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FROM THE EDITORS

Time is quickly approaching for the International Conference on Geoscience Information in Adelaide and for the Special Libraries Association meeting in Boston. We hope everyone attending has a wonderful time, and we look forward to getting timely and informative articles on these meetings for the GIS Newsletter.

We'd like to encourage all GIS members to submit materials for their Newsletter. New book and journal reviews, articles on current topics, library profiles—they all serve to keep us better informed. Our membership is small and widely scattered, internationally. The Newsletter is our best means of maintaining communication between annual meetings. Use it!

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GIS members are encouraged to contribute articles or news of general interest to the membership. Please send any manuscripts to the Chairperson of the Editorial Board. All other items, such as citations, letters to the editor, job announcements, publication notices, and general news should be sent to the Newsletter Editor.

Material for the June Newsletter should be received by the editors no later than May 15, 1986.

The *GIS Newsletter* is published bi-monthly in February, April, June, August, October, and December by the Geoscience Information Society. Subscription to the *Newsletter* is \$30.00 per year and is included in the Society's annual membership dues. All correspondence relating to dues, membership status and address changes should be directed to the GIS Secretary.

CALL FOR PAPERS AND POSTERS

GIS TECHNICAL SESSIONS

SAN ANTONIO, TEXAS

NOVEMBER 10 - 13, 1986

Have you developed some new information services, found different ways or sources for collecting information, utilized new technology? Have you otherwise come up with a new revelation, idea or discovery in the geoscience information field? If so, don't keep it to yourself. Let us hear about it at the GIS annual meeting. Give a paper at the technical session or get together a poster for the poster sessions. The whole idea of these meetings is to exchange information and ideas, so tell the world. (The GIS Proceedings are sent all over the world). Go ahead and toot your own horn. We can learn from you.

If interested, please contact Bob Bier, 1986 Program Chairman, for information and abstract forms. Absolute deadline for receipt of abstracts of your papers or posters is June 13.

Contact: Bob Bier
 GIS Program Chairman
 2346 South Devinney St.
 Lakewood, Colorado 80228
 Work Phone: 303 236-1004 or 236-1000
 FTS 776-1004 or 776-1000

MINUTES:
GIS EXECUTIVE BOARD MEETING
OCTOBER 27, 1985

The meeting was called to order at 2:15 p.m. in the Pindo Room of the Marriott Hotel, Orlando, Florida. The minutes of the previous meeting were approved.

Present were Annette Bourgeois (Vice-President/President-Elect), Unni Rowell (Past President), John Crissinger (Treasurer), Jim O'Donnell (Publications Manager), Connie Manson (GIS Newsletter co-editor), Bob Bier (soon to be Vice President-Elect), and Marvin Kaufman (AGI Executive Director).

Dr. Kauffman asked to come to the Board Meeting of each of the 17 AGI member societies to let us know what AGI is doing, to encourage society communication, and to answer any of our questions. The first of the three primary items that he told us about was the AGI Manpower Study. It will be a 3-year program to find out our numbers, specialities, salaries, experience, education, etc. The questionnaire will be funded by the member societies, industry, federal agencies, and private foundations. The total cost will be approximately \$400,000, of which approximately two-thirds has been promised. The study should begin in early 1986 with an outside contractor to set up the study. A revised version of the questionnaire will be discussed at the Wednesday AGI Council Meeting.

A recent NSF grant drew together 27 experts in earth science who looked at pre-college earth science education. This is the first time, since NSF money dried up about 20 years ago, that pre-college education has been studied. An earth science education center will be set up at AGI headquarters to aid the earth science educator interact with the practicing earth scientist (and vice versa) as well as in the classroom. A proceedings volume from the meeting will soon be published by AGI.

The third item: a series of forums for Congress has been funded by the Carthage Foundation of Pittsburgh, PA. A luncheon conducted on the Hill for Senate congress-

sional aides on the topic "Minerals and the mineral industry" was considered successful. A similar luncheon is planned for House congressional aides.

The congressional fellow may become a reality now that the USGS might be able to participate. The cost is estimated to be about \$28,000. The possibilities will be discussed this week at the AGI Council Meeting.

SECRETARY'S REPORT: Connie Wick's report was printed in the Newsletter and she wanted to update our membership numbers. There are now 232 U.S. personal members, 37 members from other nations, and 44 corporate members, resulting in a total of 313 members.

TREASURER'S REPORT: A discussion followed about how to collect money from international checks received for membership and publications. Some checks written for U.S. funds are accepted by banks and some are not. It was decided that any payment collected from other nations will be accepted only in international money orders.

ANNUAL PROGRAM CHAIR: The schedule between the lunch and the Symposium will be tight. The lack of a field trip is due to the hospitalization of the local person who had agreed to organize it.

MEMBERSHIP COMMITTEE: The responsibilities of the Membership Committee and the Secretary need to be more clearly defined. Annette should compare and contrast the two. If possible, the membership renewal form will be a printout of the individual's Membership Directory entry and will be distributed with the December GIS Newsletter. Members will make corrections on the printout and return it to the Secretary. The Membership Directory will then be constructed from the renewal forms. Suggestions for improvement include: designation of home vs. business address; subdivision of the geographic index; institutional index should include who votes for institution

members; alphabetization of the names within the geographic and organizational index; position title for each member. It was suggested that the one column format be retained, that a history of the Society be added, and that each index should all be one color. It was decided not to place stick-on labels of change of addresses in the Newsletter because of increased costs and additional labor required of the editor. Next year the renewal might be sent out in the October issue. A deadline for dues renewal will include a statement something like "to insure receipt of GIS Newsletter, Proceedings, and Membership Directory, dues must be received by March 1, 1986." Institutional renewal forms should be mailed separately from the Newsletter. Purchase of a microcomputer for the Society has been suggested, but the Board decided to postpone indefinitely the decision until the need is determined and the availability of machine access within officers' work places is considered. Perhaps an ad hoc committee is needed. Address labels and the Membership Directory data should be available from one source. The Board directed the President, Secretary, the Membership Committee, and the Newsletter editor (distribution) to discuss how all the information can be put in one database to reduce the duplication of effort.

The GIS information circular will need to be reprinted. It was printed at the University of Wisconsin. We should request a stamped (for U.S. residents) self-addressed #10 envelope from those persons requesting copies. The fact that the Secretary, the Publications Manager, and AGI distribute both it and the GIS careers brochure should be published in the GIS Newsletter. The address that should be put on both should read "Secretary, in care of AGI" and the AGI address. Copies should be sent to AGI.

The Membership Committee should be seeking new members. Unni has a list of libraries from whom she seeks information and these librarians are not GIS members. She will send the list on to Dena in order that the Society can contact these potential members.

BEST PAPER AWARD: No additions from the printed report. Unni suggested that the Executive Board should appoint a committee

to solicit nominations and make the final selection. The Executive Board could approve their nomination.

GEOREF USERS GROUP: No additions from the printed report.

THIRD INTERNATIONAL CONFERENCE ON GEOLOGICAL INFORMATION: Unni, Ros, and Claren will meet Monday afternoon to formulate the procedure for submitting requests for funds. The exhibit will cost \$300 to ship via ocean freight. For someone to take it along with them on the plane would cost \$200 each way. Could a display be rented at Adelaide or borrowed from the Australian Mineral Foundation? The wood crate is very heavy and it was suggested that a lighter container be considered. Up-to-date photos are needed. The Executive Board after the meeting should consider how and what to ship.

PUBLICATIONS MANAGER: The list of available publications will be a hand-out available at the exhibit. Jim O'Donnell suggested that we print 100 copies above our membership total of the Proceedings. Standing orders seem to be working well.

GSA CENTENNIAL MEETING: A report appeared in the GIS Newsletter and Chair Dedy Ward will clarify the Committee's plans at the Tuesday business meeting.

CAREERS IN GEOSCIENCE INFORMATION: AGI should have some available for distribution as well as the Secretary and the Publication Manager. Primary responsibility for distribution resides with the Publications Manager.

SUBJECT HEADINGS: The report was published in the GIS Newsletter and nothing has been added.

CRITERIA FOR EVALUATING GEOSCIENCE JOURNALS: John Crissinger brought a revised copy of the guidelines and would like any further changes in them to be given to him today. He will make copies for distribution at our exhibit here at GSA.

MAP STANDARDS COMMITTEE: Susan Klimley has suggested that CUAC might be interested in pursuing the goal of trying to get UMI to

improve the quality of reproduction of the geological dissertations with particular attention being given to the maps.

OLD BUSINESS

DUES: The motion to increase the dues from \$20 to \$30 for personal membership carried with one dissenting vote. The rationale for the increase was that we:

- 1- Could help to send our representatives to meetings
- 2- Could help to cover our publication-related expenses
- 3- Could assist any candidate for office whose employer might not be willing to cover transportation costs for attending the annual GIS meeting.

Other factors mentioned were:

- 4- Increased cost of publications
- 5- Greater expenses than income

Annual institutional membership will rise from \$30 to \$50. Both recommendations for increase of dues will be presented to the membership at the Tuesday business meeting.

Annette and Jim will investigate the place of publication and the distribution of the 1985 Proceedings.

NEW BUSINESS

CHECKING ACCOUNT: Part of the GIS account should be invested in a long-term, interest-accruing account in either the Bank of America or the Bank of Virginia (where AGI does business). It was decided that there should only be one checking account. In order to speed up the payments, it was suggested that only one signature be required per check rather than those of both the President and the Treasurer. Quarterly Treasurer's reports to the President will be needed.

AGI CONGRESSIONAL FELLOW: Unni will learn details at the Wednesday, AGI Council meeting and discussion can take place at the Thursday Executive Board meeting. Claren will tell the membership that AGI is again considering the fellowship.

AGI MANPOWER STUDY: Unni and Claren received copies of the draft questionnaire and returned suggestions for changes. The study will be discussed at the Wednesday AGI Council meeting. Annette will send the revised copy to the members of the GIS Executive Board (she received the copy from Dr. Kaufman.) Before GIS makes a commitment for the requested \$100, the revised instrument must be evaluated as to whether it will reflect the interests of GIS.

BY-LAWS: Unni questions why the Secretary and the Treasurer are elected and why for only two years. She suggests that both be appointed and for a term of more than two years. The election of Secretary and Treasurer require only one nominee but we usually have had two nominees for each office. It was also pointed out that the Executive Board is supposed to approve the applications for membership. Perhaps a standing or ad hoc committee might be appointed to study the By-Laws.

MISCELLANEA:

- Secretary Connie Wick prints and distributes letterhead and envelopes.
- Jim O'Donnell suggested that the minutes of the Executive Board meeting be printed in the GIS Newsletter before they are approved a year later.
- Claren announced and read the certificate of appreciation to be presented to Regina Brown at the business meeting.
- The exhibit booth is 234. John invited us to be sure to look at the exhibit. Bob Bier mentioned that the Denver USGS Library has many thousands of pictures and perhaps some of them might be appropriate for our exhibit.

The meeting was adjourned at 5:20 p.m.

respectively submitted by Claren M. Kidd
(as transcribed from the meeting tapes)

CARTOGRAPHIC USERS ADVISORY COUNCIL ANNUAL MEETING
January 6-7, 1986

by

Nancy J. Pruett
3144 Technical Library
Sandia National Laboratories
Albuquerque, NM 87185
505/844-6430

The Cartographic Users Advisory Council (CUAC) works with map-producing agencies to improve the quality and accessibility of their products. It is made up of two representatives each from ALA MAGERT, SLA G&M, WAML, ALA GODORT (new in 1985), NACIS (new in 1986) and GIS. Charlotte Derksen and I represent GIS, and I became CUAC's Chair at the end of the Annual Meeting. CUAC's Annual Meeting was January 6 and 7 in Washington, D.C. and we met with the Superintendent of Documents, representatives of the Department of State, the USGS, the Bureau of Land Management, and the National Wetlands Inventory. We also had a presentation on color microfiche from Micro Aero Charts and one on video maps from Perceptronics.

The following are highlights of the meeting which should be of interest to GIS members:

SUDPCS—The Superintendent of Documents, Donald E. Fossedal, gave us some perspective on the GPO operation, which has gone from approximately 1300 employees in 1981 to 948 now. At the same time they are being asked to really live up to Title 44— that is, to distribute one copy of everything the government publishes in the depository library program.

STATE—George Demko, Director of the Office of the Geographer, and Sandra Shaw, Chief of the Cartography Division, reviewed products of the Department of State. Their cartography products support U.S. foreign policy, and put an emphasis on foreign boundaries and sovereignty issues. A publication called *Geographical Notes* summarizes name changes and political geographical news. As a result of CUAC's interest, they

will be working to get their products into the depository library program.

USGS—Gary North, Frank Ouseley, Charlie Bennett, and Larry King came from the USGS National Mapping Division. All map distribution is being moved to Denver. The USGS is looking at videodisk for records management. EOSAT Corporation is now in charge of all LANDSAT products, with the EROS Data Center in Sioux Falls serving as a federal archive only. The Office of Management and Budget turned down the National Atlas Project (the lack of a current National Atlas has been of continuing concern to GIS). The MF-series of maps is now included in the depository program. Screens for public service ads for depository libraries as sources of maps were sent to depository libraries last year. If anyone would like copies, contact me. If anyone has run the ads, please send me a copy of the ad or at least a note of where it appeared.

BLM—David Meier, Chief Cartographer for BLM, explained the regional structure of BLM. CUAC will be working with BLM to get an inventory of available cartographic products. In the meantime, to get BLM products, map librarians should contact the regional agencies.

WETLANDS—Bill Wilen, Director of the National Wetlands Inventory, brought some samples of the wetlands maps. The National Wetlands Inventory maps are detailed maps (one we were shown was at scale 1:60,000) with detailed codes for ecological systems and water regimes and chemistry. They cover much of the U.S. (even New Mexico is included, and I don't think of New Mexico as wetlands)

and are available from NCIC (1-800-USA-MAPS) or from a number of state agencies. As a result of the CUAC meeting, the agency will be working with GPO to get them into the depository program (in fiche).

OVERALL IMPRESSIONS—All the government agencies were concerned about the effect of the Gramm-Rudman bill on their programs. It is also clear that the technology is moving much faster than I thought. Map producers are talking about distributing maps on videodisk or CD-ROM or in digital form—not ten years from now but very soon. Although

this kind of distribution is close in the book world, it appears to be even closer in the cartographic world.

We plan to meet again next January in Washington and to continue contact with the agencies in the meantime. If anyone has any concerns about the map depository program, or about the quality or availability of any map product, feel free to contact me or Charlotte. CUAC is particularly effective in working with the agencies because it represents a united front of so many organizations. Also feel free to contact us if you need more details about the meeting.

FORTHCOMING MEETINGS

- May 19-21, 1986—Geological Association of Canada/Mineralogical Association of Canada; annual meeting; Ottawa.
June 1-6, 1986—International Conference on Geoscience Information; meeting; Adelaide, South Australia.
June 7-12, 1986—Special Libraries Association; annual meeting; Boston.
June 15-18, 1986—American Association of Petroleum Geologists/Society of Economic Paleontologists and Mineralogists; annual meeting; Atlanta.
June 28-July 2, 1986—American Library Association; annual meeting; New York.

THE INFORMATION EXCHANGE

The Dallas Public Library is in the process of advertising its map collection. They would appreciate hearing about any experiences you have had in publicizing the maps in your collection. If you have brochures, news releases or any other descriptive materials which you disseminate to the public, they would be especially interested in receiving copies. If you would like samples of their brochure, contact map librarian David Rathvon, at:

Dallas Public Library
1515 Young Street
Dallas, Texas 75201
214/749-4100

MEMBERS IN THE NEWS

JULIE BICHTLER has had an article, "Library instruction for geology students," published in the November, 1985 issue of *Journal of Geological Education*.

NEW MEMBERS

Mary Ellen Fleury
Texaco, Inc.—Corporate Library
P. O. Box 60252
New Orleans, LA 70160

Ann H. Krum, Librarian
Shell Western Exploration and Production
438 Southchester
Houston, TX 77079

Dennis Trombatore
Geology Library
University of Texas at Austin
Austin, TX 78713

THE FUTURE: VIDEODISC, OPTICAL DISK, AND CD-ROM

by

Susan Klimley

Editors' note: Susan Klimley's article was originally scheduled to appear in the February, 1986 issue of the GIS Newsletter. We regret that mail delays made that impossible.

Grolier's *Academic American Encyclopedia*— 20 volumes, 9,000,000 words— not just on a CD-ROM disk, but on *one-third* of *one* CD-ROM disk for \$199. Yes, fellow librarians, I have seen the future and it is on CD-ROM. Unfortunately, it is not in mass production— yet.

In December I had the opportunity to attend the 1985 Videodisc, Optical Disk and CD-ROM Conference and Exposition in Philadelphia. It was clear that the hints of great changes that I had sensed for the last couple of years were near realization. But as with most technological revolutions, things are proceeding at a halting pace.

I attended this meeting with several very specific interests in mind. As you can probably guess, I continue to look for a solution to the geology preservation problem, and various disk technologies seem to offer a potential solution. I had also become interested in data bases distributed on CD-ROM. *Psychological Abstracts* and NTIS data bases were reported to be available on CD-ROM. Finally, a Lamont faculty member had approached me about the possibility of putting instructional geology slide sets on disk for projection during class and to make them available as "reserve reading."

The conference provided interesting insight into all the aspects of technology that I was interested in. Felix Krayesky of the Library of Congress first gave a review of disk technology. He commented that microforms are the only storage media whose density approaches that of disk technology, and he expects microforms to be around for

a long time. At present, he felt disk technology was being driven by a highly select audio market— the classical "hi-fi" music nut.

PRESERVATION

Krayesky then gave an update on the LC Optical Disk Project. LC is experimenting with disk technology— laser optical disk— to help solve their space problems, not to mention the fact that one-third of the items requested by patrons cannot be found for immediate use. Even in this pilot project, costs are coming down. The first 10 discs purchased by LC cost \$3500 apiece, while the next 100 cost \$200 apiece. Even though the LC project has preservation needs firmly in mind, there are limitations to their efforts. They are not storing color illustrations in color but instead utilize an elaborate half-toning process to preserve the detail but not the color of the image. Disk storage of color simply takes too much space. A major constraint on the project is the lack of disks available.

There were also representatives from the IRS, National Archives and Patent Office. All are actively engaged in disk storage projects, but most of the projects are not even in the pilot stage yet. Connie Moore, a private consultant, spoke of business interest in disk technology. She could only allude to several disk projects underway as the industries involved, often large transaction-oriented concerns, are pursuing disk technology as a means to obtaining a "competitive edge" in their marketplaces. Most of the companies see CD storage as a final out from microforms, which "no one likes anyway."

These are projects that require massive storage capacity and long-term stability. The experimentation will surely benefit our preservation interests in the long term.

DATA BASES

CD-ROM data bases were also represented at this conference. The Grolier's *Electronic Encyclopedia* that I described at the beginning is a good example of the density of storage on a CD. In order to have an operational *Electronic Encyclopedia*, you need the disk, a software package to give you access to the information on the disk, and a disk reader for a cost of about \$1800 which you would hook up to an IBM-compatible PC.

Other disks, such as the NTIS data bases, could be used on the same system but they would need their own software. Although no geology data bases are available (as of yet), the possibility of having an in-house data base search is a real possibility. Imagine the benefit of having students and researchers (librarians, too!) learn the ins and outs of searching GeoRef without the meter running!

There are some problems with the systems as they now exist. For example, the *Electronic Encyclopedia* does not contain any illustrations. Although this might be all right for some kinds of information, one wonders how a patron would be able to locate Nigeria without a map. Phillips hopes to remedy this problem by putting the illustrations, black and white and color, on a parallel video system. This would add the cost of a video disk reader and a color monitor to the system.

There is also the problem of multiple users for the same disk. I was looking at it in terms of Columbia's Psychology Library, which would like to experiment with *PsychLit* which is on CD. Not infrequently, there are a half dozen rapid undergrads swarming around the index tables. The people I talked to said there isn't the capacity to link a number of users to a single disk reader. It is technically possible, but just not available now.

Also interesting was the Bibliofile booth. These people have 250 installations of the American MARC records (back to 1967) on three CDs. The operating system allows for author and title searching, produces catalog cards, and can be downloaded into a

local on-line catalog for an initial cost of \$2900 (without the IBM-compatible PC). Updates are available. It is amazing to think that such a sophisticated system is within the reach of a regional library system or college library.

Of course this is not quite the whole story. It turned out that if you plunked down your money for an *Electronic Encyclopedia* you wouldn't get one for some time. It turns out that not only the glass optical laser disks used by LC are in short supply but so are the CDs. Despite the myth that these are of interest primarily to a relatively small group of classical music buffs, the demand for popular music CDs already equals classical music and is fast outpacing it. The demand has gone from 5.8 million in 1984 to 17 million in 1985 with 30 million units expected to be sold this year, according to a recent article in the *New York Times*.

None of this is of particular interest to librarians, except for the fact that the vast audio CD market is consuming most of the disks made in the U.S., making it difficult to get the "media" to produce some of the library products that we would like to see.

SLIDE COLLECTIONS

It turned out that my faculty member was on the right track about the slides on disk. Video disc is already used for this application, and perhaps not surprisingly, the medical field has taken a leading role. A number of different companies produce video discs with indexing software at fairly reasonable prices (one said \$1 per slide). These can be viewed in a classroom situation or a PC.

Geologists have already expressed an interest in this alternative to the increasingly cumbersome slide collection. At GSA in Orlando, the Video Vision booth was busy and, in the demonstration I attended, the geologists were disappointed to find that all the system offered was a set of illustrations rather than one they could design. I think it would be very interesting to invite a couple of these producers to talk at GSA.

My suspicion is that there would be quite a few geologists who would like to see where this technology is going and what current costs are.

CONCLUSION

One of the most interesting parts of attending this conference was the sense of fast-paced change. It was a small gathering—maybe a couple of hundred people, including librarians, businessmen from big corporations, and representatives of government agencies, all trying to get the lay of the land. People otherwise outside my field

were interested in why I was there and together we batted around possible solutions to the geology preservation problem.

I was also encouraged to envision the contingent of librarians present both as experimenters in the new technology and, hopefully, users. Compared to their previous reactions to other new technologies, librarians are not standing in the wings waiting to see what happens. They are already at center stage working on innovative pilot projects, ready to welcome the technology into their libraries. Now, if only supply could keep up with their enthusiasm.

TECHNOLOGY UPDATE: CD-ROM

Since we received the previous article there have been further developments in CD-ROM technology, as reported in the March, 1986 issue of *Information Today*.

The availability of more large data sets on CD-ROM has been announced. Engineering Information Inc. has announced that three sections of its Compendex data base are now available on CD-ROM: The Aerospace Engineering, Chemical Engineering, and Electrical and Computer Engineering subsets. Each of these subsets will include over 100,000 records, and will sell for about \$1200 (including updates). Ingram Book Company's ANY-BOOK database of over 1,500,000 English-language books is also now available on CD-ROM. The projected availability of other important data sets is also being discussed, including R. R. Bowker's *Books in Print* and *Ulrich's International Periodicals Directory*, and the LC MARC data base.

There are also important questions for the future:

- Will GeoRef be available on CD-ROM?
- Will full back runs of journals and other large series be available?
- Will the prices come down? For the hardware only, or, more importantly, for the data sets themselves?
- Will the storage density increase even more? Would that require new hardware?
- Will the data set software become standardized, or will every data set continue to require it's own software?

For the answers to these questions (and for more questions), stay tuned.

compiled by Connie Manson

JOB ANNOUNCEMENTS

LIBRARY DIRECTOR, MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY, Butte, Montana

Must have MLS and MS in geology, chemistry, physics, or engineering for tenure-track position; or MLS and BS in geology, chemistry, physics or engineering for non-tenure-track position. Salary: \$30,000+. Closing date: March 15, 1986 or until filled. Send application, resume, transcripts, and names, addresses, and phone numbers of three references to: Dr. Henry McClernan, Montana Tech, Butte, MT 59701.

GOVERNMENT DOCUMENTS AND MAPS LIBRARIAN, UNIVERSITY OF KANSAS, Lawrence, Kansas.

Must have MLS and experience with government documents and map resources. Salary: \$22,000-\$28,000. Closing date: March 31, 1986. Send application, resume, transcripts, and three letters of reference to: Sandra Gilliland, Assistant to the Dean, University of Kansas Libraries, Lawrence, KS 66045-2800.

GEOLOGY LIBRARIAN, UNIVERSITY OF KENTUCKY, Lexington, Kentucky.

Must have MLS and a minimum of 3 years prior geology experience. Experience in administration, library instruction, on-line searching, and a related subject background desired. Responsible for library services to the Geology Department and to the Kentucky Geological Survey. Duties include collection development, cataloging maps, reference, on-line searching, library instruction, gifts and exchange, and day-to-day operations. Salary: \$24,000. Closing date: April 30, 1986. Send application, resume, and names of three references to: Ann Howell, Administrative Assistant for Personnel, University of Kentucky Libraries, Lexington, Kentucky 40506-0039; 606/257-3801.

MAP SPECIALIST—LIBRARIAN III, DETROIT PUBLIC LIBRARY, Detroit, Michigan.

Must have MLS and experience in map cataloging and geography or cartography. Knowledge of foreign languages desirable. Salary: \$20,242-\$26,409. Send resume to: Margaret LaRose, Associate Director for Library Personnel, Detroit Public Library, 5201 Woodward Avenue, Detroit, MI 48202

GEOLOGY LIBRARIAN, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, Blacksburg, Virginia.

Salary: \$17,600+. Closing date: March 31, 1986.

MAP LIBRARIAN, UNIVERSITY OF MINNESOTA LIBRARIES, Minneapolis, Minnesota.

Must have MLS and experience in a research-orientated library. Educational background in geography or a related field is desirable. Salary: \$22,000+. Closing date: April 30, 1986. Send application, resume, and names and addresses of three references to: Barbara Doyle, Personnel Officer, University Libraries, 499 Wilson Library, 309 19th Avenue South, Minneapolis, MN 55455-0414. Identify with number UL135.

ASSISTANT MAP AND GEOGRAPHY LIBRARIAN, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, Urbana, Illinois.

Must have MLS and experience in cataloging. Knowledge of foreign languages, cartographic materials, and geography desirable. Salary: \$18,000+. Closing date: April 15, 1986. Send complete resume with names and address of five references to: David Cobb, Chair, Search Committee, c/o Library Personnel Office, 127 Library, University of Illinois at Urbana-Champaign, 1408 West Gregory Drive, Urbana, IL 61801; 217/333-0827.

PHYSICAL SCIENCES REFERENCE LIBRARIAN,
DARTMOUTH COLLEGE, Hanover, New Hampshire

Must have MLS, a background in physical sciences (chemistry preferred), and a minimum of 2 years post-MLS experience. On-line searching experience desired.

Duties: Reference, bibliographic instruction, on-line searching, and collection development. Salary: \$17,500+. Closing date: April 30, 1986. Send resume to: Phyllis E. Jaynes, Director of User Services, 115 Baker Library, Dartmouth College, Hanover, NH 03755.

ANNOUNCEMENTS

UNIVERSITY OF NEVADA-RENO MINES LIBRARY RECEIVES GRANT

In October, the University of Nevada-Reno Foundation awarded the Mines Library a \$9,000 grant to preserve the maps included in the Mackay School of Mines theses. These maps number over 525 and date from 1928. Heavy use has aged these maps rapidly and will soon destroy them.

The preservation process first involves color or black and white reproduction of the maps; the copy will remain with the thesis for circulation. In the second step, the original map is encapsulated in mylar and will remain in use in the library. The project should be complete for theses dating up to 1984 by the end of 1986. Linda Newman, Map Librarian, is project director.

In conjunction with the preservation project, the Mines Library published the *Mackay School of Mines Thesis List, 1908-1983* (GIS Newsletter, no. 97, Dec. 1985, p. 9).

The American Geological Institute (AGI) sponsored a public forum, "Radon—An Update," March 14, 1986, Kiamesha Lake, New York. The forum was held in conjunction with the Geological Society of America Northeastern Section annual meeting.

A panel of scientists and individuals at the forefront of radon research and concern discussed:

- The threat of radon contamination of homes and water supplies in the U.S.

- Geologic conditions that affect radon concentration and migration in buildings
- Steps that are being taken to assess and mitigate these dangers.

A new computer network for earth scientists has been operational since October. GEONET offers a computer teleconferencing environment for geophysicists, geologists, and hydrologists, featuring services such as private and open conferences, industry news briefs, bulletin board information, electronic mail, and topical mini-conferences on issues relevant to the profession. For further information, contact:

Nancy Nadel
GEONET
P. O. Box 29046
Oakland, California 94604
415/547-8160

NEW GEOSCIENCE MAP SERVICE

Both domestic and foreign geologic maps are available from a new geoscience map service. Geoscience Resources in Burlington, North Carolina has released their spring catalog featuring a wide assortment of maps, charts, and related accessories. For more information, contact:

Geoscience Resources
2990 Anthony Road
Burlington, North Carolina 27215
919/227-8300, or,
800/742-2677 (toll-free order number)

DUPLICATE SERIALS FOR SALE

The University of Oklahoma Geology Library has some unneeded duplicate back issues of journals and is making the following items available for sale. Transactions must take place before May 1, 1986. Shipping costs are in addition to the indicated prices. For further information, contact:

Claren Kidd
Geology Library
University of Oklahoma
830 Van Vleet Oval, Room 103
Norman, OK 73019
405/325-6217

\$1.00 per issue

- AAPG BULLETIN—Most unbound issues after v. 24, 1940 and scattered unbound issues back to v. 1, 1917.
- AMERICAN MINERALOGIST—Unbound issues, v. 44, 1959-v. 57, 1974.
- CANADIAN JOURNAL OF EARTH SCIENCES—v. 14, 1977-v. 15, 1979.
- CANADIAN SOCIETY OF PETROLEUM GEOLOGISTS BULLETIN—v. 6, 1947-v.25, 1975.
- ECONOMIC GEOLOGY—v. 54, 1959-v. 56, 1961.
- GEOLOGICAL SOCIETY OF AMERICA BULLETIN—v. 27, 1916-v. 49, 1938; v. 75, 1964-v. 85, 1974; a few issues 1974+.
- GEOLOGICAL SOCIETY OF AMERICA PROCEEDINGS—1941; 1946-1962.
- GEOLOGICAL SOCIETY OF LONDON—no. 105, 1949-no. 142, 1985.
- GEOLOGICAL SURVEY OF CANADA BULLETIN—Many paperbound issues between no. 1 and no. 244.
- GEOLOGICAL SURVEY OF CANADA PAPER—Most paperbound issues between 1959 and 1976.
- GEOTIMES—Many issues; specify what you need.
- JOURNAL OF GEOPHYSICAL RESEARCH (ATMOSPHERIC AND SPACE)—v. 69, 1964-v. 82, 1977.
- JOURNAL OF THE GEOLOGICAL SOCIETY OF INDIA—v. 22, 1981, no. 1, 4-12 thru v. 26, 1985, no. 5, 7-10.

- JOURNAL OF GEOLOGY—v. 87, 1979-v. 91, 1983.
- JOURNAL OF VERTEBRATE PALEONTOLOGY—v. 1, 1981-v. 2, 1982, no. 1-2.
- MINING ENGINEERING—v. 25, 1973-Present (a few missing issues)
- PALAEONTOLOGICAL SOCIETY OF LONDON MONOGRAPHS—Portions of Parts I, III, and IV; most if not all of Part II (issued in sections).
- SEISMOLOGICAL SOCIETY OF AMERICA BULLETIN—v. 65, 1975, no. 4-6 thru v. 68, 1978, no. 6.
- SHALE SHAKER—Most issues going back to v. 1.

\$20.00 for the set

- INTERNATIONAL GEOLOGICAL CONGRESS, 22nd, New Delhi, 1964—Sections 1-10, 12-17.

\$5.00 per volume

- AIME TRANSACTIONS (primarily of the Petroleum Division)—Bound volumes, 1921-1946.
- GEOLOGICAL SOCIETY OF AMERICA SPECIAL PAPERS—nos. 1-4, 8, 10, 11, 13, 18, 28, 29, 31, 38, 46, 48, 50, 51, 54, 58, (all softbound); no. 65 (hardbound)

NEW PUBLICATIONS

GEOREF THESAURUS AND GUIDE TO INDEXING

The 4th edition of the *GeoRef Thesaurus and Guide to Indexing*, edited by Crystal S. Palmer, is now available from the American Geological Institute.

Over 1,000 terms have been added for this edition, including:

- Place names (primarily U.S. county names and rock formation names)
- Systematic terms (rocks, fossils, minerals, etc.)
- Non-systematic terms (geologic features, processes, properties, materials, methods, techniques, etc.)

Notable changes have also been made in the entries for some existing terms, particularly in the areas of some geographic terms and in the scope of some common fossil names.

Additional explanatory scope notes and cross-references have also been added for more than 300 of the pre-1967 index terms that are no longer used.

The American Geological Institute wishes to acknowledge the contribution of the GeoRef Advisory Committee's Vocabulary Task Force members. The Task Force reviewed new terms for this edition, suggested additional new terms, and recommended changes in the front matter.

The thesaurus sells for \$65 (paper), or for \$25 (microfiche) and is available from:

Customer Service Department
American Geological Institute
4220 King Street
Alexandria, VA 22302

The Circum-Pacific Maps, a new series of integrated maps from the Circum-Pacific Council for Energy and Mineral Resources, are now available from AAPG. The maps show the relationship of geology, tectonism, and geophysics to known energy and mineral resources. The eight series of maps are at the scale 1:10,000,000, with selected compilations of the entire Pacific basin at the scale 1:17,000,000. Prices and availability vary. For further information, contact:

AAI:G
P. O. Box 979
Tulsa, Oklahoma 74101
918/584-2555

The American Geophysical Union (AGU) will publish a new quarterly journal, *Global Biogeochemical Cycles*. The first issue will be released in the summer of 1986.

This journal will address the physical, chemical, and biological cycles of the earth's atmosphere, oceans, landmasses, and biosphere, and of the effects of human activities (such as deforestation, fossil fuel combustion, and nitrogen fertilizer synthesis) on these cycles.

Global Biogeochemical Cycles will have a global and interdisciplinary focus but will also publish area-specific papers with global implications and discipline-specific papers with interdisciplinary implications.

The journal will be edited by Dr. James J. McCarthy, Director, Museum of Comparative Zoology, Harvard University.

To submit papers or for subscription information, contact:

American Geophysical Union
Global Biogeochemical Cycles
2000 Florida Avenue, N.W.
Washington, D.C. 20009

The Geological Survey of Wyoming has recently published these items:

Finley, M. E., 1985, Geologic map of Black Mountain quadrangle, Wyoming: Wyoming Geological Survey Map Series 16, 1 sheet, scale 1:24,000.

Price: \$3.00 over the counter; \$4.00 mailed first class (folded).

Glass, G. B., compiler, 1985, Bibliography of graduate theses and dissertations on the geology of Wyoming, 1899 through early 1984: Wyoming Geological Survey Public Information Circular 24.

(Revises and updates two previous thesis bibliographies compiled in 1970 and 1974.)

Price: \$5.00 over the counter; \$6.00 mailed first class.

Harris, R. E.; Hausel, W. D.; Meyer, J. E., compilers, 1985, Metallic and industrial minerals map of Wyoming: Wyoming Geological Survey Map Series MS-14, 1 sheet, scale 1:500,000.

(Contains valuable information about the geology and mineral occurrences of Wyoming.)

Price: \$10.00 over the counter; \$12.00 mailed first class.

Manahl, K. A., 1985, Geologic map of Shell quadrangle, Wyoming: Wyoming Geological Survey Map Series 17, 1 sheet, scale 1:24,000.

Price: \$3.00 over the counter; \$4.00 mailed first class (folded).

These can be ordered from:

Geological Survey of Wyoming
P. O. Box 3008
University Station
Laramie, WY 82071
307/766-2286

The Oregon Department of Geology and Mineral Industries has just published *Oil and Gas Investigation of the Astoria Basin, Clatsop and Northernmost Tillamook Counties, Northwest Oregon*, by A. R. Niem and W. A. Niem, as its Oil and Gas Investigation 14. The report

describes the geology and the oil and gas potential of the Astoria basin, and includes a full color geologic map (scale 1:100,000), a subsurface correlation chart, and an 8-page text. The report sells for \$7 and is available from:

Oregon Department of Geology and Mineral Industries
910 State Office Building
Portland, OR 97201

Orders under \$50 require prepayment.

Two new geologic maps of Maine are now available:

Osberg, P. H.; Hussey, A. M., II; Boone, G. M., editors, 1985, Bedrock geologic map of Maine. scale 1:500,000. (full color; 42" x 58") Price \$5.00 (Maine residents add 25¢)

Thompson, W. B.; Borns, H. W., Jr., editors, 1985, Geologic map of Maine. scale 1:500,000. (full color; 42" x 53") Price \$4.50 (Maine residents add 23¢)

Please specify rolled for folded copies. Send check or money order made payable to "Treasurer, State of Maine," to:

Maine Geological Survey
State House Station 22
Augusta, Maine 04333

The first volume of a new series tracing the history of petroleum geology has been published. *Oil on Their Shoes: Petroleum Geology to 1918*, by Ellen Sue Blakey, describes the people and events of the petroleum industry during the 19th and early 20th centuries. Volumes 2 and 3, which continue the history from 1918 to the present, will be published during 1986. Price is \$38 plus \$4.50 shipping within North America. (Note Catalog Number 712 with each order.) For further information, contact:

The AAPG Bookstore
P. O. Box 979
Tulsa, Oklahoma 74101

INFORMATION TODAY

Information Today is a tabloid monthly on electronic information services. A recent issue (March, 1986) had articles on hardware and software, a 3 page article on ALA midwinter, and a 4-page pull-out section on the National Online

Meeting. Subscription rates are \$22.00 for U.S., Canada, and Mexico, and \$48.00 air mail to all other countries, from:

Learned Information, Inc.
143 Old Marlton Pike
Medford, New Jersey 08055

INSTRUCTIONS FOR CONTRIBUTORS

The GIS Newsletter welcomes original, previously unpublished English language papers related to geoscience information. Manuscripts should be typed on opaque paper, on one side only, double-spaced throughout, with 3 cm margins on all sides, and all pages numbered consecutively. Length should not exceed 12 pages.

The title page should include the title, the name(s) of the author(s) and their institutional address(es). References should be mentioned in the text (author and date), with a list of "References cited" appearing at the end of the paper, following GSA reference style. Provide on a separate sheet an informative abstract of no more than 200 words and a biographical sketch of the author(s), of

no more than 100 words, which includes current position and education.

Clear, black and white (glossy) photographs and illustrations with strong contrast should be submitted on separate sheets from the text and numbered consecutively in order of reference in the text. Tables and figures should be submitted on separate sheets from the text, numbered, and referred to in the text by number.

Send two (2) copies of the manuscript to the Chairperson, GIS Newsletter Editorial Board. Include a phone number where the author(s) may be reached and a self-addressed stamped envelope for notification of receipt of manuscript. Each manuscript will be reviewed by at least two persons.

Connie Manson - Editor
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Olympia, WA 98506

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