



# THE IMAGING & GEOSPATIAL INFORMATION SOCIETY

## ~The Rocky Mountain Compiler~

**Issue 4**

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**Issued Quarterly**

*Newsletter of the Rocky Mountain Region of ASPRS, serving Montana, Wyoming, Colorado, and New Mexico*

### President's Message

*Happy New Year to Everyone in the Rocky Mountain Region of ASPRS!* We start the New Year with good news of a long sought after accreditation by the Council of Engineering and Scientific Specialty Boards (CESB) for the ASPRS Certification Program. ASPRS has a very well respected certification program for recognizing the experience and qualifications of professionals in Photogrammetry and Mapping Sciences. In fact, the ASPRS Certifications are now currently the only accredited credentials in the Mapping Sciences. Details of the press release news and quotes from **Mike Renslow**, Chairman of the Certification Committee and **James Plasker**, ASPRS Executive Director, can be found [online](#) and at the end of this newsletter. There are a number of categories for Certification through ASPRS, all requiring the passing of a rigorous test demonstrating subject knowledge and references from four peers in the application\_process:

**Provisional:** (Pass the test first and then gain experience before advancing to the next level)

1. Photogrammetrist
2. Mapping Scientist/Remote Sensing
3. Mapping Scientist/GIS-LIS

For more information regarding the always highly regarded and now accredited ASPRS Certification Program visit the [ASPRS website](#).

Again, Happy New Year and wishes for a Prosperous Year! I sense that this coming year will be one where all will benefit from an improved economy, new innovations in photogrammetry, remote sensing, GIS, and a market driven by the Geospatial sciences.

Your involvement with our Society promotes new ideas, and this is a great time to get more involved! Don't forget to nominate your colleagues for the Rocky Mountain Region Board. We are completely

**Full Certification:** (6 years of experience)

1. Photogrammetrist
2. Mapping Scientist/Remote Sensing
3. Mapping Scientist/GIS-LIS

**Certified Technologist:** (3 years of experience)

1. Photogrammetrist
2. Mapping Scientist/Remote Sensing
3. Mapping Scientist/GIS-LIS

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volunteer run and need fresh ideas and faces to keep the collaborations progressing and running smoothly.

If you can, save the date of Saturday, the 9th of February, on your calendars for a nice dinner and chance to network with other professionals in our region. The Rocky Mountain Region will be having our annual dinner and get-together at the Wellshire Inn on South Colorado Blvd in Denver. Cost is only \$30 per person for the meal! We hope to see you there! Additional details are provided below.

### Mark Stanton

President, ASPRS Rocky Mountain Region  
[mark.stanton@premiergeospatial.com](mailto:mark.stanton@premiergeospatial.com)

## Annual Dinner Announcement

Come celebrate our 64th year as an ASPRS Region on **Saturday, February 9th** at the ASPRS-RMR Annual Dinner Meeting. This year's meeting will be held at the renowned Wellshire Inn at 3333 S. Colorado Blvd, Denver.

*~ Please note: Reservations are required ~*

The annual dinner is a great networking opportunity! This year's program will include the presentation of scholarship awards, swearing in of new officers, and a guest speaker.

### Planned Agenda for the evening:

6:00pm - Arrival and Cocktails (Cash Bar)  
 6:45pm - Welcome, Introduction of 2013 Board,  
 Brief Year in Review  
 7:00pm - Dinner  
 After Dinner:  
 Guest Speaker  
 Introduction of Student Scholarship Winners  
 Synopsis of Research by Award Winners  
 Induction of 2013 ASPRS-RMR Board  
 Goals for 2013  
 9:00pm - Closing

The cost for dinner is **\$30 per person**. To make a **reservation** and **entrée selection** (Strip Steak, Vegetarian, or Salmon), please contact **Jeff Young** by 2:00pm (MST) on 3 February 2013, by phone at 303-815-2254 (OK to leave voice message) or email [jyoung@lizardtech.com](mailto:jyoung@lizardtech.com).

**\*\*Please bring your check to the dinner.**

*We look forward to seeing you there!*

## National Director's Report: Geospatial Capacity Building in Tribal America

This Fall I had the opportunity to attend the 2012 National Tribal GIS Conference held at the Southwestern Indian Polytechnic Institute (SIPI) in Albuquerque, New Mexico on November 5<sup>th</sup> to the 8<sup>th</sup>. The agenda was a very well-conceived mix of Tribal, federal and state government, and private sector presenters. I was particularly impressed with the representation of tribes across the US, including the Seminole, Zuni, Navajo, Ak-Chin, Muscogee, Stillaguamish, Coeur d' Alene, Haskell, and Cheesh'na. The Conference was organized by the National Tribal Geographic Information Support Center, which serves as a strong advocate of all things geospatial for Tribal organizations and educational hubs throughout the United States.

I was moved by several of the presentations which so explicitly connected the Tribal representatives to "place." Most of us in GIS make significant efforts addressing position and location concerns, but seldom have the mission to touch on the notion of place and the connective qualities and socio-cultural fabric that places provide. These tribal communities seem to have struck a balance between the deep rooted, multi-millennia old sense of place ... with the mechanics of position and location. By example, there was a presentation on Shiprock. Located in New Mexico, it is referenced in many Navajo legends, along with being a significant physiographic landscape feature.

These Tribal Nations face an array of staggering issues and challenges, including providing for adequate health and wellness resources for Tribal peoples, cultural resource protection, land records and mineral extraction royalties reconciliation, drought mitigation, infrastructure modernization, broadband deployment, low impact geo-tourism sustainability, and intellectual property protection. How are these Dependent Sovereign Nations facing these challenges? ... By:

- deploying geospatial technologies,
- building tribal-based skilled workforces, and
- educating tribal leaders and young tribal members on the benefits of GIS to sustaining tribal lands, natural resources and peoples.

I encourage you to participate in next year's Tribal GIS Conference to be more fully informed. Also, we look forward to seeing you at our Annual Dinner on February 9<sup>th</sup> and also in Baltimore on March 24<sup>th</sup> to 28<sup>th</sup>, 2013 at our Annual Conference, entitled "*Confluence by the Bay -- A Gathering of Geospatial Insights.*"

**Jeffrey M. Young**, National Director, ASPRS-RMR  
 303-815-2254 (cell), [jyoung@lizardtech.com](mailto:jyoung@lizardtech.com)

## Rio Grande Chapter News: Call for Board Nominations

Looking for a way to advance our Geospatial profession in New Mexico? The Rio Grande Chapter is now requesting and accepting nominations for 2013 Board member positions.

**Available positions include:**

- President**
- Vice-President**
- Treasurer**
- Secretary**
- Communications Director**
- Chapter Directors (4)**
- Student Chapter Director**

Please join the board and add your voice to our efforts to promote education and professional development in our own back yard. Your participation will also help strengthen the national ASPRS - "The Imaging and Geospatial Information Society" – in its efforts to broaden the societal benefits of our geospatial profession.

Please submit nominations by January 21, 2013 to: Nathan Kempf ([Nathan.Kempf@wilsonco.com](mailto:Nathan.Kempf@wilsonco.com))

*The election will be conducted In January-February 2013 and officers will be inducted at the ASPRS Rio Grande Chapter 2013 Spring meeting in April.*

## Welcome New Members!

- Chad Brodel
- Emily Freeh
- Gary Gegenfurtner, Jr.
- Heather Lassner
- Gary LaVanchy
- Austin Leavitt
- Jason Peeples
- Tillman Saylor
- Chris Sheil
- Tabatha Rose Waldron
- Amanda West

## 2013 Region Officers Election

It is time once again to elect the ASPRS-RMR Board of Directors for 2013. This is a golden opportunity for ASPRS-RMR members to participate in shaping the region, identifying initiatives, and setting the priorities for ASPRS-RMR. The slate of candidates and positions is listed below with their associated biographical sketches. As in years past, this election will be conducted by e-mail.

**2013 Positions and Nominated Candidates:\***

- President – 1 year – **Mark Stanton**
- Vice President – 1 year – **Mike Tuffly**
- Treasurer – 1 year – **Roger Hanson**
- Secretary – 1 year – **Chris Sheil**
- Regional Director (At-large/New Mexico) – 2 years – **Michaela Buenemann**
- Regional Director (GIS in the Rockies) – 2 years – **Tillman Saylor**
- Regional Director (Communications/Newsletter) – 2 years – **Michael Garner**

**\*Please Note:**

**No vote is required for the following positions:**

- National Director:** Jeff Young (3-year term, 2 years remaining)
- Regional Director (GIS in the Rockies Committee):** Niki Noon (2-year term, 1 year remaining)
- Regional Director (General / Montana):** Linda Vance (2-year term, 1 year remaining)

## Nominee Biographies

**President: Mark Stanton**, an ASPRS Certified Photogrammetrist, has over 20 years of experience in the fields of Geology and Remote Sensing. He has been working for the last 11 years with Premier Geospatial, Inc. (formerly known as Pixxures), in Arvada, CO. Mark has worked positions from Image Analyst to Aerial Photography Film Scanner to Orthophoto Project Manager and is now PremierGeo's Flight Operations Manager. Mark plans orthophoto project requirements, determines ground control requirements, flight parameters, manages training, aircraft positioning, sensor troubleshooting, maintenance, crew logistics, weather monitoring, mission data processing, aerial triangulation, surface model generation, orthophoto color balancing and production. When Mark is not working with remote sensing logistics, he may be found performing in the cello section with the Denver Philharmonic Orchestra, climbing, or cross-country

skiing somewhere in our Rocky Mountain backyard playground.

**Vice President: Michael Tuffly** is the Principal for Environmental Resource Inventory and Analysis LLC (ERIA Consultants, LLC) in Boulder, Colorado. He is also a Certified Mapping Scientist, Remote Sensing from the American Society for Photogrammetry and Remote Sensing (ASPRS), Certified Forester from the Society of American Foresters (SAF), Certified Senior Ecologist from Ecological Society of America (ESA), and a GIS Professional (GISP) from the Geographic Information System Certification Institute (GISCI). Mike holds a B.S. in Forestry, an M.S. in Natural Resource Management from Humboldt State University, and a Ph.D. in Forest Science from Colorado State University in Fort Collins, Colorado. Dr. Tuffly has over 25 years of experience in applied GIS and spatial modeling for federal, state, private, and nonprofit organizations. In addition, he has over 30 years addressing various fire, natural resource, and forest management issues in the United States and abroad. He is also an adjunct Professor in the Warner College of Natural Resources at Colorado State University in Fort Collins, Colorado.

**Treasurer: Roger Hanson** has been working in the geospatial industry for over 30 years and resides in Colorado Springs, Colorado. He received his Bachelor's Degree in Geography from the University of Northern Iowa in 1980 and has since worked in both the public and private sectors. Roger is a Certified Photogrammetrist and is also certified in the State of Oregon and Commonwealth of Virginia. He is also a Geographic Information Systems Professional (GISP). Roger currently serves on the ASPRS Rocky Mountain Region Board of Directors as Treasurer. At the national level, Roger has been active as a member of the ASPRS / CSBRS Licensure Exam Development committee since 2005. For the last 20+ years, Roger has served as either project manager or resource manager for several major geospatial firms. Since 2007, he has served as Director of Operations for Merrick & Company's Geospatial Solutions Business Unit.

**Secretary: Christopher R. Sheil** is a native of Colorado, having grown up in Lakewood. He graduated from the University of Northern Colorado in 2007 with a Bachelor of Arts degree in GIS. While a full-time student, Chris worked with Pepsi as a merchandiser while also holding an internship at the North Front Range Metropolitan Planning Association (NFRMPO) in Fort Collins, Colorado. At the NFRMPO he assisted in the execution of freight planning for the 2035 Regional Transportation Plan,

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as well as the completion of a Human Services Plan. Just prior to graduation from the University of Northern Colorado, Chris was offered a full-time position at the NFRMPO as a Transportation Planning Technician.

In 2009 Chris left Fort Collins to start his family back home near Denver. He began working for MapMart.com (IntraSearch, Inc.), a full service aerial and satellite topographic mapping business in March of 2009 as a member of their sales team. Working in sales allows him to work closely with remote sensing data users in the geospatial industry and allows for exposure to endless geospatial markets while providing a full range of services, including satellite imagery, aerial photography and survey, contour vectors, and custom digital elevation model generation.

**Regional Director (At-large): Michaela Buenemann** is an Assistant Professor of Geography in the Department of Geography at New Mexico State University (NMSU). Before moving to her current position in 2008, she taught at the University of Oklahoma, James Madison University, and the University of Arizona. She earned her Ph.D. in geography from the University of Oklahoma in 2007. Her research focuses primarily on integrating remote sensing, geographic information systems, and spatial modeling for the monitoring and assessment of land changes in dry lands, including both more subtle and gradual land modifications such as woody plant encroachment and more obvious and rapid land transformations such as urbanization. She is particularly interested in quantifying the spatio-temporal dynamics of land changes and their impacts on land management sustainability. She also welcomes collaborative efforts in other research areas, and some of her most exciting recent work has been on the landscape ecology of sylvatic dengue and chikungunya viruses and their mosquito vectors in western Africa. Her teaching includes courses in the areas of geographic information science and technology, human-environment relationships, and physical geography (Cartography & GIS, Introduction to Remote Sensing, Advanced Remote Sensing, Geospatial Techniques for Natural Resource Assessments, Map Use, Physical Geography, Biogeography, Field Methods, Southwestern Environments, Environmental Geography, Dry Lands, U.S. National Parks).

**Regional Director (GIS in the Rockies Conference): Tillman Saylor**

Growing up in suburban Pittsburgh, PA, Tillman Saylor's interest in the geospatial world emerged out of a love of the outdoors, travel, and experiencing new places. Whether climbing a tree to get a better aerial view of a stretch of water for fishing, insisting

on following a route on a street map during family road trips, or using scissors and scotch tape to mosaic National Geographic maps together on his bedroom wall, he was already thinking geographically from a young age. In 2003 Tillman graduated from Montana State University with a B.S. degree in Geography, focusing on GIS.

Tillman started his professional career working as an imagery analyst for MDA Federal (formerly Earth Satellite Corp) in Rockville, MD. Working on the GeoCover project, Tillman was active in production environments involving both the orthorectification and classification of Landsat images spanning the globe across several decades. After two years with the GeoCover program and having moved to a Team Leader position, Tillman transitioned to become the Manager of Customer Service for MDA Federal's Image Processing department, providing sales, marketing and product fulfillment support for commercial remote sensing products and services. During this time, throughout 2006-2007, Tillman completed a Master's Degree in Information Management from the University of Maryland's iSchool in College Park, MD.

Feeling an urge to move back out West after 7 years in the Washington, DC area, Tillman accepted a position as Inside Sales Manager with Spatial Energy in Boulder, CO in late 2010. This opportunity offered deeper insight and experience into the oil & gas, energy and related sectors, as well as web mapping services. Building on this background, Tillman came to MapMart / IntraSearch in Lone Tree, CO in late 2012 to fulfill a role as Manager of Cloud Solutions, working with a wide spectrum of clients to commercialize cloud-based data management and delivery offerings.

Ten years in the industry have taught Tillman one thing – things change, and fast. As a result his primary professional goal is to understand how the creation, utilization, sharing, demand for and value of geospatial information changes over time as the information age and our industry's place in it continue to evolve.

**Regional Director (Communications, Newsletter):**  
**Michael Garner, GISP, CFM** serves as a Technical Manager for Michael Baker Jr. at their Lakewood, CO office. In his role, Mike provides both GIS and Emergency Management support to various federal, state, and local clients. He also manages Baker's GIS department, a role he has held since 2004. Prior to that, Mike worked out of Baker's Alexandria, VA office. Mike earned his Master's degree in Crisis, Disaster, and Risk Management from The George Washington University. His undergraduate work at The Pennsylvania State University focused on Earth Sciences and Geographic Information Systems. In his spare time, Mike enjoys all the outdoor activities and wonders that Colorado has to offer.

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## Region Scholarships Awarded

Congratulations to the winners of the 2012-2013 ASPRS-RMR Scholarship Awards!

### **1st Place Winner (\$1,000)**

**Su Zhang** – Ph.D. student, Department of Civil Engineering and M.S. student, Department of Geography and Environmental Studies at the University of New Mexico; studying to be a GIS Technician and Remote Sensing Specialist; research topic: *“LiDAR-based Pavement Surface Distress Detection and Assessment.”*

### **2nd Place Winner (\$750)**

**Gary Thomas LaVanchy** – Ph.D. student in the Department of Geography at the University of Denver; pursuing a career as a University Professor; research topic: *“On the Ground in Nicaragua: Field Referencing to Assist in Estimating Groundwater Recharge.”*

### **3rd Place Winner (\$750)**

**Rebecca Richman** – M.S. student in the Department of Geography at New Mexico State University; studying Applied Geography and Biology for a career as a Geographer; research topic: *“Analysis of the Spatial-Temporal Distribution of the Mosquito Vectors of Sylvatic Dengue and Chidungunya Viruses [in Senegal].”*

### **4th Place Winner (\$500)**

**Charlie Jackson** – Undergraduate student in the Department of Geography at New Mexico State University; studying for a career in remote sensing science, geomorphometry, and object-based image analysis (OBIA); research topic: *“Object-oriented GIS: A Flat Ontology of Pixels.”*

### **5th Place Winner (one-year ASPRS Student Membership)**

**Jamie D. Fuller** – Ph.D. student at Colorado State University; studying in a multidisciplinary degree program in Ecology and considering a career as a University Professor; research topic: *“Presenting Spatial Land-change Results to an Indigenous Community in Papua, New Guinea.”*

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## International LiDAR Mapping Forum

February  
11-13, 2013  
in Denver



Long established as the premier LIDAR event, the ILMF13 Conference Program is now online and [online registration is now open](#).

This is a three-day technical conference and exhibition focused on airborne and bathymetric LIDAR, with a particular emphasis on mobile mapping systems.

### Innovative Conference

The highly acclaimed international conference offers an opportunity to learn about the latest advances in technology and hear about industry changes and developments first hand from industry experts. Find out more about data capture systems, data fusion/classification and processing techniques, and the increasing integration of key technologies. Listen to case studies highlighting actual experiences and lessons learned.

### International Exhibition

Running alongside the conference is an exhibition of 70 system and component manufacturers, operators, and service companies expected to demonstrate new LIDAR products and a wide range of new technologies and services. Exhibitors include airborne, terrestrial and bathymetric LIDAR, complementary sensor manufacturers, survey service companies, data processing, GIS and management specialists, and the latest mobile mapping vehicles.

### Basics to LIDAR

Delegates are able to attend our workshops presented by industry manufacturers, aimed at providing novice operators, project and asset managers, and potential purchasers of equipment with an understanding of the basic principles and fundamental benefits associated with LIDAR. These workshops are hosted by exhibiting companies and held alongside the ILMF conference. Delegates who are registered for the conference are able to attend these workshops free of charge.

### Mobile Mapping

Mobile Mapping Vehicles will be parked directly outside the front of the conference venue, providing easy access for all visitors wishing to view the latest technological developments in mobile mapping.

## ASPRS Certification Program Accredited by CESB

The professional and technologist certification programs have each received accreditation from the Council of Engineering and Scientific Specialty Boards (CESB). CESB voted to approve accreditation for the professional Certified Photogrammetrist (CP), Certified Mapping Scientist/Remote Sensing (CMS/RS), and Certified Mapping Scientist/GIS-LIS (CMS/GISLIS) programs, along with three related technologist certification categories – Photogrammetric Technologist, Remote Sensing Technologist, and GIS/LIS Technologist.



“Accreditation of the ASPRS Certification Programs is a major accomplishment and significantly elevates their authority,” said **Michael Renslow**, chair of the ASPRS Evaluation for Certification Committee. “Those individuals holding ASPRS Professional and Technologist Certification have personally passed a rigorous review, and now the Programs have also passed a demanding review which places them on par with other important nationally accredited certifications in engineering and related scientific fields. The ASPRS programs are currently the only accredited geospatial certifications in the United States.”

During the review process leading to accreditation, CESB required ASPRS to make a few minor changes to the Programs, including: shifting the continuing education requirement from the previous proprietary points-based system to Professional Development Hours (PDH); increasing the PDH requirement from 75 hours to 100 hours for the professionals and 50 hours to 60 hours for the technologists; re-designating the “provisional” certifications, designed to assist students during their transition to professional status, in order to avoid using the term “certified”; and isolating any training related to the Program. However, the strong foundations of the existing certifications have been retained and enhanced.

“The overall strength of the ASPRS Certification Program was previously well understood and respected in the geospatial community, and these changes only serve to further improve the Program” said ASPRS Executive Director **James Plasker**. “Accreditation also brings increased credibility to those individuals holding the various levels of

ASPRS certification, with the result that the value and importance of their credentials is further enhanced” he added.

CESB is an independent, voluntary membership body created for its member organizations who recognize, through specialty certification, the expertise of individuals practicing in engineering and related fields. CESB, as an accrediting body, provides:

- basic criteria and guidelines for the establishment and operation of specialty certification programs for engineers, technologists, technicians, and related scientific,
- it serves as a recognizing body for organizations that certify individuals,
- it represents its members in communications and, when appropriate, in negotiations with public and private agencies, groups, and individuals with respect to matters of common interest,

- and, it informs employers, specifiers, public officials, the public, and engineering and related practitioners of the benefits of specialty certification.

CESB awards accreditation in three-year epochs; the ASPRS accreditation runs through December 31, 2015.

Information regarding the requirements and guidelines for ASPRS Certification [can be found online](#).

Founded in 1934, ASPRS is an international professional organization of 6,000 geospatial data professionals. ASPRS is devoted to advancing knowledge and improving understanding of the mapping sciences to promote responsible application of photogrammetry, remote sensing, geographic information systems and supporting technologies.