

> EDITOR'S NOTE

We are pleased to announce a new department, **Surveyors Report**, designed to serve as a platform for surveyors to express opinions on a wide variety of topics. Included this month are three thought-provoking articles. As always, reader feedback is welcome!

Tomorrow's Surveyors

>> Christopher N. Ambourn, LS

I'm 27. Over the last five years (admittedly, the extent of my professional experience) I've followed closely the industry publications and the discussions amongst society members at chapter meetings as they pertain to the future of the profession and the much touted generation gap. It is notable that not much, if any, input from young surveyors has been sought or offered. Those of you with teenage kids know that is often hard to relate to them; your priorities and attitudes may be vastly different. Rapidly changing technology and the expanded access to information and media has made growing up today much different from even 20 years ago. Perhaps young surveyors, those closer to the ages of the kids that will be entering college and who have more recently experienced that decision to become a surveyor, can offer some ideas. Because we're few in number and lack the confidence to express them, our opinions do not often surface. I'm not sure I've developed that confidence yet either but, like all surveyors, I have a few opinions.

Self-oriented, introspective, quiet, independent, confident, outdoorsy – is that a word?... well, let's make it one temporarily – people seem to like labels so take your pick. I'm willing to bet at least three of those words describe a majority of the surveyors you know, maybe even you. They all describe me, and they describe most of the young

surveyors I know. If this is true, and if most surveyors can be described with those words, then I believe we have found what is known as a target market.

I am the target market, I am some of those things, and now I'm a surveyor. So as the target market I'm left no other option than to commit to some intensive introspection.

How did I get introduced to surveying? I was sitting in geography class one day minding my own business staring out the window, dreaming of outdoorsy things, when my teacher approached me and asked me if I was interested in a summer job surveying. Now it should be noted that I had barely a notion of what surveyors did or how they did it, but as I was otherwise uncommitted I accepted the offer. It turns out my future employer had asked my teacher if there was anyone in his classes that he thought might make good survey help for the summer. So my teacher – who knew I was outdoorsy, indelibly gullible, and of above average intelligence (after all, I could place all fifty states, except, on occasion, Maryland) – presented me with what was to become a career defining opportunity. Besides, the pay was good compared to other summer jobs for high school kids.

Why did I stay in surveying? I'm afraid that answer was not so easy. I kept up the summer surveying jobs through my last year of high school and my first two years at college, enjoyed being outside, looking for monuments,

and really liked working with the technology, but truthfully, the job didn't seem all that fulfilling. My boss had a civil engineering degree and the rest of the staff had either no formal education or a two-year degree. I wanted a college degree, so I chose civil engineering. That is until one day while surfing the Web I came upon the website for a university that offered a bachelor's degree in surveying. I didn't even know there was such a thing! It was if the clouds had parted and brilliant light flooded the room. I immediately downloaded an application for admission and the rest fell right into place. But I can confidently say that I would not be a surveyor today if my first boss hadn't asked my geography teacher about summer help.

I will be the first to admit that the target market that I have described is a small one, but short of redefining the very nature of our work, I don't think that it can or will be changed in the foreseeable future. The question to ask ourselves is; how do we find people who possess the personality traits that seem to be so dominant among those already in the field, making them more likely to take on this work and stick with it?

In my opinion, I believe we will *not* find those people with the Trig-Star program (at least not at a rate commensurate with the effort being expended on it). Granted, I have not been involved in the Trig-Star program, nor do I know of any young surveyors

that were (a fact which tells the story as far as I'm concerned). This is not to say that this is a bad program or that it isn't worthwhile. If the goal for the program is to reward kids who are good at math or to provide a public service, then it seems like it fulfills those objectives well enough, but if we think that we're getting the cream of the mathematics crop to become surveyors I'd like to see some statistics to back it up. In reality, it seems to me that the idea that you should *like* math or be *good* at math that drives many young people away from surveying. Every day I add, subtract, multiply, divide and do a little trig, but do I need to be exceptionally good at math to do those things? The answer is *no*. Most young surveyors I know didn't even like math in school; I know I didn't. But we've now established this program, which is probably the first exposure many kids have to surveying

and surveyors, that is focused entirely on not only being good at math but being the best at math. We've fostered the idea about our profession, among those whom we hope to recruit, that only those who are good (or the best) at math can be surveyors, when that is simply not true. Math is something we do in order to complete our work; it is neither the focus nor the major portion of our work. How applicable will trigonometry be to the profession in the future anyway? I predict that in 20 years angle measurement will be a task rarely performed in a progressive survey office. Conventional work will be largely replaced by 3D imaging and GPS, and network adjustments will, by necessity, be done with least squares adjustments. Where did all the angles go?

In order to attract new surveyors we need to go find them one by one. Society has lost track of what surveyors

do. Ask a teenager what an architect or an engineer does, and you may see a flicker of comprehension. But ask what a surveyor does and you may just get a dumb look. The only way to expose and retain young people to this job is to hire them while they are in high school or shortly thereafter, show them what we do and that they can make a good living doing it.

We need to expose the right kids to all the facets of the job. Most of us have more work in the summer than in the winter, but guess what? They don't. Maybe they like working at the grocery store for minimum wage, or maybe they fit our target market and would rather be outside making nine or ten bucks an hour. And here's the clincher, they really don't know *what* they want to do for the rest of their lives, since few teenagers have real work experience in a job that they could actually make a career out of.

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I dreaded people asking me what I was going to go to school for; I didn't know, but hardly anyone does, and most kids guess at a major and end up changing it based on if they like the classes or not. Using that method I should be playing professional flag football! But alas, I gave up that dream and became a surveyor. It's easy to say with confidence what you're going to do when you get out of high school if you're already doing the job and understand what you need to know to do it.

Still, it will take a conscientious effort on our parts to bring these kids in. We have to look for them – talk to teachers, talk to your kids and their friends, talk to young people who work for you now – find out if they know of anyone who might be looking for a career. Watch for the qualities that you see in your peers and in yourself. Get a booth at a

career fair to offer jobs on the spot or at least interviews to kids who seem interested and ask questions. Don't let them walk away with the thought that maybe they'll stop by the office to apply, because they won't. It's much easier to get a job at the grocery store.

Taking on young people may take sacrifice. It's unlikely that you'll be able to ask the college kid with the biology major who has worked for you the last three summers to return to work for you this field season, since he needs an internship in his own field anyway; or the 32-year-old that stopped by your office with a little experience and no education who was looking for a job – even though he seems very reliable, surely he can find some other gainful employment. Such individuals have very little chance of sticking with this job and will not have anything to offer in the long run.

We all have priorities, but if it is important to us that this career continues to be one that we are proud of, and one that continues to be important to society, we need to fill this very real generation gap. While us younger guys may not have years of experience under our belts, we do have a pretty clear picture of what makes the younger generation tick. So how about putting our heads together and going out to find tomorrow's surveyors? *AS*

Chris Ambourn holds a BS in Surveying from Michigan Technological University and is a registered surveyor in Wisconsin, Minnesota and Alaska. From 2001 to 2004 he served as Project Surveyor for Bolton & Menk, Inc. in Burnsville, Minnesota. He has been employed since 2004 as Project Surveyor for PDC, Inc. in Fairbanks,

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