UNSATURATED GEOTECHNICS

ALSO:

“Drilling For a Miracle”
A closer view of the Chilean rescue operation
July Is Ice Cream Month

I’m writing this on the cusp of National Ice Cream Month – July – a 31-day event celebrated by my local newspaper, The Washington Post, which today ran a second, glowing article about the frozen treat.

In February 2010, the nation celebrated National Engineers Week, a seven-day event that, to the best of my knowledge, the Post ignored in toto, to some extent linking to a headline on page one of the aforementioned sundae edition: “A newly unhindered China invests billions for a scientific edge.”

The article describes how China is encouraging refinement of existing concepts and development of new ones, in genetic engineering, medical engineering, energy engineering, and so on. You name it, and they’re either in first place or gaining ground fast. So is India.

Coincidently, the July 5, 2010 issue of Time magazine focused on Thomas Alva Edison. The cover story —by Bryan Walsh—was titled “The Electrifying Edison.” The subtitle is more to the point:

*Thomas Edison helped create the American way of innovation – but today the U.S. is in danger of losing its pre-eminence in science and technology.*

And Walsh backs up the subtitle with facts, none of which is reassuring; e.g.:

*China’s investments in R&D grew more than 20 percent a year between 1996 and 2007, compared with less than 6 percent annual growth in the U.S. At the same time, American students seem to be losing interest in science. Only about one-third of U.S. bachelor’s degrees are in science or engineering now, compared with 63 percent in Japan and 53 percent in China….And while the U.S. awarded 22,500 doctorates in science and engineering in 2007, more than half of those went to foreign nationals....*

who apparently now take their education home, where they eat our lunch, no doubt with ice cream for dessert.

Part of the problem, from my viewpoint, is geoprofessionals’—all engineering’s, actually—gross inability to generate favorable press. Consider this from the National Academy of Engineering (NAE) website:

*The National Academy of Engineering salutes leaders in engineering for their lifetime dedication to their field and their commitment to advancing the human condition through great engineering achievement and/or through innovation in engineering and technology education. The NAE dedicates more than $1 million annually to recognize these leaders and to bring better understanding of the importance of engineering and engineering education to society.*

Sounds good, but here’s a fact: I have operated an association/foundation management firm since 1971. Most of the organizations we’ve managed are involved in engineering. Some of them have been national, like ASFE/ The Geoprofessional Business Association and the National Council of Structural Engineers Associations. Others have been state or regional chapters of national groups like the American Society of Heating, Refrigerating, and Air-conditioning Engineers and the American Council of Engineering Companies.

Yet in all these years, and for all the 20-plus organizations, we have not received even one news release announcing the winner of the $500,000 Charles Stark Draper Prize that is annually awarded by the NAE. Have you? Have you ever seen the winner interviewed by anyone prominent? And don’t tell me it’s because engineering isn’t interesting; that’s a cop-out. It’s only because engineering—and that includes all of the geoprofessions—makes no real effort to give itself the glamour which is its due. It’s like getting dressed up in a tuxedo and then spending the evening in the hall closet.

Engineers made this nation, starting with George Washington who put his civilian engineering and management skills to work in support of commerce via the Patowmack Canal Company, the nation’s very first public-private partnership (P3). What a story to tell! But only for a week in February?

Wake up, geoprofessionals! Characterize what you get realizing that maple walnut gets a whole month!

“But what can we do?” way too many geoprofessionals ask in mewling bewilderment. The answer is simple: Get good professional PR help, because, obviously, whomever you’ve been relying on for the past 40 years has been
unable to achieve an objective that is eminently achievable.

Think about this: If you have humanity-shaking accomplishments to talk about, how difficult can it be to create compelling packages that get the word out? Do you want the world to know that Timothy Berners-Lee won the Draper Prize for his invention of the Internet? Then hire people who at least know how to put together comprehensive media lists and write compelling news releases. Hire people who have the connections to get the person at least a few national TV interviews. You want a network series that glamorizes engineering? Hire people to do it. If they can make heroes out of coroners, surely they can do likewise for engineers.

Face it: Just as geoprofessionals create America’s infrastructure, geoprofessionals create the geoprofessions’ infrastructure. And just like America itself, we have been freeloading way too long on the contributions of our forefathers. If we don’t start making some of our own, the U.S. geoprofessionals’—U.S. engineering’s—best days will already be behind us. The nation’s may be, too.

Of course, we’ll still have ice cream.

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