



Editorial

>> Marc Cheves, LS

THE American Surveyor

A FOOT IN THE PAST... AN EYE TO THE FUTURE

www.TheAmericanSurveyor.com

Volume 4, No. 5 June 2007
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The American Surveyor (ISSN 1548-2669) is published January/February, March, April, May, June, July/August, September, October, November and December by Cheves Media LLC. Editorial mailing address: 905 W. 7th St., #331, Frederick, MD 21701. Tel: (301) 620-0784.

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Subscriptions prices in the U.S.: Free for qualified professionals. Canada: 1 year \$56.00 US; international subscriptions \$72.00 per year (Airmail), U.S. funds prepaid. Back issues (subject to sufficient stock) are available for \$4.95 + S/H.

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Hard Trends

For many years in my meetings with survey companies across the country, I've been hearing a familiar refrain, that is, the struggle to find qualified help. To remedy this problem many have turned to technology, most notably robotic total stations. Those of you who have these instruments know full well the flexibility they provide: they don't get sick, they don't need benefits, and they allow you to most effectively use the number of people you have.

Forward-thinking companies have also turned to RTK GPS and are making productive use of that technology. But these companies also know that RTK base stations take time to set up and tear down, and often require a human guard to avoid theft or damage.

Enter real time networks (RTNs), in which one person with a rover can achieve \pm centimeter accuracy anywhere inside the network, at least horizontally. In keeping "an eye to the future," we have provided extensive editorial coverage of RTNs over the past year. RTNs may be classified into what futurist Daniel Burrus calls "hard trends" (things that *will* happen, in contrast to "soft trends" that *might* happen). Although the U.S. is still lagging behind Europe and other parts of the world when it comes to implementing RTNs, this hard trend is picking up steam. Our RTN expert, Gavin Schrock, runs the Washington State Reference Network and has already written seven installments of his RTN-101 series. This series serves as a primer on the subject. Due to a laptop meltdown, Schrock is taking a break this month, but stay tuned for future installments, for everything you need to know about RTNs.

In this issue, we report on our meeting with Brian Daniel and Loyola Spatial Systems in Virginia. Daniel has succeeded in building RTK-Net, an RTN that covers much of the Washington, DC metropolitan area and surrounding states. Also operating in the region is Keystone Precision's KeyPre VRS network. I wrote about Keystone Precision in our December 2005 issue. In our September 2006 issue I wrote about the ARTNet RTN for Atlanta and that region—which uses Topcon gear. Just last month we learned that Topcon will be establishing an RTN for the DC region as well. The fact that the DC region will have three competing RTNs (Leica Geosystems, Trimble, and Topcon) will make the area somewhat unique.

Our point in covering these RTNs? They represent a hard trend, but they also represent a business opportunity for entrepreneurs. It doesn't take a crystal ball to see that this is the direction we're headed. Help is hard to find. Technology will solve this problem. Those companies that recognize hard trends will win in the long run.

In the mean time, mentors still play a valuable role in helping the new generation of surveyors trace footsteps from the past. Therefore, we are also pleased to feature in this issue a unique aspect of the surveying curriculum at Michigan Tech. And while we were at it, in honor of Father's Day this month, we thought readers might enjoy Michigan native and Michigan Tech alum John Matonich's light-hearted tribute to his dad. 