construction Equipment, L. B. Foster, MG & B Services, Link-Belt Construction Equipment, Mississippi River Equipment, Mississippi Valley Equipment Co., Northwest Pipe Co., Pileco, Pile Dynamics, Inc., Pipe and Piling Supply, Precast/Prestressed Concrete Institute, Robishaw Engineering, Rollform Group, S&ME, Specialty Piling Systems, Inc., Berenyi, Inc., Dente Engineering, Kolhn, Crippen, Berger, PND Engineers, Robert Miner Dynamic Testing, Southern Earth Sciences, Staytower Group, Wagner Komurka Geotechnical Group, Inc.

## [PDCA MEMBERS HR CORNER](#)

**Pileyard Superintendent:** Parker Marine Contracting, Charleston., SC has a position opening for a Pileyard Superintendent. The position oversees production of 12” and 14” pre-stressed concrete pile. Additional responsibilities include all quality control procedures and maintenance of all necessary records. Qualified candidates must have pre-stressed concrete experience. Interested applicants should contact John Parker, Parker Marine, [johnp@parkermarine.net](mailto:johnp@parkermarine.net) for more information or directions for submitting resume and qualifications.

## [PDCA CHAPTER UPDATES](#)

PDCA is pleased to announce the PDCA of California and PDCA (national) have exchanged a “Memorandum of Understanding” that sets forth the foundation for the California PDCA chapter to join PDCA (national) as our fourth chapter. The PDCA of California and PDCA (national) will execute the memorandum shortly, which will lead the way to officially recognizing the PDCA of California as the next PDCA chapter.

**PDCA of Mid-Atlantic Chapter** held its quarterly meeting on Wednesday, January 24, 2007. The dinner meeting was held at Paul’s on the South River, Riva, MD. During the meeting, Mike Jahnigen, Chapter President called for volunteers to sit on the Chapter’s Membership Committee. Several chapter members volunteered, and the first committee (and maybe the most important committee of the chapter’s early history) was formed.

The PDCA of Mid-Atlantic Chapter will hold its next meeting in the Baltimore metropolitan area on Thursday, April 26, 2007. The location will be announced in the next E-Letter.

**The PDCA of South Carolina** conducted a tour of the Carolina Pole, Inc. plant in Eutawville, SC. The plants core products are Utility Poles, Piling, Posts / Blocks for Highway Guardrail Systems, and Specialized Treating and Drying Services. The tour was lead by Don Surrency and Roger Atkins (Carolina Pole) attended by 25 engineers who toured the plant to see the QC and QA that goes into the manufacturing of timber pile with an emphasis on the grade selection and treatment process. Following the tour, everyone was treated to a good ole fashion BBQ lunch.



On Friday, February 2, 2007, the PDCA of South Carolina Chapter held its 1<sup>st</sup> Annual Oyster Roast and BBQ. The event was sponsored by Parker Marine and Pile Drivers, Inc. and held at Pile Drivers, Inc.’s new facilities in Hollywood, SC. Over 125 chapter members and guests attended the event.

The PDCA of South Carolina Chapter continues to have social programs and educational programs, allowing engineers, contractors, suppliers, manufacturers and service provides of all types to come together under a variety of circumstances – all of which are intended to strengthen their relationship and promote driven piles as the best method for deep foundations and earth retention systems.

On Thursday, March 1, 2007, at 9:00 AM, the PDCA of South Carolina Chapter will host a tour of the Nucor Berkeley Plant in Huger, SC. The tour is sponsored by the PDCA of South Carolina Chapter and Skyline Steel. Due to necessary preparations by the plant, reservations are being requested by calling Chapter President, John King at Pile Drivers, Inc., 843.763.7736, or Richard Gilbert, Skyline Steel, 1.800.433.6460. Plant tour participants will be required to wear eye protection, hard hat, and closed-toe shoes (preferably work boots). The tour should take approximately 2 hours, concluding around 11:00 AM.



PDCA of South Carolina 1<sup>st</sup> Annual Oyster Roast and BBQ.

### **PDCA REPRESENTED AT 86<sup>TH</sup> ANNUAL TRB MEETING**

The PDCA attended the 86<sup>th</sup> Annual Transportation and Research Board meeting in Washington, DC from January 21-25, 2007. The PDCA primary objective was to attend the Foundation of Bridges and Other Structures Committee meeting held on Monday, January 22. George Goble made a presentation to the Committee members and others in attendance on existing problems with the AASHTO Design Code – an issue the PDCA Technical Committee has been involved with for several months. While PDCA did not speak during the meeting, we were able to discuss future meetings with several members of the AASHTO T-15 Structures and Retaining Walls, a Technical Committee under the Subcommittee on Bridges and Structures on problems the PDCA has noted in the code. Future meetings with T-15 are tentatively scheduled near the end of April or early May 2007.

### **PDCA OF MID-ATLANTIC TO SPONSOR CONFERENCE**

Just a few hours before the PDCA of Mid-Atlantic Chapter dinner meeting on January 24, the Chapter Officers, Mike Jahnigen, President (Sun Maine Maintenance), Irv Ragsdale, Vice President (Clark Foundations, LLC), Rob Braden, Secretary (Skyline Steel) and Bill Lytle, Immediate Past President (Midlantic Piling) and Steve Hall, Executive Director, PDCA met to discuss the PDCA Board idea of having the Design and Installation of Cost Efficient Piles (DICEP) conference sponsored by a local chapter with a one-day format. The PDCA is proud to announce that the PDCA of Mid-Atlantic Chapter will host the 2007 DICEP conference. The PDCA and chapter held a conference call on Monday, February 12, 2007, to begin discussing logistics of the program, to include the date (late September early October), the location, speakers and overall program.

PDCA will provide support to the chapter to help ensure the programs success. Billy Camp, S&ME is helping secure speakers for the program. The DICEP conference will feature a total of six speakers, three locals and three outside the DC, Virginia, Maryland metropolitan area.

The conference focus will continue to be directed towards engineers, but will only last one day instead of the original three. The cost to participants and the PDCA will be greatly reduced and as a result, the PDCA anticipates greater participation.

### **PDCA ANNUAL DUES**

The PDCA sent company invoices for your 2007 Membership Renewal in November 2006. If you did not receive an invoice, please contact the PDCA office for a duplicate statement. All renewing members who have paid their dues by February 28, 2007, will be included in the new PDCA Annual Directory. The directory will be professionally produced in an entirely different format this year, so don't miss the opportunity to have your business included. Membership renewal after this date will not be included in the Directory, so be sure and get your renewals in by February 28 and make the Directory deadline.