

A TRIBUTE TO JOHN DUNNICLIFF (1934-2020)
John Gadsby and Pierre Choquet

As was announced briefly in the December 2020 issue of *Canadian Geotechnique*, **John Dunicliff**, internationally known geotechnical instrumentation consultant, died in his home in Bovey Tracey, Devon, England on October 25, 2020 at the age of 86. He was the author of *Geotechnical Instrumentation for Monitoring Field Performance* (aka *The Red Book*) originally published by Wiley in 1988. This was the first book on the subject and guided readers through the entire geotechnical instrumentation process. It is the undisputed principal reference on this subject.



John Dunicliff

John was also the author of “Geotechnical Instrumentation News” (GIN), a column in *Geotechnical News (GN)* between 1994 and 2018. In that period, he authored and edited more than 94 GIN columns containing more than 200 articles. John was a talented educator and organized over 100 short courses and workshops on geotechnical instrumentation—in Canada, United States and throughout Europe.

John Dunicliff met **John Gadsby**, the publisher of *GN*, at an American Society of Civil Engineers conference in the early-1990s. He mentioned to Gadsby that there had been an article in *GN* discussing the performance of piezometers and that he did not agree with the authors because he felt they misunderstood the reliability of the particular piezometer. He asked if Gadsby would publish his letter in *GN* but said that it might offend one of the magazine advertisers. Gadsby agreed to, but said he would send John’s letter to the advertiser to get his comment. The advertiser agreed with John and said he would immediately make changes to the design of the piezometer. This was the start of John’s 94 GIN columns in *GN*. Although *GN* is no longer published, John’s GIN columns are still available at https://cgs.ca/instrumentation_news.html.

John graduated from Oxford University with bachelor’s (1955) and master’s (1960) degrees in engineering, then from Harvard University with a master’s degree in soil mechanics and foundation engineering (1968) and completed graduate studies in rock mechanics from MIT (1969). He started his career in private practice as soil engineer in London and Hong Kong before moving to the US in 1968. From 1969 to 1979, he was a partner and manager of the Soil & Rock Instrumentation Division at Goldberg, Zoino, Dunicliff and Associates (now GZA GeoEnvironmental) in Boston before becoming an independent geotechnical instrumentation consultant in 1979. In 1998, John moved back to England and remained professionally active until very recently.

John was well known for his participation in Boston's Central Artery Project during the 1990s and he often lectured about his experience gained throughout this project. But the list of the significant projects in which he participated is much longer. He was involved in the instrumentation and monitoring programs of all types of construction projects including tunnels, highways, water treatment facilities, power projects, embankments on soft ground, railroads, deep foundations, airports, retaining walls and historic buildings.

John always put a strong emphasis on the human factor in his many continuing education lectures, workshops and courses, which started in the mid-1970s. These always focused on the following words which he wrote in the first chapter of the Red Book:

The use of geotechnical instrumentation is not merely the selection of measuring instruments but a comprehensive step-by-step engineering process beginning with a definition of the objective and ending with implementation of the measured data. Each step is critical to the success of the entire program, and the engineering process involves combining the capabilities of instruments and people.

John also always emphasized the need for a "systematic approach to planning monitoring programs." As he wrote in *The Red Book*, in a chapter of the same name, that is the "Hub of the book." He also emphasized that "Every instrument on a project should be selected and placed to assist in answering a specific question: if there is no question, there should be no instrumentation" (*The Red Book* p. 38).

John's last publication was in the June 2020 issue of *Canadian Geotechnique / Géotechnique canadienne* and was titled "Geotechnical Communication—Let's make it better." This was another of his favourite topics throughout his career!

Having been strongly influenced by Ralph Peck's publications, lectures and personal conversations in the early 1980s, John published two books as tributes to Peck. The first, prepared with the Don Deere, one of Peck's close colleagues, was titled *Judgment in Geotechnical Engineering: The Professional Legacy of Ralph B. Peck* (published by Wiley in 1984 and then republished by BiTech Publishers.) The second was written with the assistance of Peck's daughter, Nancy Young, and was titled *Ralph B. Peck, Educator and Engineer—The Essence of the Man* (published by BiTech Publishers in 2006).

In 2010, John was awarded a "Distinguished Membership" by the ASCE, with the citation: "For pre-eminent leadership in the field of geotechnical instrumentation and monitoring and for his long and distinguished career as a specialty consultant dedicated to the improvement of geotechnical practice."

The first honorary "John Dunicliff Lecture", awarded by the International Society of Soil Mechanics and Geotechnical Engineering on field monitoring in geomechanics, will be delivered at the 11th International Symposium on Field Monitoring in Geomechanics in London, England, in September 2022.

The Canadian Geotechnical Society joins the international geotechnical engineering community in mourning the irreplaceable loss of John Dunicliff, the true pioneer in the discipline of geotechnical instrumentation.