

NEWSLETTER

NO. 17

OCTOBER 1971

1971 GIS ANNUAL MEETING in WASHINGTON, D.C.

The 6th Annual Meeting of the Geoscience Information Society will be held at the Shoreham Hotel in Washington, D.C., in conjunction with the meetings of the Geological Society of America (GSA) and its associated societies, 1-3 November 1971. This year's Annual Meeting of GIS promises to be the best ever held. It will consist of six events (in addition to the events scheduled by GSA):

- (1) GIS Symposium: Toward the Development of a Geosciences Information System Monday, Nov 1, 1:30 to 4:00 p.m., in Executive Room, Shoreham Hotel)

The GIS program committee, chaired by George H. Goodwin, jr. (U.S. Geological Survey, Washington, D.C.), has invited 7 speakers who will discuss various issues raised in the report A concept of an information system for the geosciences, published December 1970 by the American Geological Institute's Dept of Geoscience Information. Copies of this report were sent to all GIS members in June 1971.

See pages 6-8 of this newsletter for a list of the speakers and the abstracts of their papers. The moderator for the symposium will be GIS President, Dr. C.F. Burk, jr., of the Canadian Centre for Geoscience Data, Ottawa. The presentation of papers will be followed by a short question-and-answer period.

- (2) Annual Luncheon (Tuesday, Nov 2, noon to 1:00 p.m., in Executive Room, Shoreham Hotel)

This is the only planned social event that will bring GIS members together. Luncheon tickets (\$6.75) will be sold only in the registration area at the GSA meetings. Be sure to buy your luncheon ticket at the time you register for the meetings. There will be no cash bar. The luncheon will be followed immediately by the GIS Annual Business Meeting.

- (3) Annual Business Meeting (Tuesday, Nov 2, 1:00 to 2:00 p.m., in Executive Room, Shoreham Hotel)

GIS President Burk will convene the business meeting immediately upon serving of dessert and coffee at the Annual Luncheon.

- (4) Workshop on Guidebooks (Tuesday, Nov 2, 2:00 to 4:45 p.m., in Executive Room, Shoreham Hotel)

The Workshop is being organized by Hartley K. Phinney (Chevron Research Co., La Habra, Calif.). A

panel of six geoscience librarians and guidebook editors will discuss the pros and cons of geologic guidebooks, their publication, availability, distribution, etc. As a result of an open discussion, it is hoped that guidelines can be established that will benefit both producers and users.

- (5) Field Trip no.12: Library Excursion throughout the Greater Washington Area (Wednesday, Nov 3, 8:00 to 5:30 pm.)

The all-day tour of geoscience-oriented libraries in the Washington, D.C., metropolitan area will take place on the last day of the Annual Meeting. The GIS field trip committee, chaired by Myrl D. Powell (Subject Cataloging Division, Library of Congress), has made arrangements to visit four federal libraries in and around the District.

The tour first will visit the Library of Congress (LC) where it will hear about the operations of its Geography and Map Division and of the MARC Project, and take a brief walking tour of some of LC's more spectacular points of general interest (such as the Gutenberg Bible, the manuscript draft of the Gettysburg Address, and a view of the beautiful Main Reading Room from high up near the dome).

After coffee in the Whittall Pavilion, where the world-famous Stradivarius instruments are displayed, the group will continue by chartered bus to the National Agricultural Library (NAL) at Beltsville, Md., for a one-hour tour of this ultramodern multi-storied facility. Descriptions of NAL's computer system and the proposed Agricultural Sciences Information Network will highlight this stop on the tour.

Following lunch at an S&W Cafeteria at the Washington Science Center in Rockville, Md., during which the group will hear talks by the librarian at the National Oceanographic Data Center (NODC) and by the chief of the Libraries Branch of the National Oceanic and Atmospheric Administration (NOAA), the tour will visit the adjacent Marine and Earth Sciences Library (formerly the Geophysical Sciences Library and before that the Coast and Geodetic Survey Library) of NOAA.

The last stop on the tour (after a "drive-by" of the National Library of Medicine building in Bethesda, Md.) will be at the library of the U.S. Geological Survey, in downtown Washington. Rare and particularly interesting books and maps will be displayed and discussed.

The buses will pick up tour participants at the three official conference hotels--Sheraton-Park, Shoreham, and Windsor Park--at 8:00 a.m. and return to these hotels between 5:00 and 5:30 p.m. Posters on display in the hotels will announce the field trip and bus pick-up points; additionally, members of the GIS field trip committee will be at each hotel before 8:00 a.m. to organize the pick ups. Previously announced plans to discharge tour participants at the Downtown Airlines Terminal and/or Washington National Airport have been abandoned due to insufficient interest.

A one-page brochure describing the major geoscience collections in Washington, D.C., metropolitan-area libraries has been prepared by Sharlene G. Rafter (Marine and Earth Sciences Library, NOAA) as an insert for the GSA registration kits. Descriptive literature concerning the tour libraries will also be available.

The cost of the tour is \$5.00 which does not include the cost of lunch (an average lunch will cost about \$1.50 at the cafeteria). Tickets should be ordered in advance by using the Pre-Registration Form on page 23 of the August 1971 issue of Geotimes or, if that is not available, send a check for \$5.00, payable to 1971 GSA Annual Meeting to American Geological Institute, 2201 M Street, N.W., Washington, D.C. 20037. Be sure to ask for Tour no. 12.

Tickets will also be available during the GSA meetings and can be purchased in the registration area until 5:00 p.m., Tuesday, Nov 2. For more information, call or write: Myrl D. Powell, Subject Cataloging Division, Library of Congress, Washington, D.C. 20540; telephone 202/426-5342.

(6) GIS Exhibit Booth (Monday-Wednesday, Nov 1-3, 8:30 a.m. to 5:00 p.m., in garage area of the Shoreham Hotel)

GIS will have an exhibit booth at the GSA meetings. Mark W. Pangborn, jr., has prepared two 4' x 5' panels depicting the information explosion in the geosciences and a map showing the distribution of major geoscience libraries and collections. GIS literature as well as handout materials from the GIS Symposium will be available at the booth. GISers willing to babysit the GIS booth are urged to contact Mr. Pangborn, U.S. Geological Survey Library, Washington, D.C. 20242; telephone 202/343-5849.

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GSA recommends that attendees pre-register for the meetings, thereby saving time and avoiding inconveniences. This is the first time in several years that it is possible to pre-register for the GSA meetings. Use the center insert in the August 1971 issue of Geotimes for pre-registering; mail form and check to 1971 GSA Annual Meeting, American Geological Institute, 2201 M Street, N.W., Washington, D.C. 20037.

For those who do not pre-register, early arrival and registration on Sunday afternoon, Oct 31, are recommended. Payment of the registration fee of \$18 entitles registrants to be admitted to all technical sessions, exhibits, and special functions, including the GIS events. There is no separate registration fee for GIS activities.

The registration area is in the Lower Lobby of the Shoreham Hotel. Registration hours are 10 a.m. to 7 p.m. on Sunday (Oct 31), 8 a.m. to 5 p.m. on Monday (Nov 1), 9 a.m. to 5 p.m. on Tuesday (Nov 2), and 9 a.m. to noon on Wednesday (Nov 3).

GIS MEMBERSHIP DIRECTORY

The 1971 GIS Membership Directory is being mailed with this issue of the newsletter. The Society is again indebted to Robert S. Burns of Battelle Columbus Laboratories, Columbus, Ohio, for serving as our computer programmer-coordinator and maintaining the mailing list from which the annual directory is prepared. Special thanks also go to Esther Crawford who punches all the cards and makes all the revisions, deletions, and additions to the master file. Without their efforts we would have a real problem in mailing newsletters, announcements, etc.

Regrettably, the GIS Treasurer reports that the membership has shown a net loss this year. We have carried many members through the early part of the year but have not heard from them in spite of reminders and duplicate invoices. In order to be fair to our truly active members, these inactive names have been dropped from the membership list with the publication of this directory.

On the bright side, we have added many new names to our list. The recruiting efforts in Canada have been particularly successful and several new Canadian addresses for regular and institutional memberships are noted.

Again, a review of the geographic index will emphasize the number of members from abroad. We would like to hear from all of these far-distant members and learn more of their personal activities and of the local developments in geoscience information.

So, here is a new directory! Examine it, use it! Write to your associates!!

GIS AFFAIRS

The GIS Field Trip Guidebooks Committee has recently issued the 2nd edition of Geologic field trip guidebooks of North America; a union list incorporating monographic titles. This list identifies individual guidebooks by society and title, locates them in major

U.S. and Canadian libraries, and gives information on how to borrow or order photocopies. A geographic index provides immediate access to sponsoring society and title. Orders are now being accepted by Phil Wilson Publishing Co., Box 13187, Houston, Texas 77019. The price is \$20 net. The first edition of the union list was published in 1968.

At its meeting on 30 July 1971, the Council of the American Society for Information Science approved exchanging liaison representatives with GIS and approved Robert McAfee, jr. (Assistant to the Executive Director of ASIS) as the ASIS representative to GIS.

GISers in the NEWS

Lloyd J. Charlesworth, jr., director of subsurface laboratory and associate professor, Dept of Geology, Univ of Toledo, Toledo, Ohio 43606, is working on an extensive bibliography of Lake Erie physical and biological limnology. He "would appreciate receiving any lists of obscure, etc. items, including unpublished reports".

Lindsay Corbett of the information section of the U.K. Atomic Energy Authority, Aldermaston, Berkshire, England, is a Council member of the Institute of Information Scientists (IIS) and was organizing secretary of the biennial IIS 1970 conference at Reading Univ. He delivered a paper on "User needs and problems; problems in using external information services" at the 45th Annual Conference of Aslib, held in Darmstadt, W. Germany, 10-14 Oct 1971.

Roy W. Graves of the Information Services Dept, Univ of Tulsa, has been appointed to the Current Policies and Practices Committee of the Association of Earth Science Editors.

Mark W. Pangborn, jr., map curator of the U.S. Geological Survey, Washington, D.C., gave a talk on the USGS library and its map collection at the Conference on Maps and Map Librarianship held 6 March 1971 by the Geography and Map Group of SLA's Washington, D.C., Chapter at the Library of Congress' Geography and Map Division. The USGS currently has 115,000 maps.

Sharlene G. Rafter is now chief, Reference and Circulation Unit, Marine and Earth Sciences Library, National Oceanic and Atmospheric Administration, Rockville, Md.

Howard Shirley of the Information Operations Division of Battelle Memorial Institute, Columbus, Ohio, presented a paper during the Central American Workshop on Development and the Environment held in Guatemala, 25-30 July 1971.

Dr. Evelyn Sinha is editor of "Lake and river pollution" and "Methods, models and instruments (for studies of aquatic pollution)", volumes 4 and 5,

respectively, of Ocean engineering information series, issued by Ocean Engineering Information Service, P.O. Box 989, La Jolla, Calif. 92037. These volumes are annotated bibliographies consisting of informative abstracts covering the periods 1968-1970 inclusive.

Jay A. Woods, president of Woods Associates, Stanford, Calif., is working on a project to design, for research libraries, a desk-sized device which will support the REL computer programming system of UCLA, offer graphics I/O, OCR from bound books, and 100 Giga-byte storage, for \$100,000 purchase price.

GISers in PRINT

Bridson, Gavin, and HARVEY, ANTHONY P. (1971) A checklist of natural history bibliographies and bibliographical scholarship, 1966-1970. Society for the Bibliography of Natural History. Journal, v.5, pt.6, p.428-467.

Burk, C.F., jr. (Dec 1970) Development of automated geologically-based inventories of mineral and fuel resources in Canada. Geoscience documentation, v.2, no.6, p.132-134.---Paper presented at Engineering Foundation Research Conference, "National Materials Policy", held at Henniker, N.H., 16 July 1970. Summary of current efforts of the Canadian Centre for Geoscience Data to use automated data systems in the development of owner-controlled, linked data files constituting a Canadian-wide network of estimates of potential mineral and fuel resources.

CORBETT, LINDSAY, and German, Janice (Apr 1970) MARC II based mechanized cataloguing and ordering system offered as a package by AWRE. Program, v.4, no.2, p.64-65.---AWRE is Atomic Weapons Research Establishment in Aldermaston, England.

Martinson, Tom L. (Dec 1970) A simple stratified flow chart for compiling subject bibliographies in geography. Special Libraries Association. Geography and Map Division. Bulletin, no.82, p.32-41.

Matthews, William H. (1971) Invitation to geology; the Earth through time and space. Published for the American Museum of Natural History. Garden City (N.Y.): Natural History Press. 148p. \$5.95 cloth; \$1.45 paper.

Nelson, Joyce E. (Fall 1970) LSU School of Geoscience Map Library. Louisiana Library Association. Bulletin, v.33, no.3, p.87-90.

NEW MEMBERS of GIS

Fay, C.B.: Univ Map Collection, Dept of Geography, McGill Univ, P.O. Box 6070, Montreal 101, Quebec.
Los Angeles Public Library, Serials Division, 630 W. Fifth St, Los Angeles, Calif. 90017
Waaft, Dr. Jules Pieter de: Geologist, Falconbridge

of Africa (Congo) Ltd, B.P. 9500, Kinshasa, Rep. Dem. du Congo.
Zoller, Henry: Librarian (Cataloger), U.S. Geological Survey, GSA Bldg, Washington, D.C. 20242

CAN WE HELP?

The University of Costa Rica recently instituted a degree program in geology. The fledgling department now has 16 students and is building toward the future. This is the only geology degree program in the Central American region and was initiated with the agreement of the other countries in the region that this department be the focal point for geologic education in Central America.

However, the library to support the new department is small and has very limited resources. Furthermore, there are no significant collections of geoscience publications available to the general public in the entire region.

CAN WE HELP? Are there duplicate books, journals, reports, maps, monographs, and other materials on your shelves, in your attic storage, or in the basement of your facility that could be donated to help build a library for these students and for fellow geoscientists? If such materials can be made available, the GIS members can make a significant and worthwhile contribution to one area of scientific development for our Central American neighbors. With some searching and elbow grease on the part of all members, with the labors of a Coordinating Committee, and with the financial support of shipping costs from the GIS Treasury, we can give a real boost to the building of a geoscience library collection for the University of Costa Rica.

There will be many details to work out and much work to be done to make this a reality. It is mentioned at this time in order to solicit your suggestions and comments and to seek volunteers to serve on the Coordinating Committee. The suggestion will be discussed during the Annual Business Meeting of GIS in Washington, D.C., November 2.

In the interim, please indicate your willingness to participate on the Committee and send your suggestions, criticisms, comments, or ideas to: Howard B. Shirley, Battelle Memorial Institute, 505 King Avenue, Columbus, Ohio 43201.

ACKNOWLEDGEMENTS

A special note of recognition and a vote of thanks are given to the following organizations who have generously supported GIS through Institutional Membership. Such support will contribute much to the Society's capability to undertake worthwhile

projects and make significant contributions toward the improvement of the information environment in the geosciences.

1971 Institutional Members

Australian Bureau of Mineral Resources
Canberra City, Australia

California Institute of Technology, Geology Library
Pasadena, California

Canadian Dept of Energy, Mines, and Resources
Earth Physics Branch Library
Ottawa, Ontario, Canada

Carleton University Library
Ottawa, Ontario, Canada

Chevron Oil Field Research Company
San Francisco, California

GTS Corporation
New Orleans, Louisiana

Geological Survey of Canada
Ottawa, Ontario, Canada

Gulf of Canada

Imperial College of Science and Technology
Watts Library, Dept of Geology
London, England

Los Angeles Public Library
Los Angeles, California

Macquarie University Library
North Ryde, New South Wales, Australia

Mobil Research and Development Corporation, Field Research Laboratory
Dallas, Texas

University of New Hampshire Library
Durham, New Hampshire

Tenneco Oil Co., Exploration Research Library
Houston, Texas

CANADIAN GEOSCIENCE INFORMATION

The Canadian Centre for Geoscience Data sponsored a one-day workshop on the SAFRAS system for 14 geologists of the Geological Survey of Canada on 27 May 1971. The workshop was held at Systems Dimensions Ltd in Ottawa. During the workshop, each geologist was able to design and create a computer-processible data file specific to a sample set of geologic (field or laboratory) data.

The second edition (71-1) of the Canadian Index to Geoscience Data will be published in Fall 1971 by the Canadian Centre for Geoscience Data. Parts or all of the index may be available in microfiche.

24th INTERNATIONAL GEOLOGICAL CONGRESS

The 24th International Geological Congress will be held in Montreal, Canada, 21-30 August 1972. Section 16 of the Technical Program is entitled "Computer-based Storage, Retrieval and Processing of Geological Information", and is organized in cooperation with the IUGS Committee on Storage, Automatic Processing, and Retrieval of Geological Data (COGEODATA) and the Canadian Centre for Geoscience Data in Ottawa.

Papers covering the following topics will be presented: content, notation, and structure of data files, including the selection of standard parameters; operating computer systems applied to geological information; computer-based data files; computer-based bibliographic, abstracting, and indexing services; and simulation and modelling. For further information, write: Organizing Committee, 24th International Geological Congress, 601 Booth Street, Ottawa 4, Ontario, Canada.

ROCK MECHANICS INFORMATION SERVICES

The problems, procedures, and decisions involved in designing, establishing, and evaluating a specialized information system for rock mechanics are described and analyzed in "Rock mechanics information services", report no.5076 of the Office for Scientific and Technical Information (OSTI), London.

Services now provided by the rock mechanics information system include a quarterly journal, a keyword-in-context index covering the years 1870-1968 and available in book or tape form, selective dissemination of information, and retrospective searches. The project report includes details of the operational system, the results of user studies, investigations of coverage, recall and precision, and an assessment of the searches made.

Indexing studies cover the vocabulary used, the depth and extensiveness of indexing, and the consistency of indexers. Of particular interest are details of the use of a faceted classification in computer-search strategies and the inclusion of a comprehensive economic evaluation.

Copies of the report are available from the National Lending Library for Science and Technology, Boston Spa, Yorkshire LS23 7BQ, England.

EARTHQUAKE HYPOCENTER DATA

Seven- or nine-track magnetic tapes containing hypocenter data for 40,000 earthquakes recorded between 1961 and 1970 are now available at \$60 from the National Geophysical Data Center, Environmental Data Service, NOAA, 8060 13th Street, Silver Spring, Md. 20910. These data, used to produce world and re-

gional seismicity maps, include earthquake location, time, depth, and magnitude. Punched cards containing current hypocenter data are available from the same address at \$60 per year for monthly shipments and at \$30 per year for annual shipments.

ASIS ANNUAL MEETING in DENVER

A session entitled "Specialized Data and Information Bases and Services" at the 34th Annual Meeting of the American Society for Information Science (Denver Hilton Hotel, 7-11 November 1971) will have a strong earth-science orientation. Scheduled for Tuesday morning, Nov 9, and chaired by Neil A. Olien (Cryogenic Data Center, U.S. National Bureau of Standards, Boulder, Colo.), the four papers are:

Forgotson, James M., jr. (Petroleum Information Corp, Denver): "Design, Construction and Applications of Well and Production Data Systems"

Freeman, Robert (NOAA, Rockville, Md.): "Environmental Information: New Developments in NOAA"

Lloyd, Joel J. (American Geological Institute, Washington, D.C.): "Design and Building of an Information System for the Geosciences"

Sturdivant, Clarence A. (Marathon Oil Co, Littleton, Colo.): "Use of Commercially Available Machine-Readable Bibliographic Files in Petroleum Research"

GEOLOGIST/LIBRARIAN BECOMES AUTO MECHANIC

An item in the 7 August 1971 issue of the Chicago Sun-Times (v.24, no.161) entitled "Book stack to car rack" told how Bob Townsend, at 38, a former librarian at Illinois State Univ and only a thesis short of a master's in geology, abandoned his books to become an auto mechanic.

"I'm chucking everything now to do what I want", he said. "I have a very understanding wife and three fine boys 8 to 11 years old. The other night we all sat down and talked it out. We all decided it would be better to have a contented, happy man come home from work each day instead of a disgruntled librarian. So I quit. For the last year I've spent my Saturday mornings as an apprentice without pay in a one-man garage. Now I've rented a four-car garage and for the first time in my life I'm my own boss. All I ask is that I make enough to feed my family and pay doctor bills".

MISCELLANEOUS PUBLICATIONS

Cutbill, J.L., ed. (1971) Data processing in biology and geology. London: Academic Press. 346p. (Systematics Association. Special volume, no.3).--- Proceedings of a symposium held at Univ of Cambridge's Dept of Geology, 24-26 Sept 1969.

GIS SYMPOSIUM at GSA MEETINGS

Hubaux, Andre (Feb 1971) Are there critically-evaluated data in geology? Geoscience documentation, v.3, no.1, p.3-5.---Paper presented at the 2nd CODATA Conference, St. Andrews, Scotland, 7-11 Sept 1970. " ... The interests of geologists in critically evaluated data and in numerical data about substances is only marginal. The main stream of geological research is concerned with a better knowledge of our environment".

International Federation for Documentation (15 July 1971) Information sources on environment; a brief survey. FID news bulletin, v.21, no.7, p.88-89.---Lists 13 abstracting and indexing services, 3 bibliographies, and 10 international organizations.

Ristow, Walter W. (June 1971) Map collections in the Soviet Union and the Democratic Republic of Germany. Special Libraries Association. Geography and Map Division. Bulletin, no.84, p.20-23, 39.---Description of map libraries visited during a 3-week tour in 1970.

GIS OFFICERS

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Vice-President: George H. Goodwin, jr., Chief Librarian, U.S. Geological Survey, Washington, D.C. 20242

Secretary: Mrs. Doreen M. Sutherland, Chief Librarian, Geological Survey of Canada, 601 Booth St, Rm 350, Ottawa 4, Ontario, Canada

Treasurer: Howard B. Shirley, Information Operations Division, Battelle Memorial Institute, 505 King Ave, Columbus, Ohio 43201

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GIS Newsletter Editor: Robert McAfee, jr., Assistant to the Executive Director, American Society for Information Science, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036

GIS members are invited (urged) to contribute to the GIS Newsletter. Please send news notes and other material pertaining to geoscience information activities or publications, and which would be of interest to the membership, to the GIS Newsletter Editor at the address given above.

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The GIS Symposium "Toward the Development of a Geosciences Information System" will be held Monday, November 1st, 1971, in the Executive Room of the Shoreham Hotel, from 1:30 to 4:00 p.m. Presiding: Dr. C.F. Burk, jr. The speakers and abstracts of their papers are reprinted below by permission of the Geological Society of America from Abstracts with programs, Oct 1971, v.3, no.7, published by GSA for the 1971 Annual Meetings.

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Dr. Athelstan F. Spilhaus, jr. (Executive Director, American Geophysical Union, 2100 Pennsylvania Ave, N.W., Washington, D.C. 20037): GEOSCIENCE PUBLICATIONS.

Periodicals and books, the geoscience publications having the most impact on the researcher, are experiencing the greatest financial difficulties and the most severe criticism of their efficacy as information transfer media. The cost of reviewing, editing, and typesetting the Journal of geophysical research is \$60 per page; printing and mailing add 0.6c per page per copy. Perhaps only a few of the 40 articles in a typical issue contain information relevant to an individual researcher. An integrated information system that articulates all methods of publication and dissemination of information in order to serve the needs of scientists as fully as possible at a reasonable cost to the users at both ends of the system is required. Papers of broad interest should continue to be published in the traditional format, while others can be abstracted or listed by title only; the mode of presentation would depend on an evaluation by peer review. Availability in microform or hard copy by request or through previously established interest profiles is essential. Indexing would also be critical to provide ready access to the published paper and the information in storage. A computer-based system for processing the information is necessary to assure completeness and timeliness, another area in need of improvement. How much and what kind of formal publication is justified in rapidly advancing areas of research is a major question. Publishers who do not adopt a flexible approach that maximizes the sum of the benefits to authors and information consumers are not likely to survive in the competition for author prestige and reader attention.

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Stella Keenan (Executive Secretary, National Federation of Science Abstracting and Indexing Services, 2102 Arch St, Philadelphia, Penna. 19103): BIBLIOGRAPHIC CONTROL AND THESAURI.

The paper will focus on the current status of abstracting and indexing services in the geological sciences in terms of bibliographic control and thesaurus development. In order to provide the proper perspective, the problems of the control of serial publications and the bibliographic records generated by

abstracting and indexing services will be discussed. Possible channels to solve these problems will be identified. These channels include standards that have either been approved or are under development nationally or internationally. Other national and international developments concerning the handling of serials and agreements on bibliographic control will be reviewed. Existing cooperative arrangements between abstracting and indexing services will be described. Current studies will be mentioned and resulting cooperative agreements based on these studies will be projected. A brief case history of thesaurus development in the U.S. will be given including the development to date of the Engineers Joint Council (EJC) Thesaurus and the Department of Defense Project LEX. The American National Standards Institute (ANSI) draft standard for thesaurus development and the UNESCO Guidelines for the Development of Monolingual Thesaurus will be mentioned. The current status of thesaurus development in geology through a Working Group of the International Council of Scientific Unions Abstracting Board (ICSU/AB) will be described.

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Wallace C. Olsen (Library Liaison Officer, National Agricultural Library, Beltsville, Md. 20705): A LIBRARY NETWORK FOR THE GEOSCIENCES.

The AGI Committee on Geoscience Information has provided the initial philosophy, leadership, and action toward an information system. The plan is commendably broad in scope and acknowledges the numerous disparate elements necessary to its formation. However, the library network is inadequately explored or justified as an element of the total system. The analytical study of geoscience library resources and services is only one of numerous efforts which will be necessary before a library network can be created. Additional areas must be systematically established or investigated: 1) Documentation and substantiation of the need for the network; 2) Specifications on clientele and library membership; 3) Organizational structure most appropriate and realizable; 4) Relationship of the network to other major library resources and libraries; 5) Codification of users' needs for services of the network; 6) Levels of responsiveness the network and its members must attain; 7) Identification, ranking, and scheduling of primary tasks; 8) Telecommunication requirements. Using this and additional data, a detailed plan for discussion should be drawn. The geoscience information system does not appear to be aware of the necessities of libraries in the establishment of bibliographic, thesauri and vocabulary controls. This must be changed, or corrective and duplicate efforts may result.

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Dr. S.C. Robinson (Chairman, IUGS Committee on Storage, Automatic Processing and Retrieval of Geological Data, Geological Survey of Canada, 601 Booth St, Ottawa, Ontario K1A 0E8): DATA STANDARDIZATION IN GEOLOGY.

To be effective in solving geological problems, the growing mass of numerical earth science data (largely geophysical and geochemical) must be correlated with geological "ground truth" data. Lack of a standardized system for recording these largely qualitative geological data not only inhibits this correlation but denies earth scientists the use of statistics and systematic ordering and recall of data as a basis for geological interpretation.

The essential steps in standardizing geological data are (1) to establish content - the minimal factual observations that are necessary for objective description of each geological entity (rock exposure, mineral deposit, stratigraphic holotype, etc.), (2) to establish notation - the descriptive terms and units for recording the descriptions, which must be free from subjective input by the observer, and (3) to establish a method of recording data that will be compatible with computer usage. Such standards must provide flexibility to enable geologists to record additional data to meet specific requirements.

Some projects employing teams of observers have introduced data-gathering standards successfully and have even converted geologists to their use. National and international committees are trying to bring about adoption of standards with the hope of facilitating exchange of data and eventually, the establishment of archival data sources. General acceptance of standardization, however, will depend upon explicit demonstration of its practical advantages.

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Dr. Frank T. Manheim (U.S. Geological Survey, Woods Hole Oceanographic Institution, Woods Hole, Mass. 02543): IS THERE A TRANSLATION IN YOUR FUTURE?

As in other scientific areas, the flight of Sputnik triggered urgent activity in translation, chiefly from Russian into English. This activity increased until 1967. For earth sciences, the NSF has been a major source of support. Most existing translated journals are published under the auspices of the AGI, the AGU, and private publishing firms in the U.S., but nearly half of subscribers are foreign institutions. A much smaller proportion of significant Soviet books, which form the bulk of Russian scientific literature, has been translated.

Since 1967, translation activities have stabilized and now may be heading for a downturn, due in part to NSF's plans to drop support of most existing translations efforts, except soft-currency programs. At the same time, many educational institutions are downgrading or eliminating language requirements in spite of relentless growth in world scientific literature. Advances in retrieval systems make it easier to search for foreign titles, but scientists are increasingly less able to evaluate them.

As formal communications networks break down, scientists are becoming more parochial and subjective in choosing information strategy. If foreign literature is out of sight, it is easy to put it out of mind. The translations problem cannot be solved independently of the general literature problem. However, ameliorative courses include drastic revision in the handling of language requirements in high school and college, and intensification of un-sentimental redaction (selection, revision, and reduction) in translating foreign literature.

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John F. Price (National Referral Center, Science and Technology Division, Library of Congress, Washington, D.C. 20540): RESOURCE INVENTORY: A COMPARISON OF THE AMERICAN GEOLOGICAL INSTITUTE (AGI) PILOT PROJECT WITH THE NATIONAL REFERRAL CENTER (NRC) INVENTORY.

A resource inventory is defined as a collection of all types of information resources, wherever they exist: in government, in industry, and in the academic or professional world. The concept of what constitutes an "information resource" should be broad enough to include any organization, institution, group, or individual with specialized knowledge in a given field and a willingness to share this knowledge with others.

The NRC inventory is described. It contains over 8000 information resources of which 1141 have indicated they provide information in the geosciences or related subject areas. Approximately 775 of these resources are listed in the latest NRC directory. The AGI pilot project registered 496 resources, most of which are in the NRC file.

NRC referral services are available to the geoscientist without charge. Requests received through the mail are normally answered within five working days. Depending upon the nature of the request, telephone calls may receive immediate attention. NRC directories may be purchased from the Superintendent of Documents, U.S. Government Printing Office.

Also described are the methods utilized by NRC in updating its resource inventory, i.e., cyclical reviews, feedback program, and resource approval of directory entries. An informal working agreement is proposed to eliminate further duplication of effort between AGI and NRC.

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Joseph P. Riva, jr. (Chief, Earth Sciences Branch, Smithsonian Science Information Exchange, 1730 M St, N.W., Washington, D.C. 20036): TOWARD THE DEVELOPMENT OF A GEOSCIENCES INFORMATION SYSTEM--RESEARCH IN PROGRESS.

It is estimated that about 20,000 earth sciences-related research projects are under way in the United States. The Smithsonian Science Information Exchange attempts to provide to the geologic community a means of locating and evaluating this geologic research for which no published results yet exist. The Exchange solicits and inputs summaries of research projects sponsored by state and local governments, private foundations, universities, and industry, as well as the research funded by all Federal agencies. Response has been good in all of these areas with the exception of industry where proprietary interests sometimes inhibit cooperation.

The information received is stored in an IBM 360/40 computer where it is available for retrieval by both subject and administrative criteria. The subject index is conceptual in nature and organized into hierarchies. It is designed for both administrative personnel planning and evaluating programs, and individual scientists interested in research related to their own.

It is suggested that the proposed Geosciences Information System be decentralized with centralized services. In the area of research in progress, duplication of the activities of the Exchange would be inefficient. A much smaller effort could be expended to supplement the existing geological data base at the Exchange with the savings applied to those areas for which information systems presently do not exist. It is thus proposed that the Geosciences Information System consist of independent components which are coordinated to add their type of information to each inquiry received by the central system.

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It is hoped that as many GIS members as possible will attend the 1971 GIS Annual Meeting in Washington, D.C., 1-3 November. It is the only GIS function during the year that brings the members together. Make your plans to attend and participate in the meeting.