The Old Dominion Surveyor

A Publication of The Virginia Association of Surveyors, Inc.

“Every man is a debtor to his profession.”

2010 VAS Convention
Hilton Mark Center
Alexandria, Virginia

Vol. 46, No. 3    November 2009
In October 2009, APE acquired the Spatial Systems division of Loyola Enterprises Inc, located in Richmond, Virginia, a leading distributor and service provider for Leica Geosystems measurement technology. APE will now have direct coverage in Virginia, Maryland, West Virginia, Washington DC, along with Georgia, Alabama, Tennessee, Florida, Mississippi, North and South Carolina and Indiana.

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Left to Right: Tracy Foran, Jim Petry, John Essig, Greg Perkins, Bill Murphy, Tommy Nichols, and Warner Allen

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Tim’s Line-of-Sight

Fall is upon us and with the change in weather, it is time to be making plans to attend our January 2010 convention. Chuck Dunlap and the Convention Committee have worked hard and have spent many hours in meetings with the hotel in Alexandria to make the 2010 Convention a success. Please visit the VAS website for details and hotel reservation numbers. Also, review the program itinerary since some changes have been made from previous convention formats.

As I reported in the last issue of The Old Dominion Surveyor, VAS has elected not to renew the contract of our current lobbyist for the upcoming 2010 legislative session. The Legislative Committee will be seeking help from members to monitor bills introduced in both the House and the Senate in 2010. Please forward any information on bills that might potentially affect surveying to the VAS central office in Richmond or to our legislative chairman Fred Shanks.

I represented VAS at the Maryland Society of Surveyors Fall Conference in October. They presented some very interesting seminars and attendance was very good at each, despite the economy.

I would like to thank all the Chapter Presidents for submitting their chapter meeting dates to the Central Office for publication on the web site and in The ODS. Again I encourage all members of VAS to attend the State Board meetings. In doing so, your voice will be heard on subject matters affecting surveyors across the Commonwealth. I hope to see everyone in Alexandria January 21-23 for the 2010 VAS Convention.

— Timothy Nash, VAS President

VAS CONVENTION HOTEL RESERVATIONS
Hilton Mark Center, Alexandria, Virginia
January 21, 22, and 23, 2010

You must make your room reservations by December 18, 2009, in order to get the convention rate. Use group code VAS.

For reservations, there are three options:

1. Call 703-845-1010
2. Call toll-free 800-445-8667

Look forward to seeing you there!

The Old Dominion Surveyor
www.vasurveyors.org

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- Full page (8 1/2"x11") $250 per issue

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"Get a room." Most of us have heard it, said it, or thought about saying it usually when we were having too much fun on a date, or saw someone being more affectionate in public than we or someone else thought proper for the setting. Sorry, that is not what this article is about. This article is about the Virginia Association of Surveyors, Inc., the Virginia Surveyors Foundation, the Virginia Association of Surveyors Education Trust and the many organizations and causes that we support.

There is a long list of things that we accomplish through our surveying-related organizations. We give scholarships, we help one another in times of need, we support and propose laws and regulations that enhance our profession and the welfare of the public, and we contribute many thousands of hours each year unselfishly in support of a better world for all of us. All of this and much more is accomplished by our dues, donations, and dedicated time. And we are rightly proud of all of it. That is not what this article is about.

Each year in January, the Virginia Association of Surveyors (VAS) hosts an annual membership meeting and along with this meeting puts on technical sessions, social events, displays of the latest and greatest technologies, and offers opportunities to meet with old friends and competitors. A good time is had by all. In order to make this event a success, the Convention Committee starts signing contracts and planning events about two years in advance. The cost of all of this is based on the number of rooms that the motel/hotel rents to the attendees during the event. For the past several years the VAS has generated in excess of two hundred room nights during our convention. The facility offers pricing to our Association based on the projected number of room nights and associated food sales. If our members do not stay at the hotel or do not attend the events, then the facility charges VAS a penalty for their projected and unrealized profits. This penalty can range between $5,000 and $25,000. If this happens, the penalty must be paid from the general fund of the VAS. We have never failed to meet our projected room and food estimates. This year may be different. The economy is hurting many of us. Disposable income is very hard to find and many of us feel that our time and money would be better spent in other ways.

Many of us live close enough that we can commute to the events. That is not what this article is about.

This article is about what each one of us stands to gain if we “Get a room”.

• “Get a room”. You will be rested and have time to visit the exhibit hall to look at the latest and greatest technology. The economy is not great for our vendors either. They may be offering deals on their products.

• “Get a room”. Wouldn’t it be nice to sit down and visit with an old friend or even a competitor? We might strengthen the old ties or come to common ground.

• “Get a room”. The technical sessions will be informative and will help offset the new continuing education requirements. You might learn something, teach something, or be heard.

• “Get a room”. Your spouse may enjoy the freedom of not having you underfoot!

• “Get a room”. Go to some of the business and committee meetings. You will probably learn that your organization is doing good work in your name.

• “Get a room”. Talk with students and young surveyors and surveyors to be. It will charge your battery and help them.

• “Get a room”. You will leave remembering why you are a surveyor.

• “Get a room”. You owe it to yourself.

• “Get a room”. You owe it to your profession.

• “Get a room”. You owe it to your business or employer or employee’s.

• “Get a room”. You owe it to yourself!!!

"Get a room" ……………………………
On behalf of the Convention Committee, I would like to cordially extend an invitation to all VAS members to attend the upcoming annual meeting January 21 through 23, 2010 at the Hilton Mark Center in Alexandria, Virginia. With respect to the fact that this past year has been an especially difficult one for our profession and industry, the Committee, after much deliberation, has shortened the annual meeting program in an effort to keep the event representative of these current and difficult economic times; and, towards this end, the Committee has worked especially hard this year to develop a program that we hope all VAS members will find informative and interesting.

The convention will kick off Thursday afternoon with the winter meeting of the Board of Directors. All are invited; and, this would be an especially good opportunity for incoming Chapter officers to learn what VAS is doing on the state level. As in the past, Thursday's events will continue with the President’s Reception and the opening of the Exhibit Hall.

Friday is a busy day and starts with two great technical sessions, the first titled “RTK GPS & State Plane Coordinates”; and, the second titled “Live from Virginia” wherein using the GNSS Reference Station Network for high accuracy GNSS applications. As everyone already knows, surveyors are using more and more real time internet applications in the course of their work; and, these sessions will show us where things are now and where they are going. The day continues with the spouses program, which at the time of this writing will include visits to some of Washington’s finest, but sometimes, overlooked attractions. The program is tentatively scheduled to include visits to the Library of Congress, arguably one of the most beautiful buildings in Washington with great exhibits, the Supreme Court, and concluding at the National Cathedral, which has a number of interesting features and with its high vantage offers spectacular views of the city from the towers. The Exhibit Hall is open all day; and, all members are encouraged to visit the displays and spend time with our vendors, who have been very supportive to VAS over the years. Friday concludes in the evening with the Annual Banquet and installation of officers.

As always, the annual meeting of the Association will see 2010 Convention, page 12
The Annual Plat Contest will be held during the 62nd Annual Convention and Meeting, to be held January 21-23, 2010 at the Hilton Mark Center in Alexandria, Virginia. The categories are the same as the 2010 ACSM/NSPS Plat Competition.

Entries may be machine or hand-drafted and have a maximum plat size of 34”x 44”. While each submission must be a single sheet drawing, the drawing may be part of a set. Entries must have been prepared within 30 months prior to the mailing deadline. All entries will be judged on adherence to the minimum standards as set forth by NSPS and VAS.

The judges will consider interpretability, content and layout of data shown, presentation, innovation, applicability to typical client or persons using this type of plat, and correctness. Neatness and accuracy of scale will also be considered. All plats must be signed and sealed with a label stating ‘FOR PLAT CONTEST USE ONLY’. Each plat must also be labeled with the name of the category in which it is being submitted. Contest winners will be announced at the Awards Luncheon on January 23rd.

The first and second place winners in each category can also be entered in the NSPS Map/Plat Contest. First and second place plaques will be awarded for each category.

Mail your entries to: Judy Hite
8752 Landmark Road
Richmond, VA 23228

Your entries for each firm or branch office must be received along with the entry fee of $35.00 (for one to six plats) by January 4, 2010. Please make checks payable to: Virginia Association of Surveyors, Inc.
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- Making money in GIS for land surveyors and civil engineers
- What’s New with Carlson Software 2010
- Surface Modelling with Carlson Software

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Carlson Connection
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President

Charles F. Dunlap

Charles F. Dunlap, L.S. has been associated with Walter L. Phillips, Inc. since 1992, where he is a senior project manager and associate. Mr. Dunlap attended Virginia Tech and Northern Virginia Community College, where he studied building construction and surveying/suburban development, respectively. He has been involved in the field of surveying and land development engineering since 1969. He received his 3A Land Surveyors license in 1978 and his 3B Land Surveyors license in 1981; and, he has been a member of VAS since 1979. He presently serves as the VAS First Vice President and is the Chair of the Convention Committee, where he has been actively working with the other members of the Committee planning the 2010 VAS Annual Meeting. Previously, he has held the office of VAS Secretary/Treasurer and Second Vice President and has held all offices in the Bull Run Chapter, where he was a charter member. He is also currently a charter member of the District of Columbia Association of Land Surveyors. He is currently a member of the Mt. Vernon Chapter. Chuck has also participated in the VAS education program, having been an instructor for the drainage class for the exam candidates, most recently at the inaugural John Foster School in 2007. He also represents VAS on the Fairfax County Engineering Standards and Review Committee. In addition to the above, Chuck completed the ESI Designated Plan Examiner Program (DPE) in 1993; and, he is a DPE in Fairfax County and a member of ESI. Chuck and his wife, Nancy, live in Vienna, Virginia.

Second Vice President

W.E. “Will” Nash

Will has 29 years of surveying experience in Virginia and the Rocky Mountains. After spending five years in the energy industry working the over thrust belt, he returned home to Virginia in 1985 to work toward licensure. Working in Northern Virginia and Southside Virginia for several private firms involved in boundary, subdivision, and site development work, he was licensed in 1993. At this time he took his present position with the Town of Farmville as surveyor, subdivision administrator, E&S program administrator and VUPS representative.

Recently retired from a parallel military career, Will has 24 total years in the U.S. Air Force and Air National Guard deploying on three occasions to combat locations in Asia Minor and the Middle East and was recalled to active duty in September of 2001.

Will lives with his wife of 25 years, Deanna, in Burkeville, Virginia and has one son who works in drafting and design for a local steel firm and a daughter attending Christopher Newport University in Newport News.

Serving previously as Southern Chapter President, Region IV Director, and currently as Secretary/Treasurer, Will believes in the importance of this organization and will work toward helping all Virginia surveyors believe in it as well.

First Vice President

Pete Moore

Pete is the surveyor in charge of the Dewberry and Davis office in Manassas, Virginia. He has been surveying since 1979 and was licensed in 1993. Pete became a member of the Association and the Bull Run Chapter in 1995. He has held all offices in the Bull Run Chapter and twice served as their president in 2000 and 2001. He also served a two- year term as Region I Director, Secretary/Treasurer, and is currently Second Vice President and Editor of The Old Dominion Surveyor. Pete has served twice on the Prince William County Design and Construction Review Committee. Born into a military family that moved around quite a bit, he finally settled in the Northern Virginia area in 1973. He has three daughters and currently resides in Haymarket, Virginia.

Secretary/Treasurer

Bruce J. Frederick

Bruce Frederick is a Vice President and Regional Manager of the Norfolk and Newport News offices of Patton Harris Rust and Associates. Bruce has been with PHR&A for 22 years and was one of the first employees hired when the office opened in Virginia Beach.

Bruce got started in his
surveying career with the City of Portsmouth where he worked summers between school semesters. Bruce obtained a Bachelor of Science Degree from the College of Bridgewater in Business Administration with an emphasis in economics.

Bruce was Region III Director in 2007-2008. Bruce was born and raised in the Tidewater area and currently resides in Chesapeake with wife Anne and daughter Nicole.

**Secretary/Treasurer**  
**John Sehl**

John is the President of Allison, Baird & Sehl, P.C. in Montross, Virginia. He started surveying in Minnesota in 1979 and has been surveying in Virginia since 1983. He was licensed in 1993 and became a member of the Rappahannock Chapter in 1995 and has held all offices in that chapter. John has also served a two-year term as Region II Director and is currently on the VAS Budget and Awards Committees. Born in Minnesota, John is one of fourteen children growing up on the family farm. He moved to Virginia in the early 80s to try and find work during that recession. John and his wife Donna have four children and currently reside in Fredericksburg.

**Region II Director**  
**Keith A. Shrader**

Keith Shrader is a licensed surveyor in Virginia, North Carolina and West Virginia. Keith held the office of President of the Virginia Association of Surveyors Central Chapter from 2006 to 2008, and Vice President of the Virginia Association of Surveyors Central Chapter from 2004 to 2006. He is also a member of the North Carolina Society of Surveyors.

Keith is the Vice President of Surveying for Youngblood, Tyler & Associates, P.C. as well as a principal with the firm, and has over 26 years experience in the surveying field. He has been with Youngblood, Tyler & Associates since 1987 when he joined the Company as a Party Chief. He is responsible for the quality control of the survey crews in addition to cost estimation, project coordination, boundary survey calculations and control surveys.

Keith Shrader studied Civil Engineering and Surveying at Bluefield State College, West Virginia Institute of Technology and J. Sargeant Reynolds Community College. He received his Virginia Surveying License in 1995.

**Region IV Director**  
**Troy D. Williams**

Troy D. Williams is a Vice President of Hurt & Proffitt. He has been part of the firm for over 20 years and holds surveying licenses in Virginia and West Virginia.

Troy is the Manager of Hurt & Proffitt’s Survey Department in Lynchburg. He has served as a survey field crew member, survey technician, and coordinator of Hurt & Proffitt’s eight survey field crews; he is especially proficient with the in-house processing of field data & GPS systems. Troy has had a direct role in many of Hurt & Proffitt’s largest surveying projects over the past 20 years.

Troy is currently serving as President of the Southern Chapter for the Virginia Association of Surveyors and has been elected as Region IV Director. He holds memberships in the National Society of Professional Surveyors and the West Virginia Association of Surveyors.

Troy has been married to his wife Paige for 19 years and they have three children; Alissa (18), a freshman at Old Dominion University, Hailey, (15) and Troy Jr. (9). Troy’s interest in surveying began at eighteen when he began his career at Hurt & Proffitt and has been technology-driven throughout his career being the first to implement the latest technology into Hurt & Proffitt’s field and office procedures throughout the years.

**NSPS Governor**  
**David Holland**

David L. Holland, LS is the County Surveyor for Henrico County, Virginia and a licensed surveyor in the Commonwealth of Virginia. He holds a degree in Journalism from the University of Memphis and a degree in Surveying and Mapping from the Denver Institute of Technology. He is a Past President of the Virginia Association of Surveyors. He is also a member of the advisory board and an adjunct faculty member for the School of Engineering and Technology at J. Sargeant Reynolds Community College in Richmond, where he teaches advanced courses in Land Surveying.
The Silent Auction will be held again this year. As always we are looking for items to be donated by the chapters or individuals. If you’re not planning to be at the convention, please get your donation to Judy Hite at the VAS office. All proceeds go to the Education Trust for scholarships.

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Proposed 2010 VAS Annual Meeting Schedule

Thursday, January 21, 2010

- Convention registration: 7:30 AM to 5 PM, Lower Lobby
- Technical Session I: “Surveying in DC”, 8 AM to 5 PM (room to be announced)
- Exam Writing Committee Meeting: 10 AM to 4 PM, Willow Room (tentative)
- Board of Directors meeting: 1 to 4:30 PM, Walnut Room
- Exhibit Hall: Open 5 PM to 8 PM
- President’s Reception: Thursday evening, 5 to 7:30 PM, Plaza Ballroom

Friday, January 22, 2010

- Incoming Chapter President’s Breakfast Meeting: 7 AM to 8 AM, Finn & Porters Restaurant
- Convention registration: 7:30 AM to 4 PM, Exhibit Hall
- Technical Session II: “RTK GPS & State Plane Coordinates”, 8 AM to 5 PM, Arbors Room
- Technical Session IIIA: “Live from Virginia - RTK Net - The GNSS Reference Station Network for High Accuracy GNSS Applications”, 8 AM to Noon, Juniper Room
- Technical Session IIIB: “Live from Virginia - Understanding OPUS”, 1 PM to 5 PM, Juniper Room
- Lunch: 12 PM to 1 PM, Exhibit Hall
- Virginia Surveyors Foundation Meeting, Noon to 1:30 PM, Exhibit Hall
- Exhibit Hall open: 7:30 AM thru 5 PM, Plaza Ballroom
- Spouses Program: 9 AM to 3 PM*
- VAS Auxiliary Meeting: 3:30 PM to 4:30 PM, VAS Office, (Elm Room)
- Annual Banquet Reception: 6 PM to 7 PM, Lower Foyer
- Annual Banquet: 7 PM to 10 PM, Terrace Room
*Tentative program is to visit the Library of Congress, Supreme Court, Union Station for lunch & shopping and National Cathedral

Saturday, January 23, 2010

- Convention registration: 8 AM to 11 AM, Lower Lobby
- Annual Association Meeting: 8 AM to 12 PM, Plaza Ballroom C
- Awards Luncheon: 12:30 PM to 2 PM, Terrace Room

2010 Convention, continued from page 5

be held Saturday morning, which will be followed by the Annual Awards Luncheon.

There are a couple of changes this year for which everyone needs to take note. First, room reservations at the hotel must be made by December 18, 2009 in order to receive the preferred VAS rate. These reservations must be made directly with the hotel; and, the link is on the VAS website. The other change for this year, the annual banquet will not be having the “black tie optional” as we have in the past; instead, we have opted for business suit attire. We hope to see everyone at the annual meeting. See above for the proposed schedule and page 14 for technical sessions information.
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Thursday Tech Session I - “Land Surveying in Washington, D.C.”
Surveying in D.C. from “A” to “Z” --- From A&T to Zoning...
Presented by DCALS, The District of Columbia Association of Land Surveyors

While basic principles remain the same, land surveying practices, traditions, rules, and licensing all differ in Washington DC from those of Virginia and elsewhere. This fast-paced 8-hour seminar gives a comprehensive basic introduction to all aspects of Washington, D.C. Land Surveying. Topics include: History, “Record vs. Measured,” Property Types, Subdividing, Building Plats, Wall Tests, Theoretical Lots, Tax Lots, Plats of Computation, Legal Descriptions, Licensing and Registration, Research, Datums, Condominiums, Permitting & Zoning, Jurisdictions, D.C.’s new GIS and, most importantly, Boundary Surveying in Washington D.C. Taught by licensed & registered D.C. land surveyors with decades of experience, this class is focused on information that surveyors, engineers and architects practicing in Washington D.C., even occasionally, need to know. Highly recommended for anyone preparing to take the city’s land surveyor licensing exam. Included in the seminar cost is an extensively updated Manual with new information never before published.

Friday Tech Session II - “RTK GPS & State Plane Coordinates”
Using RTK GPS with Reference Networks and Understanding Issues Related to NAD83 State Plane Coordinates

The basics of the NAD83 Virginia State Plane Coordinate System will be covered. With the increased use of state plane coordinates we will discuss the new set of problems and solutions that this creates for us, such as the grid vs. ground issues and its impact on day to day work legally and practically. We will also review the issues you need to consider when using GPS and conventional coordinates in the same project. This will lead us into our discussion of how GPS RTK can now be used many different ways. This workshop will cover the strengths and weakness of the various types of RTK. The new NGS Real Time Standards will also be presented.

Instructor: Alan R. Dragoo, Reg. Surveyor, Keystone Precision Instruments
Sales Manager - Maryland and Virginia Land Survey Products

Friday Tech Session III - “Live from Virginia!”

Morning Session: RTK-Net - The GNSS Reference Station Network for High Accuracy GNSS Applications

Course Outline
- CORS Continuously Operating Reference Stations – Pros & Cons discussed and useful tips will be presented including live examples of best practices
- CORS vs. CO-OP – What is the Real Difference?
- Motivation for Network RTK
- SPIDER – A 21st Century Reference Station Network Solution (Exclusively from Leica Geosystems, Inc.)
- Leica’s Implementation of the Master-Auxiliary Concept
- Cellular Modems-Is it the end of UHF Radios?
- Virginia’s RTK-Net FULL Time RTK Broadcasting Reference Stations
- SPIDER & RTK-Net – The future of Virginia’s RTK solutions for ALL!

Instructors: Chuck Jones, PLS and Greg Perkins, GNSS Networked Reference Station Support Engineer Leica Geosystems, Inc.

Afternoon Session: “Understanding OPUS”

OPUS (Online Positioning User Service) is a free Web-based utility that enables users to upload GPS dual-frequency data to the National Geodetic Survey, where the data are post-processed automatically to obtain precise coordinates. OPUS is found at http://www.ngs.noaa.gov/OPUS/

The popularity of OPUS has resulted in new versions, such as OPUS RS (rapid static) that computes geodetic quality coordinates from minutes rather than hours of data, and new add-ons, such as a database where users may publish a datasheet for a single control point or a community base station.

The guiding principle of OPUS is to keep it simple, but users can benefit from a peek at the machinery. Beyond an explanation of OPUS, this workshop provides attendees with the knowledge to evaluate the quality of their own GPS data and to improve the quality of their OPUS-computed coordinates. Attendees will learn how to make OPUS work best for them.

Instructor: Michael W. Cline, Geodesist, Spatial Reference System Division, National Geodetic Survey
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Offices also in:
Allentown, PA; Milford, MA; East Syracuse, NY
## Calendar of Events for 2009 - 2010

**Appalachian Chapter** — December 8 Christmas Dinner, Culinary School, Bristol. Contact Tony Holbrook, tony@holbrooksurveyors.com or Ken Sorrels, kvsorrels@tuckmapping.com.

**Central Chapter** — Membership meeting dates: November 18, December 11, Christmas Party. Locations to be determined. Contact Alison Hanson at ahanson@hbsurveying.com.

**Mount Vernon Chapter** — December 16 Holiday dinner; Board of Directors Meetings – May 5, July 22, October 28. Locations to be determined. Contact John Walsh at jwalsh@bccon.com.

**Rappahannock Chapter** — Dinner Meetings – December 17, Holiday dinner; Board of Directors – November 19. Locations to be determined. Contact Eric Sullivan at 540-898-5878, ext. 15.

**Tidewater Chapter** — General membership meeting November 19, December Christmas dinner TBD. Contact Timothy Fletcher at tim.fletcher@phra.com or 757-599-1050.

**VAS Board Meetings** — Spring Board Meeting — April 23 & 24, 2010, hosted by the Western Chapter
Summer Board Meeting — June 25 & 26, 2010, hosted by the Monticello Chapter
Fall Board Meeting — September 17 & 18, 2010, hosted by the Southern Chapter

**Land Surveyors Exam Review Class** — April 5 - 8, 2010. Comfort Suites, Richmond, Virginia. Additional information available at a later date. Contact: Chip Richardson at chip.richardson@jorce.com or Judy Hite at vasoffice@verizon.net.

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**VAS ANNUAL CONVENTION, JANUARY 21, 22, AND 23, 2010. Hilton Mark Center, Alexandria, Virginia.**

**REMEMBER TO MAKE YOUR CONVENTION HOTEL RESERVATIONS BY DECEMBER 18!**