

Award Recipients

The following awards and scholarships were presented at the ASPRS 2006 Annual Conference in Reno, Nevada. The complete text from the 2005 Awards Program is available on the ASPRS website at <http://www.asprs.org/membership/scholar.html>

ASPRS Honorary Members



Robert H. Brock, Jr., ASPRS Honorary Member.

Robert H. Brock, Jr. received his BS in Forestry, SUNY College of Environmental Science and Forestry and Syracuse University, 1958; his MS in Photogrammetry/Civil Engineering from SUNY College of Environmental Science and Forestry (ESF) and Syracuse University, 1959; and his PhD in Photogrammetric and Geodetic Engineering, Field of Civil Engineering, Cornell University, 1971.

Brock began teaching at Syracuse University in 1959. In 1967, he went to ESF to build the mapping sciences component of the program.

With the efforts and leadership of many good people along the way—including Dr. Tom Lillesand and Dr. Paul Hopkins—the program now has an outstanding educational program and research facility. During his career, Brock taught photogrammetry and mapping science subjects to over 2000 students at the undergraduate level and 500 students at the graduate level. Brock was Chair of the Faculty of Environmental Resources and Forest Engineering at ESF from 1980-1999, continuing to teach until his retirement in 2002. He maintains active involvement with students at the college by serving on graduate student committees as an Emeritus Professor.

Brock has engaged in mapping science research for government and private industry for 45 years. Throughout his career he has practiced consulting in analytic and interpretive photogrammetry for engineering firms, law firms, and industrial research firms. His research has led to many journal articles, papers and reports in the areas of image analysis, image measurement, analytic mapping systems, system calibration and global positioning systems. His work has co-produced patents for: 1) a System for Correlating Electronic Distance Measurement and Aerial Photography for the Extension of Geodetic Control, 1980; 2) Radar Calibration Using Direct Measurement Equipment and Oblique Photometry, 1984; and 3) RDOP Surface: An Optimum Design Tool for GPS Relative Positioning, 2000.

Brock joined ASP (ASPRS) in 1958. As a student, he served as Secretary for the Central New York Region (CNYR). In the following years, he served in all the office capacities for the CNYR. He was also very active on the Committee on Computational Photogrammetry and served as the Chairman in 1969. He directed the Symposium on Computational Photogrammetry the year in which it was held in Syracuse at ESF. From 1975-78, he represented the CNYR on the ASP Board of Directors and was elected to the Executive Committee of ASP from 1976-78. During the 1980 Fall Convention of ACSM-ASP in Niagara Falls, he served as Deputy Director for Student Programs. He received an ASP Presidential Citation for organizing and implementing the first student activities program at a National ACSM-ASP Convention. He has also presented or co-authored papers, which have appeared in the proceedings and some of which have been published in *PE&RS*. He takes great pride in seeing many former

students become leaders in ASPRS. He has received several Ford Bartlett Awards for sponsoring new members.

Brock is also active in the American Society for Agricultural and Biological Engineers, which oversees the EAC/ABET accreditation efforts for the Faculty of Environmental Resources and Forest Engineering at ESF. He is a certified Photogrammetrist and is listed in the Who's Who in American Education, Engineering, and American Men and Women in Science. Since his retirement, Brock has furthered his own education by taking classes in photography through the Newhouse School of Public Communication at Syracuse University. This included taking the opportunity to study abroad in London for a semester.



Roy R. Mullen, ASPRS Honorary Member.

A native of Vineland, New Jersey, **Roy R. Mullen** graduated from high school in 1941 and served with the U.S. Marine Corps in the Pacific during World War II. He attended the American University where he received his BS degree in Geology. In 1951 he joined the Topographic Division of the U.S. Geological Survey (USGS).

Mullen spent the early part of his career in the Survey's Atlantic Region, headquartered in Arlington, Virginia, where he worked in photogrammetric mapping except for one year spent in Field Surveys.

In 1956, he was designated as the Survey representative for the United Nations in supplying photogrammetric consultation to the Government of Greece. He was detailed to Food and Agriculture Organization (predecessor to FAO) of the United Nations to establish an orthophoto mapping capability for Greece including installation of equipment and production training. In 1962, he was assigned as a staff engineer to the Branch of Research and Design, Office of Research and Technical Standards, McLean, Virginia. Working principally in photogrammetric instrumentation, he contributed to the development of the USGS Autoplot system and USGS Orthophotoscope. From 1960-71 he also taught Photogrammetry I & II in the Graduate School for the Department of Agriculture. In 1968, he was named Chief, Branch of Photogrammetry, Special Projects Office and in 1969, he was assigned as Chief, Branch of Photogrammetry, Office of Research and Technical Standards.

In 1972, he was appointed Pacific Region Engineer of the U.S. Geological Survey's Topographic Division. Under his leadership, the USGS continued to use state-of-the-art systems to produce orthophotography for cooperating Federal and State agencies in the Pacific Region. The staff at his regional office continued to be leaders in the development and use of orthophotography within the USGS, and developed digital orthophoto techniques. In 1976 he returned to headquarters in Reston, Virginia to assume the position of Assistant Division Chief of the Office of Research and Technical Standards, where he led the agency into the digital era by establishing the Digital Applications Team which developed the DEM, DLG and 100K data themes, and starting the agency's modernization effort.

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In 1980, Mullen became the Associate Chief of the Topographic Division sharing the direction and management of the entire Division's mapping responsibilities. Encouraged by the Department of State, Mullen also initiated and managed the US/Chinese Protocol established to exchange technology on remote sensing, automated mapping and GIS. For almost 10 years he was the Department of the Interior permanent representative to the UN Regional Conferences on Cartography for Africa, Southeast Asia, and the Americas. Just before his retirement in 1995, he returned to the Western Region to assume the duties of Chief of the Western Mapping Center (formerly the Pacific Region) and to serve as the center's Acting Chief on detail.

He has represented USGS at numerous national and international conferences and has served ASPRS as Chairman of the (then named) ASP Technical Division as well as Director of the 1971 Annual Convention. He is the author of numerous technical papers in the field of photogrammetry and is a recognized lecturer on the subject. He was a contributing author to the Manual of Photogrammetry, 3rd and 4th editions and, in 2005, Technical Editor for the 5th edition. He also served as President of Commission IV of the International Society for Photogrammetry from 1980-84 and received several Presidential Citations from both the ASP (ASPRS) and ACSM. In addition to ASPRS, Mullen is a member of the American Association for the Advancement of Science.

Mullen and his wife, Alyce, live in Oakton, Virginia. They have four children: Holly, Heather, Hillary and the late Hugh Mullen.

Donor: ASPRS through the ASPRS Foundation.

ASPRS Fellow Award



Anthony B. Follett was awarded a Fellow Award.

Anthony B. Follett is the Co-founder of the current AeroMetric, Inc (dba AeroMap U.S.) group of companies and is Senior V.P. and Division Manager. Follett's career spans over 30 years in the field of photogrammetry covering a whole range of experience. He is unique in personality, experience, integrity and his accomplishments. His mild manner, fairness, patience, and honesty have consistently won the respect of his employees, clients, co-workers and peers. He received his BS in Civil Engineering at Oregon State University in 1969 and

his MS in Photogrammetry & Geodetic Engineering, University of Illinois, 1971. He did post graduate work in Forestry Management, Oregon State University, 1971-72.

Follett has been well respected since his arrival in Alaska in 1971 by both private industry and government. He served for two years active duty with the USAF as a Civil Engineer Officer, then in the reserves for several years. His background includes production experience as flight crew, photo lab, mapping, cartography, project management, and programming. Other experience includes forestry and land surveying with the Alaska Region of BLM. A rare individual with experience in both business and the practical aspect of production in photogrammetry and related professions, he has designed and managed hundreds of photogrammetric projects. His well-rounded background affords

him a unique capability for running a photogrammetric company like AeroMap U.S. For many years in the early establishment of North Pacific Aerial Surveys, Inc. (a predecessor company) he conducted his officer duties and worked in production at night, exemplifying his dedication, ethics, and hard working attitude.

He has outstanding business ability and is known locally and in the industry, as very professional, fair, honest, extremely reliable, and a very hard working individual. You can count on his word as well as the follow through on commitments and responsibilities. He is an achiever of the highest caliber. He sets the highest standards for himself in any assignment or task, and always conducts himself in the most professional manner. For example, he is responsible for the employment of over 60 individuals and their families as Division Manager of AeroMap U.S.; a big responsibility he takes very seriously and carries out without a complaint on a daily basis.

In addition, he has been extremely active in MAPPS since it's founding and held many officer positions, serving as President from 1995 through 1997. One major contribution was his efforts with the Alaskan congregational delegation to help secure funding for government agencies and to encourage those agencies to contract more work out to the private sector; a successful endeavor. He is a Member & Vice-Chairman, Export Council of Alaska, Dept. of Commerce; member of the Department of Geomatics Advisory Committee, University of Alaska, Anchorage; a past member, Survey and Mapping Advisory Committee, Alaska Dept. of Natural Resources; as well as a past Instructor, University of Alaska Anchorage, Oregon State University, and University of Illinois in Photogrammetry & Forestry. Follett is also a member of the American Society of Civil Engineers, the National Science Foundation Traineeship in Civil Engineering, University of Illinois, and the Tau Beta Pi National Engineering Society.

Follett is well known for his participation in ASPRS affairs, both local and National. He has been a member of ASPRS since 1968 and is a Certified Photogrammetrist No. R472. He is active in National ASPRS and the local ASPRS Region by helping to organize the 1986 ACSM/ASPRS National Conference in Anchorage. He was President of the Alaska Surveying and Mapping Conference, President 1976 and served on various committees of the ACSM and chairmanships for many years. He is the Co-founder of the Alaska Foto-Gram, started in 1973, and editor for 4 years. He is also Past President, Alaska Region, American Society of Photogrammetry. He Chaired the Survey of the Profession committees form 1982 through 1986. He is also responsible for major contributions to the ASPRS 2003 Conference in Anchorage Alaska in the form of staff and finances. He is the author and presenter of several technical papers throughout his career. Follett has received ASP and ASPRS Presidential Citations in 1980 and 1988.

Dr. Barry Haack is a Professor of Geographic and Cartographic Sciences at George Mason University (GMU), in Fairfax, Virginia. Haack received his BS from the University of Wisconsin, MA from San Diego State University, and PhD from the University of Michigan. All degrees were in Geography. While at the University of Michigan, he was employed as a Research Scientist by the Environmental Research Institute of Michigan.

Haack has been on the Geography Faculty at GMU for 20 years. He has been Geography Program Director and Graduate Coordinator, and continually taught courses in remote sensing, geography and GIS. Over 300 students have received MS degrees in Geography from GMU, and most have taken his courses. Many of these students are

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Barry N. Haack received a Fellow Award.

in key positions in various government agencies or industry. They keep their ties with, and show their respect for, Haack, inviting him to consult with or present workshops at their respective agencies. He has broad experience in technology transfer and the application of remote sensing. He was a Research Scientist at the USAID-funded Regional Remote Sensing Facility in Nairobi, Kenya, and a Fulbright Scholar at the University of Dar es Salaam in Tanzania. He has worked extensively in Nepal, beginning with the Nepal National Remote Sensing Centre and more recently as a Visiting Scientist at the International Centre for Integrated Mountain Development. He has advised the Government of Suriname on Land Management, consulted on agricultural rehabilitation in Afghanistan, represented the United Nations on a regional evaluation in South Asia, and conducted workshops in numerous countries.

Haack has a distinguished record of funded research that has emphasized the application of synthetic aperture radar (SAR), SAR-derived measures, and the integration of SAR with optical data for land cover classification. He has regularly presented his research findings at ASPRS and other professional society meetings, and published in *PE&RS* and all leading remote sensing journals. He was author and co-author of chapters in the Society's Manual of Photographic Interpretation, second edition. He is frequently called upon to review manuscripts for the society.

Haack's international reputation crosses the disciplines of educator, researcher and consultant. He has accrued an extensive record of service to ASPRS. He has been a member for over 30 years. He has served on the Society's Publications and Membership committees; the Autometric, ERDAS, Ta Liang and Alan Gordon award committees; and special focus groups and applications committees. Active in the Potomac Region of ASPRS, he has served on the Board of Directors, Chaired the Education Committee — chairing the region's scholarship committee, and organized and presented technical workshops. He co-chaired the Technical Program Committee for the 2005 ASPRS Annual Meeting in Baltimore. His society awards include the Ford Bartlett, Leica Geosystems, Presidential Citation and Conference Management.



Linda Fries accepted a Fellow award on behalf of her late father, Lloyd O. Herd.

Lloyd Herd is a graduate of The Ohio State University in Civil Engineering (1935) [a classmate of Curtiss LeMay]. He was a Professional Engineer and Land Surveyor. In the early days of ASPRS, Herd attended the first several meetings of ASP held at Wright Paterson Field (Dayton) beginning in about 1935. He worked in various positions with the AAA in use of air photos, TVA under George Whitmore doing preliminary mapping for Oak Ridge, U.S. Corps of Engineers during

World War II, and finally with the Ohio Dept. of Highways after the war. During this early phase of photogrammetry, Herd was an active colleague of Ted Abrams, Sid Park and General B.B. Talley.

Herd became a member of the ASP/ASPRS in 1937 and actively contributed to the Society with the development of photogrammetric applications and publication reviews. As Chief of Aerial Engineering (ODOT) he provided job support for students of photogrammetry as they attended The Ohio State University. People in this category include Godfrey Konecny and Larry Fritz along with dozens of others. He even provided a bus and travel expenses for a number of OSU students to attend the national meeting of the ASPRS in Cincinnati.

As chief of the Aerial Survey Section, Herd acquired one of the first four models of the analytical plotter produced for worldwide use by Nistri/Bendix. He was an early and continuing member of the ASPRS Transportation Committee. His publications can be found in the various proceedings of the national Transportation Research Board (TRB) of which he was a gubernatorial appointment for 20 years. He also supported ASPRS by frequent attendance at local, national and international meetings.

He is also noted for his support for industry and academia in the Eastern Great Lakes Region, and "...was one of the greatest assets we had" reports several Region members. He and/or ODOT donated aerial photographs to universities in Ohio, got jobs for young photogrammetrists, and generally did everything he could to promote the profession and the Society. He contributed the complete back set of Photogrammetric Engineering to OSU dating back to the early 1940s. When Herd retired at the age of 70 as Director of the Department of Aerial Engineering and Photogrammetry with the Ohio Department of Highways, he had become renowned in his field.

In addition to being a leader in his profession, Herd was a leader in his community. He was one of the founders of the Grandview Bobcat Boosters Club serving as its first president. He was a member of Boulevard Presbyterian Church since 1946 and was a past president of the church's Men's Club. He performed in the church's choir and men's chorus to raise funds to build the present church. He served on the Board of Trustees of the Grandview Heights Library for 40 years.

Unfortunately Herd died on July 15, 2005. Proudly, but sadly, we are honored to present him the ASPRS Fellow Award posthumously.

Donor: The ASPRS Foundation.

Photogrammetric Award (Fairchild)



Professor Gordon Petrie.

ASPRS is pleased to bestow The Photogrammetric Award on **Professor Gordon Petrie**, an outstanding photogram-metric professional with a record of solid achievements. His contributions to the field over his half-century career include both outstanding technical work and a corps of students throughout the world trained by him.

Petrie graduated with a MA with first class honors in Geography from the University of Aberdeen and later obtained a post-graduate Diploma in Surveying from University College London. He also has a BSc in Photogrammetric Engineering, from ITC, Delft, The Netherlands.

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The majority of his career has been spent at the University of Glasgow, where he began as a Lecturer in Surveying and Photogrammetry, later became a Professor of Topographic Science, and is now an Emeritus Professor & Honorary Research Fellow after his retirement in 1995. He has been a visiting professor at the Department of Geography, University of Georgia, and the Department of Geography, Miami University of Ohio, and a Carnegie Research Fellow at ITC. His students have gone on to become prominent contributors to the field in many countries and to ASPRS.

Petrie's research interests have covered a wide range of topics, including the design of sensors and instrumentation, and he has maintained his knowledge of equipment and technology in the field reaching from the days of analog equipment to current digital practice. A particular interest has been cameras and sensors, especially other than conventional film aerial cameras, with his early work on IR line scanners and SLAR leading to current study of commercial satellite sensors.

His range of expertise is reflected in an extensive bibliography of significant publications in photogrammetry, remote sensing, and surveying. Since his retirement, he has also found time to write for trade journals and the popular press on subjects related to mapping, thereby bringing an expert perspective to a wider, non-technical audience. His interest in writing and his meticulous standards on correct English have benefited innumerable students, whose work was greatly improved by his sub-editor's marks in purple ink.

Petrie has been involved with computers for many years and has embraced the Internet, making available a Web page giving links to no fewer than 7764 useful sites related to photogrammetry, surveying, and remote sensing.

He has been active in the Remote Sensing and Photogrammetric Society, as evidenced by the Honorary Membership awarded him in 1995, and in ASPRS, with frequent presentations and interactions at meetings in the United States.

Donor: Lockheed Martin through the ASPRS Foundation.

The SAIC/Estes Memorial Teaching Award



Marguerite Madden accepted the SAIC/Estes Memorial Teaching Award for Roy A. Welch from Don Lauer.

Roy A. Welch is the founder and former Director of the Center for Remote Sensing and Mapping Science (CRMS), Department of Geography at The University of Georgia-Athens. He is currently a Distinguished Research Professor Emeritus in the University's Department of Geography and founder and President of R-Wel, Inc., a desktop mapping software company that in 1987 released the first digital photogrammetry and 3D terrain visualization software

on a personal computer. During his 32-year tenure as a professor of Geography, Welch taught countless students techniques, skills, concepts and theory of air photo interpretation, remote sensing of the environment, photogrammetry, geographic information systems, field surveying and Global Positioning Systems.

He began his career in his home town of Waukesha, Wisconsin by attending and graduating from Carroll College in 1961 with a Bachelor

of Science degree in geography and biology. From 1962 to 1964 he was a photo-analyst with the U.S. Government and returned to graduate school to receive his master's degree in physical geography from the University of Oklahoma. He ventured to Scotland to attend the University of Glasgow where he received his PhD in 1968 in remote sensing, photogrammetry and cartography. Upon graduation, Welch worked first as a manager in the Earth Sciences Department of Itek Corporation and then as a National Academy of Sciences – National Research Council Research Associate with the U.S. Geological Survey. In 1971, he became an assistant professor in the Department of Geography at the University of Georgia. In two years he was promoted to Associate Professor and four years later to full Professor. In 1980, he obtained the rank of Research Professor in Geography and in 1984 he founded the Laboratory for Remote Sensing and Mapping Science. Through numerous research contracts and grants with federal, state and local government agencies, he provided many graduate students with the opportunity to become directly involved in externally funded research. The CRMS was named a NASA Center of Excellence in 1998 and continues to remain a world-renowned research facility following 20 years of direction by Welch as Director.

Welch has over 170 articles published in refereed journals and his numerous awards over the years include the ASPRS Fairchild Photogrammetric Award in 1981 for "research leading to significant contributions in remote sensing, in assessment of image quality and digital image processing," the Sigma Xi Active Member Research Award in 1981 "for significant research on the cartographic applications of satellite imagery," the ASPRS Alan Gordan Memorial Award in 1993 for "contributions to desktop mapping with personal computers, including digital photogrammetry, radargrammetry, and three-dimensional terrain visualization" and Inventor of the Year in 1996 by the University of Georgia Research Foundation. In 1984, he was elected President of ASPRS and in 1995 a Fellow of ASPRS. In recognition of his GIS research, expertise and long-term involvement in the International Society for Photogrammetry and Remote Sensing (ISPRS), Welch was elected to serve a four-year term as the President of ISPRS Commission IV, "Mapping and Geographic Information Systems" from 1992-1996.

Throughout his career, Welch used his research experience to enrich his teaching and provide students with real-world applications of geographic principles and techniques. Following his retirement in 2003, he has remained active in the advisement of UGA graduate students. Welch's influence continues through the actions of his many former students who hold positions of responsibility in government agencies, universities and private companies involved in geospatial information science and technology.

The SAIC Estes Memorial Teaching Award was inaugurated in 2003 and is named in honor of Professor John E. ("Jack") Estes, teacher, mentor, scientist, and friend of.

Donor: Science Applications International Corporation (SAIC) through the ASPRS Foundation.

Robert N. Colwell Memorial Fellowship

Desheng Liu is a doctoral candidate in Remote Sensing of Environment in the Department of Environmental Science, Policy, and Management at the University of California, Berkeley, with an expected completion date of May, 2006. His research has focused on the application

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Desheng Liu accepted the first Colwell Fellowship.

of remote sensing technologies to the monitoring of natural resources and environmental change, and includes a NASA-sponsored project on the “Systemic Evaluation of Machine Learning Approaches for Remote Sensing Land Cover Classification”, and the mapping and monitoring of a forest disease (Sudden Oak Death) in California using high resolution airborne imagery. His stated goals are “to advance the development of computational algorithms for more efficient use of remotely-sensed data and to promote the use of these algorithms

in various real world applications.”

Liu has an exceptional record of scholarship, both as an undergraduate at Wuhan University in China, and as a graduate student at UC Berkeley; possesses an impressive list of published and pending papers and presentations and has received superb recommendations from his professors, advisor, and professional references. Liu also has received numerous academic honors and awards, is a member of several professional and scientific societies, and has significant teaching experience.

Over the course of more than a half century, Dr. Robert N. 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 the 25 Honorary Members of ASPRS, chosen from the Society’s 6000 members

Donor: The ASPRS Foundation, from funds donated by students, associates, colleagues and friends of Robert N. Colwell.

2006 marks the first year that this award has been granted.

The BAE Systems Award



Pravara Thanapura was awarded the BAE Systems Award by Dr. Stewart Walker of BAE.

Pravara Thanapura, as the lead author of the paper “Mapping Urban Land Cover Using Quickbird NDVI Image and GIS Spatial Modeling for Runoff Coefficient Determination” with co-authors H.L. Dennis, S.R. Burckhard, M. O’Neill, D.H. Galster, and E. Warmath. Pravara Thanapura, a PhD candidate in Geospatial Science and Engineering at South Dakota State University, plans to complete her degree requirements in 2007.

Donor: BAE Systems through the ASPRS Foundation.

Boeing Award for Best Paper in Image Analysis and Interpretation



Timothy Warner.

Timothy Warner and **Karen Steinmaus** for the paper, “Spatial Classification of Orchards and Vineyards with High Spatial Resolution Panchromatic Imagery,” (*PE&RS*; 71-2, pp.179-187).

Donor: Boeing S&IS Mission Systems through the ASPRS Foundation.

John I. Davidson President’s Award for Practical Papers



Rongxing Li accepted the award on behalf of the 27 authors of the first place article.

First place: Rongxing Li, Steven W. Squyres, Raymond E. Arvidson, Brent A. Archinal, Jim Bell, Yang Cheng, Larry Crumpler, David J. Des Marais, Kaichang Di, Todd A. Ely, Matt Golombek, Eric Graat, John Grant, Joe Guinn, Andrew Johnson, Ron Greeley, Randolph L. Kirk, Mark Maimone, Larry H. Matthies, Mike Malin, Tim Parker, Mike Sims, Larry A. Soderblom, Shane Thompson, Jue Wang, Patrick Whelley, and Fengliang Xu for “Initial Results of

Rover Localization and Topographic Mapping for the 2003 Mars Exploration Rover Mission” (*PE&RS*, 71-10, pp. 1129-1142).

Second place: Christopher E. Parrish, Grady H. Tuell, William E. Carter, and Ramesh L. Shrestha for “Configuring an Airborne Laser Scanner for Detecting Airport Obstructions” (*PE&RS*, 71-1, pp. 37-48).

Third place: Paul M. Dare for “Shadow Analysis in High-Resolution Satellite Imagery of Urban Areas” (*PE&RS*, 71-2, pp.169-177).

Donor: The ASPRS Foundation.

Leica Geosystems Award for Best Scientific Paper in Remote Sensing

First place: Elijah Ramsey III and Amina Rangoonwala for “Leaf Optical Property Changes Associated with the Occurrence of *Spartina alterniflora* Dieback in Coastal Louisiana Related to Remote Sensing Mapping,” (*PE&RS*; 71-3, pp. 299-311).

Second place: Lei Ji and Albert J. Peters for “Lag and Seasonality Considerations in Evaluating AVHRR NDVI Response to Precipitation,” (*PE&RS*; 71-9, pp1053-1061).

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Elijah Ramsey III accepted a first place award from Leica representative Brad Skelton.

Third place: Francesca Pozzi and Christopher Small for “Analysis of Urban Land Cover and Population Density in the United States,” (*PE&RS*; 71-6, pp. 719-726).

Donor: Leica Geosystems GIS & Mapping through the ASPRS Foundation.

ESRI Award for Best Scientific Paper in GIS

First place: Bisheng Yang, Wenzhong Shi, and Qingquan Li for “A Dynamic Method for Generating Multi-Resolution TIN Models” (*PE&RS*, 71-8, pp. 917-926).

Second place: Rodolphe Devillers, Yvan Bedard, and Robert Jeansoulin for “Multidimensional Management of Geospatial Data Quality Information for its Dynamic Use Within GIS” (*PE&RS*, 71-2, pp. 205-215).



(l.-r.) ESRI representative Mark Cygan presented the third place awards to Rongzong Li, Xutong Niu, and Ruijin Ma.

Third place: Xutong Niu, Ruijin Ma, Tarig Ali, and Rongxing Li for “Integration of Mobile GIS and Wireless Technology for Coastal Management and Decision-Making” (*PE&RS*, 71-4, pp. 453-459).

Donor: The Environmental Systems Research Institute, Inc. (ESRI) through The ASPRS Foundation.

William A. Fischer Memorial Scholarship



Nora Csanyi was awarded the William A. Fisher Memorial Scholarship.

Nora Csanyi, currently a PhD student with the Department of Civil and Environmental Engineering at the Ohio State University has been selected to receive the 2006 William A. Fischer Memorial Scholarship. Csanyi is being presented this award in recognition of her significant academic credentials and her very impressive record of research and publications in remote sensing. Ms. Csanyi’s research has focused on the enhancement of lidar mapping accuracy and techniques. The results of Csanyi’s research should greatly enhance our ability to fully integrate lidar mapping techniques into a wide range of remote sensing applications.

The committee wishes Csanyi much success and is confident that her current and future research efforts will continue to make important contributions to the remote sensing community.

The committee wishes Csanyi much success and is confident that her current and future research efforts will continue to make important contributions to the remote sensing community.

Donor: The ASPRS Foundation through individual and corporate contributions in memory of William A. Fischer.

Robert E. Altenhofen Memorial Scholarship

Yushin Ahn is a doctoral candidate at the Ohio State University, Civil and Environmental Engineering and Geodetic Science, with a specialization in digital photogrammetry. He has an extremely strong background in theoretical and analytical photogrammetry, and excellent academic records at both Ohio State and in Korea. He has an excellent list of 14 publications, of which two are in refereed journals. He provided a focused research proposal, and has excellent faculty references. His faculty advisor is Professor Toni Schenk.

Donor: The ASPRS Foundation. This award was originally established by Mrs. Helen Altenhofen as a memorial to her husband, Robert E. Altenhofen, past president of ASPRS. He was an outstanding practitioner of photogrammetry and made notable contributions to the mathematical aspects of the science.

Ta Liang Memorial Award



Judith van der Elst accepted the Ta Liang Memorial Award for Heather Richards.

Heather Richards’ selection was based on her academic achievements, planned program of research-related travel, and extracurricular activities.

Richards is a PhD student in the Department of Anthropology at the University of New Mexico. She is investigating the role of built forms and bounded spaces in forming the social dynamics at the ancient Maya site of Copan, Honduras and is bringing modern geospatial techniques to bear on the problem. In particular, she is

using photogrammetric methods not only to create 3-D models, but to use the models in her investigation of the societal role of structural forms. Richards plans to use the award for travel to the study site at Copan, Honduras, where she will carry out a close-range photogrammetric study at the archeological site.

In addition to her studies, Richards has been actively involved in several projects involving the development of innovative and cost-effective applications using GIS, remote sensing and photogrammetry. She has presented the results of these projects at national and international conferences and is presently co-organizing two symposia. She has also designed and taught a new course, “Geospatial Analysis in Archeology” that, among other things, is intended to introduce students of Archeology to geospatial techniques such as GIS, remote sensing, and photogrammetry.

Donor: The ASPRS Foundation through individual and corporate contributions to the in memory of Ta Liang.

Paul R. Wolf Memorial Scholarship

Jamon Van Den Hoek has been selected to receive the 2006 Paul R. Wolf Memorial Scholarship. Van Den Hoek is being presented this award in recognition of his outstanding academic credentials and his plans and enthusiasm to become an education professional in Survey-

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ing, Mapping, and Photogrammetry. Van Den Hoek is currently a PhD candidate with the Department of Civil and environmental Engineering at the University of Wisconsin-Madison. He has demonstrated at all levels and has been recognized for, his continued interest, dedication, enthusiasm, and aptitude to become an education professional. The committee wishes Van Den Hoek much success and is confident that his current and future education efforts will continue to make important contributions to the Surveying, Mapping and Photogrammetry community.

Donor: The ASPRS Foundation from funds donated by the friends and colleagues of Paul R. Wolf. Recognized nationally and internationally, Paul was an outstanding educator and practitioner of surveying, mapping, and photogrammetry and a great friend of the Society. As author, teacher, and mentor, Paul made significant educational and academic contributions to these fields. The award was inaugurated in 2003.

The Kenneth J. Osborn Memorial Scholarship



Dr. Don Davis accepted the Osborn Memorial Scholarship on behalf of his student, Sean Bolender.

Sean Bolender is pursuing a Bachelor of Science degree in Geomatics at the University of Alaska at Anchorage. His areas of specialization include an emphasis on geodesy and photogrammetry. His paper was strong, indicating exceptional potential for an undergrad. His faculty advisor is Steve Buchanan, PLS.

Bolender plans to graduate in May of 2006, after which he plans to continue his employment with the Division of Cadastral Surveys

with the U.S. Bureau of Land Management (BLM). At BLM, he plans to fulfill requirements for holding positions of responsible charge in order to become professionally licensed in Alaska. His future interests include using his skills to develop digital videos of geomatics topics to advance others' knowledge about the disciplines. His references also articulated his active interest and participation in outreach activities, such as conferences and professional society events, wherein he made good use of his knowledge and skills in collaboration and communication.

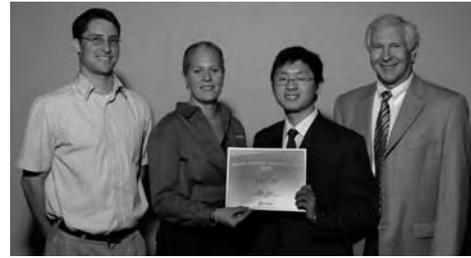
Donor: The ASPRS Foundation from funds donated by the friends and colleagues of Kenneth J. Osborn. Recognized nationally and internationally, Ken was an outstanding practitioner of surveying, mapping, photogrammetry, and geospatial information and technology, and a great friend of the Society. As a professional cartographer with the U.S. Geological Survey, Ken made significant contributions to these fields. The award was first offered in 2005.

The ASPRS GeoEye Award

(formerly the Space Imaging Award for Application of High Resolution Digital Satellite Imagery)

Yuyu Zhou

Yuyu Zhou is a PhD student in Environmental Sciences at the Univer-



(l-r) Orien Richmond (recipient), Brenda Burroughs (presenter), Yuyu Zhou (recipient), and Brian Mercer (recipient on behalf of Qiaoping Zhang).

sity of Rhode Island. His proposal is "Impervious Surface Extraction and Coastal Environmental Monitoring Using High Spatial Resolution Remote Sensing Images." The objective of this study is to use the developed algorithm to obtain the impervious surface area from high spatial resolution remote sensing images such as Ikonos and to study its impact on the coastal environment. It is hoped that with the ISA extracted from high spatial resolution Ikonos imagery, the impact from changing ISA on the water quality and receiving water hydrology in the inland and coastal waters of the identified study areas will be accurately examined and confirmed.

Qiaoping Zhang

Qiaoping Zhang is currently a PhD candidate specializing in digital image processing and remote sensing in the Department of Geomatics Engineering at the University of Calgary, Alberta, Canada. He has proposed to use the awarded Ikonos image data to investigate the issues in automating the road network extraction from high resolution multi-spectral imagery (MSI) in urban/suburban areas. The selected study area is the City of Calgary, Canada, which has both rapidly expanding suburban areas and densely residential urban areas. The awarded images cover different areas of the city with difficult complexity levels and with different acquisition seasons. A texture-based advanced image segmentation technique and a Radon transform-based road centerline extraction algorithm will be utilized for road network extraction. The extracted road networks will be assessed against the reference data, the National Road Network, Canada Level 1 (NRNC1) and ground truth. This project is expected to be helpful in identifying the issues in developing an operational image-based road map change detection and map updating system, which is of interests to many practical applications, such as basemap updating, disaster assessment, and urban studies.

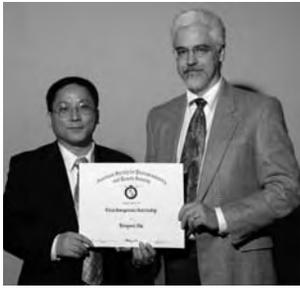
Orien Richmond

Orien Richmond is a second-year PhD student at the University of California, Berkeley in Dr. Steven Beissinger's lab in the Department of Environmental Science, Policy and Management (ESPM). He will use the imagery to help locate and characterize freshwater inland wetlands in the Sierra Nevada foothills that are habitat for the threatened California Black Rail (*Laterallus jamaicensis coturniculus*), a rare, secretive marsh bird. He will use species-habitat models to predict the occupancy of unsurveyed wetlands and then test the accuracy of the models in the field this summer. It is essential to use high-resolution imagery because many of the wetlands are small in size (<0.5 acres).

Donor: GeoEye, Inc. through the ASPRS Foundation.

Award Recipients

Leica GeoSystems Internship



Hongwei Zhu received the Leica GeoSystems Internship from Leica representative Brad Skelton.

This year we received eight applications for the Leica Internship. We have evaluated each application in terms of value and significance of the proposed research project, significance of the past research and development work and excellence of the past academic curriculums. The selection committee, consisting of Leica Geosystems senior scientists, evaluated each application in terms of value and significance of the proposed research project, significance of the past research and development work and excellence of the past academic curriculums. After careful evaluation following the criteria and majority role, the committee has selected Hongwei Zhu as the winner of this year's ASPRS Leica Internship award.

Hongwei Zhu has proposed research on automatic terrain surface reduction to get the real digital elevation model from the digital surface models generated from LIDAR and aerial images. This topic is not only an important research theme, but also has very practical application, since manually removing the buildings, trees and other above-the-ground objects are very tedious and time-consuming. This research falls into the on-going research and development effort inside Leica Geosystems. We think the proposed research and investigation have the potential to benefit both the scientific research community and our customers.

Hongwei Zhu is a PhD candidate at the Environmental Remote Sensing Center, University of Wisconsin-Madison, planning to graduate in the summer of 2006. He has a very strong photogrammetry and remote sensing background. He also holds a master's degree in computer science focusing on Computer Vision and Artificial Intelligence. His PhD research topic is "Aerial Image Matching Incorporating Object Recognition." His advisor is Professor Frank Scarpace.

Donor: Leica Geosystems GIS & Mapping through the ASPRS Foundation. The internship provides the award winner with an opportunity to carry out a small research project of his/her own choice, or to work on an existing Leica GeoSystems project as part of a team.

Z/I Imaging Scholarship



Dr. Mostafa Madani from Intergraph presented the award to Taehun Yoon.

After a thorough review of all applicants for the Z/I Imaging Scholarship, the review committee felt that the standout candidate was **Taehun Yoon**. His record of academic achievements, his significant technical publications, the strong support from his advisors and his reputation place him significantly above the remainder of the applicants for the 2006 Award.

Donor: Z/I Imaging through the ASPRS Foundation

Kodak International Educational Literature Award (KIELA)

The **Unidad Académica de Morelia of the Institute of Geography, National University of Mexico**, offers an international MSc program focusing on landscape management; contributes to an MSc program in biology focusing on spatial modeling; participates in undergraduate degree programs in environmental science focusing on spatial analysis, and offers graduate degrees in geography with specialization in society and territory, environmental geography, and territorial management. Courses are offered in remote sensing, geographic information systems, visual image interpretation, landscape data analysis, and land cover mapping. This award will enhance current literature holdings and educational materials in photogrammetry, remote sensing, and GIS. Access to such materials will be open to academic professionals, specialists from public and private organizations, and students in support of academic courses, graduate theses development, and practical environmental projects.

Donor: Eastman Kodak Company, through the ASPRS Foundation. This award has been augmented by

- a generous grant from the **Environmental Systems Research Institute (ESRI) of the complete ESRI Press Library collection**
- selected titles from the **John Wiley and Sons, Publishers, catalog.**
- The conference proceedings from the **Geospatial Information Technology Association (GITA)**
- The conference proceedings from **The Association of American Geographers (AAG)**

Outstanding Service Award



Dr. Stewart Walker accepted for both himself and for BAE Systems.

Dr. Stewart Walker for his vision and efforts within BAE Systems to establish the BAE Systems Award for the best paper by a young scientist at our annual conferences.

BAE SYSTEMS for their support and funding of the BAE Systems Award and their financial support for the most recent reprinting of the ASPRS Career Brochure.



Don Lauer.

Don Lauer for the establishment of the Robert N. Colwell Memorial Fellowship, including the design and execution of the largest and most successful fund-raising effort in the history of the ASPRS awards and scholarships.

Donor: The ASPRS Foundation.

Award Recipients

ASPRS Ford Bartlett Membership Award

Daniel L. Civco, Patricia G. Foschi, Brian Miyake, Thomas R. Mueller



(l-r) Brian Miyake, Patricia Foschi and Dan Civco earned the Ford Bartlett Membership Award.



(l-r) First place winners from the Rocky Mountain Region, Jeff Young (RMR President) and Terry Ryan (RMR Vice President).

Donor: The ASPRS Foundation. (This award was originally sponsored by the firm of Lockwood, Kessler, and Bartlett, Inc.)

Presidential Citations

The Officers and Directors of the Southwest Region -

A. Stewart Walker
Richard Aspinall
Stephen Yool
Eric Andelin
James Morrell
Peter Boniface
Duane Haselfeld
Ding Yuan
Leland Harbers

for their commitment to the revitalization of the region

Bradish Johnson - for his career of outstanding service to the photogrammetry and remote sensing industry at the USGS Camera Calibration Laboratory.

Jim Hipple - for his long-standing work as Chair of the Electronic Communications Committee.

Michael Thomas - for his constant support during my Presidential term.

Donor: The ASPRS Foundation.

Region of the Year Award

2006 RECIPIENTS:

First Place: The Rocky Mountain Region

First Honorable Mention: The Central and Columbia River Regions

Second Honorable Mention: The Central New York and Eastern Great Lakes Regions

The Rocky Mountain Region is once again a winner. Their ambitious board and volunteers have steadfastly pursued and attained their goals with a mission in mind. Their constant endeavor to outdo themselves not only enhances their importance to their members but to the Society as a whole. The Region's overall efforts to be an outstanding Region by having numerous scholarships awards, technical tours (including national ASPRS conferences), three new student chapters, creating a plan to integrate member champions, hosting a successful 18th Annual GIS in the Rockies, the largest Fall GIS and

Remote Sensing conference in the Western US. A no-words-to-describe annual report had really no competition.

The Central US Region and Columbia River Regions have tied for First Honorable Mention. Central US Region has been a consistent winner in this category. Their excellence has made ASPRS a high profile society in their community. The rapport with members through social programs and activities in promoting photogrammetry, remote sensing and GIS, student chapters, scholarships such as the Lortz Memorial Scholarship, technical meetings and workshops is legendary. Columbia River Region can always be counted on to diligently support the Society—particularly with their involvement in developments in Survey Law in Oregon for photogrammetrists (affected by new legislation). They won this award through their successful annual GIS in Action conference (numerous technical presentations), the Lidar workshop, and the 9th Annual Joint Puget Sound/Columbia Technical Exchange.

The Central New York and Eastern Great Lakes Regions have tied for Second Honorable Mention. Central New York Region has won this award for its dedication through their membership promotion (student of the year Award Program) and retention programs (was the Region of Month for January 2005), and support of the National Society on conference policy/planning committee for the Fall 2007 conference in Ontario. Eastern Great Lakes Region was incredibly diligent in pursuing this award through superior accomplishments in membership promotion (61%, which surpassed their goal in student membership), and adding two new student chapters. Recruitment of new members is a high priority goal of the Region.

Donor: The ASPRS Foundation

Region Newsletter of the Year Award

First Place: The Central Region Newsletter

Second Place: Rocky Mountain Compiler

Third Place: Wavelengths, Columbia River Region

The Central Region Newsletter is the First Place Winner of the Newsletter of the Year Award after receiving second place two times in the last two years. This unique publication demonstrates high standards of photojournal-istic style and covers all the important areas in the Region, such as meetings, job postings, scholarships (including a scholarship application workshop), and memberships—particularly, a champion of

Award Recipients



Central Region President Barry Budzowski accepted the first place award.

ASPRS/incentive, student membership benefits information, "welcome new members" and other information valuable to readers.

The Rocky Mountain Compiler took Second Place. This attractive and colorful publication is an informative and down to earth communication tool with substance. Rocky Mountain readers look forward to its coverage of regional, and national news, announcement of job postings, scholar-ships, memberships, technical/social meetings, and ballots/election result.

Wavelengths, from the Columbia River Region, has received third place three times in a row. We salute the Columbia River Region for its consistent record of high standards in this race for excellence in the field of communication. Wavelengths covers the basics of National and Regional Board reports, membership, student chapters, conferences, workshops, information on Land Imaging Satellites, announcement on the ASPRS Foundation/Colwell Memorial Fellowship Awards, and their new business on the ASPRS-CRR Logo Contest: "Win a Trip to Reno."

Donor: ASPRS Foundation.

Region Website of the Year Award

First Place: Potomac Region — <http://www.asprspotomac.org/>

Second Place: tie -

Mid-south Region — <http://www.rac.louisiana.edu/msasprs/>
and

St. Louis Region — <http://www.asprs.org/st-louis/>



Potomac Region Director Jim Hipple accepted the first place award.

A scoring and weighting system applied by a third party neutral judge was used to decide the winners of the Region Website of the Year Award. The race was extremely tight with the winner and the joint runners up separated by only half a percentage point.

This year's winner and runners up almost equally demonstrated high quality look and feel in the website design and effectively conveyed accurate, informative and timely content. Each site was also easy to navigate with few or no broken links

and page file sizes were minimized to reduce page loading times. All three sites displayed content of unique regional flavor.

Donor: The ASPRS Foundation.

ASPRS Student Travel Grants

2006 RECIPIENTS:

Alicia Marie Rutledge

Hongwei Zhu



Hongwei Zhu and Alicia Maire Rutledge accepted their awards from ASPRS President Karen Schuckman.

Alicia Marie Rutledge

"I am currently a graduate student at Texas A&M University studying for a MS in remote sensing through the Department of Forest Science. My work is concentrated in lidar information extraction methods, and to that end I work as a research assistant at Texas A&M's Spatial Sciences Laboratory. For the past two semesters I have also taught two remote sensing and photogrammetry undergraduate laboratories. My understanding of, and interest in, remote sensing and geospatial technologies has deepened through these experiences.

I am a founding member and current secretary of the TAMU student chapter of ASPRS as well as a student member of the national organization. ASPRS has been invaluable in terms of networking and allowing information dissemination among other student members. Attending the ASPRS Annual Conference affords me a chance to extend this network and allow me to present my research to a wider community of experts.

This grant is a great help in allowing me to achieve my goal of presenting a paper detailing my current research, entitled 'Using LIDAR in Determining Forest Canopy Parameters.' ASPRS is a valuable network and resource to which I hope to contribute my skills and knowledge."

Hongwei Zhu

"I am a Ph.D. candidate at the Environmental Remote Sensing Center, University of Wisconsin-Madison and will present a paper at the ASPRS annual conference entitled, "Object-Based Matching with Integration of LiDAR and GIS Data." This is one of a series of papers based on my thesis research. I will benefit from attending the conference because the feedback from experts in this field will definitely provide great guidance to my research. The questioning and commenting by conference attendees will help me to find possible problems with the research and inspire new ideas. Attending the annual conference is also a great opportunity to get to know people in this field and gain recognition by other researchers. This is very important to me, since I have decided to make photogrammetry and remote sensing research my career. In addition, I am planning to graduate in the summer of 2006; at this stage, exposing my research to potential employers is critical.

This grant is a great way to show that ASPRS encourages student research work. The grant is not just an honor, but will also boost my career and encourage my further research."

Donor: The ASPRS Foundation.

Award Recipients

ASPRS Conference Management Awards

George F. Hepner, Conference Co-chair

Alan M. Mikuni, Conference Co-chair

Patricia G. Foschi, Technical Program Co-chair

Robert. D. Ramsey, Technical Program Co-chair



(l-r) Doug Ramsey, Trish Foschi, Alan Mikuni, and George Hepner accepted the Conference Management Awards

Donor: The ASPRS Foundation.

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