

AAG REMOTE SENSING SPECIALTY GROUP

Issue No. 13

December 1984

FROM THE CHAIRPERSON

The fall semester is well underway and by now the rigors of teaching and research are no doubt impacting all of you in the usual fashion. I know my days all seem hectic.

I have received word from Ron Weinkauf and Tina Cary that their workshops, "Introduction to Remote Sensing" and "Digital Processing of Remotely Sensed Data," respectively, are organized for the Detroit meetings. Duane Nellis has been busy with overall program planning including the field trip to ERIM and related points of interest in the Ann Arbor region. Paul Mausel provided a valuable service early on in the area of field-trip planning. Duane and I were somewhat surprised, though, at the general lack of submissions of abstracts for RSSG-sponsored paper and poster sessions. Perhaps reduced travel budgets caused some problems; or the new early deadline for abstract submissions?

John Place is examining the feasibility of continuing our tradition of a social gathering for the membership at the annual meeting. Hopefully, the RSSG budget will allow us to socialize in our accustomed manner at least one more year.

As you will note in your perusal of this edition of the newsletter, my colleague at Nebraska, Scott Samson, has outlined a plan for a nationwide programming effort to develop code for a public-domain instructional image-processing package. I believe this to be a worthwhile undertaking and hope that many of you contact Scott indicating your interest and willingness to participate. In my opinion, such an activity might warrant RSSG sponsorship; at least it seems worthy of discussion at our April business meeting.

Since we are rapidly approaching the time for renewing our AAG membership, I would like to provide yet another reminder that a "check" in the RSSG box on your annual renewal form provides a \$.75 rebate to the specialty group. We appreciate your cooperation on this matter.

Donald Rundquist, RSSG
Chairperson

PLANNING FOR AAG ANNUAL MEETING CONTINUES

The RSSG Program Committee for the 1985 AAG Annual Meeting is concluding planning for RSSG-sponsored activities. Duane Nellis (Kansas State University), RSSG Program Committee Chair, reports that arrangements are firm for two RSSG-sponsored sessions, two workshops and a field trip.

Sessions

A paper session on "Environmental Remote Sensing" has been organized by Donald Rundquist (University of Nebraska). The session will be chaired by John Jensen (University of South Carolina).

Duane Nellis (Kansas State University) has organized a remote sensing poster session. Eleven poster papers have been submitted for presentation.

Workshops

Two RSSG-sponsored workshops will be offered in Detroit. Both are scheduled to run all day Saturday and on Sunday morning.

Tina Cary (Rutgers University) will present a workshop on "Digital Processing of Remotely Sensed Data." The objective of this workshop is to provide participants an introduction to digital image processing. Each participant is expected to be familiar with the electromagnetic spectrum, and matter-energy interactions. Those topics will be only briefly reviewed in the introduction. The steps in data analysis and classification will be introduced in lectures; then participants will form teams to conduct an analysis on a micro-computer. Finally, the group will re-convene to compare and discuss analysis results. Enrollment will be limited to fifteen persons.

Ronald Weinkauf (University of Wisconsin-La Crosse) will offer a concurrent course entitled "Introduction to Remote Sensing." This course will provide an overview of remote sensing techniques and applications. No prior knowledge of remote sensing will be presumed. Enrollment will be limited to approximately thirty persons.

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...AAG Meeting (Continued from page 1)

Field Trip

An all-day field trip to remote sensing centers in Ann Arbor, Michigan, has been organized by Eugene Jaworski (Eastern Michigan University). The trip is currently scheduled to take place on Tuesday, April 23, 1985 (8:00 a.m. - 5:00 p.m.). The cost will be \$25. The tentative agenda is as follows:

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| 8:15 a.m. | Depart on Action Tours bus from in front of the Westin Hotel. |
| 9:15 a.m. | Arrive at Environmental Research Institute of Michigan (ERIM). |
| 9:30-10:30 a.m. | Tour of Earth Resources Data Center of ERIM. Demonstration of computer-assisted categorization, geometric correction, image enhancement, applications (including GIS system). |
| 10:30-11:30 a.m. | Tour of Radar Division of ERIM. Application of SLAR and SAR systems. Review of projects. |
| 11:30-noon | Current projects and recent developments at ERIM. Questions and answers. |
| Noon-1:00 p.m. | Travel toward Geospectra and Daedalus. Lunch on your own at Chuck-E-Cheese. |
| 1:00-2:30 p.m. | Tour of Daedalus Enterprises, Inc. (recent scanner developments and applications). |
| 2:30-4:00 p.m. | Tour of Geospectra Corporation. Demonstration of Dipix system. Current applications in petroleum, mineral, and geologic remote sensing. |
| 4:00-5:00 p.m. | Travel back on bus to Westin Hotel in Detroit. |

Additional information on RSSG arrangements for the AAG-Detroit meetings may be obtained from M. Duane Nellis, Department of Geography, Dickens Hall, Kansas State University, Manhattan, KS 66506, (913) 532-6727.

SURVEY OF REMOTE SENSING FACILITIES/CAPABILITIES AVAILABLE

The preliminary results of a survey conducted by Steven Dicks, University of Florida, and aimed at summarizing geographic remote sensing facilities and capabilities on a national basis is available to those requesting a copy. The document will continue to be updated and supplemented. Those departments offering remote sensing courses who have not responded to the survey are encouraged to do so. A \$2.00 mailing fee for the document is requested. For a copy of the document or a questionnaire, please contact: Kevin M. Turcotte, RSSG Student Director, Department of Geography and Geology, Indiana State University, Terre Haute, Indiana 47809. Phone: (812) 232-6311.

— CALLS FOR PAPERS —

The Third Pacific Northwest Conference on Photogrammetry, Remote Sensing and Geographic Information Systems

Dates: May 15-17, 1985
Place: Portland, Oregon
Comments: Those wishing to present a paper or display a poster should submit a proposal by January 31, 1985. Include author's name, position, address, telephone number, subject title and abstract, not to exceed one page.

Conference Chairman: George Gross
13545 NW Science Park Dr.
Portland, OR 97229
(503) 646-1733

Program Chairman: Glenn Ireland
USGS-NMD
847 NE 19th, Suite 300
Portland, OR 97232
(503) 231-2019

1985 ACSM-ASP Fall Convention

Dates: September 8-13, 1985
Place: Indianapolis, Indiana
Comments: Abstracts (title, author, address, telephone number, professional affiliation) not to exceed 200 words; due by February 1, 1985. Papers due June 1, 1985.

Submit ASP papers to: Dr. Paul W. Mausel
Dept. of Geography/Geology
Indiana State University
Terre Haute, IN 47809
(812) 232-6311

Submit ACSM papers to:
Richard Lomax
243 S. Sheldon St.
Charlotte, MI 48813
(517) 543-2191 (h)
(517) 373-3237

Pecora X - Remote Sensing in Forest and Range Resource Management

Dates: August 20-22, 1985
Place: Fort Collins, Colorado
Comments: Abstracts for papers (500 words maximum) or summaries of posters (250 words maximum) due February 1, 1985.

Mail paper abstracts to:
Dr. Robert Haas
Pecora X Program Chairperson
USGS EROS Data Center
Sioux Falls, SD 57198
(605) 594-6114

Abstracts of posters should be mailed to:
Richard J. Myhre
USDA Forest Service
3825 Mulberry St.
Ft. Collins, CO 80524
(303) 224-3028

SOFTWARE EXCHANGE

Basic Digital Image Processing Software Package Proposed

Having experienced the painful growing pains in developing educational media for remote sensing, I am able to empathize with the person attempting to establish a fundamental remote sensing program. Probably the greatest pressure encountered, though, is finding a digital image processing software package which is inexpensive, simple to use, relatively transportable, and encompasses the basic concepts of image processing.

To alleviate some of the anxieties of introductory digital image processing, both for the instructor as well as for the student, I would like to explore the possibility of developing a public domain image processing software package which would meet the needs of the beginning as well as the experienced remote sensing educational environments. The software would be written in BASIC in order to meet the requirements of the smallest of microcomputers (FORTRAN is more efficient but less available than BASIC).

I would like to bring together a group of interested people to help in the identification of image processing software to be developed, establishment of common data formats, documentation design, the actual writing and implementation of software, and other problems which may be encountered along the way. Because graphic display routines vary from one machine

to another, a set of graphic display drivers would also enhance the package.

Undertaking a project such as this is not a small thing for one person. To make it a more manageable task, it is necessary to have a concerted effort in the development of this software. If each participant would be responsible for just one program (writing, documenting, and testing), we could have a respectable package together in a short time. Authors will be given proper credit in the program's documentation. The more we can spread the responsibility around on this project the quicker the initial version may be made available.

Since the set of programs will become public domain, costs will be limited to the actual costs of reproduction and mailing. No profit will be generated from this project other than sharing and improving each other's knowledge.

If there are members of the remote sensing community who are interested in pursuing this project, please contact me so that a list of interested participants may be compiled for later communications.

Scott A. Samson
Conservation and Survey Division
University of Nebraska-Lincoln
Lincoln, NE 68588-0517
(402) 472-3471 Ext. 246

PG TO PUBLISH REVIEWS OF GEOGRAPHIC SOFTWARE

Stanley Brunn (University of Kentucky), editor of The Professional Geographer (PG), has recently announced the introduction of a new section in the journal to be called "Reviews of Geographic Software." The section will include short reviews, much like book reviews, of programs dealing with instruction (games, etc.), computer graphics, remote sensing, GIS, AI, and other topics. Reviews of unique applications of hardware to geographic problems will also be encouraged. It is anticipated that approximately six reviews will be included in each issue of the journal. RSSG members interested in preparing a review should contact Dr. Stanley D. Brunn, Editor, The Professional Geographer, Department of Geography, 1457 Patterson Office Tower, University of Kentucky, Lexington, KY 40506-0027, (606) 257-2931.

Contributors to this edition of the RSSG Newsletter included Don Rundquist (University of Nebraska), Duane Nellis (Kansas State University) and Scott Samson (University of Nebraska). Deb Stewart (University of Kansas) assisted in editing and layout.

RSSG PUBLICATIONS COMMITTEE REPORTS PROGRESS

Leonard Bryan (Asian Regional Remote Sensing Training Center), RSSG Publications Committee Chair, reports that the Committee has completed its portion of work towards the anticipated publication of a selection of remote sensing papers in The Professional Geographer. It is hoped that these papers will appear in an early 1985 issue.

The Committee has set two immediate future objectives:

1. To prepare a set of remote sensing slides;
2. To prepare a special publication of the AAG.

RSSG members are invited and encouraged to communicate to the Committee their ideas and suggestions concerning the specific content of these publications. The Committee also solicits input regarding other "publishing" objectives/ventures which the RSSG may wish to consider. It is anticipated that these ideas will be discussed at the RSSG business meeting during the 1985 AAG meeting.

Ideas and comments may be directed to Dr. M. Leonard Bryan, Asian Regional Remote Sensing Training Center, Asian Institute of Technology, G.P.O. Box 2754, Bangkok 10501 Thailand.

NEWSLETTER CONTRIBUTIONS INVITED

RSSG members are encouraged to use your newsletter to facilitate information exchange, to apprise your colleagues of noteworthy events and news, and to solicit assistance. Contributions might include announcements regarding:

- Software (available or needed)
- Data (digital data or imagery available or needed)
- Teaching Aids (e.g., slides, films, brochures, sources of information, field trips)
- Training/short courses; new or modified academic programs
- Interaction with other professional organizations (e.g., ASP, IGARSS, URISA)
- Available reports/publications (perhaps having limited distribution)
- Recent significant remote sensing-related news from your department, agency or firm
- Jobs (e.g., you have a position to fill or know of a firm, agency or institution which is seeking employees)
- Grant/research opportunities
- Short letters to the editor regarding RSSG business or other matters

Please forward contributions for the next (March 1985) issue of the Newsletter by February 15, 1985, to: James Merchant, Editor, RSSG Newsletter, Kansas Applied Remote Sensing Program, University of Kansas, Space Technology Center, Lawrence, KS 66045-2969, (913) 864-4775.

RSSG Newsletter
Kansas Applied Remote Sensing Program
University of Kansas
Space Technology Center
Lawrence, KS 66045-2969

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POSITION AVAILABLE

Descriptive title: Staff Cartographer/Geographer-Geographic Information Systems

Qualifications required: M.S. or Ph.D. in Cartography, Geography, or related discipline; minimum of two years experience in the operation, development, and design of Geographic Information Systems (GIS). Experience should include geocoding; use of spatial data hardware and software; spatial database management including data structuring, georeferencing, and database updating; polygon and raster data handling; application of modern geographic and cartographic concepts and analyses; computer graphics for GIS; data sources and characteristics; accuracy assessment.

Position duties: Employee will conduct research, develop and present seminars and educational courses, analyze, design, and implement GIS technology, and contribute to the development of GIS research and development projects.

Salary: Based on qualifications

Send resume and cover letter to: Ronald D. Exler, Battelle, 2030 M Street, N.W., Washington, DC 20036.

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