



## DID YOU KNOW?

Dr. Goble promoted LRFD as early as 1980, authoring papers such as, [Pile Design and Installation Specification Based on Load-Factor Concept](#)



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## The Loss of a Legend: George G. Goble, Ph.D., P.E.

By Frank Rausche, Ph.D., P.E., D.GE

There are some giants in the world of engineering - some more recognized than others. For those of us in the deep foundation engineering world, Dr. Goble was a giant. He had the intellect, knowledge and - most importantly - the drive to change our world. His keen sense of where technology is leading us and how it can be used for a more effective and efficient use of resources helped us all in this industry to improve and renew.



George Gordon Goble was born in 1929 in Boise, Idaho. His family had a farm where he learned to do honest, hard work. This background formed his thinking as to what a good person should and should not do to better themselves and this world. He studied civil/structural engineering at the University of Washington and spent a year on a Fulbright scholarship at the University of Stuttgart (Germany). He became Professor and Chairman of the departments of civil engineering first at Case Western Reserve University (CWRU) and later at

the University of Colorado - Boulder. Throughout his professional life he worked as a consultant.

Most importantly for us at GRL and PDI, George recognized early on the potential of the pile testing technology that had been formulated and studied by faculty and students at CWRU. Many different pieces of the puzzle had to be put together: the theory, the sensor selection and packaging, the computer and software development. More difficult yet: it was necessary to convince people that the technology would work and help engineers and contractors make a better product for project owners. The general electronics industry was not interested and so it was up to Dr. Goble to get people and resources together to build and use the Pile Driving Analyzer®. It was his gift to instill the same

enthusiasm that he had for these innovations in those that worked with him, as well as those he met and talked to along the way. He was instrumental in both the founding of the companies and in the promotion of the technology. It required a lot of different tactics and hard work. Professor Goble didn't mind climbing the greasy pile driving leads to attach gages and do the field work in polar cold and desert heat. And out of those field experiences came many humorous stories which everyone listening enjoyed.

True to his upbringing, George would never stop working. From the time of our founding and into the early 2000s, he helped direct the companies and stayed close to GRL and PDI while he was teaching and researching at the universities and getting involved in other ventures. GRL/PDI benefited from him sending us his best students to work with - and more importantly, we benefited from his advice and support. Without his perseverance in our early years we would not be where we are today.

Sadly, George G. Goble passed away today, Sept. 19, 2017, in Longmont, CO shortly after his 88th birthday. He is survived by his wife Christine Goble, his daughter Tanya, son Gregory and a grandchild. Our thoughts and prayers are with his family. GRL and PDI will thankfully cherish his loving memory and lasting contributions for a long time to come.



GEORGE G. GOBLE



## PDI Introduces New Products

Pile Dynamics continuously focuses on innovation of QA/QC products for the deep foundations industry. Over the next few months, we will launch several new products including, the Static Load Tester, Shaft Area Profile Evaluator, Pile Dynamics Analyzer – Dynamic Load Tester, and the CHAMP-Q.

**Static Load Tester (SLT)** provides for measurement of up to 16 channels of force and displacement signals per data acquisition box (DAB), expandable by adding DAB units. PDI's SLT significantly reduces field set up time by means of smart universal inputs from many types of sensors, including vibrating wire, resistance strain gages, dial gages, etc.



**Shaft Area Profile Evaluator (SHAPE)** offers quick, cost effective, 360°, 2- & 3-Dimensional views of a drilled shaft or bored pile holes prior to concrete pouring with four or eight sonic beams scanned simultaneously. SHAPE documents the quality control of shaft radius, volume and verticality.

**Pile Dynamics Analyzer - Dynamic Load Tester (PDA-DLT)** was created specifically for cast-in-situ piles with the standard data acquisition options as well as with a top transducer or F=ma method.

**Cross-Hole Analyzer (CHAMP-Q)** simultaneously uses four probes to evaluate the concrete quality of the entire shaft (up to six profiles) in one pull by the Crosshole Sonic Logging method. Color-coded CSL transceivers offer optimized speed of testing and data entry.



Please contact [sales@pile.com](mailto:sales@pile.com) for additional information on any of the above new product offerings.



## International Representatives Days Held in October

Traditionally, Pile Dynamics hosts their Representatives from around the globe, every three years. In October, 27 representatives from 18 countries attended a three-day information/training session in our Cleveland, Ohio, USA, offices to learn and discuss new offerings, product updates and industry insights. PDI had two test shafts drilled for live demonstrations and hands on training. The collaboration between PDI and it's representatives allows for superior customer service and the broadest offering of QA/QC products for the deep foundations industry. If you're looking for a PDI Representative in your area, please visit [www.pile.com/world-wide-agents](http://www.pile.com/world-wide-agents) or contact [info@pile.com](mailto:info@pile.com).

## Upcoming Events

Complete list of 2018 events and registration links available at [www.pile.com/events](http://www.pile.com/events)

### DECEMBER

19: **Webinar: Pile Driving Hammer Performance** ([Registration Form](#))

### JANUARY

1-4: Transportation Research Board 97th Annual Meeting (Booth #724)

30-Feb 2: **QC of Deep Foundations- One Day Workshops: Houston, San Antonio and Dallas** ([Registration Form](#))

31: **Webinar: Intro to PDA-DLT for Drilled Shafts** ([Registration Form](#))

### FEBRUARY

5-6: **Dubai Workshop - PDI, DFI & American University** ([Registration Form](#))

6-7: **Webinar: Proper PDA Practices** ([Registration Form](#))

12-16: **QC of Deep Foundations- One Day Workshops: San Francisco, Los Angeles, and Seattle** ([Registration Form](#))

13: **Webinar: Static Load Testing (SLT)** ([Registration Form](#))

20-21: **Webinar: CAPWAP 1&2** ([Registration Form](#))

27-28: **Webinar: CAPWAP 3&4** ([Registration Form](#))

### MARCH

5-9: IFCEE (Booth #136 & 138)

13-14: **Webinar: Dynamic Pile Testing for Non-PDA Users** ([Registration Form](#))

21-23: Design Build in Transportation (Booth # 707)

27: **Webinar: Thermal Integrity Profiling** (*Details Forthcoming*)

## GRL Welcomes New Engineer



David Headley joins GRL Engineers, Inc. as a member of the Central Office. David was a Battery Executive Officer in the US Army where he was recognized with several medals and ribbons for his service. He is a graduate of Calvin College with a B.S. in Engineering, concentrating on civil and environmental engineering. Welcome, David!



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