10/31/2015

‘Where I Ought to Be.’ Dean Emeritus Reflects on Lifetime of Work

Oct. 31, 2015 - For Bruce Bishop, a cozy retirement is still a ways off. On his last official day of work in June, the former dean and professor of civil engineering was waist deep in activities at the Water Lab and taking on a new project to showcase the College of Engineering across South America.

And despite his active involvement across the university, the Dean Emeritus says it’s time to make a quiet exit. Dr. Bishop served as dean for 20 years – from 1982 to 2002, during which he improved industry connections to the college, broke ground for a new four-story classroom building and pioneered new recruiting efforts to get more young women interested in engineering programs.

Bishop wasn’t always sure he wanted to be an engineer. As a student, he did well in school especially in math, physics and chemistry, and he’d thought about a career in science. But his exposure to civil engineering at an early age tipped the balance. Bishop’s father, a civil engineer who grew up on a farm in Delta, Utah, had been engineering water projects around the west before joining the civil and irrigation engineering faculty at what was then the Utah State Agricultural College. From the time he was about 8, it wasn’t uncommon to see young Bruce on campus or in the field tagging along
with dad. At the time, there weren’t many engineers in Cache Valley so during summers and weekends, Bishop’s father and other professors would take on some of the engineering work that needed to be done in and around Cache Valley. By the time he was 12, Bishop’s dad put him to work.

“He’d go out and do some surveying for a project, so he’d pack up his surveying gear and I was his rod man,” said Bishop with a chuckle. “I’d be hiking around the hillsides carrying surveying rods while he took the measurements.”

The work came naturally to the budding engineer, who by his senior year of high school, had been hired by engineer and Professor Emeritus Reynold K. Watkins to work on a new study in buried pipe design and culverts. He didn’t know it at the time, but Bishop was taking part in a new area of engineering research that would set standards for years to come. That next fall, Bishop started his freshman year at Utah State, and engineering was not his ultimate goal.

“I thought, ‘I can’t be an engineer. Dad’s an engineer,’” he quipped. “But after I got started I realized engineering is where I ought to be, and it just kind of happened from there.”

The coursework came easy to Bishop who sailed through much of his undergraduate experience. At the start of his junior year things were going smoothly and he could see his master’s program right around the corner. However, the war in Vietnam was heating up and Bishop suspected he might have to be a part of it.

“I didn’t want to risk being enlisted so I signed up for ROTC that fall and was commissioned as an officer in the Army Corps of Engineers at the time of graduation,” he said.

Bishop postponed active duty long enough to complete a Ph.D. at Stanford where he studied systems analysis and economic planning in engineering – a discipline that would define much of his professional career and the next chapter of his life.

“Immediately after finishing my Ph.D., I was right off to the Army Corps of Engineers. That took the next two years of my life, and during that time you were going to spend a year in Vietnam whether you supported the war or not.”

Bishop spent a year working on projects related to flood control, dams and river navigation. The following year was spent in Vietnam where he served on a joint services task force assigned to study ways for the U.S. to end its involvement in Vietnam.

“Our analysis showed there was no withdrawal scenario that could preserve a stable South Vietnam,” he recalled. “Unfortunately, our military interventions in other parts of the world since then have only proved we didn’t learn a thing from Vietnam.”

After about a year, Bishop returned to Utah in 1971 to join the engineering faculty at USU. Since then he’s also served as an executive director of the New York State Energy Research and Development Authority, as an engineering expert for the US Forest Service, Oak Ridge National Laboratory, Los Alamos Scientific Laboratory, various Utah State agencies, and on international project in Brazil, Africa, India and Thailand.

**Looking back on his 44 years of service at Utah State, Bishop shared these words of advice for incoming freshmen and graduating seniors.**

For Freshmen: There’s going to be a lot of hard work ahead. Don’t come in thinking it’s going to be easy. Instead, come into it thinking it’s going to be fun. Engineering – more than any other career – helps you understand the science and technology of how things work in our world, and how that impacts people’s lives and society in general.

For Seniors: You’ve got a good degree and lots of options. Engineering can take you a lot of different directions. A broad spectrum of companies and agencies need engineers to design and implement projects and products, and to manage technology; or it can be a launching pad for other degrees in engineering, medicine or business. Or you can start your own company. Whatever ways you choose to practice engineering, our goal should always be to improving the quality of life for our fellow human beings and the sustainability of the environment.