

Surveying 2007



— Meet Rita M. Lumos, NSPS President

On March 10, a new NSPS Board will be installed during the ACSM - IPLSA - MSPS convention in St. Louis, Missouri. Rita Lumos, a surveyor from Nevada, will become the second woman to head that Board as president. In an interview with the ACSM Bulletin, Rita talks about her long involvement with the national surveyors' association and how she sees herself contributing to its further growth.

ACSM BULLETIN: How does it feel to be the second woman ever to chair an association that still represents a predominantly male profession?

RITA LUMOS: First, I would like to say that it's both a great honor and a great responsibility to be the president of the National Society of Professional Surveyors. I'm very excited about taking the job. Interestingly enough, the thought about being the second woman to serve as the NSPS president has not been something that I have thought a lot about. Perhaps this is because I've never thought of myself as a pioneering woman surveyor—although that has been true in some cases. Instead, I prefer to think of myself as the next surveyor who's going to be the president of the association. I've always felt that we [women] need to be in the mainstream, become a part of what's going on, be active. In order to really be "equal" in all we do, we have to stop thinking of ourselves as women surveyors, and just think of ourselves as surveyors.

ACSM BULLETIN: This is not the first high-ranking post you have ever occupied. You had also served as president of the Nevada Association of Land Surveyors, and you have had very long association with NCEES. Would you like to comment on your previous professional involvements?

RITA LUMO: Over the years, I have been active in a number of professional surveying bodies and activities. I chaired my local chapter, of course, and then went on to become the president of NALS in 1990. The following year, I was appointed to the NALS Governor's position, and I



From left to right: Joe Dolan, 2006 NSPS president, John Fenn, incoming treasurer, John Abenroth, outgoing treasurer, Pat Beehler, incoming vice president, and Wayne Harrison, Board of Governors' chair, attending the NSPS Board transition meeting

have been active in NSPS governance since then. I served two terms as the NSPS Area 9 Director and had a short term on the last ACSM board prior to the restructure. I had the privilege to be appointed to the Nevada Board for Professional Engineers and Land Surveyors. I served four terms—that's 12 years—on that Board, chairing it for two of those years. That was a great honor. To serve on that Board, was, I think, one of the most rewarding experiences I've had in my life. Through that position I became involved in NCEES, where I have had the privilege of chairing two separate committees—the Model Law Committee and the Examination for Professional Surveyors Committee, which I am still involved with. I've been an ABET evaluator for several years, and I may continue my involvement with ABET in another capacity come April. I have had



John Abenroth, left, and John Fenn (right) discussing a computer networking issue with Clifford Sheppard, ACSM's network administrator

some other professional associations, such as with the American Public Works Association, but all said, surveying has been the biggest part of my professional life—both professionally and socially. Through my involvement in surveying, I have had an opportunity to meet wonderful people from all over the country—surveyors whom I now count as my friends.

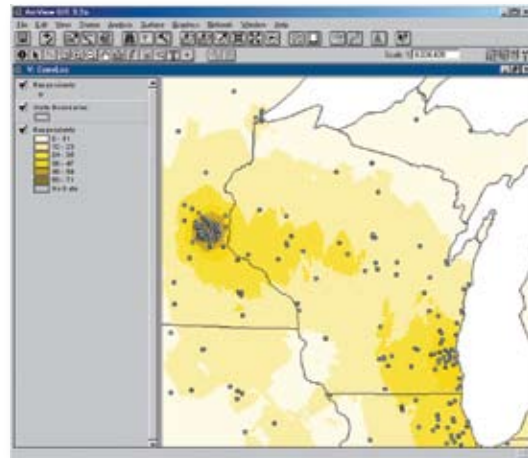
ACSM BULLETIN: What was the initial impetus for your becoming a surveyor?

RITA LUMOS: I started out to be a math teacher (surprise!) but then, in 1962, I went to work for an engineering and surveying company. They taught me how to survey, and I loved it! At one point I did think of about going back to college and qualifying for a different career; I got a catalog and read its offerings, but there really wasn't anything that looked more exciting to me than what I was already doing. That was the point in my life when I seriously considered getting a license and pursuing a career as a professional surveyor. I did not really become involved in professional society activities until my children were a little bit older, and then it all just happened. I have never allowed my gender to become a real issue; the emphasis has always been on getting the work done, and to be able to do what needed to be done.

ACSM BULLETIN: Which technological, legislative, and structural changes do you consider to have had the most impact on the surveying profession in general and NSPS in particular?

RITA LUMOS: The biggest changes, I believe, are the increased educational requirements and

the fact that surveyors are now better educated, better informed, than they were in 1962, when I was introduced to surveying. This fundamental change is due to technological advancement as well as legislative progress. Surveying rapidly became more highly technology oriented, which in turn increased demand for education, both at the college level and in lifelong learning. NSPS has an opportunity and a responsibility to be a leader in providing continuing education courses and seminars for our members and for helping



Using GIS to understand the potential surveying student population at the University of Wisconsin

to guide the course of undergraduate surveying education. A couple of the ways that we do that are through our Education Committee and through the many NSPS volunteers who work with ABET on accreditation. Within NSPS, the organizational changes in the early 1980s that transformed the erstwhile division into a separate member organization within ACSM constitute a great advancement for the surveying profession.

ACSM BULLETIN: Certainly, education is the number one change. But isn't it also true that certain functions of the surveyor that formerly required a solid grounding in trigonometry and math can now be performed by pushing a button—thanks to the sophisticated technology currently on the market.

RITA LUMOS: I believe that it is a real danger that we have folks who know how to push buttons but don't understand what the equipment is doing, what it's capable of doing, and what the results of the analysis are. This is where education



John Matonich, for years the driving force behind the very effective ACSM Joint Government Affairs Committee, and current Treasurer of ACSM, will serve as Vice President of NSPS in 2007

becomes absolutely critical. A huge part of surveying is the analysis of the field work, and if one does not have the educational background to interpret the mathematical results, then one is in danger of making some serious errors and, as a result, harming the public.

ACSM BULLETIN: There seems to be a broad general consensus that surveying education needs to rise to the challenge and yet, when programs are established to fill the

gaps, these same programs seem to face problems attracting students.

RITA LUMOS: They do; they're kind of in a Catch 22 situation. Two conditions need to be fulfilled in order for enrollment in surveying programs to reach expectation levels. First, states need to pass legislation that requires higher education as a condition for licensure, and then there has to be the right type of education available. And more often than not, these prerequisites are dependent on one another, so much so that the issue of which comes first, the programs or the requirements, becomes blurred. Nevertheless, I do believe that as time goes by and increasingly more states define and legislate their educational requirements for surveying licensure, then the colleges and universities offering surveying programs will have a much easier time enrolling students. It's already happening. Currently about half of the states either have specific educational requirements in place, or are in the process of phasing them in. The "phase-in" period can be as long as ten years. In Nevada, we passed legislation in 1999 specifying that by 2010, candidates sitting for a surveying license must have a four-year surveying degree.

ACSM BULLETIN: In recent years, GIS has gained considerable ground as a method of analyzing and visualizing the Earth. Has the surveying

community embraced GIS? And not only in research or education, but also on the ground?

RITA LUMOS: The surveying community has been much too slow in embracing GIS technology. But it is happening. In my state there are a number of surveying companies that offer GIS services. Surveyors took a long time to realize the benefits of utilizing this technology in their work. But the fact also is that not all parts of GIS are relevant or "belong" to surveying. Those aspects such as resource management or utilities management are beyond the scope of surveying. But, while we can't say that all of GIS is surveying, we can say that a substantial part of it—the ground truth of GIS, if you will—definitely concerns surveying.



Dawn James, the new Member Organizations Administrator at ACSM

ACSM BULLETIN: Is NSPS planning on getting involved in those parts of GIS that are relevant to surveying?

RITA LUMOS: We have been involved, in some ways, over the years. We were part of the discussions beginning in 1995 on the new Model Law Definition of Surveying. The new definition developed during those discussions includes a huge component that addresses GIS and photogrammetry vis-a-vis land surveying. Within ACSM, we are fortunate to have member organizations whose mandate centers on GIS, and, so, during our transition meeting we also discussed various ways of opening more meaningful dialog with them and offering programs that would be of interest to them. That's part of our long-range plan.

ACSM BULLETIN: Which program or administrative areas would you like your Board to address in 2007?

RITA LUMOS: My more visionary predecessors have ensured that NSPS offers a number of very good programs, and newer ones are getting off the ground. Our task now is to make sure that these

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Surveying a church using Trimble total station

programs are supported, continued, and allowed to grow and “blossom.” And so, I see myself focusing the Board’s work in that direction. I feel that one of my abilities is organization, and since committees are the lifeblood that makes organizations function properly, my priority will be better communication with the committees and better direction so that their work is more meaningful. “Making sure that the work gets done” will be my charge.

ACSM BULLETIN: In conclusion, what message would you like to send to surveyors throughout the country?

RITA LUMOS: Having been in surveying for all these many years, I have come to appreciate how vitally important it is for all of us in the country to be part of the national association for surveyors—NSPS. We tend to get involved in our state societies and in our businesses and forget that the national organization is out there looking after the interests of all surveyors in the U.S. Aside from the great benefits NSPS offers—such as professional insurance—the association’s involvement through the Government Affairs program with legislation, the well established technician certification program (CST), and our own “trigonometry bee,” the TrigStar program, are all of immense importance to American surveyors and surveying, and hence worthy of nation-wide support. One may not have a desire or the time to serve as an NSPS officer or governor, but everybody has something to offer. We need your participation, we need surveyors to get involved in committee

work, to give us ideas and, generally, take an interest in their national society, NSPS. ■

