MENSLETTER NEWSLETTER NEWSLETTER NEWSLETTER

AAG REMOTE SENSING SPECIALTY GROUP

Issue No. 14

April 1985

From the Chairperson

ADMINISTRATIVE ISSUES TO BE CONSIDERED

This is the time of the year when we normally look forward to a new chairperson taking over at our annual business meeting. This past year has been interesting for me, but I must admit that I am ready to "transfer the gavel." Of course, the first step is to organize a nominating committee for the purpose of developing a new slate of candidates, which I began to do. As a part of that process, I went back in my AAG Newsletters to the October 1, 1983 issue (p. 13) to review and verify the latest administrative and operational procedures for AAG specialty groups. With regard to the administration of specialty groups, the guideline is as follows:

Each active group will normally be governed by a board consisting of a chair, a secretary-treasurer and three directors. These officers will serve for two-year terms; the chair may not serve two consecutive terms. Initially some officers may serve one-year or three-year terms in order to begin staggering the occurrence of vacancies on the SG board.

Two-year terms! Somehow, I had overlooked this fact. So, it appears that our group is now faced with making a decision. We could: 1) align ourselves with the parent organization by adhering to the above-stated guideline; or 2) seek some special consideration from the AAG to allow us to proceed as we have in the past with a one-year term for the chairperson.

I suppose the former action is correct, but not because I wish to serve another year. Like you, I stay very busy with the normal demands of my regular job. A two-year term for the chairperson means more work for the individual we elect, but at the same time, it does perhaps provide a greater opportunity to both implement programs and interact with the other officers. The topic certainly seems worthy of detailed consideration at the annual business meeting. I suggest we make this decision in Detroit. Therefore, I will postpone the formation of a nominating committee until after the AAC meeting.

(Continued on page 3)

LANDSAT THREATENED IMMEDIATE CONGRESSIONAL CONTACTS URGED

An ominous new threat to the Landsat program has recently emerged from the Office of Management and Budget (OMB). David Stockman, Director of OMB, is making an active effort to eliminate federal funding for the program. Such action would effectively kill the commercialization process and the Landsat program (see Wall Street Journal, March 10, 1985).

There is evidence that Congress may be asked to act on the Landsat question within a matter of weeks. Consequently, RSSG members are urged to take the following actions immediately:

- Write, or otherwise contact, members of your congressional delegations (especially senators, since they will be pivotal). Make at least four points:
 - support the continuation of federal involvement in the Landsat program and request that they do the same;
 - cite specific uses of Landsat data by your university, agency, firm or organization and identify users;
 - note the manner in which elimination of Landsat would affect your state, your organization (their constituents);
 - discuss the impact of exclusive reliance on foreign sources (e.g., SPOT) for satellite multispectral data and the need for a U.S. program.

Send copies of all letters to Malcolm Baldrige (see below).

2. Write to the Honorable Malcolm Baldrige, Secretary, Department of Commerce, Washington, DC 20230, to express your support for the Landsat (Continued on page 3)

AAG - DETROIT 1985

COMPLETE SCHEDULE

OF

REMOTE SENSING EVENTS

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From the Editor

NEWSLETTER POLICY PROPOSED

Publication of the RSSG Newsletter is the largest single annual expense incurred by the specialty group, yet no policy on publication and circulation exists. An average issue, having a circulation of about 375, has cost approximately \$160.00. This expenditure has covered paper, duplication, preparation of headlines and graphics and first-class postage. The cost of purchasing mailing labels from AAG has been an additional \$50-100 per year. All expenses associated with typing, editing, layout, collation and writing have been borne by editors, contributors and their employers.

A loosely defined newsletter circulation policy has evolved over the years due, in part, to the fact that lists of RSSG members obtained from the AAG Central Office have not shown names of late renewals. It also appears that some remote sensing specialists are neglecting to check the RSSG box on their AAG renewal applications. This check-off must be accomplished each year. In any case, requests by individuals not identified by AAG as RSSG members to have their names added to our mailing list have generally been honored. I estimate that, at present, about 20% of our newsletter circulation goes to persons who are not RSSG members and may not be members of AAG. I am in favor of a broad distribution of the newsletter, but suggest a formal policy needs to be established to guide decisions regarding circulation.

During the past year two steps have been taken to attempt to control (or cut) future publication costs and to help with circulation. Dr. John L. Place, RSSG Treasurer, has acquired tax-exempt status for RSSG. We are now eligible for special non-profit third class postage rates. I have applied for such rates and expect to begin using our non-profit permit with the next issue of the newsletter. Although the newsletter will take somewhat longer to reach you, our mailing costs will be trimmed by about 50 percent.

Our other action has been to place the RSSG membership list on a Zenith 150 microcomputer. I am now able to maintain a current in-house circulation list, print mailing labels, and sort by various attributes. I expect that this will save us approximately \$50-100 annually.

During the 1985 RSSG business meeting, I would like to discuss several proposals which might be implemented as formal policy concerning the newsletter. These are, in brief:

- Publication There will be four issues per year published in March, June, September and December;
- 2. Budget Newsletter publication costs will not exceed \$150.00 per issue. Should additional funds be needed during the period between

- annual business meetings, approval of both the RSSG Chairperson and RSSG Treasurer will be required;
- 3. <u>Circulation</u> All persons identified by AAG as RSSG members will receive the newsletter at no charge. All other subscribers will be charged an annual fee to be established at the annual business meeting.

I will be interested in your comments and suggestions regarding these proposals. If you cannot attend the business meeting, please call or write.

James Merchant, Editor (913/864-4775)

CARTOGRAPHERS ORGANIZE MICROCOMPUTER USERS GROUP Should RSSG Follow Suit?

In an attempt to promote and facilitate the use of microcomputers in cartography, the American Cartographic Association (ACA) Information Services Committee (ISC) has established a Microcomputer Users Group. As an initial effort, ISC has published a Directory of Microcomputer Users in Cartography (February 1985). The Directory, compiled by Dr. Carleton W. Cox, ISC Chairperson, lists persons who are interested in sharing information about microcomputers and their applications in cartography. The purpose of the directory is to encourage information exchange among microcomputer users. The Users Group plans, also, to publish a newsletter. Copies of the Directory and additional information on the Users Group are available from Dr. Carleton W. Cox, 309 Kent Circle, Downingtown, Pennsylvania 19335 (215/768-6976).

Remote sensing specialists have much in common with cartographers. There are, quite likely, many RSSG members who use microcomputers and who would like to identify and correspond with others (1) using similar hardware, (2) developing or modifying software to run on a specific microcomputer, and/or (3) dealing with similar teaching, research and applications problems. The possible merits of establishing a microcomputer users group under the sponsorship of RSSG will be discussed at the Detroit-AAG annual RSSG business meeting. RSSG members who are interested in establishing a microcomputer users group, who have opinions regarding RSSG sponsorship, or who would be interested in providing leadership to establish such a group are invited to contact either Donald Rundquist, RSSG Chairperson (University of Nebraska, Conservation and Survey Division, 113 Nebraska Hall, Lincoln, NE 68588; 402/472-3471) or James Merchant, RSSG Newsletter Editor (University of Kansas Space Technology Center, Lawrence, KS 66045: 913/864-4775).

ASSOCIATION OF AMERICAN GEOGRAPHERS - DETROIT 1985 SCHEDULE OF REMOTE SENSING EVENTS

APRIL 20 Saturday

APRIL 21 Sunday

WORKSHOPS

Introduction to Remote Sensing
8:00 a.m. - 4:30 p.m.,
Saturday, April 20
8:30 a.m. - 11:30 a.m.,
Sunday, April 21
Organized by Ronald Weinkauf,
University of Wisconsin - LaCrosse

Digital Processing of Remotely
Sensed Data
8:00 a.m. - 8:00 p.m.,
Saturday, April 20
8:00 a.m. - 12:30 p.m.,
Sunday, April 21
Organized by Tina Cary,
Rutgers University



BUSINESS MEETING

Remote Sensing Specialty Group Business Meeting 5:00 p.m. - 6:00 p.m., Monday, April 22 Chaired by Donald Rundquist, University of Nebraska



FIELD TRIP

A field trip to the Environmental
Research Institute of Michigan (ERIM),
Daedalus Enterprises, Inc., and
Geospectra Corporation, Ann Arbor,
Michigan
8:00 a.m. - 5:00 p.m.,
Tuesday, April 23
Organized by Eugene Jaworski,
Eastern Michigan University

...Issues (Continued from page 1)
In our last newsletter, I mentioned that John Place was investigating expenses associated with an RSSG social gathering. John determined that the cost of renting a suite in Detroit for an evening is extremely high, so I recommended that we not expend the funds and forego the party for this year. Perhaps interested individuals could meet over dinner after the business meeting. I regret that the social gathering does not seem feasible, but our funds are limited.

The remote sensing program for Detroit looks very good. Hope to see you there!

Don Rundquist RSSG Chairperson



POSTER SESSIONS

Agriculture, Cartographic

Representation, Remote Sensing,
GIS, Applied Studies
8:00 a.m. - 11:40 a.m.,
Wednesday, April 24
Organized by AAG

Special Poster Session on Remote Sensing 8:00 a.m. - 9:40 a.m., Wednesday, April 24 Organized by Duane Nellis, Kansas State University

PAPER SESSIONS

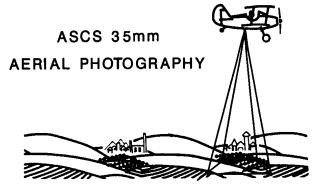
Environmental Remote Sensing
10:00 a.m. - 11:40 a.m.,
Wednesday, April 24
Organized by Donald Rundquist,
University of Nebraska;
Chaired by John Jensen,
University of South Carolina

Remote Sensing and Biomass Productivity
1:00 p.m. - 2:40 p.m.,
Wednesday, April 24
Chaired by Donald Rundquist,
University of Nebraska

FOR ADDITIONAL INFORMATION:

- On registration for the meeting, field trip, workshops, contact the Association of American Geographers, 1710 Sixteenth St., NW, Washington, DC 20009 (202/234-1450).
- On <u>RSSG arrangements</u> for the AAG-Detroit meetings, contact M. Duane Nellis, Department of Geography, Dickens Hall, Kansas State University, Manhattan, KS 66506 (913/532-6727).
- ...Landsat (Continued from page 1)
 program. These letters will help fight OMB
 claims that Landsat users are indifferent in
 their commitment to the program;
- Urge your colleagues who use Landsat, agency administrators, state legislators, and others to take similar actions.

For additional information on this matter contact: Mr. Earl J. Tullos, Jr.; Institute for Science and Public Service; Florida State University; 361 Bellamy; Tallahassee, FL 32306; (904) 644-2007 (or) Mr. David Thibault; 7222 47th Street; Chevy Chase, MD 20815; (301) 951-0104.



Most geographers are quite familiar with the black and white panchromatic 9" x 9" aerial photography acquired periodically over most of the U.S. by the USDA Agricultural Stabilization and Conservation Service (ASCS). That the agency also sponsors a more frequent small format aerial photography program is less well-known. Since 1977, ASCS has been acquiring 35mm natural color slides of most agricultural areas across the U.S. County ASCS offices use these slides to assist in annually monitoring various compliance programs which they oversee.

All but approximately 200 U.S. counties currently participate in the ASCS aerial compliance program. The timing of coverage varies regionally. Coverage may be repeated from one to four times a year, depending on crop mixes and phenologies. In Kansas, for example, photography is obtained statewide twice each year, usually once in the summer to monitor feed grains, and once in the fall or spring to monitor winter wheat. Nominal image scale usually is between 1:80,000 and 1:100,000, though larger scale photos are sometimes obtained. Each slide, therefore, covers 1-2 square miles.

County ASCS offices typically use the slides only for a single year. Subsequently, they may be stored, given away piecemeal, or even discarded. Recognizing that these aerial slides could be valuable for teaching, research and various applications, we, in Kansas, have developed a cooperative program with the Kansas ASCS state office to archive obsolescent slides.

Kansas county offices are encouraged to mail slides no longer required to the Kansas Applied Remote Sensing (KARS) Program at the University of Kansas. The slides are indexed by county and date of coverage, and are then made available for inhouse viewing or duplication by students, faculty, public agencies, private firms and other users. At present, approximately 80 percent of Kansas' 105 counties participate in the program.

The ASCS aerial slides have proven to be of value for a variety of applications, especially in areas where other imagery is not available or is too expensive. Additional information on ASCS 35mm aerial photography may be obtained from your ASCS state office, ASCS county offices or the KARS Program (University of Kansas, STC, Lawrence, KS 66045; 913/864-4775).

RSSG TO SPONSOR BOTH ADVANCED AND INTRODUCTORY WORKSHOPS

Two RSSG-sponsored workshops will be offered during the AAG 1985 Annual Meeting in Detroit. Both are scheduled to run all day Saturday (April 20) and on Sunday morning (April 21).

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. Lecture on Saturday, from 8:00 a.m. till noon will serve to introduce the analysis sequence, including pre-processing (corrections and enhancements), analysis (site location, sample selection for training and testing, classifiers) and results (evaluation and presentation). Then the participants will form three groups. Each group will have $3\frac{1}{2}$ hours to work on the microcomputer analyzing Landsat data (which will be provided). One group will have access to the microcomputer from 1:00 p.m. to 4:30 p.m., and another group from 4:30 p.m. to 8:00 p.m. on Saturday. The third group will have from 8:00 a.m. to 11:30 a.m. on Sunday. All three groups will reconvene at 11:30 a.m. on Sunday to present, compare, and discuss results for one hour.

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. Saturday morning presentations will provide an overview of remote sensing techniques and will focus upon research. Particular attention will be given the Large Format Camera and Shuttle Imaging Radar. The Saturday afternoon session will focus upon instruction and will include presentations on remote sensing education in California, interpreting Soviet land use and diazo enhancement. Sunday morning's session will concentrate on applications. Remote sensing applications in the private sector, in state government (Michigan) and in Canada will be discussed. An image/data packet and instructional material will be provided to all workshop participants. Session leaders will include representatives of NASA, Michigan State University, San Jose State University, the Ontario Remote Sensing Center, Geospectra Corporation, Wayne State University, and the Michigan Department of Natural Resources.

Remote Sensing Centers*

TECHNOLOGY APPLICATION CENTER THE UNIVERSITY OF NEW MEXICO

The Technology Application Center (TAC) is a research division of the University of New Mexico, Albuquerque. Since 1965, TAC has operated as one of NASA's Industrial Applications Centers whose mission is to assist in transferring space technology to user communities. TAC began its remote sensing program in 1968 with the dissemination of earth-oriented satellite photography. The launch of Landsat-1 in 1972 initiated a long term program of diversification, and TAC now offers a broad array of products and services. The Center's financial support profile has changed from one that was exclusively NASA to one which today is broadly based on university, industry, government and individual users. During the past decade, TAC has served the user community with some 90 completed projects. Both traditional and digital image processing techniques have been used.

TAC markets applied remote sensing on a non-profit, cost-recovery basis. The Center's present expertise is concentrated in four areas: (1) digital image processing of satellite and aerial scanner data; (2) training - including workshops, short courses, and the Visiting Scientist Program; (3) aerial and satellite data retrieval and dissemination; and (4) design and implementation of geographic information systems.

The Center maintains strong ties with the University's Department of Geography. Dr. Stanley A. Morain, Director of TAC, is also Chair of the Department of Geography. Several other geographers are employed as remote sensing research scientists at TAC, and graduate research assistantships are often available for students in geography.

TAC's Visiting Scientist Program

TAC's Visiting Scientist Program, established in 1983, has two roles. First, the program is designed to provide long-term instruction in applied remote sensing, particularly for the international community. TAC has recently provided training for earth resources scientists from Egypt and the People's Republic of China under this program, and negotiations are currently underway for visits by scientists from Nepal, India, Egypt and Qatar during 1985. Training emphasizes practical hands-on experience, typically revolving around a relevant remote sensing project, and is custom-tailored to the needs and interests of the trainee or his sponsor. Trainees may spend from one month to twelve months or longer at TAC.

Secondly, the Visiting Scientist Program is designed to make advanced image processing facilities available to remote sensing specialists for independent remote sensing projects. This second aspect of the Program should be of particular interest to members of the RSSG; it is now in the process of expansion. On a non-profit, cost-recovery basis, TAC can provide remote sensing professors conducting summer or sabbatical research with office space, background documentation (including direct access to the NASA files), access to our extensive CCT library, computer time on our VAX 11/750 with ELAS and ARC/INFO software, personal access to a RIPS image processing microcomputer, clerical support, photocopying privileges, and any necessary technical instruction. This aspect of the Visiting Scientist Program is designed to serve the large community of remote sensing specialists who do not have ready access to comparable facilities. Because of TAC's relatively independent status, financial arrangements for the use of these facilities are easily worked out. The ready availability of these facilities should greatly expand the research and research grant proposal horizons for many in the RSSG community. TAC also welcomes proposals for collaborative research projects with TAC personnel involving the use of our facilities.

For further information, please contact:

Dr. Will D. Swearingen Technology Application Center University of New Mexico Albuquerque, NM 87131

(505) 277-3622

^{*}Editor's Note. This article, on the University of New Mexico's Technology Application Center, is the first in a regular series on Remote Sensing Centers. These articles will swmmarize the orientation, specialties and current activities of remote sensing research laboratories, academic departments, public agencies and private firms in which geographers are involved. Persons wishing to prepare articles for the series are asked to contact James Merchant, RSSG Newsletter Editor, for guidelines.

—— POSITIONS AVAILABLE ——

RESEARCH ASSOCIATE - REMOTE SENSING. COOK COLLEGE REMOTE SENSING CENTER - RUTGERS UNIVERSITY. One year appointment, renewable, beginning June 1, 1985. Ph.D. or M.S. in remote sensing or a related field, experience in applied remote sensing research, computer programming, and geographic information systems desirable. Duties include providing support to the Center, assistance in the development of research proposals and programs, and supervision of the remote sensing lab. Closing date April 30, 1985. An Equal Opportunity/Affirmative Action Employer. Send resume and 3 letters of recommendation to: Search Committee, Department of Environmental Resources, Cook College, P.O. Box 231, New Brunswick, NJ 08903.

ASSISTANT PROFESSOR - RESOURCE INVENTORY & ANALY-SIS. CORNELL UNIVERSITY. Full-time tenure track position beginning August 1, 1985. Applicants must have a Ph.D., with training in natural resource inventory, remote sensing, and related disciplines, and experience with computer-based geographic information systems. Applicant must be a skilled communicator and have a personal orientation toward extension programming involving the staff of Cornell Cooperative Extension. A major focus of this position is to provide leadership to extend techniques for inventorying and analyzing resource information. Responsibilities will include developing and administering the extension program of the Cornell Laboratory for Environmental Applications of Remote Sensing (CLEARS). Opportunity for doing applied research and teaching. Extension activities focus on, but are not limited to, New York. Closing date: May 15, 1985. Send letter of application, resume, transcripts, and 3 letters of recommendation to: Dr. Ray B. Bryant, Chairman of Search Committee, Department of Agronomy, Cornell University, Ithaca, NY 14853-0144, (607) 256-3267.

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

SUPERVISOR - COMPUTER SYSTEMS. CONSERVATION AND SURVEY DIVISION - UNIVERSITY OF NEBRASKA. Responsibilities include documentation and organization of computer service activities in the Division; assisting the professional staff of the Division (including Remote Sensing Center) in specific research and service objectives; hardware maintenance schedules and the procurement of computer supplies; implementation of a Division-wide Geographic Information System and the consolidation of existing data bases into the system; overall management responsibility for micro-/mini-Network and mainframe access; management of the activities of other staff employed to assist with the tasks outlined above; coordination of the development of the Division's systems with those of other agencies and other units of the University; and other related duties and responsibilities in support of the Division's programs. Applicants should have a background in computer science and in hydrology, geography, or geology. Demonstrated aptitude and experience in high-level languages for the management of large data bases; computer graphics desirable. M.S. (preferred), minimum 9 years education/experience. Closing date: May 1, 1985. Send resumes, transcripts, and 3 references to: Computing Search, Conservation and Survey Division, University of Nebraska-Lincoln, Lincoln, NE 68588-0517.

Contributors to this edition of the RSSG Newsletter included Donald Rundquist (University of Nebraska), Duane Nellis (Kansas State University), Will Swearingen (University of New Mexico), Tina Cary (Rutgers University), Ronald Weinkauf (University of Wisconsin - La Crosse), Debora Stewart and Andrew Norton (University of Kansas), and Jay Tullos (Florida State University).