

ConferenceReview



Trimble CEO Steve Berglund opens the conference.

It is reassuring to see that the surveying industry and community is capable of supporting not only some outstanding national association conferences, but also now at least one international commercial conference. There is definitely a place in our industry for both.

Two very memorable conferences come to mind, both exemplary in representing their respective styles; the 2002 FIG/ACSM in Washington D.C. and Trimble Dimensions 2005 in Las Vegas this past October.

The association conferences are essential to our industry, worthy of patronage by surveyors as well as substantial sponsorship by industry solution providers. In addition, isn't our industry worthy of some big international-scale conferences like other related industries (for example, Autodesk University for CAD, and that 'big daddy' hosted by ESRI for GIS)? There is a practical limit to corporate sponsorship of association conferences and solution-specific content therein; many a surveyor has groused about having too much of one or more vendors' footprints all over recent conferences. Specific user communities need such big events, without having to co-opt an entire association conference to do so.

After a few years' hiatus, the Trimble "big-one" has been reborn as an international conference. By many indicators, this one turned out all right-quite all right, truth be told. I was all set to find things to complain about (I have a tendency to do that), but short of making up something that went wrong, I'd have to say that this was as polished

Trimble UC: An Analysis

as Autodesk University and with the same kind of content quality you would find at the ESRI show.

October 24-26, Las Vegas, the Mirage

More than 1,300 attendees from 50 countries, 150+ sessions and the potential for total mayhem. Despite the sensory overload of Las Vegas and some red eyes (probably the gauntlet of smoke-filled casino floors one must traverse to get anywhere in that town), things seemed to go without a hitch. If one can get to/from the classes, and the presentations are ready without major technical problems, that is the first goal. The conference planners definitely pulled that one off.

Content

Though most sessions focused on the Trimble flavor of particular solutions, there were a substantial number of case studies, academic and technical papers, business development and general sessions. Realistically, it was Trimble's show, so of course they were going to "push yellow," but I found many attendees, like me, come from "mixed shops," seeking new solutions rather than specific products.

More than 50 construction track sessions ranged from the hot-button topics of site calibration and managing the 3D data (hang on folks, the time to jump on this train is now...), to case studies, to focused topics on configuring and managing specific equipment or applica-

>> By Gavin Schrock, LS



tions. The running theme was: 3D design data, how to manage it, how to use it in your specific equipment. A notable presentation by McAninch Corp (a large earthmoving and utility contractor) applies academic-style analysis to manage the increasing “bench” of automated technologies now available for construction sites. A thought-provoking research project by the University of Applied Sciences (Würzburg-Schweinfurt, Germany) seeks to develop a mobile robotic system capable of precisions of less than an inch, with an eye towards agricultural applications.

Survey tracks also included a great number of specific application and equipment operations, maintenance and calibration sessions, as well as general sessions focusing on the apparent running themes of digital data management, monitoring, robotics, scanning, and real-time solutions. Fine sessions highlighting monitoring applications included a project involving offshore gas rigs in Malaysia, slope stability studies from South Africa, an advanced course on structural deformation monitoring theory, and two sessions on as-built complex industrial plants with laser scanners.

The National Geodetic Survey presented the latest developments in their Height Modernization program (which provides guidance for individual states to improve their own vertical reference framework) and the OPUS post-process-

ing service. In addition, there were a dozen “techie” presentations including advanced ionospheric modeling for real-time networks, future code and correction types, wireless communications, magnetic drive technology, and an academic treatise contrasting “real-time v. post-processing.”

Case studies and “gee whiz” projects showcased are nearly always informative and entertaining. Some notable sessions: a re-measurement of the height of Mt. Everest (it almost becomes a philosophi-

cal question of “measuring from where to where?”), specific considerations in surveying for a high-speed railway, streamlining accident scene surveys, the boom in real-time networks in China, and using a mix of technologies to create a cost-effective cadastre in Egypt. A session of note was the research done by Schnieder Corp., a Midwest consulting firm, on survey-grade “continuous topo.” They have taken an in-depth look at methods to qualify accuracies of All-Terrain-Vehicle (ATV) platformed mobile topo surveys, particularly the vertical component.

Though most if not all of the survey and construction track sessions would apply towards continuing education requirements of applicable states, there was also a dedicated Professional Development track on the final day of the conference. The 35+ subjects covered in those sessions included fundamentals of the newer technologies like 3D laser scanning and real-time GPS, as well as some in-depth treatise on mitigating error sources in total stations; theory, practice, and realistic expectations for code-based GPS applications; dealing with site calibrations; and GPS post-processing.

Feedback

I thought it might be good to get Trimble’s take on its own conference, so I called their PR folks and asked to talk to someone up the ladder. They put me in touch with president and CEO Steve Berglund. Fearful of a practiced company spiel, I prepared some ambush questions (a task made easier by Steve’s current bout of jetlag):

Me: What do you consider to be the biggest lesson learned from this conference?

SB: It’s not like me to not be able to find something to improve but I can’t think of one. Things we might look at in respect to the next conference would border on the trivial.

Me: So in short, you are quite pleased?

SB: Absolutely. We pretty well cooked the conference formula ahead of time, and would just be looking to build on the success of this one.

Me: You used to have user conferences. What’s different about this one?

SB: This is really the first year with this formula. We wanted to promote technology and those of our partners. In addition, we felt that a good set of exhibits was important.

Me: And the content of the sessions?

Is it important for an industry conference to have a lot of general content?

SB: I like to think we had plenty of general content. I don’t think we’ll see a day when any particular vendor would give center stage to its competitors, but there is a certain amount of general solution material that would fit in any [good] conference. Of course, we had plenty of material on our own products, but we wanted to focus on solutions to problems that surveyors and construction professional face. We view [our company] as a provider of solutions, not just products.

Me: I saw your keynote sessions included a joint panel of AEC companies (Autodesk, Bentley, and ESRI).

SB: Yes, as key related technologies, each [of those] speakers stressed the importance of digital design data to their specific solutions and products... something that Trimble is particularly focused on in developing our integrated solutions.

Me: Will an annual conference like this become the main source for user

training, rather than more regional type training, as other conferences have become?

SB: Not at all. We will be presenting this in addition to the regional training as well as that which is available through our reseller network. We have a much larger user community now, and this was the next logical step in providing user resources.

Me: What was your main goal for this conference?

SB: Education and promoting our vision. There is a lot more depth to Trimble now, and we have a much larger user community; we also offer a broader range of solutions and related technologies. An annual conference is a great venue for sharing solutions and ideas.

Me: So there will be a “next year?”

SB: Planning on it!

Editor’s Note: Trimble Dimensions 2006 will be held November 5-8 at The Mirage Hotel in Las Vegas.

This was pretty much my own take on the conference. It worked well, it provided what I would expect from a big commercial conference, and I certainly hope there are more. I also e-mailed a lot of other attendees about their experiences; while not a poll, most were as follows:

Christian Trautvetter, Surveyor, State Office for Surveying and Geoinformatics Thuringia, Germany:

“Dimensions was a great opportunity to meet people in the surveying business from all over the world. It is very interesting how similar the tasks and problems we try to solve are. And it’s even more interesting how many different and creative ways people find to do so. It was the first time for me to see the whole spectrum of survey products, from total stations to GPS, machine control, laser scanner and GIS data collection. During the presentations, talks, and discussions I was able to collect lots of knowledge and ideas. But it was also important for us to show our concepts and achievements and discuss them with the ‘community.’ By learning from others we can avoid a lot of unnecessary work and make our products and services better.”

Some had a few suggestions:

Carlos Escudero, Surveyor, Geocom Chile:

“The presentations should be shorter, not one hour but only 30 minutes. This would give more time to present more topics as well as repeat presentations at different times. Then, if you are can’t attend a presentation at a given time, you can attend

at another time. I would also like to have the information in Spanish, so some presentations could have simultaneous translations. This would increase the potential for having participants from Latin American countries.”

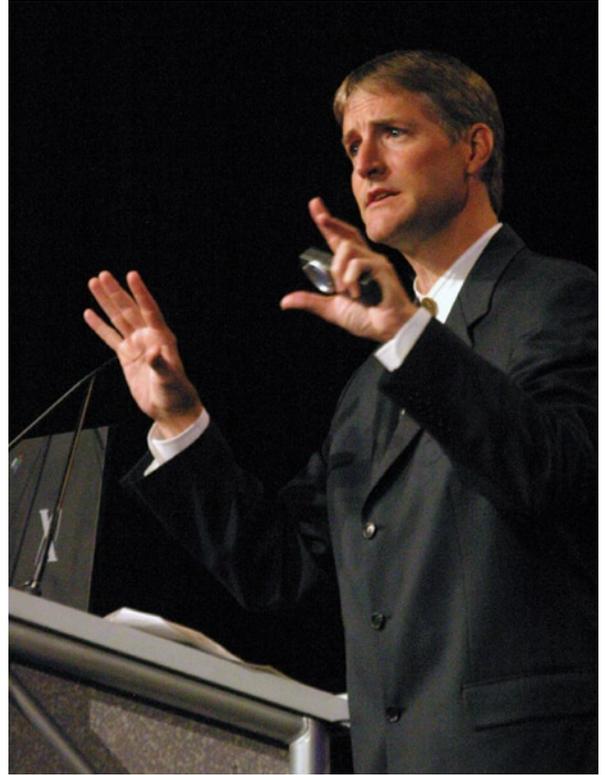
On the same note, I’d like to see some simultaneous translations of the techno-babble of some of the academic papers... but I digress.

I asked a number of the conference advisory board (made up of key folks from the public and private sector in the surveying and construction communities) if they felt that their advice was heeded by the conference organizers. The consensus

was that the content matched the wishes of the advisory; and judging by the numbers of attendees for specific sessions, their instincts were correct. An example was the conclusion drawn by both surveyors and construction folks on the advisory panel that a better understanding of how to calibrate real-time GPS solutions is a key training issue they face. As a result there were a dozen sessions on this subject. One of these calibration sessions in particular drew more than 200 attendees. I spoke with one construction company that sent 15 of their key operators to the conference for the technical training on site calibration and machine control configuration alone.

Of course there were other comments on the conference that had nothing to do with the content or management, but mostly these were about “being taken for a ride” on the blackjack or poker tables, or the even-more-frightening experience of riding in a Las Vegas taxicab. But all kidding aside, the average attendee were not there primarily to party, though it does make for a pleasant conference to have some added diversions.

Overall as attendees we were treated well, fed frequently (with more opportunities to stuff oneself than on a cruise liner) and entertained. There was a particularly exciting performance during



Erik Lindbergh

the gala diner by “Mechanical Action,” a kind of cross between “Stomp” and “Cirque De Soleil.” Besides Berglund, other keynote speakers included Dr. Scott Pace of NASA, Erik Lindbergh of the Lindbergh Foundation, Mark Pflederer of Caterpillar and Professor Ken Alder of Northwestern University.

That the conference was arranged in dual tracks: one for surveying, and another for construction, was a good thing. As I opined in the conference preview [Sept. 2005] the construction track would also be beneficial to surveyors as the recent boom in machine control and integration of digital data into construction could be another key element of surveying in the years to come. Could be, but we need to be ready for it.

Other industries have big commercial conferences, surveying deserves its own. If the quality can be maintained, it would be nice to see more... or more than one. 

Gavin Schrock is a surveyor in Washington State where he is the administrator of the regional cooperative real-time network, the Puget Reference Station Network. He has been in surveying and mapping for over 25 years and is a regular contributor to this publication.