

Celebrating 50 Issues of *Geotechnical Instrumentation News*

Gord McKenna

“Put your hand in your pocket and drill separate boreholes!” and so began the words of wisdom in John Dunnycliff’s *Geotechnical Instrumentation News (GIN)* – an edited section of the last fifty issues of BiTech’s *Geotechnical News* magazine.

John often writes that it is “*our* GIN” but truly it’s *his* GIN, *his* heart and soul – his readers and contributors help keep it going by writing, arguing, commenting, and sharing. John is an inspiration to the entire geotechnical instrumentation community – a community that he has helped to create, to bring together, and to nurture. A self-styled “stickler” and “curmudgeon”, John’s insights and thoroughness from his famous Red Book, his instrumentation short courses, and his writings in GIN echo in our ears as we struggle to measure up to his clear standard of care and thoroughness. Getting people to present and argue passionately about the intricacies of geotechnical instrumentation in GIN is one more way that John helps us keep high standards even when we’re knee deep in the mud, tricking sensors a hundred feet into the solid earth.

Leafing through fifty issues of GIN, I’m struck by the breadth of our geotechnical instrumentation community – it’s not just soil and rock – it’s concrete and steel, it’s tunnels and dams, pavements and shafts, piles and tires, it’s the permafrost, the seafloor, and residual soils in the tropics, it’s shallow, deep, and everything in between. It’s about understanding the past, signing off on the present, predicting the future.

We often allow ourselves to forget what a small community we are, and how so many of us are geographically isolated. Geotechnical instrumentation is a small industry – there are only a few manufacturers, a few key workshops and conferences, a few major projects on the go at any given time. It takes nearly a generation to work the kinks out of new technologies – many don’t survive the harsh field conditions, and many old favourites are no longer manufactured (yet must still be lovingly read and maintained). GIN offers a running dialog of new technologies, improvements on old ones, ideas and understanding for continuous improvement. Issues are sprinkled with adages from Ralph Peck and Karl Terzaghi to remind us where we have been, where we are going, and the need for both understanding and the utmost care. GIN provides a place for us to meet – it brings us together.

John uses GIN to bring together manufacturers, designers, field practitioners, spec writers, and procurement specialists to get the most out of geotechnical instrumentation. We take to heart the need to understand exactly how each sensor works – how each one reacts differently with the ground, and how every borehole is different. No cookbook or standard can cover all conditions, but there are some important recurring themes in GIN that include:

- The Golden Rule: Every instrument on a project should be selected and placed to assist with answering a specific geotechnical question; if there is no question, there should be

no instrumentation

- The person held responsible should be the one with the greatest vested interest in the data
- If an instrument is not working perfectly before installation, there’s not much hope of it working well after installation (so make absolutely sure it is working perfectly before you install it)
- Don’t allow dust to grow on data
- We almost never know the actual value of the quantity being measured, so we must resort to other methods to ensure accuracy
- Never shy from an opportunity to interrogate sensors under controlled condition – to ensure their accuracy, and to better understand their behaviour in the ground.
- Installation is *always* a professional endeavour, not something to be left to the inexperienced or to simply the lowest bidder.

GIN is a wonderful mix of articles about the success and failure of instruments and instrumentation programs, users’ complaints and answers from manufacturers, short book reviews, checklists for doing things right, and plugs for upcoming instrumentation conferences and workshops. Weaving it all together is John’s running commentary on everything from liquid level gages, to measuring unsaturated pore-water pressures, to comparing accuracy, resolution, and precision, to writing specification packages for those who insist on assigning their instrumentation programs to the lowest bidder. Mixed in for good measure are pointers

on cricket, pleas for good grammar and punctuation, and an ongoing explanation to North Americans on what it means to be British (“two nations separated by a common language”).

At the start, some were concerned that GIN would be too controversial for manufacturers (a.k.a. advertisers) – highlighting disagreements with clients, inviting comments on reliability, or dredging up problems solved long ago. John’s solution is to invite comment from all interested parties, often published together, but also often running as major themes over three or four issues. The reader not only understands the solutions, but how people go about arriving at them, and an understanding that there are many things we all struggle with together. His success in this re-

gard provides an example of how to approach such disagreements with integrity. But it requires skill and effort on John’s part – GIN works because of John’s commitment to excellence in writing, in instrumentation, and to getting the word out.

How long can we expect John to carry the torch? He’ll tell you that GIN depends on all of us – keeping the articles coming, hopefully a little faster than in the past, and adhering to his 26 point manifesto on style. But then he’ll confide that editing GIN is “Part of who I am.” So I’m assuming the first fifty issues are the sign of more good issues, more good controversies, and more good insights to come.

Thank you, John, for your dedication in bringing our community to-

gether, and offering a thoughtful, well edited, and diverse mix of articles, reviews, notices, philosophy and discussion that teaches and inspires all of us.

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