

## THE IMAGING & GEOSPATIAL INFORMATION SOCIETY

## ~The Rocky Mountain Compiler~

Issue 3 Fall 2006 Issued Quarterly

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

# Register Now for the ASPRS-MAPPS Fall Conference

"Measuring the Earth II: Latest Developments with Digital Surface Modeling and Automated Feature Extraction" will be held November 6-10, 2006 in San Antonio, Texas.

The American Society for Photogrammetry and Remote Sensing (ASPRS) and the Management Association for Private Photogrammetric Surveyors (MAPPS) are hosting this third in a series of successful conferences on the latest technologies in acquisition and applications in remote sensing, mapping, and GIS and the latest developments and implementation of automated operations.

The Preliminary Program is now available online at: <a href="https://www.asprs.org/fall2006/program.htm">www.asprs.org/fall2006/program.htm</a>.

This conference once again offers a mix of general sessions, breakout technical sessions, and posters on project acquisition and applications, automated feature extraction, visualization, simulation, research and development, hazards, and more. Combined with an exhibit hall filled with the latest products in the industry, this is a conference you MUST ATTEND.

**Lewis Graham**, President, GeoCue Corporation, is the keynote speaker. Other general sessions cover Automated Feature

Extraction, Disaster Response/Homeland Security, and the Future Directions of DEM.

ASPRS' well-recognized topical workshops will also be offered on November 7 & 8, another great reason to attend this conference.

Go to <a href="www.asprs.org/fall2006/registration.htm">www.asprs.org/fall2006/registration.htm</a> to register online. Please register today and make your hotel reservations online at the Crowne Plaza Riverwalk Hotel <a href="www.asprs.org/fall2006/hotel.htm">www.asprs.org/fall2006/hotel.htm</a>.

### **ASPRS-RMR President's Message**

### In Search of the Next Big Idea...

I finished my last message to you with the thought..."Collaboration is our legacy and our future" which has led me to several questions regarding the future of our professional community. Recently I attended a Transportation Research Board meeting

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where there was a good deal of discussion on key areas of research and what will the footprint of the remote sensing and photogrammetry profession be in 20 to 30 years. With this as a context I would like to lend a perspective on the future of remote sensing and photogrammetry.

First, to understand the future we should reflect on the past. Let's say 30 years ago, in a time filled with very basic drafting tools, pin-bar registration was viewed as innovative, blue lines were a regular means to edit and duplicate map information, the 7.5 minute quadrangle was the default base-mapping standard, and something called CAD was just emerging to a level to be viewed as commercially viable however primitive by today's standards. We were indeed in a "pre-arc era" where our professional community was dominated by labor-intensive workflows.

And now, the present, we remain labor intensive although one might argue that improvements have occurred and as a whole we are better, faster and cheaper...hold that thought because that itself will require closer examination in a future communication. Our products and associated analyses continue to rely on human interpretation and oversight to validate results of automated and semi-automated workflows. Yes improved tools, techniques and methodologies have been introduced but the question is, are these simply incremental improvements or are they breakthroughs in the wav we problems...the way we think...the way we present our results. Where will the next "big idea" emerge--collection, cataloging, analysis, synthesis, or interpretation? What if all objects were intelligent? What if pixels morph to "v-pixels" (pixels with vector qualities) and vectors adapt and evolve to become "p-vectors" (vectors with pixel qualities). airborne sensors are refined to a resolution where a pixel in effect becomes a point? (We are already there with LIDAR.) Each of these points with a unique globally recognized and recoverable location and geospatial content, and with a context-based fingerprint such as a geospatial "DNA"...What is coming? Content addressable pixels, object managed storage, and maybe a return to a hierarchical data model which accounts for nonhierarchical external relationships.

Our professional community needs to endeavor to bring measurable value in context to real world issues. Global forces are knocking at our door and we as a profession need to develop a keen aptitude for global situational awareness. Our workforce of the future needs to understand the "what" and the "why" of a problem just as much as the "how to". We

need to lead together to address these very big problems with very big ideas such as climate change and global habitability.

In the past, human kind dealt with the Ice Age .... maybe now we need to plan ahead for the Heat Age...basic guestions like where should humans settle or migrate need to be considered. What behavior can we change today that will slow-down that process? How do we deal with severe weather? Is a major global migration going to be an appropriate response? Will we stay in place, so to speak, and modify our habitat to accommodate climate change? Will political and religious issues overshadow sound environmentally based sustainable growth decisions? Will fossil fuel dependency continue to dictate our approach to everyday life? If we as a professional community continue to refine our tools, methods and workflows ...our identity will become marginalized by other professional communities who use geospatial technologies to front-on address domain based problems in the life, social and physical sciences and associated engineering fields.

Yes we must continue to collaborate to improve processes, methods, techniques, and tools. In this regard external collaboration is essential. Let's be willing to understand what we know and what we don't, and to systematically define our differentiation as a group of professionals. Let's proactively plan to collaborate rather than that being a professional afterthought only occurring as regulated or legislated. At the same time we need to collaborate and bring value to solving the big problems with big ideas and lead the global community to the "Geo-Spatial Age"

**Jeff Young** 

President, ASPRS Rocky Mountain Region

## **National Director's Report**

Before writing this article, I went back and looked at some of my writings from years past. After awhile, the articles look much the same. We (collectively) plan and prepare for the upcoming meeting (wherever that is), we report status from the last meeting, and we discuss aspects of our profession and the governance of our society. While one is tempted to call all that activity mundane, it is the essential pulse of our profession, and our meetings and conventions are the critical point of interface for us. After all, getting out of the cube you call an office, and interacting with your professional peers somewhere other than the office is an essential component of keeping your skills current and your creative juices flowing. This past week was GIS in

the Rockies, and from what I have heard, was a great opportunity to get stimulated again (Unfortunately, I missed it, as I was trapped in my cube all week writing a proposal). I'll catch up, really I will!

At the National level, ASPRS is planning for the Fall Specialty Conference with MAPPS. This year the fall conference is in San Antonio, November 6-10. It already looks to be a very good conference, and in a great location. If you haven't been to the Riverwalk in San Antonio, this is as good an invitation as you'll ever get!

Next spring, (May 7-11) the Annual Conference will be in Tampa, another very desirable location!

Administratively, ASPRS continues to be very healthy financially, with excellent administration from Jim Plasker and the staff at headquarters. year, we have several new publications coming out, including an update to the Manual of Remote Sensing and an ASPRS Manual of GIS. At the summer ExCom (Executive Committee) meeting in Salt Lake City, items of discussion included the future of Landsat (as usual), upcoming meetings (Ottawa next fall!), and a variety of coordination activities. President Kari Craun and Past-President Karen Shuckman have facilitated a series of meetings to gather lessons learned from the storms of 2005, and how our profession can be better utilized in the response. The draft document of recommendations was posted for review in early August, and an article will be published in PE&RS. In addition, ASPRS will host a discussion forum on this subject on November 8 in San Antonio, Texas in conjunction with the ASPRS/MAPPS 2006 Specialty Conference. This will be an informal discussion of current (2006) hurricane season activities and changes that have taken place in the past months. many of which are directly related to the ASPRS recommendations.

### **Allen Cook**

National Director, ASPRS Rocky Mountain Region

### **Nominations for Board Elections**

The ASPRS Rocky Mountain Region needs your active and engaged participation! Being a Board Member is just one of many ways to support the continued expansion of the geospatial community in the Rockies. We are all living through some very challenging professional times in the geospatial community—worldwide, in the US, and in our region. Photogrammetry and remote sensing technologies are experiencing unprecedented public visibility, and

at the same time great technological innovation. Board membership allows individuals to lead the convergence of these compelling technologies, connect with our peers, communicate to our membership, and contribute to these kinds of collaborations.

Please consider running for the 2007 Board of Directors, and contact any of the Regional Officers listed on our Web page about your interest and any questions you may have. In the Winter Newsletter, we will publish the nominated slate of officers to be presented to the membership for a vote...so take action today!

For more information please contact:

### **Terry Ryan**

Vice-President, ASPRS Rocky Mountain Region 303.903.3604 or at tryan@lizardtech.com

# Rocky Mountain Region 2007 Scholarship Announcement

In its continuing efforts to support and build awareness for the Remote Sensing & GIS sciences, the Rocky Mountain Region of ASPRS is proud to announce its academic scholarships for 2006-2007. If you'd like to obtain additional information or details please visit <a href="https://www.asprs-rmr.org">www.asprs-rmr.org</a> to learn more about the Scholarship Program.

The Rocky Mountain Region (RMR) of ASPRS offers scholarships to deserving undergraduate and graduate students every year. The scholarships are intended for students throughout the Rocky Mountain Region (Colorado, Montana, New Mexico, and Wyoming) who are demonstrating excellence while pursuing careers in the fields of Photogrammetry, Remote Sensing, and Geographic Information Systems (GIS) or related disciplines. Both undergraduate and graduate students of any third-level educational institution within the four-state region who are pursuing careers in these disciplines are eligible for the awards.

The deadline to submit applications is in the fall every year and the winners are chosen in early or mid-December. Awards are presented at the ASPRS-RMR Annual Dinner Meeting in January. We've consistently offered thousands of dollars in annual scholarships and this year will be no different!

Preference is given to those studies that apply sound scientific principles to practical applications and/or to those presenting their work at an ASPRS sponsored conference. Award of both the Undergraduate and the Graduate scholarships is based on academic merit (that is, the application form does not request any personal financial data).

For more information, please contact **Terry Ryan**, Vice-President, ASPRS-RMR at 303.903-3604 or at <a href="mailto:tryan@lizardtech.com">tryan@lizardtech.com</a>.

# Funding Doubled for Three National ASPRS Scholarships

**ASPRS** Foundation President Dr. **Thomas** Lillesand announced that the Foundation Board of Trustees has approved increased prize amounts for three ASPRS Scholarships to be awarded in 2007. Prizes for the Osborn and Wolf Scholarships and the Colwell Fellowship have been doubled. Due to an outstanding response from ASPRS members and others in the geospatial community, scholarships are now fully endowed at the higher "The ASPRS Foundation gratefully levels. acknowledges all of the donors who fund these scholarships, which enable students of the profession to further their studies. Additionally, through their support, donors have affirmed the goals of the Foundation and the Society to continue support for educational endeavors in the geospatial sciences," stated Dr. Lillesand.

## ROBERT N. COLWELL MEMORIAL FELLOWSHIP - Now valued at \$4,000

The purpose of the Award is to encourage and commend college/university graduate students or post-doctoral researchers who display exceptional interest, desire, ability, and aptitude in the field of sensing or other related geospatial information technologies, and who have a special interest in developing practical uses of these technologies. Over the course of more than a half century, Robert Colwell developed a reputation as one of the world's most respected leaders in remote sensing, a field that he stewarded from the interpretation of aerial photographs during World War II, to the advanced acquisition and analysis of many types of geospatial data from military and civilian satellite platforms. His career included nearly 40 years of teaching and research at the University of California, Berkeley, a distinguished record of military service reaching the rank of Rear Admiral, and prominent roles in private industry and as a consultant for many U.S. and international agencies. Among the many awards bestowed upon Dr. Colwell, he had the distinction of being one of 25 ASPRS Honorary Members chosen from the Society's more than 6,000 members.

## PAUL R. WOLF MEMORIAL SCHOLARSHIP - Enlarged to \$1,000

The purpose of the Award is to encourage and commend college students who display exceptional interest, desire, ability, and aptitude to enter the profession of teaching Surveying, Mapping, or Photogrammetry. Recognized nationally and internationally, **Paul Wolf** was an outstanding educator and practitioner of Surveying, Mapping, and Photogrammetry and a great friend of the Society. As author, teacher, and mentor, Dr. Wolf made significant educational and academic contributions to these fields.

## KENNETH J. OSBORN MEMORIAL SCHOLARSHIP - Increased to \$1,000

The purpose of the Award is to encourage and commend college students who display exceptional interest, desire, ability, and aptitude to enter the profession of surveying, mapping, photogrammetry, geospatial information and technology. addition, the Award recognizes students who excel at an aspect of the profession that Kenneth Osborn demonstrated so very well, that of communications and collaboration. Recognized nationally and internationally, Osborn was an outstanding practitioner of surveying, mapping, photogrammetry, and geospatial information and technology, and a great friend of ASPRS. As a professional cartographer with the U.S. Geological Survey, Osborn made significant contributions to these fields.

Applications for the 2007 scholarships are due to ASPRS by December 1, 2006. Forms are available at www.asprs.org/membership/scholar.html.

Founded in 1979, The ASPRS Foundation, Inc. is an independent 501 (c) 3 organization established to provide grants, scholarships, loans and other forms of aid to individuals or organizations pursuing knowledge of imaging and geospatial information science and technology, and their applications across the scientific, governmental, and commercial sectors. The Foundation is the primary funding source for all non-sponsored awards and scholarships recognized by the American Society for Photogrammetry and Remote Sensing.

### **Invitation to New Student Chapters**

In a continuing effort expand our outreach and meet the main objectives of the ASPRS Rocky Mountain Region (RMR), the current board of directors would like to take this opportunity to invite educational institutions and faculty advisors to consider creating and building ASPRS Student Chapters at their schools. This invitation is open to all institutions with new and/or existing Photogrammetry, Remote Sensing & GIS programs. This is an ideal opportunity for students who wish to become more active in their educational and professional lives by participating in ASPRS.

By starting a student chapter with the RMR, students and educators alike will have access to technical presentations, job fairs, discounts on ASPRS publications, networking opportunities, and eligibility for over \$20,000 in National and Regional awards, scholarships, and fellowships.

If you'd like to inquire about existing student chapters within the RMR, or to obtain a Petition Form in order to begin the process at your institution please contact **Terry Ryan**, Vice-President, ASPRS-RMR at 303.903.3604 or at tryan@lizardtech.com.

### **Welcome New Members!**

Ms. Aimee K. Blanchard

Mr. Thomas M. Gearing\*

Ms. Carrie Guiles\*

Ms. Joanna L. Herring\*

Mr. Sean H. Morgan

Mr. Juan Paritsis\*

Mr. Rajendran Mohan Rao

Mr. Patrick E. Robinson

Ms. Christine M. Sommers-Austin

Ms. Jennifer L. Stefanacci

Ms. Jennifer D. Watts\*

Ms. Elizabeth Zeiler

# Needed... Volunteers for the Fall MAPPS-ASPRS Specialty Conference

If you are a student at an accredited college or university and would like to attend the 2006 MAPPS/ASPRS Specialty Conference without paying the required Registration fee, consider assisting with the Conference. By helping the Conference Committee for only 15 hours during the week of November 6-10, 2006, you will be able to attend — depending on your assignments — the General Sessions, and Technical Sessions, visit the Exhibit Hall, and enjoy the Welcome to San Antonio Reception and the Exhibitors' Reception. This is a great opportunity to learn more about the geospatial world, meet some of the top names in the industry and explore job possibilities. If you are interested in employment in the industry, a special area in the

Exhibit Hall will be set aside for résumé postings. Be sure to bring multiple copies with you.

To serve as a volunteer, go to the conference website at <a href="www.asprs.org/fall2006/">www.asprs.org/fall2006/</a>, click on "Volunteer Information" on the left side of the page, and complete the application. Please include three choices for assignments each day in order of preference ("1" being first), and fax to the attention of the Conference Committee Volunteer Coordinator listed below:

#### Haluk Cetin, PhD

Associate Professor of Geosciences Research Associate Mid-America Remote Sensing Center (MARC) 104A Wilson Hall Murray State University Murray, KY 42071

Fax: 809-762-4417 or 809-762-3276 E-mail: Haluk.Cetin@MurrayState.edu

Please include MAPPS/ASPRS Specialty Conference in the Subject Line of all e-mail messages and send all fax applications to the attention of **Dr. Haluk Cetin**.

Assignments will be made on a first come basis and cannot be guaranteed. For more information contact the Conference Volunteer Coordinator or visit www.asprs.org/fall2006.

### Job Postings!!!

Be sure to check out the Job Listings page, updated weekly, on our RMR web site. We also have a supplemental listing of companies with web site links. This is a helpful resource for those seeking a new job! We currently have 24 great jobs posted. There are many new opportunities out there!! Check it out!!

Check out the Rocky Mountain Region Jobs Listings at <a href="https://www.asprs-rmr.org/jobs.html">www.asprs-rmr.org/jobs.html</a>

## ESRI 2006 Homeland Security GIS Summit

October 23–26, 2006, Colorado Convention Center, Denver, Colorado

The second annual ESRI Homeland Security Summit will take place October 23–26, 2006, in Denver, Colorado. Participants will have the opportunity to meet and discuss frameworks for enterprise-level deployment of geospatial capabilities, data sharing, and more.

<sup>\*</sup> denotes a new student member

#### Who Should Attend?

The conference is for government officials, elected leaders, utility professionals, and business executives who establish priorities and set directions for their organizations. Essential personnel should attend to learn about current projects, information networks, and collaborative opportunities including:

- Agriculture and food safety professionals
- Airport safety managers
- Emergency Operations Center managers and directors
- · First responder leadership
- Health directors
- IT managers
- · Law enforcement managers
- · Petroleum operations chiefs
- Public safety managers
- Public transit directors
- Risk management officials
- School safety officials
- State and local government executives
- Threat assessment analysts
- Transportation fleet managers
- University facility directors
- Utility operation executives
- · Water safety officials

### Concurrent Event

The ESRI Health GIS Summit will be taking place concurrently with the Homeland Security GIS conference.

While a separate conference, there may be opportunities to connect with those from agencies or departments who share mutual interests in collaborative methods.

Learn more on registration, accommodations, and paper submissions. Information will be continually updated on the conference Web site.

If you have any questions, please contact us at hssummit@esri.com

# Invitation to Participate in Remaining Board of Directors Meetings!

We still have three more RMR Board meetings for the 2006-year. The RMR-ASPRS Board of Directors (BOD) would love to see more involvement from our membership. Now is a good time to be involved, there will be new positions available on the BOD for the 2007-year. We would like to see everyone involved! October 20, 2006 - Quarterly Meeting @ Sanz and WebEx

November 10, 2006 - WebEx December 8, 2006 - WebEx

# Call for Papers - 2007 International LIDAR Mapping Forum (ILMF)

Baltimore, MD. Feb 12-13, 2007

The ILMF is now seeking submissions of presentations and technical papers for the ILMF 2007 Annual Meeting to be held February 12-13, 2007 in Baltimore, Maryland, USA at the Baltimore Marriott Waterfront Hotel.

The ILMF has become the premier event for the LIDAR industry. This "summit" is the gathering of industry leaders, pioneers, experts from government, academia, and professionals from myriad industries looking to invest in, and benefit from, LIDAR technology and services.

The ILMF 2007 meeting will include a full day of parallel breakout and plenary sessions - Submissions are requested for the following:

### Breakout Sessions - Monday, February 12

Aerial LIDAR Mapping: With over ten years of practical application, still many opportunities and obstacles abound. What are the technical, practical and business issues facing the future of aerial LIDAR mapping? Submissions should focus on the latest trends, technologies and opportunities, as well as "Intro to LIDAR" for newcomers to the technology.

**LIDAR Bathymetry:** A half-day session will be devoted entirely to LIDAR bathymetry. Contributions are welcomed from individuals and organizations engaged in this particular field of LIDAR mapping.

**LIDAR Data Processing:** The ILMF is inviting submissions from software vendors and LIDAR data users to share their ideas and experiences with the latest tools, techniques and challenges related to the processing, handling, managing, distributing and adding value to LIDAR data.

Sensor Fusion: Submissions are invited regarding the fusion of LIDAR and other data, particularly terrestrial laser scanning, close-range photogrammetry, digital cameras, multispectral and hyperspectral imagery, and IFSAR. The resulting products are becoming a critical source of value added or "intelligent" data. A brief overview of the various sensor types will also be presented.

### Plenary Sessions - Tuesday, February 13

Submissions for the Plenary Sessions are invited on any subject related to LIDAR mapping, although preference will be given to submissions addressing any of the following topics or subjects: The State of the Industry \* Urban 3D Modeling \* Data Quality Assurance and Control \* LIDAR Mapping Applications and Projects \* International LIDAR Mapping Operations.

#### **Submission Guidelines:**

- 1. Abstracts should be about 200 words and must be submitted no later than November 10, 2006 to the ILMF Organizer (organizer@lidarmap.org).
- 2. If accepted, final presentations should be in MS PowerPoint or similar format. The ILMF reserves the right to publish presentations in a record of the proceedings.
- 3. Presentations should not be commercial in nature and it is suggested that they should not include more than one slide describing the presenting organization or its products/services.

#### Registration:

Online registration will be available soon at <a href="https://www.lidarmap.org/registration.html">www.lidarmap.org/registration.html</a>: \$375 for early registration ends December 1, 2006; registration after December 1 is \$490. Full registration provides access to all conference sessions and materials; complete conference proceedings; access to all sponsored social events, meals, breaks and reception.

The International LIDAR Mapping Forum (ILMF) is committed to the advancement of education and knowledge of LIDAR mapping technology and applications. To further this goal, the ILMF holds an annual meeting that brings together LIDAR professionals from around the world to network and learn about the latest technology, issues affecting LIDAR mapping and future opportunities.

For additional information, please contact Roland Mangold, conference organizer at 303-298-9847 ext 333 or by email at <a href="mailto:organizer@lidarmap.org">organizer@lidarmap.org</a>.

# Premier Issue of New Student Newsletter Is Available Online

ASPRS is undertaking new activities to improve its service to student members. One effort is the publication of an electronic newsletter full of information specifically useful to students. The first issue, two pages (764 Kb pdf) is available at <a href="http://www.asprs.org/student\_news/2006\_fall.pdf">http://www.asprs.org/student\_news/2006\_fall.pdf</a> and includes links to tutorials in remote sensing and

photogrammetry, a map and list of student chapters with advisors, information about student discounts on books in the ASPRS bookstore, as well as other information.

A second new development is the creation of a Student Advisory Council (SAC). All students attending the Annual Meeting are welcome and encouraged to attend the Council meeting. See the newsletter for more information about the SAC and how to get involved.

## **URISA and MAPPS Salary Surveys**

Two salary surveys of interest to ASPRS members are due to be completed by the end of the year. Both URISA (Urban and Regional Information Systems Association) and MAPPS (Management Association for Private Photogrammetric Surveyors) conduct a survey every three years.

URISA's salary data is presented according to region, job title, type of organization, experience level and more.

The 2006-2007 edition of the URISA Salary Survey will answer these questions (and more):

- How have salary levels changed since 2003?
- Have GIS departments increased in size?
- Are more non-technology skills being required?
- What GIS software proficiencies are necessary?
- What benefits do organizations typically offer?
- How long is the average work week?

Responses were collected through 1 October and are now being analyzed. Pre-publication sale price is \$79 for URISA members and \$169 for non-members.

The MAPPS survey collects Non-Cash Benefits and Salary data from MAPPS member firms. The resulting report provides a comprehensive overview of the major salary data and benefit programs for eight pay levels for technical positions from entry level through middle management. Employee benefits include paid time off; health, vision and dental coverage; life insurance; short and long term disability plans; bonus programs; savings plans and much more. The results are reported on a consolidated basis, as well as by size of firm and geographic region. The report will be available in January 2007 and will include a comparison of significant data from the 2000 and 2003 surveys for both benefits and salary.

## **ASPRS – Rocky Mountain Region: 2006 Officers**

President	Jeff Young SANZ Geospatial Solution Group Englewood, CO	Work: 303-495-6334 Fax: 303-814-0693 jyoung@sanz.com
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Secretary	Victoria Provenza Spatial Technologies and Analytics Centennial, CO	Work: (303) 770-8251 Victoria@staaco.com
Treasurer	Mark Hess Ocean Imaging Inc Littleton, CO	Work: (303) 948-5272 Fax: (303) 948-5272 mhess@oceani.com
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Regional Director (GIS in the Rockies)	Trent Casi Harris Corporation Golden, CO	Work: (303) 215-1700 tcasi@harris.com
Regional Director (GIS in the Rockies)	Roland Mangold Spectrum Mapping, LLC Denver, CO.	Work: (303) 298-9847 Fax: (303) 292-9279 rmangold@specmap.com
Regional Director (Communications/Newsletter)	Jennifer Whitacre Spectrum Mapping Denver, CO	Work: 303-298-9847 Fax: 303-292-9279 jwhitacre@specmap.com
Regional Director (General)	David Opitz Visual Learning Systems, Inc Missoula, MT	Work: (406) 829-3593 opitz@vls-inc.com
Regional Director (At Large)	Richard W. Cooke ITT Visual Information Solutions Boulder, CO	Work: 303-413-3964 Fax: (303) 786-9909
Past President & GIS in the Rockies Advisory Board	Jaymes Pardue Infotech Enterprises America, Inc.	Work: 303-384-1925 Fax: 303-384-1926 jpardue@infotechsw.com
Communications Coordinator/Webmaster (not on the board)	Sheila Pelczarski Denver Water (MC 414) Denver, CO 80204	Work: 303-628-6511 Fax: 303-628-6852 sgp@denverwater.org