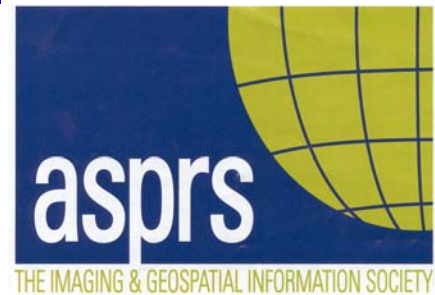


---

# Wavelengths

## Columbia River Region



<http://www.asprs.org/ColumbiaRiver>

**Volume 2002:3 — November 2002**

---

### **Fifth Annual ASPRS Information Exchange Meeting, Another Success**

by Chris Aldridge, ASPRS-CRR Vice-President

The Columbia River and Puget Sound Regions of the ASPRS presented the Fifth Annual Information Exchange on October 15, 2002. The well-attended meeting brought together ASPRS members from different regions to share experiences, discoveries, success, and failures.

The daylong meeting was perhaps most adequately described as "Remote Sensing for Fun and Profit." About 75% of the topics were related to remote sensing applications and projects. Topics ranged from "High Resolution Urban Remote Sensing: Outputs, Methods, and Precision," presented by Vince Sandor of the City of Portland, to "Supporting the City of Seattle's Cedar River Watershed Habitat Conservation Plan with Remotely Sensed Data," presented by Duncan Munro of Seattle Public works.

All of the technical presentations were well thought out and professionally presented. The true success of each presentation was measured by the amount of participation from the audience. Not one presenter escaped without a good fifteen minutes of Q&A, often generating side discussions that lasted through lunch and into the parking lot after the sessions closed.

A special presentation by Martin Plamondin was very well received. Mr. Plamondin has spent the better part of the last twenty years restoring and recreating the Lewis and Clark Corps of Discovery maps. His presentation took us all back to a time in the history of mapmaking when cartographers physical observations were all they had to create maps. His research has yielded much insight into the accuracy and reliability of William Clark's maps.

### **ASPRS Building Fund Drive, 2002**

ASPRS moved the Society's headquarters from leased space in Falls Church, Virginia, to purchased space in the Maryland suburbs of Washington, DC in 1989. In deciding to move, the Board articulated a goal of eventual full ASPRS ownership of the headquarters space. The original Building Fund Drive was initiated even prior to the move and during the early 1990s significant progress was made toward the original goal of full ownership. While that goal never diminished, the mid-1990s brought lower overall contributions to the Building Fund.

With the revitalization and positive financial growth of ASPRS during 1998-1999 came the opportunity to renew the Society's vision of full and clear headquarters ownership. During the Fall 1999 Board meeting, ASPRS set aside \$30,000 of 1999 cash reserves to initiate a renewed Building Fund Drive by matching individual and Regional donations to the Building Fund on a one-for-one basis. The Board added an additional \$10,000 to the matching fund balance in late 2000 and \$30,000 again in early 2002 to reinforce its commitment to a strong Building Fund drive. For further information, see: [www.asprs.org](http://www.asprs.org).

At present, there is an opportunity to have your contribution multiplied by a factor of four. If you send your donation to the ASPRS Building Fund via the Columbia River Region, the Columbia River Region will match your donation. Then when the matched donation reaches ASPRS Headquarters, it will be matched again. Thus, if you were to donate say \$25, this would result in a donation to \$100 to the ASPRS Building Fund.

**Donations the ASPRS Building Fund are deductible as charitable contributions for federal income tax purposes.**

**Please send your contribution to:**

Robert Harmon  
ASPRS Columbia River Region  
c/o Oregon Water Resources Department  
158 12th Street NE  
Salem, OR 97301-4172

## ASPRS-CRR Presents Two Successful National-Level Workshops

by Chris Aldridge, ASPRS-CRR Vice-President

The Columbia River Region of the American Society for Photogrammetry and Remote Sensing became the first ASPRS region to present nationally-sponsored workshops away from the normal venue of a national conference. In a joint presentation with ASPRS National, the ASPRS-CRR presented *two* workshops in October, 2002. The workshops were held on consecutive days and utilized the facilities at the Vancouver, Washington, Water Resource Education Center.

The first workshop "*Utilization/Integration of LIDAR For Mapping and GIS*" was presented by Mike Renslow, Vice President, Spencer B. Gross, Inc., a long-time ASPRS member, former ASPRS National President, and an acknowledged expert on LIDAR. The workshop presented the fundamentals of LIDAR technology, data characteristics, supporting technologies, processing, creation of digital map products and applications.

This presentation was designed for technicians and professionals who require an in-depth review of LIDAR technology and data characteristics, and how the data integrate into existing mapping and GIS applications. The following topics were covered in depth:

- The Theory Behind Laser Technologies
- Airborne GPS and Inertial Measurement
- Components of a Functional LIDAR System
- Multiple Returns and Intensity Data Capture
- Error Budgets and Standards
- Data Processing
- Product Development
- Project Design

The workshop on the second day, "*Performance, Accuracy, and Economics of Imaging Sensors, LIDAR and IFSAR for Surface DEM Generation,*" was presented by Mike Renslow and Dr. Bryan Mercer, Chief Scientist, InterMap Technologies Corp. This workshop presented the differences

between a number of existing imaging and remote sensing systems that are specifically designed for surface data generation. These included high-resolution satellite imagery, radar, Interferometric SAR, LIDAR, and aerial photography. The workshop was aimed at providing a comprehensive understanding of the technology, accuracy, and performance of the various alternatives available for surface generation. The presentation examined the economic viability and cost effectiveness of these systems, including:

- Background on Image Acquisition Techniques
- Basic Photogrammetric Principles
- High Resolution Satellite Imagery
- Satellite-borne Radar Systems
- LIDAR Technology
- Interferometric SAR Applications
- Inter-comparisons and Accuracy Evaluation
- Standards and Guidelines for Active Sensor Data
- Outlook for the Future

The workshops were an experiment in the practicality of presenting a nationally sponsored workshop away from relatively secure setting of a national conference. Both workshops were well very attended, with near-maximum capacity for both. Both were a financial and an educational success. Course evaluations indicated that all who attended expanded their knowledge in at least one area of interest. Having attended both, I can say that even if attendees left the workshops in sensory overload, they gained knowledge that will assist them in future discussions and applications of the various technologies.

---

### New Column: Meet Our Sponsor

Beginning with this issue, we are beginning a new column titled "Meet Our Sponsor." We'll run one Meet Our Sponsor page in at least the next five newsletters, in order of submissions by our sponsors.

---

---

## Meet Our Sponsor: Titan Systems Geospatial

---



### About Titan Systems Geospatial

Requirements for geospatial information, analysis and output continue to weave themselves more deeply into today's businesses. From simple geospatial data development and map production to complex modeling and analysis applications, today's geospatial solutions often require a blend of technologies to implement. Titan's GIS professionals, operating throughout the U.S. and internationally, are supporting the integration of GIS with mainstream information systems by focusing a diverse set of capabilities on our customers' problems.

Our teams of GIS technicians, analysts and developers provide innovative solutions allowing you to integrate your mission data with geospatial information or embed spatial technology in your existing systems. Our experience over the last ten years has put us solidly in the forefront of the Geospatial Information Technology industry. As organizations across the public and private sector have awakened to the increased productivity and cost-savings provided by GIS, new enterprises are joining long-time customers who rely on Titan for geospatial solutions.

### Offerings

Our products and services include standard products and customer-determined products and services with the majority of our work being customized products to meet unique customer requirements.

#### **Geospatial Database Design, Development & Analysis**

#### **Consulting, Education & Training ESRI Authorized Instruction**

#### **Remote Sensing, Photogrammetry & Image Exploitation**

#### **Software Engineering Solutions**

#### **Systems Engineering & Web Solutions Development**

*"Our reputation for no-nonsense GIS implementation brings us clients who need information products they can use driven by enterprise GIS architectures to support critical decision-making. We can support your needs - at your site or ours..."*

**Titan Geospatial  
4099 SE International Way, Suite 206  
Portland, OR 97222-8853  
503-794-1344  
www.titangis.com**

## CALENDAR: 2003

**Jan 18-22, 2003:** MAPPS Winter Meeting  
Hawk's Cay Resort  
Duck Key, FL.  
<http://www.mapps.org/events.asp>

**March 3-5, 2003:** California/Hawaii/Nevada/Guam  
ESRI Regional User Group Annual Conference,  
Renaissance Ilikai Waikiki Hotel, Honolulu, HI.  
<http://www.cahinv.org>

**March 4-8, 2003:** 99th AAG Annual Meeting,  
Hyatt Regency Hotel, New Orleans, LA.  
<http://www.aag.org/>

**March 17-19, 2003:**  
MAPPS Federal Programs Conference  
JW Marriott Hotel  
Washington, DC.  
<http://www.mapps.org/events.asp>

**March 27, 2003:** 7th Annual NE Oregon GIS  
Conference, Pendleton OR  
Sponsored by NE Oregon GIS User Group and Ore-  
gon Center for Rural Policy, Research and Services  
<http://www2.eou.edu/rsi/gisconference>  
Contact: Layne Sylvester at 541-962-3755 or  
[lsylvester@eou.edu](mailto:lsylvester@eou.edu)

**March 29-April 2, 2003:** 2003 ACSM Annual Con-  
ference with APLS and AGIC. Phoenix Civic Plaza,  
Phoenix, AZ.  
<http://www.acsm.net/acsmconf.html>

**April 21-23, 2003:** GIS in Action 2003, DoubleTree  
Hotel, Lloyd Center, Portland, OR. **Please note  
that this is a change from the last newsletter.**

**May 3-9, 2003:** ASPRS Annual Conference, Tech-  
nology: Converging at the top of the world.  
William A. Egan Civic and Convention Center,  
Anchorage, AK.  
<http://www.asprs.org/alaska2003/index.html>

The Calendar will be updated with each issue.  
Please send contributions to: [rwkiefer@aol.com](mailto:rwkiefer@aol.com).

## ASPRS-CRR BOARD OFFICERS

NATIONAL DIRECTOR — Tom Pagh  
Spencer B. Gross, Inc.  
13545 NW Science Park Dr  
Portland, OR 97229  
[tom@sbgmaps.com](mailto:tom@sbgmaps.com)

PRESIDENT: REGION — Margo Blosser  
Gorge GIS, 423 E. 3rd  
Hood River, OR 97031  
[mblosser@gorge.net](mailto:mblosser@gorge.net)

VICE-PRESIDENT: REGION — Chris Aldridge  
Spencer B. Gross, Inc.  
13545 NW Science Park Dr  
Portland, OR 97229  
[chris@sbgmaps.com](mailto:chris@sbgmaps.com)

SECRETARY-TREASURER — Bob Harmon  
Oregon Water Resources Department  
158 12th St. NE  
Salem, OR 97310-4172  
[robert.c.harmon@wrds.state.or.us](mailto:robert.c.harmon@wrds.state.or.us)

PRESIDENT: PAST — Doug Smith  
David C. Smith & Associates  
1734 SE Tacoma Street  
Portland, OR 97202  
[dsapdx@easystreet.com](mailto:dsapdx@easystreet.com)

NEWSLETTER EDITOR — Ralph Kiefer  
15119 Oyer Dr  
Oregon City, OR 97045  
[rwkiefer@aol.com](mailto:rwkiefer@aol.com)

SCHOLARSHIP CHAIR — Nancy Tubbs  
USGS, 14420 NE Alton Court  
Portland, OR 97230  
[ntubbs@usgs.gov](mailto:ntubbs@usgs.gov)

WEBMASTER — Jackie Olson  
USGS-WRD10615 SE Cherry Blossom Dr  
Portland, OR 97216  
[icolson@usgs.gov](mailto:icolson@usgs.gov)

ADVISOR: STUDENT CHAPTER — Michael Wing  
Oregon State University  
Peavy Hall 215, OSU  
Corvallis, OR 97333 [michael.wing@orst.edu](mailto:michael.wing@orst.edu)

ADVISOR: STUDENT CHAPTER — Art Benefiel  
Central Oregon Community College  
21121 Bayou  
Bend, OR 97702  
[a.benefiel@cocc.edu](mailto:a.benefiel@cocc.edu)

The President, Vice-President, Past President, and National Director are Elective Officers. The Executive Committee consists of the President, Vice-President, Secretary-Treasurer, Immediate Past President, and National Director, and carries on the business and financial affairs of the Region.

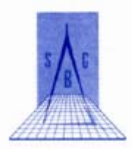
# Thanks to Our Sponsors



**BPS** Bergman  
Photographic  
Services, Inc.

Larry Bergman

7816 SE 13th Avenue (503) 239-6010  
Portland, Oregon 97202 FAX: (503) 239-4637




Thomas L. Pagh, CP  
Project Manager

**Spencer B. Gross, Inc.**  
PHOTOGRAMMETRIC ENGINEERING  
13545 N.W. Science Park Drive Portland, Oregon 97229  
503/646-1733 FAX 503/626-4818

*David C. Smith & Associates, Inc.*

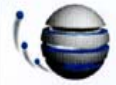
PROFESSIONAL PHOTOGRAMMETRISTS AND  
DIGITAL MAPPING SPECIALISTS



1734 S. E. Tocoma  
Portland, Oregon 97202

**DAVE SMITH, P.L.S., CP**  
President

Bus. (503) 232-5285  
Fax. (503) 230-9052  
Res. (503) 774-1769



**TITAN** SYSTEMS CORPORATION  
AVERSTAR GROUP

**ROGER E. CRYSTAL**  
GIS Site Manager

4099 SE International Way, Suite 206  
Portland, OR 97222-8853  
Email: roger.crystal@titan.com

Tel: (503) 794-1344 x116  
Fax: (503) 794-1350



**VALLEY AIR**  
PHOTOS

RICHARD GRAVILLE

P.O. BOX 1118  
CALDWELL, IDAHO 83606-1118  
TEL: 208 454-1344  
FAX: 208 454-1345



**ValueCAD** Sal Kadri

- AutoCAD, MicroStation - Drafting, As-Built
- Scanning, CAD Conversion, Digitizing
- CAD, GIS, AM/FM, EDMS

2548 S.E. Ankeny St.  
Portland, OR 97214  
email: sal@valuecad.com

Ph. (503) 233-8796  
Fax (503) 731-9087