# RSSG Newsletter Association of American Geographers Remote Sensing Specialty Group March 1992



### From the Chair:



This marks my last RSSG Chair's column for the Newsletter as I end my term after the San Diego AAG meetings. I've enjoyed working with many of you over the past two years and appreciate the cooperation and commitment of numerous individuals who made this assignment much easier.

Our specialty group is so crucial in continuing to articulate the role of remote sensing in geographic research and education among professional geographers. I look forward to the excellent leadership I am confident will be provided by our new Chair, Tina Cary (EOSAT).

Continued on page 2 ... Chair

# NATIONAL LAND REMOTE SENSING POLICY ACT

The National Land Remote Sensing Policy Act of 1991 (H.R. 3614) was introduced into the Congress last October by Representative George Brown (D-California). The legislation is designed to address, among other things, Landsat funding issues, program oversight and data distribution to colleges, universities and other nonprofit users of satellite data. The proposal calls for the administration of the Landsat program to be split between the Department of Defense and the National Aeronautics and Space Administration (NASA). NASA would oversee civilian use of the data.

Continued on page 2 ... Landsat

### REMOTE SENSING EVENTS AAG - SAN DIEGO

APRIL 18-22, 1992

Saturday, April 18, 1992

12:00 noon - 7:00 pm (To be held at the Department of Geography, San Diego State University)

Workshop 1: Digital Processing of Remotely Sensed Data

Workshop 2: Analysis of AVHRR Data for Regional and Global Environmental Monitoring

Sunday, April 19, 1992

8:00 am - 9:40 am

Paper Session: Remote Sensing Applications - Urban, Agricultural, and Environmental

9:55 am - 11:35 am

Paper Session: Remote Sensing and Landscape Ecology

1:30 pm - 3:10 pm

1:30 pm - 3:10 pm

Poster Session: Cartography/GIS/Remote Sensing

3:25 pm - 5:05 pm

Paper Session: Remote Sensing Research

Methodology

5:20 pm - 7:00 pm

Paper Session: Interfacing GIS and Remote Sensing

Continued on page 7... Events

Chair... Continued from page 1.

Please take a few moments to fill out the enclosed ballot to elect future officers of this organization.

Our 1992 remote sensing program at the San Diego AAG meetings looks exciting. A special thanks to Doug Stow (San Diego State University) for serving as program chair.

The future of remote sensing within the discipline of geography depends on how specialists educate our colleagues on the tremendous potential of this technology for understanding geographic problems. Through RSSG committee functions, organization of paper sessions and workshops, as well as coordinating special publications, the RSSG will continue to foster an understanding of geographic remote sensing.

M. Duane Nellis, Chair Remote Sensing Specialty Group Department of Geography Dickens Hall Kansas State University Manhattan, KS 66506-0801

Landsat... Continued from page 1.

A synopsis of the legislation is contained in an address Rep. Brown made before the National Press Club on October 23, 1991. Excerpts of this address are printed in the February 1992 issue of GIS World (Volume 5, Number 1), pp. 20-21.

Recently RSSG Chair Duane Nellis was asked by AAG Headquarters to comment on H.R. 3614. He wrote to "strongly urge the AAG to formally support passage of the bill." Every RSSG member should become informed about the proposed legislation, and many will surely wish to contact their congressional delegations to convey opinions about the bill. For copies of the legislation, the October National Press Club address, or additional details contact Rep. Brown's office at (202) 225-6371.



### RSSG BUSINESS MEETING AGENDA

The RSSG annual Business Meeting will be held on Tuesday, April 21, 1992 (8:00 a.m. - 9:40 a.m) in San Diego, CA. The preliminary agenda for the meeting is outlined below. Please convey suggestions for changes or additions to Duane Nellis, RSSG Chair (Kansas State University), Telephone: (913) 532-6727; FAX (913) 532-7310.

- 1. Recognition of 1992 program contributors paper sessions and workshops
- 2. Secretary-Treasurer's report
- 3. RSSG Newsletter Editor's report
- 4. Status of committees

Nominating Committee

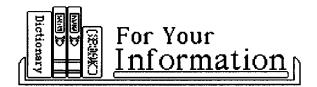
Awards Committee

Fund-Raising Committee

Membership Committee

ASPRS Liaison Committee

- 5. RSSG Outstanding Contributions Award and Medal
- 6. Reports by RSSG regional councilors
- 7. Impact of AAG/RSSG dues procedure
- 8. Fielding RSSG candidates for national AAG positions
- 9. RSSG activities for the IGC
- 10. Sessions for the 1993 Atlanta AAG meetings



### GIS BROCHURE PUBLISHED

The U.S. Geological Survey (USGS) has published an excellent new brochure on Geographic Information Systems. The brochure is part of a series dealing with topics such as the National Aerial Photography Program (NAPP), U.S. GeoData, Map Accuracy and related topics. Copies of the GIS brochure and others are available upon request from the USGS Earth Science Information Center (ESIC). ESIC offices are located in each state and the regional USGS offices in Reston, VA, Rolla, MO, Denver, CO and Menlo Park, CA. For additional details call ESIC free by dialing 1-800-USA-MAPS.

# SCS PUBLISHES IMAGE INTERPRETATION TEXTBOOK

The USDA Soil Conservation Service (SCS) has published a textbook on Remote Sensing Basic Photo Interpretation. Designed to support SCS training in the use of aerial photography and satellite imagery, the book is packaged with some 38 panchromatic and 103 color infrared images of areas throughout the U.S. The book, imagery and supportive materials are available for \$65.00. An instructor's set, containing the book, imagery and additional notes and materials, costs \$95.00. To order or acquire additional details contact: Michael Rasher, Remote Sensing Unit, USDA/Soil Conservation Service, National Cartographic Center P.O. Box 6567, Ft. Worth, TX 76115 (817) 334-5559.

# GRADUATE STUDENT FELLOWSHIPS IN GLOBAL CHANGE RESEARCH

NASA has announced the 1992-1993 competition for graduate student fellowships in global change research. Up to 45 awards will be made to persons pursuing a Ph.D. Awards are for \$20,000 per annum. The deadline for receipt of applications is April 1, 1992. For additional details contact: NASA Global Change Fellowship Program, Code SE-44, NASA Headquarters Washington, D.C. 20546.

### GIS HANDBOOKS AVAILABLE

Two excellent and inexpensive handbooks on land information systems have been published by the University of Wisconsin. The books are Introduction to Land Information Systems for Wisconsin's Future and Implementation of Land Information Systems in Local Government-Steps Toward Land Records Modernization in Wisconsin. Don't be mislead by the titles. The publications will be useful to anyone interested in GIS/LIS, not just residents of Wisconsin. The books sell for \$5.00 each plus a small fee for shipping. To order call the Wisconsin State Cartographer's Office (SCO) at (608) 262-3065 or write the SCO, University of Wisconsin-Madison, 550 North Park Street, Room 160, Madison, WI 53706-1404.

### MAP PORTRAYS LANDFORMS OF THE U.S.

The U.S. Geological Survey has published a new digital shaded relief map of the conterminous U.S. The map was compiled by computer manipulation of some 12 million terrain elevations, and is the largest single-sheet graphic of the Nation's landforms since the maps by Raisz prepared over 50 years ago. An accompanying pamphlet describes highlights and technical details on image processing and computer graphics methods used in map production. Published at a scale of 1:3,500,000, the map measures approximately 55 x 36 inches. It sells for \$5.00. To order, request Miscellaneous Investigations Series Map I-2206, Landforms of the Conterminous United States by G.P. Thelin and R.J. Pike. Copies can be ordered from the U.S. Geological Survey, Denver Federal Center, Map Sales, Box 25286, Denver, CO 80225 (Telephone: (303) 236-7477).

### HONORS AND AWARDS

John Lavin, graduate student in Geography at Kansas State University, was the recipient of a \$5500 NASA fellowship to support his remote sensing research on urban development patterns associated with Asuncion, Paraguay. Lavin's research is directed by M. Duane Nellis (Kansas State University).



# POSITIVE SYSTEMS, INC. INITIATES AID TO EDUCATION PROGRAM

The Airborne Data Acquisition and Registration (ADAR) System 5000 is a lightweight, high resolution, multispectral remote sensing system developed by Positive Systems, Inc. System 5000 data has been used for a variety of applications including environmental monitoring, wetlands research, the study of riparian zones, forestry, agriculture and industrial applications. The custom data sets collected by the System 5000 are delivered in standard raster data format ready for input into GIS/IP systems within 72 hours of the flight, although special projects can receive preformatted data within a couple of hours after the images were obtained.

Flexibility of spatial resolution, spectral resolution and area imaged allow each project to produce results specific to the individual applications. Image resolution ranges from 50 cm to 4 meters per pixel, with typical projects imaged at 1 meter to 2.5 meters per pixel. One to four parallel sensors are utilized to provide multispectral images. Individual channels are also variable in regards to bandwidth captured, allowing each project to obtain images specially tuned to the spectral coverage required. Standard red/green/blue or near IR/red/green images are possible, as are unique spectral studies within the sensor's range.

The System 5000 incorporates Global Positioning Satellite (GPS) technology, allowing scenes to be registered with approximate location information as well as recording flight or feature lines. This capability greatly enhances the effectiveness of images used in applications where location information is critical and difficult to obtain.

Positive Systems has recognized the requirements Universities have for obtaining low-cost, high-resolution, multispectral digital images that can be shared throughout the different departments that teach and conduct research in remote sensing and GIS. To serve this need, Positive Systems has

developed the Aid to Education program. This program provides five multispectral ADAR System 5000 scenes to use without duplication restrictions within the University. The images include wetlands, forests, urban areas, agriculture and industrial scenes. Each Aid to Education package includes five 3.5" floppy diskettes (DOS or UNIX format). Each disk contains one four-band multispectral scene, with each spectral image recorded as a separate file (in band sequential format, 8 bits per pixel, no file header). An information file provides data on spectral bands, image size (rows and columns), date of acquisition and a brief description of subject.

The Aid to Education package sells for \$150 (or \$175 for the international community). The price covers reproduction, shipping and handling. For additional details contact:

Positive Systems, Inc. Aid to Education Director P.O. Box 1551 Kalispell, Montana 59903 (406) 257-7745

### USE YOUR NEWSLETTER

The RSSG Newsletter is your vehicle for communicating with colleagues interested in remote sensing. You are invited to send news regarding publications, awards, honors, academic programs, research activities, commercial ventures, students, jobs and other announcements to:

James W. Merchant Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517 Telephone: (402) 472-7531

FAX: (402) 472-2410

# ASSOCIATION OF AMERICAN GEOGRAPHERS REMOTE SENSING SPECIALTY GROUP

## **BALLOT**

March 1992

Retu	rn by March 27, 199	)2 to:		
	Dr. M. Duane Nellis Department of Geogra Dickens Hall Kansas State Universi Manhattan, KS 66506	ity		
	1000 1000			
Vice-Chair (	1992-1994)			
Stephe	n J. Walsh (Univers	ity of North Ca	arolina)	
John A	. Harrington, Jr. (In	ndiana State Ui	niversity)	
Secretary-Tre	easurer (1992-1994)			
R. Dou	glas Ramsey (Utah S	State Universit	y)	
	<u> </u>			
Student Direct	etor (1992-1993)			
Richard	l Lissitschenko (Kan	ısas State Univ	ersity)	
Don Cl	ine (University of C	olorado)		
Sunil N	arumalani (Universi	ity of South Ca	rolina)	
	se vote for one pers eligible to vote.	on for each po	sition. Only cu	rrent members o
Vous nama:		Signat	ure:	

Continued from page 1 ... Events

for Rural Land Use Analysis (cosponsored by the Contemporary Agriculture and Rural Land Use) Specialty Group)

Monday, April 20, 1992

8:00 am - 9:40 am

Paper Session: Biophysical Remote Sensing I

9:55 am - 11:35 am

Paper Session: Biophysical Remote Sensing II

1:30 pm - 3:10 pm

Paper Session: Geographic Applications of AVHRR

Data

Paper Session: Remote Sensing-GIS Integration

Tuesday, April 21, 1992

8:00 am - 9:40 am

RSSG ANNUAL BUSINESS MEETING

9:55 am - 11:35 am

Paper Session: Spatial/Biophysical Analyses in

Glacier National Park, Montana



# USGS GLOBAL LAND INFORMATION SYSTEM (GLIS)

The Global Land Information System (GLIS) is an interactive computer system developed by the U.S. Geological Survey (USGS) for scientists seeking sources of information about the Earth's land surface. GLIS contains "metadata," (i.e., descriptive information about data sets). Through GLIS, scientists can evaluate data sets, determine their availability, and place online requests for products. Users can also view outline maps portraying geographic coverage of imagery or other data, and view actual samples of data. Graphic tools enable one to visually assess cloud cover or data quality.

GLIS contains references to regional, continental and global land information including land use, land

cover, soils, topographic and cultural data, as well as remotely sensed satellite and aircraft data. Continual updates of information and addition of new data sets will allow GLIS to remain current.

GLIS can currently be accessed via personal computers (PC) through wide-area networks and through dial-up telecommunications interfaces. Users wishing to perform text-based queries can use an alphanumeric terminal or a terminal emulator package on a PC.

From NSI/DECNET: \$SET HOST GLIS USERNAME: GLIS

From INTERNET: \$TELNET glis.cr.usgs.gov or \$TELNET 192.41.204.54

Direct Dial: Set modem to 8 bits, no parity, 1

stop bit

Dial: (605) 594-6888, or FTS

753-7888

In addition to text-based queries, users can conduct graphic searches through interfaces such as the PC-GLIS package available from USGS/EROS Data Center. Information on conducting graphic queries is available by contacting GLIS User Assistance (address below). Access to GLIS via 32-bit UNIX workstations is forthcoming.

For a free brochure and additional details on GLIS contact: USGS/EROS Data Center, GLIS User Assistance, Sioux Falls, SD 57198; (605) 594-6099 or 1-800-252-GLIS, or FTS 753-7099.



RSSG Newsletter c/o James W. Merchant Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517