

RALPH B. PECK (1912-2008)

By Suzanne Lacasse



Photo by Nancy Peck Young

When Ralph passed away in Albuquerque in New Mexico on 18th February, he was an accomplished engineer, a man who had achieved so much, won every prize, and yet he was the friend of everyone. He could leave this earth contented: his life had influenced several generations of engineers, and touched so many of us.

Ralph was close to 96 years old when he died. In his last few days, Ralph smiled and enjoyed seeing and talking to his close friends, reminding us in his strong voice that we had to hurry up if we had some last minute business. He was cheering us up, rather than us helping him along the way!

Ralph Brazelton Peck was born on 23 June 1912 in Winnipeg, Canada to American parents. His father was a civil engineer designing bridges for the Northern Pacific Railway in Canada. Ralph's family settled later in Denver, Colorado, and Ralph became an American. Ralph is survived by his two children, Nancy Peck Young (Allen) and James Peck (Laurie), and two grandchildren, Michael and Maia.

Ralph is also survived by thousands of geotechnical engineers who are indebted to him for all he has taught the profession. The geotechnical community is unique in many ways, but particularly through its friendliness and openness. Many friends from other professions have commented on how the geotechnical community reminds them of a family. Ralph B. Peck was one of the forces that made the community a family.

Ralph was lucky at the start of his career. After losing his job because of lack of work, he went to Harvard to study the new subject of soil mechanics under the direction of Karl Terzaghi and Arthur Casagrande. He soon became the assistant of Karl Terzaghi, and co-authored with him "Soil Mechanics in Engineering Practice (1948).

Ralph the engineer

Ralph was the geotechnical consultant "par excellence". He designed every type of foundation and was consultant on projects all around the world. He worked as consultant well on in his 90s. Although a full time professor at University of Illinois (1948-1974), and an excellent one, Ralph could count more than 1050 consulting projects where he soundly advised on how to solve geotechnical problems. Ralph, like his father, was an excellent engineer.

Ralph's passion was foundations, bridges, and dams. Fittingly, his last project was the Rion-Antiron Bridge in Greece. Although the expert adviser on most projects, Ralph was the one listening to the field crew and the geologist. Ralph did confide that some of the projects he enjoyed the most were the ones in Canada, where the problems were challenging, the state of practice good and the engineers competent and friendly!

Ralph gave us the Observational Method, where he "allowed nature to speak for itself": "Nothing is better practice than predicting and verifying how the subsurface materials will behave, and adjusting the design and construction procedures on the basis of the observations as a project proceeds."

He worked with the greatest in our profession, and although doing a lot of consulting, produced milestone books, hundreds of quality papers and kept on dutifully teaching his university courses.

Ralph the educator

Ralph considered his teaching as the most important part of his life. Each semester, he taught a full load of undergraduate and graduate courses. More than 6000 students have heard Ralph lecture at University of Illinois, and many more have enjoyed his lectures around the world. His case history courses were an unforgettable learning experience: they were as interesting as reading a detective story (dixit Ed Cording) – going to the site, observing clues, listening to the construction workers, solving a puzzle with always some piece missing.

Ralph Peck taught us a method of working: critical observation, understanding fundamentals, evaluating soil behaviour, and not the least using engineering judgment. Ralph was famous for his one-page summary: "If you can't reduce a difficult engineering problem to just one 8-1/2 x 11-inch sheet of paper, you will probably never understand it".

Ralph was a brilliant educator. He taught from his case studies and made the students focus on the essence of the problem. He was defiant of quick solutions with fancy calculations. Understanding the geology, the soil and the forces at work was the essence of the solution. Ralph had also unique communication talents, not to mention his outstanding command of the English language!

Ralph the philosopher

Ralph was among the first to publish papers on the philosophy and human aspects of geotechnical engineering and papers on nature and civil engineering. Today, these papers appear as visionary, as the profession is gradually moving to include in design the perception by society and the hazard and risk involved.

Ralph pondered on the future of our profession, the future of our learned societies, the importance of site investigations versus finite element analyses, the danger of relying too much on numerical analysis or statistics. He advised young engineers on their career choices, he deplored the abuse of the observational method, and discussed why do we do site investigations! Throughout his career, Ralph strongly believed that we should bridge the gap between academia and practice.

For his achievements, Ralph was awarded essentially all known awards in our field. The National Medal of Science was awarded by the President of the United States with the following citation: "For his development of the science and art of subsurface engineering, combining the contributions of the sciences of geology and soil mechanics with the practical art of foundation design".

When made Honorary member of ASCE, Ralph received the following citation describing well his accomplishments: "For his outstanding career as an educator, researcher, problem-solver, and communicator; for his ability to perceive the problem and apply theoretical concepts to its practical solution; and for his innovative and inspirational instructional methods."

Ralph the man

Ralph was a kind and modest man. From the very start, Ralph was very eager to learn and determined to be a good engineer! Ralph taught us by example: his life is a success story, yes, but it came about with hard work, talent, perseverance, social antennas, a great sense of humour and good judgment. Ralph never tried to impress, he acted true to himself, and simply made an unforgettable impression on all of us. Ralph was a gentleman, always interested in what you were doing, and respected you.

Ralph was not the man for long good-byes or long list of achievements. He enjoyed life, good friends, good food, good company, a good laugh, good books, travelling, and a challenging foundation problem. And he managed to do well in everything he set his mind to do.

Ralph was always happy when attending conferences and geotechnical meetings. He loved being with his fellow engineers, meeting old friends, talking to the younger people, complying with the requests for photographs and seeing the future of our profession assured with the new recruits eager to meet him. Ralph enjoyed the meetings for a good reason: the geotechnical community was his extended family.

Closure

The story of Ralph Peck is a life lived to the full, years of dedicated teaching, a loving family, a successful career, unique students and unique projects: the stuff that makes heroes. Aptly, Ralph became the First Hero of the Geo-Industry in year 2000.

Death is not a human being disappearing, it is the start of an immortal legend. Ralph, you were a legend long before most of us even heard about your name, and you will continue to be so because of your human qualities and your contributions to our profession.

Ralph, this is goodbye to you from the Canadian geotechnical community. Today, we say thank you for the life you lived, for sharing with us your intellect and your passion for soils, geotechnical engineering and civil engineering. We are all enriched, not only by the contents of your contributions, but also by the style with which you practiced your profession.

Ralph B. Peck was unique because he excelled as an engineer, scientist, philosopher, educator, citizen. He was a man of reflection and a man of judgment.