

All members, families and friends of **POLISH-AMERICAN ENGINEERS ASSOCIATION** are cordially invited to attend our monthly meeting. We extend special invitation to Polish engineers and technicians who recently came to Chicago area.

**DATE:** **Friday, May 15, 2009**

**TIME:** 7:30 – 8:00 pm Social time  
8:00 pm – Business and Technical Session

**PLACE:** **Copernicus Center**  
5216 West Lawrence Ave.  
Chicago, Illinois

**SPEAKER:** **Mr. Clyde N. Baker, Jr., P.E., S.E.**  
Senior Principal Engineer  
STS/AECOM

**TOPIC:** **Design of Foundations for the World's Tallest Buildings**

The talk presents the essential requirements for the design of foundations for the world's tallest buildings from a geotechnical perspective, discusses briefly the basic foundation types and several key principles to remember, including the need for close structural engineer and geotechnical engineer cooperation. The special in-situ testing and load testing techniques commonly used are also presented. Two recent international case histories in which the writer has been involved are used to illustrate some of the basic points. As an additional feature, the experience of gradually increasing allowable bearing pressure in a given geology over a sufficient time span to observe performance is also presented using Chicago high-rise experience.

Mr. Clyde Baker has served as geotechnical engineer or consultant on eight of the twenty tallest buildings in the world including the three tallest in Chicago (Sears, Hancock and Amoco) and current four tallest buildings in the world: the Petronas Towers in Kuala Lumpur, Malaysia; 101 Financial Center in Taipei, Taiwan; and Burj Dubai in Dubai. He is currently working as a consultant on several super tall buildings that are under construction including the Spire in Chicago, Doha Convention Center and Tower in Qatar and Incheon 151 in Incheon, Korea.

Clyde N. Baker, Jr. received his B.S. and M.S. degrees in Civil Engineering from Massachusetts Institute of Technology and a B.S. degree in Physics from William and Mary College in Williamsburg, VA. He joined the staff of STS Consultants, Ltd. (formerly Soil Testing Services) in the fall of 1954.

Through more than 50 years of experience, Mr. Baker has developed and international reputation in the design and construction of deep foundations. He has been a leader in using in-situ testing techniques correlated with past building performance to develop more efficient foundation designs. In the Chicago soil profile this has facilitated economical use of belled caissons on hard pan for major structures in the 60- to 70-story high range (such as Water Tower Place, 900 North Michigan, and AT&T) which normally would have required extending caissons to rock at significant cost premium.

Mr. Baker has also been very active professionally on both the local and national scene. He is an honorary member of ASCE. He is past president of SEAIOI and the Chicago Chapter of ISPE. Nationally he has served as Chairman of the Geotechnical Engineering Division of ASCE and is past editor of the Geotechnical Journal and is a past chairman of ACI Committee on Footings, Mats and Drilled Piers. He is a member of the National Academy of Engineering and was recipient of the ASCE Ralph B. Peck Award for the year 2000.

**2009 Washington Award recipient Clyde N. Baker, Jr., P.E., S.E. Senior Principal Engineer** has more than 50 years of engineering experience with the design, analysis and construction of deep foundations for high-rise structures. Mr. Baker has earned an international reputation in the design and construction of deep foundations.



More recently he received the 2007 Engineering News Record Award of Excellence and the ASCE Opal Lifetime Achievement Design Award in April, 2008.



**CONFERENCE OF POLISH ENGINEERING ASSOCIATIONS IN NORTH AMERICA** will be held in Montreal, Canada, 8-10 May, 2009. Program of the Conference is currently being prepared; everybody is invited for their ideas and recommendations. In attendance we will have Technical University professors from Poland, United States, Canada, and as in the past there will be numerous representatives of active in Europe Polish Engineering Associations.



We would like to thank 45 members and sympathizers of PAEA for the enthusiastic support of **May 3<sup>rd</sup> Parade**. Weather cooperated and even though we were forced to use substitute banner everyone enjoyed the parade and our traditional get together at Giordano's.



**SAVE TWO DATES:**

- (1) **Annual picnic** will take place on **Saturday June 27<sup>th</sup>** at Fourth Lake resort.
- (2) **Banquet** commemorating 75<sup>th</sup> anniversary of our organization will take place on **Sunday October 25<sup>th</sup>, 2009**



***SPECIAL NOTICE: We were unable to find PAEA banner. Someone inadvertently took it from 2008 parade and never returned. We would prefer not to spend money to obtain a replacement. Please return it to the administration.***