The information gathered during the pile installation must be immediately interpreted allowing for real time feedback and decision. A modern Pile Driving Analyzer® (PDA), such as the model PAK, provides a vast array of results for each hammer blow, giving the experienced engineer information that answers most installation questions. However, the engineer must be capable of:

- continuously monitoring compression, tension, and bending stresses, cushion condition, hammer behavior, pile alignment etc. to prevent pile damage during installation. The engineer should not only consider axial stresses but also additive bending and local stresses.
- recognizing whether or not damage has occurred, judging its seriousness and finding its cause by checking hammer, driving system, alignment, structures, pile quality, and other effects.
- evaluating the efficiency of the driving system, recognizing areas where reasonable improvements are possible and, if necessary, making recommendations for potentially more economical equipment.
- distinguishing between spurious vibrations and truly important record features and thus avoiding wrong decisions based on misunderstood or ininterpreted data interpretation.
- making recommendations as to time and frequency of restrictive testing for optimal economy and evaluating potential benefits and shortcomings of such tests based on local geotechnical experience.
- using data and observations with common sense. For example, a small hammer having driven a pile to hard rock may not be able to activate the required ultimate capacity, but common sense tells us that the well seated pile will provide plenty of capacity. The engineer only has to assure the pile is on hard rock.
- Yes, as an alternative, a less experienced person could take the measurements. Then, however, the experienced professional must thoroughly review all records and results. This is a process that often takes as much time as the actual field measurements since a huge amount of data must be explained to the professional and then examined.

In summary, the PDA is a valuable tool only in the hands of well trained personnel. Used with skill and experience, it can help save time and money through the improved use of equipment and materials.

Dr. George Goble
Recipient G. Brooks Earnest Award

The Cleveland, OH section of the American Society of Civil Engineers has bestowed upon George Goble their highest honor, the G. Brooks Earnest Award. On October 12, the awardee will present a lecture to the section entitled “From Research at Case Institute of Technology to Actual Field Applications.”

Dr. Goble was also invited to lecture undergraduate students of the Alma Mater by the Dean of the College of Engineering of the University of Idaho.

SOON TO COME
1995 PDA USERS' DAYS/SEMINARS

Whether in romantic Heidelberg, Germany - or in fast-paced Cleveland, OH, USA, the September 1995 Users' Days promise to bring much new information and a review of time proven methods. In light of this Newsletter's main article, we hope to meet with many testers from around the world.

Those frequently involved with specifying and using PDA, P.I.T. or CAPWAP® should consider attending our seminar and wave equation workshop preceding the Users Days. This will be an excellent learning opportunity for persons familiar with pile dynamic methods.

STRESSWAVE '96
The Fifth International Conference for the Application of Direct Stress Wave Theory to Piles
Sept. 11, 12, 13 1996
Contact: M. Hussein 407-826-7476

The Organizing Committee has accepted more than 100 papers for presentation and publication in the proceedings volume. A bulletin will be issued shortly.

Are you interested in continuing to receive this Newsletter? If yes, please fill in and return the enclosed card to GRAI.