

# Spotlight on the SURVEYING PROFESSION

How many times have you been asked "What do you do?" and replied "I'm a Land Surveyor", only to get the response "Oh, you're the guy on the side of the road looking through that telescope thing", or "Oh, you're the guy with that stick thing. What do you say to that?"



You may respond that, true, Land Surveyors do survey work on the side of the road, but surveying is so much more. You could say that Land Surveyors provide geodetic positioning — location on the face of the earth to centimeter accuracy. Or, you may respond that Land Surveyors also provide mapping, boundary determination, forensic mapping and consulting, legal parcel determination, among other services. Land Surveyors also go places others never get to see, to set markers that will be left for posterity and for future Land Surveyors to discover, measure and preserve. Land Surveyors have to sleuth locations of century-old (and more!) markers left by our predecessors and determine their meaning, veracity and importance for boundary location.

Land Surveyors are the first to appear, and many times the last to leave, not only on a local project, but also on the face of an era. It was Land Surveyors who first determined alignments of railroads in the push to conquer the West, for better or worse. Land Surveyors show land formations, property title lines and later, the works of man as indelible imprints on our planet. Regardless of your philosophy or political affili-

ations, you must acknowledge the significant imprint Land Surveyors have had on our planet.

It is not hard to foresee that it will be Land Surveyors among the first to arrive on distant worlds to set up the planetary reference systems, the planetary reference points and later, the location of features that will be used for adaptation to mankind's needs. The tools and products that the surveyors of the future will use are yet to be made, but surely the Surveyor will bear the burden of spatial systems for mapping the new worlds.

Seem fantastic? Perhaps, but this fact is certain: not much of the works of man gets done without a Land Surveyor. We provide the initial spatial assessment of a project, the transfer from design to construct and later, the locations of the improvements as made.

So how is it that we Land Surveyors have such a large part in the march of civilization yet what we do is so misunderstood by the public? Something should be done.

## The Problems

When it comes to supply and demand for licensed surveyors, our profession is not providing enough licensed professionals to keep up with the supply side, let alone those with experience. The graying of the profession also contributes to the net attrition rate. It has been estimated that the annual registration rate for Land Surveyors has decreased from

150 in the 1980s to a current 100 per year. At these current rates of attrition, the number of licensed Surveyors in California could decrease from 14,000 in 1980 to 3,000 or less in 2025.

And the demand is increasing. As society moves toward heavier dependence on spatial information, this has led to more demand for GIS, mapping, remote sensing and cadastral experts. Where there is low supply, market pressures will drive fulfillment for qualified personnel - and they may not necessarily be licensed Land Surveyors.

Low enrollment in accredited programs and the paucity of baccalaureate programs available across the country partially accounts for a dwindling number of surveyors. Administrative educators of surveying programs suggest consolidation of surveying curricula with other engineering programs, which points to the pressure to deal with lower demand for college survey programs. CLSA has even been solicited for funds to help mitigate budget cuts threatening one California institu-

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tion's ability to provide a full course selection for surveying. Taking longer to complete a degree program makes surveying less attractive to potential graduates.

The low number of Land Surveyors passing the state test (and the low cut scores) is constantly under scrutiny. The debate as to why is not germane here, only the fact. Better training or better preparation may lead to higher pass rates, but the number of new applicants is still not meeting demand.

The related problem is ignorance about what surveying really is, and all that it can be. If guidance counselors, educators or career track designers don't understand the nature and breadth of surveying, they can't be expected to suggest surveying as a career to suitable students. If a student indicates a proclivity to working outside and has a demonstrated aptitude for math skills, land surveying doesn't show up as a potential career.

## Some Solutions

To improve the rates of entrants into land surveying, I believe several things must happen. An understanding of what surveying encompasses must be provided to those who counsel career tracks and to those who are potential entrants. An image of surveying as an attractive, dynamic and satisfying career with a superior earning potential is also important. Universities, colleges, technical schools and other resources must be readily available to satisfy the educational needs of potential entrants. So, who is best suited to get the word out, to start the flow of new surveyors through the pipeline? It is you, me, and the rest of the profession.

## Some Solutions

We live in a pretty visual world these days. Efforts by other state surveying societies and professional groups have resulted in videos and promotional programs that rely on distribution to the right individuals and on their subsequent promotion of the information upon receipt. The results have been a little dry, or have shown a fairly narrow view of surveying that only confirms surveying as a construction related trade. So the thought occurred to me to do an active presentation, one that conveys a message directly to the target audience through TV spots, radio and other media. Like the very successful Army, Navy and Air Force programs, the Land Surveyor program would portray the widely varying activities that comprise surveying, showing various situations wherein a surveyor has a leading role and make it look appealing. The goal is to have the target audience say "That's me! I see me in that role and I want to do that!" So begins an effort I called Operation Spotlight, to spotlight the profession and put us center stage. An interesting thing is the byproduct of Operation Spotlight. A majority of the audience of TV, radio or printed media don't want to become a surveyor. That's OK, but they will know much better what a surveyor does and how surveying plugs in to society's needs today.

## The Plan

Like any mission, there needs to be objectives, targets, execution, schedules and verifiable success. Operation Spotlight, or OpSpot, is no different. The primary objective of OpSpot is a recruitment. The secondary objective of OpSpot is increased awareness of the land surveying profession and increased understanding of what surveying is and does.

## Operation Spotlight

OpSpot has multiple targets. CLSA Central Office has done much marketing research already and provided a wealth of information. The primary targets for recruitment are students of all ages. The group K-6

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(the awareness stage) will be contacted through active participation and presence by surveyors, and through materials distributed directly to the teachers. A surveyor coloring book is already available along with other resources. Grades 7-8 (children in the exploration stage) will continue to have materials distributed to their teachers, but also participation in programs like the Scouting Merit Badge and Career Days will broaden the exposure. Grades 9-12 (students in the preparation stage) can be presented with the Scouting Merit Badge program, TrigStar and career guidance materials. After high school, students and high school grads and individuals in the work force looking for alternate employment or training (the advanced preparation stage) will have post-secondary school educational opportunities and technical training opportunities. They need to know that scholarships are available through CLSA's Education Foundation. They also need to know that there are many employment opportunities **right now!**

## Phase 2 - Distribution

The distributed materials can range from the coloring book, to media packages with info-mercial videos, to printed details on where to get more information, how to contact local surveyor groups such as local CLSA Chapters, and lists of college or technical educational facilities. CLSA Central Office personnel have worked hard to identify marketing vehicles, such as printed brochures, articles in local newspapers, website access, phone numbers for more information, materials for

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educators, an expanded audience for TrigStar program, an active promotion of the Scouting Merit Badge program — all must be organized as available resources. Part of OpSpot includes preparation of a 30-second TV spot, or commercial, or a 60-second spot, and a long run version for inclusion as DVD in brochures and as streaming video on the CLSA website.

The schedule for OpSpot is an aggressive one. Phase 1 includes identifying recipients of the information, preparation of information and assembly of materials, including the long run video. Phase 1 has been going for a while, now. The added video materials will need to be done through selection of a qualified media agency with proven expertise in creating, writing, producing and editing such materials and who can work within a budget. Ultimately, enough visual material needs to be collected to edit a long run, high definition video for posting on the CLSA website and for inclusion in the distribution materials.

Phase 2 is the actual distribution process. The materials prepared under Phase 1 will be distributed to educators and newspapers. Your involvement at the local level is needed to provide face time at schools and at career fairs, to write interesting short articles about surveying for local newspapers, to assist with the TrigStar and Scouting Merit Badge programs.

We are shooting to have Phase 1 & 2 operational by late 2005.

### Phase 3 - TV Spot and Media Buy

Phase 3 is the event that will rely on the foundation of awareness built in Phase 1 & 2. Phase 3 is the editing of a hot, dynamic 30-second TV spot from material assembled in Phase 1 and a media buy in a test market. Also, radio spots for airtime in selected markets is part of Phase 3.

Consider the following brief outline for a 30-second commercial. A host or voice over asks if you have considered surveying as a career, if you know whether it is right for you. The host, whose attire changes to match that of the scene, walks past a series of images showing what surveying is and asks Do you like construction and working outside? The scene shows a young woman running a robotic total station on stakeout then blends into high-rise surveying. Our host then asks Perhaps you would rather work in the wilderness with high tech equipment? The background scene shows a solo surveyor backpacking a GPS unit to the summit of a mountain with a breathtaking view. Next, our host says Perhaps you prefer mapping, GIS and CAD work. The background scene shows a surveyor going over maps with engineers, shows a mapper using GIS software at a work station. The next scene presents our host in professional, office environment attire, asking Did you know you can join a large company management or work directly with clients? The scene shows a surveyor running a meeting in the corporate environment, and then a small firm surveyor working with mom and pop clients. The host says Would you like explore forensic survey work, or perhaps research? The background shows a surveyor explaining a map to a jury and then moves to a scene in a recorder's office. Finally, our host closes with All this and much more is available with a well-paying career as a surveyor. For more information contact your local or state surveying organization. The spot fades to the phone number and web address of CLSA set up for the response.

Phase 3 is planned for execution in 2006.

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### Cost and Assessment

Everything has its price. Although the Board of Directors approved a budget item for CLSA to implement Phase 1 & 2, CLSA will explore sponsorships and sale to other organizations as a way to defray costs to our organization.

It is hoped and expected that there will be an immediate response to the distribution in Phase 2, particularly from the group between ages 18 to 22. The response mechanisms for inquiries need to be in place.

It is hoped that the TV spot will be the catalyst for a much wider audience seeing who we are and what we do. Again the immediate response to a TV ad campaign must be met with available resources for those who want more information and who see surveying as a possible career choice.

Success may only be identifiable in a minimum of two to four years, the time it takes to complete an associate or baccalaureate degree program. Another indicator of the success of Operation Spotlight would be an increase in available surveying office and field technical personnel, through regular employment or work/study programs.

So that's the idea and the plan behind Operation Spotlight. Having been given the privilege and honor to be next year's President of CLSA, I am hoping this will be a worthwhile contribution through this organization to support our profession of surveying. I also know that this can only be done with your help and support. So stay tuned ❖