

ASIDIC newsletter

No. 49, Fall 1984

ASSOCIATION OF INFORMATION AND DISSEMINATION CENTERS

Fall Meeting in Washington Features New Technology David Grooms, Dennis Auld Elected

The Fall, 1984 meeting of ASIDIC was held at the Georgetown Marbury Hotel, Washington, DC. As usual at Fall meetings, elections were held. The Nominating Committee submitted the names of David Grooms for President and Dennis Auld for Member-at-Large. No further nominations were received at the meeting; therefore, since both candidates were unopposed, the ASIDIC Secretary cast the necessary vote for their election.

The topic of the meeting was "Planning for the Future"; the traditional format of short talks followed by discussion groups was followed. A meeting summary appears in this newsletter.

Future Meetings

The Spring, 1985 meeting will be held at the Sheraton Sand Key Resort, Clearwater Beach, FL, on March 17-19. If the exquisite locale (especially for beach addicts) doesn't attract attendees, the program should, for it will feature suggestions from large users for improvements to databases and online systems. Potential speakers are urged to consult with the Program Chair for the meeting, Harry Alcock, IFI/Plenum Data Co., 302 Swann Ave., Alexandria, VA 22301, phone (800)-368-3093.

The Fall, 1985 meeting, hosted by NERAC, will be in Boston; Dan Wilde has already reserved the Boston Aquarium for another clam-bake and lobster eating contest. The Spring, 1986 meeting will be in Albuquerque, and the Fall, 1986 meeting will be in New York.

Committee Reports

J. Ron Smith (BIOSIS) has resigned as Planning Committee chair and has been replaced by Dan Wilde (NERAC). Lois Granick (PSY-CInfo) joins the Planning Committee, and Scott Kostenbauder (IBM) has become chair of the Finance Committee. The Education Committee chair is vacant; volunteers are wanted. Cathy Ferrere (IN-SPEC) is the new chair of the Program Committee; she has been succeeded as chair of the Membership Committee by David Grossman (Marquis Who's Who).

New Newsletter Features — Help Wanted

Readers will notice two new features in this issue of the Newsletter which should make it more useful to ASIDIC Members. First, a "President's Column" makes its appearance, and second, a short Book Review column has been instituted. BUT...time and other pressures will not allow me to continue to write book reviews regularly. So volunteers are urgently solicited; if you are interested, please contact me at the address below.

President's Column by David Grooms

This inaugural issue of the President's Column is dedicated to you, the members of ASIDIC, for your voluntary support of all ASIDIC activities. The Executive Committee wishes to express sincere appreciation to all of you who attend the meetings regularly and volunteer your time for committee work.

Special recognition is given to those who have chaired a committee or hosted an ASIDIC meeting. The present committee chairpersons are:

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|-------------------------|---|
| Standards | Maureen Kelly (BIOSIS) |
| Publications/Newsletter | Donald Hawkins (AT&T Bell Laboratories) |
| Finance | Scott Kostenbauder (IBM) |
| Program | Cathy Ferrere (INSPEC) |
| Planning | Dan Wilde (NERAC) |
| Membership | David Grossman (Marquis Who's Who) |

Participation by our newer members and by all of you is encouraged. Committee work is a delightful opportunity to get to know people in ASIDIC and at the same time lighten the load of everyone involved. So those who have an interest in one of the above committees are encouraged to contact the chair, and they will be most happy to have you serve. Hosting a meeting is a special opportunity requiring the host to attend to all the hotel arrangements. Thanks to Lois Granick and Barbara McLean of PsycINFO for contributing to the overall success of the Fall meeting by having everything flow smoothly with the hotel.

Please let me know if you have any questions about the activities of the Executive Committee; write care of the ASIDIC address.

News Releases Received

- The 1984 edition of *Computer-Readable Databases: A Directory and Data Sourcebook*, edited by Martha Williams, will be published by the American Library Association as a two-volume set. Each volume is \$87.50, the set is \$157.50. This work should be well known to most ASIDIC Members; it is a standard reference in online searching and machine-readable databases.

Orders may be placed with Publishing Services, American Library Association, 50 E. Huron St., Chicago, IL, 60611.

- Information Intelligence, Inc., P.O. Box 31098, Phoenix, AZ 85046, has announced a monthly newsletter entitled *Online Libraries and Microcomputers*, featuring articles on applications of microcomputers for online applications and library automation. Access to an online careers database is included with the newsletter. Subscriptions are \$35/year in North America, \$50/year overseas (including airmail postage).
- R. R. Bowker announces the publication of *IBM Software Directory*, which brings together descriptions of over 3,000 software packages that run on or are compatible with the IBM PC. Order from R. R. Bowker Co., P.O. Box 1807, Ann Arbor, MI 48106. Price \$24.95 plus shipping and handling.
- A conference on corporate electronic publishing systems will be held in Chicago on January 8-10, 1985. For further information, contact Carol Hurley, Cahners Exposition Group, 999 Summer St., P.O. Box 3833, Stamford, CT 06905.

New Members

ASIDIC welcomes the following members:

Information Consultants, Inc.
2021 L Street, N.W., Suite 300
Washington, DC 20036
Dr. J. C. Lasmanis

McKinsey & Co., Inc.
55 E. 52nd St.
New York, NY 10022
Ms. Ellen Shedlarz

McNeil Consumer Products
Camp Hill Road
Ft. Washington, PA 19034
Ms. Helen J. Hohman

Rufus S. Lusk & Son, Inc.
1824 Jefferson Place, N.W.
Washington, DC 20036
Mr. Rufus S. Lusk, III

Book Reviews

The Search for Data in the Physical and Chemical Sciences
Linda Ray Arny
Special Libraries Association, New York, 1984, 150p. ISBN
0-87111-308-2. \$21.95.

This book is a short overview of data compilation activities around the world. The first section discusses the creation, compilation, and retrieval of data. Chapters in this section include those on the nature of data, locating data, data centers, and data journals. A chapter on online access to data mentions such systems as the ManLabs system (the fact that it is no longer available is not mentioned), the NIH-EPA Chemical Information System, and the Omnidata system. Some directories of online databases are also listed. Particular emphasis is paid to the National Bureau of Standards (NBS) and the National Standard Reference Data System (NSRDS). The second section of the book is a guide to compilations published by NBS along with a property index. This index is sorely needed because, as the author points out, NBS indexes are inconsistent and outdated. Two appendices list NSRDS data centers and databases produced by the Office of Standard Reference Data. The book concludes with a comprehensive and relatively complete bibliography.

The author seems to have paid particular attention to government or quasi-governmental bodies involved in data compilation. Activities of professional societies (such as the PARS project of the American Institute of Physics) are not mentioned. Another shortcoming of the book is the lack of an index, which seems strange in a book discussing indexing of data and properties. Despite these deficiencies, this is a good introduction to the world of data compilation and retrieval and is recommended for those with a casual interest in the subject.

Technostress: The Human Cost of the Computer Revolution

Craig Brod

Addison-Wesley, Reading, MA, 1984, 242p. ISBN 0-201-11211-6. \$16.95.

This book deals with the psychological aspects of the computer revolution and how people are affected by them. Brod, a psychotherapist, has interviewed workers using computers and has investigated the stresses to which they are subjected. He has coined the term "technostress" to describe this phenomenon. The book discusses the industrial environment, the home, how computers affect children, managing computer workers, and similar topics. Brod's discussion of video games and their effects on young people is particularly interesting.

Some of this book may be difficult reading for non-psychologists because it deals with methods of treating technostress. Although this work is not directly concerned with information and other issues of interest to ASIDIC members, it is recommended because of its treatment of an area that affects us all.

Fall 1983 Meeting Reprints

North American members of ASIDIC will find reprints of four of the papers presented at the Fall, 1983 meeting. These were published in *Information Services and Use*; future papers will be distributed in the same way.

FALL MEETING SUMMARY

The Video Disk as a Medium for Database Distribution *Bettie Steiger and Jane Ryland, Reference Technology, Inc.*

Steiger presented an overview of Reference Technology's videodisk system; Ryland described its more technical aspects. Reference Technology, started two years ago with \$10 million in venture capital, produces and distributes videodisks. It has three products: a three-dimensional error correction code (TRIDEC), the CLASIX 12 inch "dataplate" and the CLASIX DataDrive, which is a microcomputer peripheral used to play back the disks and distribute the information. This configuration offers profit opportunities for system manufacturers, who can integrate the CLASIX line into their systems; information providers, who have an unchangeable and untamperable medium for distributing their products; and online system operators, who can distribute reference works to end users without telecommunications problems.

The disks hold a gigabyte of information on each side and provide local storage for fast online retrieval at individual workstations. The challenges are to identify high volume users, identify high value information, create or buy appropriate access software, and manage the entire program.

Information systems first evolved through individual hand copying, the printing press, and reference books. Books have the advantages of being cheap, easily produced, and fully illustrated. They suffer from the disadvantages of being slow to search (because they use an analog procedure), having a low density of information (hence needing considerable storage space), and slow access to the information. However, books have stood the test of time and continue to survive. They were joined by microfilm and microfiche, which resolved the storage space problem and had a higher information density. Fiche and film are cheaply and easily produced, but they have some of the same disadvantages as books: slow, sequential access, and difficulty in analysis. Today's online retrieval systems provide rapid random access from a large volume of information, but they are expensive and have no illustrations. Online systems are hard to analyze, and it is difficult to transmit large data sets.

The future will see videodisk added to reference books and online systems. They will complement rather than supplant them. Videodisks are cheaply and easily produced, provide for retrieval of both full text and illustrations, and are good for browsing. They also have the advantages of a high density of information (solving the storage problem), rapid random access, and they are easily transmitted to users. Videodisks can merge with online systems; the videodisk can store the retrospective information, while the online system continues to be used for current information. This merger of two technologies could be made transparent to the user; it uses the strong features of both.

A single disk can hold a gigabyte of information per side-- equivalent to about a million 8-1/2 by 11 inch double spaced pages each containing about 2,000 words. Masters are produced from a magnetic tape which generates a videotape. The videotape, with error correction added, is then transferred to a master disk from which copies are made. The entire process can be completed in as little as ten days. Duplication of a master is done in about 60 seconds and costs about \$15; the cost of the master can be amortized over 1,000 copies. Error correction, using a "premastering" process, can reduce the error rate to as low as 1 in 10^{13} bytes. Reference Technology's TRIDEC process tolerates both a high raw error rate and large bursts of errors. Their drive has a multi-user, high speed standard computer interface with an average seek time of 125 milliseconds. The result is a better way for professional searchers to analyze information at their workstations.

Something Old, Something New, Something Big Blue
Scott Kostenbauder, IBM

The IBM Technical Information Research Center (ITIRC) serves the more than 100,000 worldwide employees of IBM, working with local company libraries to meet information needs, publishing abstracts in alerting bulletins, performing online searches and supplying over 50,000 copies of internal documents.

ITIRC operates the current information Service (CIS) on an individual profile basis. Profiles are searched against all databases available; output is sent electronically to subscribers who can then scan the retrieved items and either save them or order full copies of the documents. Charges for CIS are added to the user's ITIRC bill and are automatically passed to the departments. The searching system is based on STAIRS.

Twenty online databases, including IBM manuals, patent files, ABI/INFORM, two engineering databases, and two chemistry and physics databases, are available in-house worldwide. The system uses a hard-wire dedicated network and allows access to outside vendors as well. The internal database depends on IBM employees submitting their memoranda to ITIRC, where they are indexed, coded, input, and finally microfiched. A submission system allows electronic input. Because the search system operates at 9600 baud, many employees experience frustration when searching commercial systems at "only" 1200 baud.

Document delivery is the third major service of ITIRC. Items are blown back from master copies on microfiche. Orders are normally delivered to the requester within a week, but they can be delivered in as little as 40 minutes (for executives). Attempts are made to deliver external documents within two weeks.

The Future of a Small Technical Database
Hardev Dugal, Institute of Paper Chemistry

The Institute of Paper Chemistry was founded in 1929 to support basic research by graduate students, do contract research for industry, and provide information services for its membership. It produces the Paperchem database in-house and makes it available through the Dialog and ORBIT systems. Paperchem contains 40% foreign literature (of which 12% is Russian, 11% German) which is translated at the Institute.

Several years ago, the production of Paperchem was automated in an effort to reduce costs. Previously, abstracts were keyed twice and checked several times; time lag was nearly a year. Since automation, time lag has been cut to three months. Staff has been reduced from 17 to 13, but it still costs \$65 to \$75 to produce an abstract.

Survival of the database is a major concern to the Institute. It is mission-oriented and well liked by Institute members. Because pulp and paper is a complex industry, Paperchem is interdisciplinary and contains business and economic information as well as technical. The future of Paperchem depends on the Institute's ability to compete with large general databases, similar databases, foreign interference, government interference, and full text databases. The solution is to know their users, the new services they need, and provide them as rapidly as possible while still maintaining the high accuracy needed.

The BRS/Saunders Colleague System: Reaching the Critical Mass
Steve Ifshin, BRS/Saunders

BRS and Saunders have formed a joint venture to deliver medical information to end users. Colleague is a conventional bibliographic database containing items from books, journals, and newspapers. It concentrates on specific subject areas, such as drug information or internal medicine, but it avoids graphic-dependent material. Four or five new journals should be added to Colleague by the end of the year, including the *New England Journal of Medicine* and *Lancet*. Colleague will also work with existing databases and make subsets of them available in one database if that would better suit the needs of their customers. MCI Mail and an electronic bulletin board is also available.

Access to Colleague does not require a subscription to the main BRS system. Rates include telecommunications and online printing; there is no offline printing. The general BRS databases will also be available to Colleague customers. Prices will include a \$50 setup fee, then \$32/hour prime time and \$20/hour in non prime time, with a \$15 monthly minimum. The software is a menu system, with simple commands for truncation, saving searches, purging, etc.

Early pilot experiences with Colleague show that users become sophisticated rapidly. End users and librarians interact well, with the librarian becoming a search consultant. In one arrangement, the librarians log on to the service, then allow the requesters to do their own searching and retrieve their own data.

New features planned for Colleague are an accounting system, and a method for librarians to block access to selected databases, such as expensive ones. Training is by computer-aided instruction accompanied by manuals.

Information on Vu/Text: An Experiment

Dennis Auld, Data Courier, Inc.

ABI/INFORM was recently loaded on the Vu-Text system as a means of getting the file into new markets and of serving an information need not currently being met. Recalling Roger Summit's talk at the 1984 National Online Meeting, we see the three conditions for rapid growth of online services are being fulfilled:

⊗ Front-end search packages for personal computers,

⊗ Integral modems in PC's, and

⊗ More articles in the popular press.

Present vendors must become innovative in serving a fragmented market; new vendors must prove they know the market. Market research will become more important as new features are introduced. For the database producer, this means lower profits, print products subsidizing online products, and the necessity to find alternate means of delivering information. Users are demanding more satisfaction, tailored services, more access to information, easier to use systems, and more relevant information.

The *Philadelphia Inquirer* recently completed a link to QL Systems and added some non-newspaper databases to enhance their subject coverage and give their reporters national information that is needed at the regional level, creating the Vu-Text system. Data Courier saw Vu-Text as an opportunity to expand into a new market. They had to adapt some of their normal marketing techniques to conform to reporters' habits. Reporters cannot attend training sessions or take much time to learn a new database; training is therefore offered through toll-free 800 numbers, newsletters, and extensive training for the Vu-Text personnel.

The New Patent Information System

L. Liddle, U.S. Patent and Trademark Office

The Patent and Trademark Office (PTO) has a critical need for automation. Of the 12 million documents available for manual searching in the public search rooms, 7 to 27% may be missing at

any one time. The trademark search file has never been inventoried. A PTO automation plan was therefore submitted to Congress and a commission established to implement it.

The Trademark Application and Monitoring (TRAM) program is an administrative and control system which tracks pending trademark applications. Current capabilities include T-search, which provides the ability to search the file of applications, and T-CAR, a computer assisted retrieval system for historical material. Each record in the TRAM database contains text, bibliographic information, tracking status, and the assignment history of the mark. The active file contains 460,000 trademarks; it contains graphic elements as well as textual data. There is also an image file of some 240,000 design marks, to which online access is available. The system handles some 60,000 applications annually.

Under the TRAM system, the system was supported with a local area network, local printers, Burroughs hardware, and terminals. The new T-search system will use an IBM 4341 and software being developed by SDC (an expanded version of ORBIT). Development is proceeding well; the first phase is expected to be available in November, 1985.

Patent automation is a much larger job than trademark automation. A contract has been awarded to the MITRE Corporation for engineering support. A Patent Application and Location Monitoring (PALM) system is now operational, and in April, 1984, contracts were let to Chemical Abstracts Service and Planning & Research Corporation to do systems engineering. Future contracts will be granted for data input and output systems.

The full text of all patents issued in the last 14 years is available; this collection contains over a million documents. The completed patent system will have 2500 workstations, mostly for examiners although some will be placed in the public areas. It will allow retrieval of images as well as text. All stations will be linked by a local area network; they will use optical disk technology for searching. Each workstation will have a split screen, one side for text and the other for graphics. Textual, class, chemical structure, and patent family searching will be available, with the first phase of the system expected to be operational by mid-1985. There may have to be as many as five processors per workstation; the system will be very expensive.

Mutual assistance will be sought from European and Japanese patent offices. The Japanese are working on an image building system; it is proposed to exchange the U.S. and Japanese databases when they are functional. Exchange arrangements with French and German patent offices are also being investigated. A long-range goal is to have information from the 1920's to date available online.

EMIS, The Electronic Publishing of Materials Data
Chris Cannon, INSPEC

Numeric databases complement bibliographic databases; they do not compete. Database producers cannot ignore the need for experimental data; INSPEC therefore created the Electronic Materials Information System (EMIS). EMIS contains essential data and relevant reference sources and allows the publication of original data and materials supply sources. It is therefore both an electronic publishing and messaging system.

Some of the materials essential to semiconductor development are included in EMIS. The system contains both textual and numeric data on materials properties (10000 records) and sources of supply (200 records). Each data record contains one property of one materials, so several EMIS records can result from one journal article. The title of the record contains information on the material and the property, rather than the title of the source article. Sources of information are papers in the literature, handbooks, review papers, or original data that are first published in EMIS. There are also about 150 data reviews by the EMIS staff in the database. When a review is entered, the records with the original data are deleted. Searching EMIS is done by material and property codes. The software is a menu system.

INSPEC's experience with EMIS has provided insight into the cooperation between the scientist and reviewers or editorial staff during the selection and refereeing process. About 60 organizations are using EMIS; growth is strong. The future of this database lies in the close link with the users.

Discussion Groups

As customary, the meeting divided into four discussion groups which reported the results of their discussions to the reconvened assemblage.

Group 1

Full text databases have a future depending on their content, the availability of the original, and the appropriateness of the on-line system. Technology also has an influence; laser systems are better than online because of the shorter time needed to print long records. Problems with full text files include synonyms and the large amount of labor in loading (if the data are not in machine-readable form), and copyright.

Value pricing is not illogical if more value is being delivered for the higher price. For example, Dow-Jones cleaned up the AP Newswire, removing duplicates, and is successful in charging three times what other vendors were charging.

Training emphases will shift from "how to work the machine" to presenting the value of information. A standard command language is slow in coming; there needs to be more cooperation between database producers and vendors.

Group 2

Large bibliographic databases have a future, but publishers should not assume there is a market for a database just because the data exists. Publishers should exploit existing databases, find new markets for them, and place a heavy emphasis on new technology. Examples are customized subsets and non-prime time access (such as Knowledge Index). Front-end packages might draw a few new users, but this group felt they will have no large impact because of the time needed to learn and the voluminous documentation. Optical disks have possibilities, but frequent updating could present a problem. A hybrid system--disk and online--might be best.

Group 3

The future of full text will depend on the type of information available. Large database producers find it difficult to know their markets when vendor information is scant; small database producers can be more nimble and can make a database more widely available. Because dynamic information is needed rapidly, it may help to create subsets of large databases.

Group 4

It is difficult to determine the future of the online industry because the pace of technology is so fast; only the questions remain the same! Full text has a bright future; we will see more databases and more uses.

Large databases will also be used more and more, but as they grow we will have to learn how to search them. Expert systems (CAI?) will be needed. Training courses are the means by which database producers learn what users want and how they search; they will continue to be vital.

Acknowledgements

Thanks are due to Betty Unruh of Dialog and Judy McQueen of Information Systems Consultants, Inc. for providing me with their notes of the meeting.