

Tom Richards, Jr., P.E., D.GE: Giving to the Industry on Many Levels

It is often said that a person is defined by what he does, and not by what he says. In the case of DFI Trustee Tom Richards, we have someone who has always done both. He can be counted on to follow through on every commitment. This applies to being a widely-recognized and respected geotechnical engineer and a “can-do, will-do” contributor to professional organizations to which he lends his considerable talents.

The Beginning and Today

As to how his personal geotechnical engineering template was formed didn't necessarily start out as initially planned. While in junior high and high school, Richards really enjoyed his drafting classes and thought that he wanted to be an architect. However, while in a pre-college architect class, one he felt would be helpful to his future career, he witnessed a live model unceremoniously “drop her robe” showing how much art there was in architecture. Being a young man (17) of principle, he found that experience to be a bit unsettling. It was at that point he decided that perhaps engineering would provide a more comfortable context for his interest in building things. Architecture's loss was geotechnical engineering's gain.

Soon after graduating from the University of Pittsburgh in 1985 with a degree in civil engineering, he began his geotechnical engineering career at GAI Consultants. In 1988 he joined Nicholson Construction Company in Cuddy, Pa. He has been with Nicholson ever since. He currently holds the title of chief engineer.

Over the years Richards has amassed extensive experience in all aspects of geotechnical construction. He is widely acknowledged as being an expert in the field of micropile and anchor design and construction. In this capacity he has led the design and testing of hundreds of technically challenging and innovative



geotechnical and construction projects throughout the U.S. Richards tells us that one of the things that he enjoys about working at Nicholson the most is that “even after 30 years I learn something new every day. I discover information about varying market projects, new techniques and geology about which I was not conversant. I learn about customers, equipment and analytical tools. I also love that we are actually building things, and not just conducting studies. We see real results, even though sometimes they are not what we had hoped for.”

Consummate Volunteer

Richards has generously lent his expertise to a wide variety of important industry research projects conducted by DFI, ADSC and the FHWA. He is a frequent presenter at industry seminars and technical conferences. His committee service includes being past chair of DFI's Micropile Committee and its Tiebacks and Soil Nails Committee. In addition, he has been active in ADSC, where he was the chair of its Industry Advancement Fund Task Force for Micropiles and its Geo-Support Committee. Add to these his service

on the Post Tensioning Institute's Rock and Anchor Committee and the ASCE Grouting Committee. He is currently serving his second three-year term as a trustee of DFI's Board, ably carrying on the tradition of Nicholson Construction's past president, Pete Nicholson, a stalwart DFI member since DFI's founding as well as a DFI past trustee.

Clearly, the list of Richards's extensive engagement in industry affairs provides testimony as to how his commitment to helping advance the deep foundations industry is defined.

Most Challenging Projects

When asked about his most challenging and interesting jobs, Richards rattled off an impressive number of projects that involved designing and installing anchors, grouting under difficult conditions for tunnels and dams, and large soil-sensitive slurry wall construction.

However, the most memorable of all of the situations in which he found himself was being five blocks northwest of New York City's twin towers at 8:45 a.m. on September 11, 2001. Being this close to the event and, later, being on the Nicholson team that was tasked with returning to the site to test the recovery anchors, are experiences that are indelibly imprinted in Richards' psyche. In some ways, going back to the site had a healing effect on Richards. Under these professional circumstances he was required to dispassionately deal with the task of first stabilizing and, ultimately, the rebuilding of what had once been two of the world's most iconic structures. Richards offers that having been so engaged “shows the human aspects of geotechnical construction.”

To this day Richards has difficulty describing what he felt at that tragic moment. Being a man of faith helped him cope with dealing with the tragedy that he experienced up close and personal.



Richards' flawless technique

Richards' Work Acknowledged

For more than 34 years Richards has been a standout participant in the deep foundations industry. Among Richards' many acknowledgments for his achievements is having received several "NERD Awards." The "NERDs" are *Nicholson Engineering Research Development Awards*. The honors were personally presented to him in the early 1990s by noted industry leader Donald A. Bruce, Ph.D., D.GE, C.Eng., now of Geosystems, L.P. In 2010, Richards received the ASCE/Geo-Institute's Academy

of Geo-Professionals *Diplomate of Geotechnical Engineering, Emeritus* designation. This much vaunted advanced certification is one of which Richards is particularly proud. Becoming a member of the venerated Moles organization in 2013 is definitely a career highlight. As mentioned earlier, he is currently serving his second term as a member of the DFI Board of Trustees. These are just a sampling of Richards' industry honors.

The Future

When asked where he sees the deep foundations industry headed, in terms of growth, innovation, technology and project delivery, he responds, "It seems that major innovations have stagnated with more bidders and lower margins. It's about market maturity and saturation. I see a trend that geo-construction specialty work is being performed by general contractors through the acquisition of specialty subcontractors and/or their employees. Perhaps, there is a positive part of this, in that there is less shopping of prices for the minor geotechnical part of the project and higher profits."

Richards' recommendation to young folks entering the industry is "to participate in industry organizations where they can learn from the 'best.' Where they can network with fellow professionals, participate in committee work, and, even, learn from one's competitors." He notes that "a good place to learn is often at the hotel bar." He adds, "Don't shy away from offering your opinion on important technical and organizational issues. Stir the pot if the pot needs stirring."

Lest you think that Richards' life is all work and no play, it is instructive to point out that he is clear that, "one must have passion beyond work." For him, it's his family, including wife, Carrie, sons Russell, age 25, and Wesley, 22. Richards' passion for skiing is also well known, having been a ski patrolman at Seven Springs ski resort in Pennsylvania for 29 years. A classic example of how he marries fun and volunteerism.

Richards' life gives testimony to his dedication to career, family, church and the industry he loves, an industry that appreciates his significant contribution.