

Central Region Newsletter American Society for Photogrammetry & Remote Sensing

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ASPRS Annual Meeting: Reflections and Commentary

ASPRS held its 2005 Annual Meeting in Baltimore, Maryland, from 7 to 11 March. As usual, a diverse collection of private sector, academic, and government people were in attendance.

Many people from outside the United States planning to attend the conference were ultimately unable to do so because they had problems attaining a visa. This is an unfortunate effect of recent changes the United States government has made in an effort to more effectively combat the threat of terrorism.

Two of the Central Region's three 2005 scholarship winners attended the conference and submitted their reflections and comments for this newsletter.

ASPRS Annual 2005 Conference – A Student's Perspective

I recently attended the Annual ASPRS 2005 Conference. From the perspective of a senior graduating in May 2005, I can't even begin to express how important it is for students in this field to attend this conference. I recommend that students begin in their junior year, despite the fact that many students are not comfortable with networking: they may feel that they don't have enough knowledge or experience to offer yet; so they don't bother.

Many students don't realize that there are numerous professionals out there who are happy to guide them in the search for knowledge and information. It is as simple as sincerely saying, "Where do you work? What do you do? How long have you done that type of work? How did you start out? What was your specific field of study in school?" I found the professionals at this conference very willing to talk about themselves and their work environment – you just had to give them the chance and show sincere interest in what they had to say. They will frequently ask what you are studying, when you graduate, what type of work you are interested in and they are often very supportive and encouraging that you are being so proactive as to even speak with them. At this point, they will often suggest positions, companies, or other individuals you can talk with further. I



The entrance to the conference.

have met several individuals from the Rolla area through ASPRS regional meetings and technical talks that I ran into at the conference. They pulled me to the side to inquire how I was doing and to assist me in my job search by offering recommendations. I was pleasantly surprised that they did that for me. The opportunities for information can be endless as you talk to one person after another.

Speaking with exhibitors (companies) about jobs and what they are looking for in the employees they hire is also an excellent approach. Asking what they do, what services they offer, and whether or not they have positions in the area of the industry in which you are interested. By starting early, a student can gain valuable information because that student now has the time to get the skills, experience or knowledge that companies want to see on a resume. It is also about being seen, heard and getting your name in the social circles by participating in events and meeting people and talking with them.

Many students choose not to attend the annual conference due to the costs involved. The conference is made more affordable through the opportunity to volunteer fifteen hours and waive the registration fee. I volunteered for and was able to attend two workshops (cost approx \$150-\$250 each) at no cost. Workshops are intensive half or full day classes on a particular area of expertise and are an excellent way to learn up-to-date and cutting edge information. One can earn Continuing Education Units for attending workshops and that is valuable if you are planning to obtain an ASPRS certification in the future. As there are many requirements to be met for certification this provides students with an excellent chance to get a jump start. The conference hotels are rather pricey, but if a person is resourceful, they can do online searches and find less expensive hotels within decent proximity to the conference hotel. The volunteer coordinator was kind enough to connect students from other universities with one another so that they could make arrangements to share rooms and cut costs even more. It was a great opportunity to meet other students (soon-to-be-professionals) from all over the world and that alone is an excellent networking opportunity. Networking is what this organization is all about. The geospatial industry is a small world and no matter the distance geographically, having contacts in various areas of the industry is a very valuable asset. This conference is an investment in your future and I have definitely found that it will pay off.



Shilpa Venkataraman checks out the Exhibit Hall



Shilpa Venkataraman and author Shannon Lear

The ASPRS Annual Conference offers two days of workshops, over 100 (free) technical sessions that cross several days of the conference and numerous extracurricular activities, social events and technical tours. I personally had trouble deciding which ones to attend due to having so many options. There is a job board for posting resumes and another for job postings. One should not scoff, because my resumes certainly kept disappearing and I have been contacted and have interviews arranged due to that effort. Again, as a student, I cannot even begin to express how valuable these conferences can be...it just depends on what you make of it. It is worth the money...though it would be nice if they could make it a bit less costly, enabling more students to participate and benefit from this experience.

—Submitted by Shannon Lear

ASPRS Annual 2005 Conference – A Student's Perspective II

This past March, I was fortunate enough to have opportunity to attend the ASPRS 2005 Annual Conference in Baltimore, Maryland. My overall impression of the conference was extremely positive and it was a wise investment of my time both now and for the future. I was a student volunteer at the ASPRS Central Region Conference last September, where – as a last-minute replacement talk - I presented geospatial work that I have been involved in. The presentation was well received and I was invited by Dr. Marguerite Madden, the session moderator, to present the continuation of my work at the Annual Conference. I have been told that it is rare for students to be invited to present their work at such esteemed conferences. I was extremely honored and a bit nervous about the conference opportunity.



Author Christopher Wood

Although I was a volunteer, my experience at the conference ended with the real reason that I was there: to present the continuation of the work that I have been involved in. The presentation was entitled “Visualizing Urban Impacts on the Surrounding Environment of the James River Basin, MO” and as the name suggests, the talk consisted of many geo-visualizations that graphically demonstrated the impacts of urban growth in the James River Basin on the surrounding environment. I must admit that to present in the same session as my supervisor coupled with my relative lack of presentation experience was just a little daunting. Subsequently, even though I was extremely comfortable with my presentation content, it took awhile to settle down and become comfortable with the act of presenting. I remembered some advice provided to me by a fellow Southwest Missouri State University colleague, who shall remain nameless but was also present at the conference, that with my ‘exotic’ Australian accent and soft spoken tones I had acquired a tendency to put a crowd to sleep when I was lecturing. Consequently, I was mindful of making the extra effort to change the tone and pitch of my voice as often as possible in accordance with the material that I was delivering. I had spent many hours over the previous days and weeks preparing my presentation and my initial draft had been over twice the size of the finished product. I was reticent to remove too many more slides from the presentation for fear that I would lose the concepts that I was trying to convey, but as my talk progressed I also became a little concerned that I may be running out of time. However, it turned out that I had paced myself very well and even finished in time to field a few questions from the audience. The presentation was well received and the audience took the opportunity to take many of the supplemental products (visualization CDs and brochures) that I had made available to them. I was later told that many people from the session that I was presenting in attended the Friday talk of Dr. Monika Moskal which explained in detail the concept of how geo-visualizations are actually created. I feel greatly privileged to have had this opportunity and I greatly appreciate of the opportunity to present my work at such a prestigious national conference.

As a conference attendee, presenter and volunteer, I have to share with you about two great events available to all conference attendees that served as excellent venues for networking: the “Taste of Baltimore” Welcome Reception and the Exhibitors Reception. On Tuesday evening, The “Taste of Baltimore” Welcome Reception was sponsored by the Potomac Region of the ASPRS in the Waterview Ballroom of the conference hotel and I found it to be quite a spectacular event. Many people that I had previously met – including those that I had checked in at the Registration Desk over the previous two days – were willing to talk with me. I was surprised how many people were interested in how my studies and my presentation preparation were progressing. On Wednesday evening,

the Exhibitors Reception was held in the Exhibit Hall, and this again proved to be time well spent at another excellent reception. The reception provided the opportunity to walk through the exhibit hall and meet with many various companies within the geospatial field, which in itself provided an excellent chance to find out about what these companies do, what their hiring prospects are and what skills and abilities they are looking for in the employees that they will hire.

As a student volunteer, I found the diversity of backgrounds amongst the student volunteers to be both amazing and impressive – there was truly a national and international feel to the volunteer group. Many of the student volunteers were Americans from universities from all over the country (Vermont, Michigan and Texas are just three states that come to mind). There were also many students, such as myself, who are Internationals (from countries as diverse as Australia, Colombia, and India) studying here in the USA towards higher degrees. One student volunteer, interested in finishing the last year of his PhD in the USA, had actually flown all the way in from Sao Paulo, Brazil specifically for the conference and a chance to meet and network with potential advisors. I was pleasantly surprised with how well everyone interacted, and we were often complimented on our cohesiveness and performance as student volunteers. My volunteer time was spent at the registration desk, where I found an indirect opportunity to brush up on my networking skills and I found that with a good memory for people, I was able to recall and interact with many people that I had met at the Central Region Conference. I thoroughly enjoyed the chance to meet and serve so many people within the geospatial industry. I strongly recommend to all geospatial studies students to become involved in and utilize the resources that ASPRS has to offer as a professional organization. Conferences such as these are very strong networking asset and a really great experience.

—submitted by Christopher Wood

Events Calendar

May 16-18, 2005. **Multi Temp 2005: The 3rd International Workshop on the Analysis of Multi-temporal Remote Sensing Images**, Beau Rivage Resort and Casino, Biloxi, Mississippi, USA. (www.multitemp05.org)

June 14-16, 2005. **Shuttle Radar Topography Mission Workshop to Summarize the Results of the SRTM Mission**. Reston, Virginia, USA. (www2.jpl.nasa.gov/srtm/)

June 16-18, 2005. **Open Source Geospatial '05 - MUM3/EOGEO**. Radisson Hotel Metrodome, Minneapolis, Minnesota, USA. (mapserver.gis.umn.edu/mum/mtg2005.html)

July 16-21, 2005. **Management Association for Private Photogrammetric Surveyors Annual Summer Conference**, Grove Park Inn, Asheville, North Carolina. (www.mapps.org)

September 21-23, 2005, **18th Annual GIS in the Rockies**, INVESCO Field at Mile High, Denver, Colorado. Sponsors: ASPRS, ACSM, GIS Colorado, GITA, PLSC and URISA. Theme: "The Geospatial Revolution: A Whole New View" Web address: <http://www.GISintheRockies.org>. Topics cover the creation, maintenance, use and benefits of geospatial data. Concurrent technical sessions, a job fair and the exhibition will be on Wednesday and Thursday. Technical tours, a geocaching event and a golf outing will be on Friday. Workshops are also available.

September 27-28, 2005. **The 2005 Geotech Conference "Frontiers in GeoScience"**, NOAA Auditorium and Science Center, Silver Spring, MD www.asprspotomac.org/geotech05. [Download Flyer](#) (45Kb Adobe PDF)

October 9-12, 2005. **URISA's 43rd Annual Conference**, Kansas City, Missouri. (www.urisa.org)

2005 Technical Session “SURVEYING INSTRUMENTATION: A HISTORICAL PERSPECTIVE”

Dr. Richard L. Elgin will speak on the evolution of surveying equipment using a slide show that features his 600-piece collection of early American surveying equipment. A serious collector and researcher of antique surveying equipment, Dick illustrates the full range of American compasses, from early (late 18th century) plain compasses through vernier, solar and late (early 20th century) "railroad" compasses. Also included are transits, beginning with one of the earliest (Young, c. late 1830's) and progressing through to a solar transit. Dick's collection also has in it calculating devices, pocket compasses, levels, sextants, and one of the five existing W. & L.E. Gurley dividing engines. In this slide show, Dick reviews his collection, speaks of his experiences collecting equipment, gives biographical information about the makers represented, discusses technical aspects of some of the pieces shown, illustrates how the equipment has evolved since about 1780, gives information about the value of such equipment, and gives pointers on how to get started collecting surveying equipment.

DATE: Tuesday, May 3, 2005

TIME: 1:30 – 2:30 PM

PLACE: Conference Room 503

USGS Mid-Continent Mapping Center

1400 Independence Road

Rolla, Missouri

For instructions on how to get to the venue contact Larry Stanislawski (573-308-3914/lstan@usgs.gov) or Phil Rufe (573-308-3540/prufe@usgs.gov).

Central Region Annual Election—Candidate Biographies

The time has come to cast your votes! It is time to elect a new region Vice-President, Secretary/Treasurer, two new Directors, and a National Director. Below you will find biographic sketches of each nominee. There is a ballot included at the back of this newsletter. Please return your ballots to either Dr. Monika Moskal or Phil Rufe by 31 May 2005.

Dr. Monika Moskal

Vice President

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National Director: Barry Budzowski

Barry Budzowski is currently the Technical Manager for Western Air Maps, Inc.. Barry graduated from East Central University, Ada Oklahoma, in 1987, having earned a Bachelor of Science degree in Cartography. Barry began his mapping career with Western Air Maps as a cartographic editing technician. Within 6 months Barry was promoted to Supervisor of the Map Editing Department. Throughout Barry's 17 year tenure with Western Air Maps he has overseen the re-vamping of the map compilation process from a mix of digital/mechanical production techniques to an all digital softcopy geospatial production workflow, has helped to introduce GIS software and has developed GIS workflows, and pioneered digital orthophotograph production at Western Air Maps. Barry continues to be responsible for project management, developing and overseeing quality control systems for various types of geospatial products, for production and dissemination of project production documentation and for overseeing and monitoring IT operations. Recently Barry was made Western Air Map's Technical Manager and is responsible for researching new technologies and implementing new workflows with the specific goal of increasing production efficiency while enhancing quality. Barry also recently received his GISP certification from GISCI.

Barry has been an active ASPRS member since 1999. Barry resides with his wife and two children in Overland Park, Kansas.

National Director: Jackson Cothren

Dr. Jackson Cothren started as an Assistant Professor in the Department of Geosciences at the University of Arkansas in August of 2004. He is also a research scientist at the Center for Advanced Spatial Technologies (www.cast.uark.edu) at the University of Arkansas. He earned a BS in Mathematics from the United States Air Force Academy in 1989, an MS in Geodetic Science and Surveying from the Ohio State University in 2000, and a PhD in Geodetic Science and Surveying from the Ohio State University in 2004. He has over 14 years of experience in photogrammetry, image processing, computer vision, and geodesy with the US Air Force, the Ohio State University, and in private industry.

He is currently serving as team leader of an effort to design and implement a comprehensive geospatial-data infrastructure for seven Central America countries and part of Mexico. The geospatial data includes literally hundreds of Landsat 5 and Landsat 7 scenes from 1970 through 2003 and various contemporary MODIS products that will support carbon sequestration analysis throughout the Meso-American Biological Corridor.

He has worked extensively with QuickBird imagery as a source of imagery to update aging orthophotos and quickly generate impervious surface maps. Several grants have resulted in the purchase of over 700 square miles of 60 cm GSD satellite imagery. His work in this area has been extended through the National Consortium for Rural Geospatial Innovations (RGIS, www.ruralgis.org) to include developing techniques and training courses for using this type of imagery for low-cost orthophoto updates on a county-wide basis. Through RGIS, he is leveraging CAST's work in photogrammetric research to work closely with the Northwest Arkansas Regional Planning Commission to coordinate ortho-photo updates over 1800 square miles of Benton and Washington County in Arkansas.

He has worked with high school students across seven states to introduce fundamental and advanced GIS and remote sensing technical and planning skills as a member of the EAST Geospatial Support team at CAST (www.cast.uark.edu/cast/east and www.eastproject.org). He has helped develop curriculum for more than seven different two to five day short courses and visited more than 50 EAST labs in schools across California and Arkansas. These full day visits focus on providing students with ideas and skills to apply GIS to problems in their communities.

Both as an Air Force officer and as a civilian engineer working for the Air Force he was

responsible for the direction and management of all photogrammetric and geodetic research at the National Air Intelligence Center. He has worked as professional consultant to private industry to develop digital photogrammetry software - including a self-calibrating bundle adjustment, non-metric camera calibration algorithms, and automatic target recognition algorithms.

Vice-President: Philip Rufe

Philip Rufe works in the Mid-Continent Geographic Sciences Center in Rolla, Missouri. He holds a BS in Geography from the United States Military Academy in 1988 and an MS in Geography and Cartographic Science from George Mason University in 1994. Personal interests within the field are digital aerial imaging systems and how to calibrate and characterize those systems and their data. Phil has been a member of ASPRS since 1992 and a Director on this Board since 1996.

Secretary/Treasurer: Jerry Wagner

Jerry Wagner is a Cartographer at the USGS National Geospatial Technical Operations Center—Office Three. He was raised in St. Louis, Missouri and received a Bachelor of Science degree in Earth Science and Biology from Southeast Missouri University, Cape Girardeau and has been working on a Masters of Business Administration from Webster University. Jerry began in his mapping career working at Surdex Corporation in St. Louis before going into federal service at DMAAC (now NGA) in St. Louis. He then transferred to Mid-Continent Mapping Center in 1977 and entered the Cartographer Development Program. He has served most of his 27 years with the USGS in the Branch of Production Operations in various positions as cartographer, supervisor and section chief. Jerry and his wife, Linda, have two children, Melissa and Sarah.

Jerry has been a member of ASPRS since 1976. He is currently serving as Secretary/Treasurer for 2004-2005 and is running for a fourth term. He has served previously as Director and President of Rolla Region (before it was renamed Central Region).

Director: Kevin Dobbs

Kevin Dobbs is a Research Assistant and Project Coordinator at the Kansas Biological Survey - Kansas Applied Remote Sensing Program. He has over four years experience in applied remote sensing and geographic information system research. His research experience includes use of geomagnetic and electromagnetic techniques for mapping kimberlite deposits, use of digital image analysis techniques for characterizing volcanic intrusive emplacement dynamics, use of high resolution satellite imagery to delineate and classify built structures in urban environments, watershed modeling, and use of bathymetric data to quantify reservoir sedimentation rates. Current research interests involve watershed modeling, watershed planning, image classification using genetic algorithms, object oriented image classification, and advanced 3-D visualization using GIS and remote sensing imagery.

Kevin has a BA in Environmental Studies from The University of Kansas and is currently completing his master's degree with the Department of Geography at The University of Kansas. He is also an active in the following professional, campus, and community organizations:

- Recycling and Resource Conservation Advisory Board, City of Lawrence, KS
- GIS Steering Committee, The University of Kansas
- American Society for Photogrammetry and Remote Sensing
- Mount Oread Geospatial Technologies Club
- National NEMO Network
- The Civil Air Patrol, Topeka Eagle Squadron
- Farpoint Asteroid Search Team, Northeast Kansas Amateur Astronomy League

Director: Jason Tullis

Jason A. Tullis is an Assistant Professor in the Department of Geosciences and is affiliated with the Center for Advanced Spatial Technologies (CAST) at University of Arkansas. He majored in geographic information systems (GIS) and remote sensing at the following institutions: Brigham Young University, BS (1999); MS (2001); University of South Carolina, Ph.D. (2003). While attending Brigham Young University he worked as a biogeographer for the Uinta National Forest where he was trained in photogrammetry, fire ecology, and field surveying techniques. While continuing his education at University of South Carolina he worked under the direction of Dr. John R. Jensen as an assistant and later Program Manager at the NASA Affiliated Research Center (ARC) where he was trained in digital image processing, GIS programming, and *in situ* surveying in conjunction with remote sensor data collection missions. Dr. Tullis has been a graduate instructor for *Principles of Remote Sensing* and *Introduction to Raster GIS*. Dr. Tullis is currently teaching *Remote Sensing of Natural Resources* at University of Arkansas and co-authoring *A Geospatial Primer* online course for University of Mississippi's Institute for Advanced Education in Geospatial Sciences (IAEGS). Dr. Tullis is conducting research in several areas, including: a) prediction of storm surge inundation boundaries using SLOSH modeling and LIDAR-derived DEMs, b) remote sensing-assisted spatial decision support system (SDSS) design for addressing red oak decline, c) predicted changes in temperate grassland productivity with global climate change, and d) recent multi-temporal land cover change detection in Arkansas. Dr. Tullis has published his work in *Photogrammetric Engineering & Remote Sensing* and in *Geocarto International*. He has contributed to book chapters in *Using Geospatial Technologies in Urban Environments* (in press) and in *Introductory Digital Image Processing* (3rd Ed., 2005).

Classifieds

The Region Board of Directors has created a Classifieds section in the newsletter. Region members seeking to hire or to be hired should send information to the Newsletter editor.

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Donors Wanted for a Central Region Corporate Scholarship.

The Board awarded two scholarships in 2003 and would like to continue this practice in future years. However, the principal in the Gene Lortz Scholarship Fund is sufficient to sustain one scholarship only. We would like to ask corporate members to consider donating to fund a new Central Region Corporate Scholarship to support students and future professionals in our region. Please contact our treasurer if you are interested in making a donation.

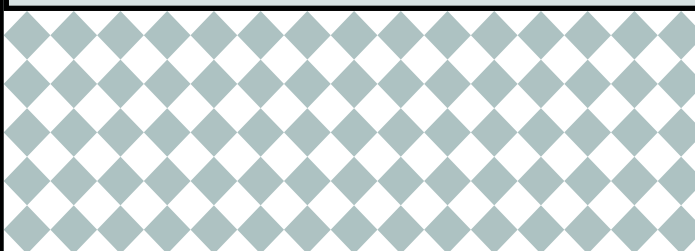
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Donors Wanted for the Francis E. 'Gene' Lortz Scholarship:

The Board awarded two scholarships this year and would like to continue this practice in future years. However, the principal in the scholarship fund is insufficient to sustain the current level and number of awards. We would like to ask our members to consider donating to this fund to support students and future professionals in our region. Please contact our treasurer if you are interested in making a donation.

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Central Region Ballot

NOTE: Only Regular, Associate, and Emeritus members are eligible to vote. If you receive this ballot in electronic format, you can either print and mail the paper back to Dr. Moskal or Mr. Rufe or you make your selections in the e-form, save the file, and e-mail it back to Dr. Moskal or Mr. Rufe. Those receiving the paper version will have to mark one of the two checkboxes and return the ballot to Dr. Moskal or Mr. Rufe.

National Director (vote for one)

- ☐ Barry Budzowski
- ☐ Jackson Cothren

Vice-President

- ☐ Philip Rufe

Secretary/Treasurer

- ☐ Jerry Wagner

Directors (vote for two)

- ☐ Kevin Dobbs
- ☐ Jason Tullis

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