

Fall Meeting in Newport Considers New Technologies Attendees Visit Medieval Castle for Banquet

Dennis Auld Elected ASIDIC President New Executive Committee Takes Office

The Fall, 1987 ASIDIC meeting was held in Newport, RI, at the Viking Hotel and Conference Center. Despite a spate of cool damp weather, it was one of the more eventful and enjoyable meetings in recent history. A slate of new officers, led by Dennis Auld (UMI/Data Courier), was installed. The technical program, under the direction of Walter Beveridge (IBM) and Anne Fernald (Thompson & Thompson) and summarized later in this Newsletter, was excellent and very well received.

The superb local arrangements were under the able direction of Taissa Kusma (American Mathematical Society), who had the benefit of experience after also arranging the previous meeting in New Orleans. A wide range of activities outside the technical and business meetings provided something of interest to everyone. The highlight of the arrangements was a Medieval style banquet at Belcourt Castle; because it was so special, it is described below in detail. The meeting was extremely successful and will be remembered for a long time.

Committee Reports

Finance: ASIDIC continues to be in sound financial health; members are urged to pay their dues as early in the year as possible so that ASIDIC can have maximum use of the funds.

Membership: Six new members have joined ASIDIC recently; they are listed in this Newsletter.

Executive: A guide for those hosting a meeting, making local arrangements, and planning the technical program has been completed. Thanks to Marjorie Hlava, David Grooms, Rita Lerner, Jeanette Webb, and Daniel Wilde for all their hard work on this. A brochure describing ASIDIC for new and prospective members is now in the final editing process and should be printed soon; it was written by Marjorie Hlava, and the layout was done by Dennis Auld. The Executive Committee discussed merging the Planning and Education Committees and decided to leave them separate for the present.

Publication: In response to several questions, Newsletter Editor Don Hawkins (AT&T Network Systems) described the production process for the Newsletter. It is entered into a file on a UNIX™ system and edited using the *vi* text editor. The *Writer's Workbench* system checks for

spelling and grammatical errors, then the file is passed through the *troff* phototypesetter to create the final camera-ready copy. ASIDIC gratefully acknowledges AT&T's computer support in this effort. Printing, addressing, and mailing are done commercially; a batch mailing service is used for overseas copies to save postage costs.

Election Results

The candidates chosen by the Nominating Committee (David Grooms, Daniel Wilde, and Harry Allcock) all ran unopposed and were unanimously elected. Dennis Auld took office as ASIDIC President; a list of the names and affiliations of the new officers and committee chairs is attached to this issue of the Newsletter. Outgoing President Marjorie Hlava (Access Innovations) congratulated the incoming officers for the membership. In his inaugural address, Dennis remarked (as he held up a pair of size 1 infant shoes) that he had big shoes to fill! His initial President's column appears below.

Medieval Banquet

A most unusual evening at Belcourt Castle, Newport, RI, was enjoyed by Fall meeting attendees. After being greeted by a hostess in Medieval costume who offered visitors some bread and salt "to ward off the evil spirits," attendees were given a guided tour of this lavishly furnished home. Then a Medieval style banquet, complete with the outgoing queen (Marjorie Hlava) and incoming king (Dennis Auld) was held. Because of treasonable acts committed during the meeting, certain recalcitrant members of the Executive Committee were sentenced to the dungeon and tortured with wine. They properly showed their repentant spirit by reciting the following pledge to the queen before the entire assemblage:

*We do solemnly and sincerely promise and swear,
Without any mental reservations or secret evasions of mind,
To disseminate any time, anywhere, anything
To anyone who is willing to pay up-front, during, and after
Forever and forever.*

*We will pay due royalties or kickbacks to the Queen as she may decree
Via contract with renewals every five years
With one year options until terminated
In accordance with the provisions of Paragraph 5.B.1.*

So mote it be.

After these ceremonies, the forgiven insurgents, along with the rest of the attendees repaired to the banquet hall, where they were served a repast eaten as in Medieval times—with the hands! Thanks to the photographic skills of Edward Kipp (National Research Council of Canada), some highlights of the occasion were captured and are attached for all to enjoy.

Future Meetings

Spring, 1988. The next ASIDIC meeting will be held in San Antonio, TX on March 13-15, 1988, at the Mansion del Rio. The technical program will be on a subject near and dear to all ASIDIC members and information users—pricing of information. Program chair for the meeting will be David Grooms (Patent & Trademark Office); local arrangements will be by Harry Allcock (IFI/Plenum Data Corp.). Make your plans *now* to attend this meeting on a most important subject!

Fall, 1988. The Fall, 1988 meeting will be in northern California at a site yet to be decided. Representatives of the five ASIDIC members in the area (Database Services, Dynamic Information, Lawrence Livermore Laboratories, Dialog Information Services, and Information

Access Corp.) are now busy inspecting potential sites and choosing a suitable one.

Information Conference in Beijing

The Second International Beijing International Symposium on Computerized Information Retrieval will be held December 7-11, 1987, in Beijing, People's Republic of China. It is organized by the China Society for Scientific and Technical Information (CSSTI). Papers will be presented on creation of databases, new technologies for database development, future of information services, and network developments. There will be an exhibit area. For further information, contact Mr. Wang Xiaozhu, Conference Secretary, CSSTI, P. O. Box 382T, Hepingli, Beijing, China (Telephone 464746; Telex 20079 ISTIC CN).

President's Column

by Dennis Auld

Shoes and kidding aside, I sincerely appreciate the membership electing me President of the Association and look forward to working with all of you in the coming year. Both my predecessors in this office and past members of the standing committees have exemplified stewardship in building and nurturing an organization we can all be proud of. The mission that lies ahead is to continue building on this excellent foundation.

More than anything, ASIDIC is a forum in which topics critical to the dissemination of information can be addressed, discussed, and evaluated. The vehicle for this is the meetings. The fuel is the speakers and the programs. The driver is you. Your participation in the meetings, committees, and functions guarantees the ongoing success of this truly unique organization.

The roads on which this vehicle travels are the committees. As this fall's election resulted in several new names, the members of the Executive Committee, chairs of the standing committees, along with their affiliations, addresses, and telephone numbers, are attached. Also listed is the Secretariat's address and phone number. These individuals are dedicated professionals possessing the ability to assist in making your involvement with the Association a full and productive one. Please feel free to call on them or me whenever necessary.

The task of the Executive Committee this year is to complete the "back office" jobs begun last year. This includes documenting support procedures, printing and distributing the brochure, evaluating the membership questionnaire, and supporting the committees in presenting the best possible programs so that the membership can have a voice in topics concerning them.

I congratulate all new Executive Committee members, new members of the committees as well as the committee chairs, and the program and site hosts for the 1988 meetings in San Antonio and northern California. I also look forward to working with an invaluable member of this organization, Jeanette Webb, who is the Secretariat of ASIDIC. Most importantly, I look forward to working with and for the members of this organization.

Outgoing President's Message

by Marjorie Hlava

This newsletter covers well what has been and is taking place in the organization. The new slate of Officers is in place. The new brochures will be mailed with the next meeting announcements. A new Host Guide has been produced.

The upcoming meetings are in San Antonio, TX, March 13-15, 1988 and in northern California in September. The Spring meeting will deal with the innovations in pricing allowed by new technology. Social events will include a dessert cruise on the Rio Grande.

At last—the prestigious position of Past President is mine! These last two years have been good. ASIDIC is a wonderful organization to work with. I want to thank the members of the Executive Committee over the last two years: Dennis Auld (UMI/Data Courier), Bob Lormand

(Lawrence Livermore Labs), David Grooms (Past President of ASIDIC, Patent & Trademark office) and particularly, Taissa Kusma (American Mathematical Society), Secretary/ Treasurer. The Chairs of the Standing Committees were always ready and willing to provide additional help. ASIDIC couldn't run without their energies. Thanks to Dan Wilde (NERAC, Inc.) Planning, Maureen Kelly (BIOSIS) Standards, Scott Kostenbauder (IBM) Finance, Don Hawkins (AT&T) Publications, and Jeanette Webb, our marvelous Secretariat who keeps us honest.

We are in sound financial shape—our reserve fund is actually a little too large. Our membership has increased, which is (sometimes) a mixed blessing since we want to keep the flavor of the meetings and discussions informal. I believe this major benefit of ASIDIC is intact. So on to another informative (and fun) year for ASIDIC.

New Members

ASIDIC welcomes the following new members:

Thomson & Thomson
One Monarch Drive
N. Quincy, MA 02171
Ms. Anthea Gotto

Technical Centre for Agriculture and Rural Cooperation
P. O. Box 380
6700 AJ Wageningen
The Netherlands
Mr. Andries Dusink

Information Unlimited
P. O. Box 2606
Fayetteville, AR 72701
Mr. Thomas S. Walton

Dynamic Information
P. O. Box 8019
Redwood City, CA 94063
Mr. Randall Marcinko

Research Publications
1921 Jefferson Davis Hwy, Suite 1821-D
Arlington, VA 22202
Mr. Charles J. Merek

Chase Manhattan Bank
444 E. 82St., Suite 11M
New York, NY 10028
Ms. June R. Klein

Book Review *by Helen Wiltse*

Guide to Database Distribution: Legal Aspects and Model Contracts.

Joe Bremner and Peggy Miller

National Federation of Abstracting and Information Services, Philadelphia, 1987.

This book reviews the process of licensing machine-readable databases. A discussion of each section of a sample database agreement provides a convenient format for introducing the

important issues involved in the process of negotiating these agreements. The legal principles governing this area are constantly changing; this book is not a substitute for good legal advice.

The following topics are covered: definitions, protecting intellectual property, royalties, data handling, marketing cooperation, warranties, terms, arbitration, waiver of contractual obligations, confidential information, severability, and miscellaneous provisions. Each topic is discussed in the context of the model contract. The authors have made every attempt to deal with all sides of the topics. Vendor and data base producer views are presented with equal analysis. Areas of potential conflict are identified and explored.

This book does not, however, address the concerns of an individual organization negotiating a contract with a vendor or database producer for in-house use. Some of these concerns might be the same as those between producers and vendors, but it is clearly not the intention of this book to touch on this area of activity.

The book is well written and its use for the "business person or for the lawyer who may be unfamiliar with this area" is clearly stated. It contains good pointers even for individuals who wish to be better informed about this area of activity.



Penitent members of the Executive Committee pledge allegiance to the Queen during the banquet ceremonies. Left to right: David Grooms, Bob Lormand, Scott Kostenbauder (partly hidden), Joe Bremner, Gloria Moline, Betty Unruh, Taissa Kusma, Dennis Auld.

FALL MEETING SUMMARY

Prophets and Profits: The New Technologies

Hypertext.

Karen E. Smith,

Institute for Research in Information and Scholarship (IRIS), Brown University.

Hypertext is a method of providing non-sequential access to information. Links connect the text in one document with that in another; one application is notes and footnotes in a book or paper. Similarly, hypermedia links trains of thought in any medium, whether it be graphics, video, synthetic voice, compact disk, etc. It is claimed that hypertext will change how people read and write, support word processing and idea processing, and form a basis for the global scientific literature.

The history of hypertext can be traced to Vannevar Bush's paper on Memex in 1945. It was followed by a system sold to the Air Force by McDonnell Douglas in 1960 and the Xanadu system developed by Ted Nelson. In the 1980's, many developments occurred: NoteCards by Xerox, Neptune by Tektronix, and Intermedia by IRIS. These were all research laboratory systems; recent commercial products include a hypertext and graphics system, Guide, by Owl International, and Apple Computer's Hypercard.

The Intermedia system simulates the MacIntosh interface but runs on IBM hardware. Links are put in a web-like structure to connect documents. The system has been used in classes teaching English as a Foreign Language, and in genetics classes. Present research centers on generating the links automatically and interfacing a hypertext system to online database systems. It may be possible to scan documents for inclusion in a database and have the system automatically generate the pointers, index terms, etc., thus eliminating manual indexing and keyword entry and saving substantial labor. A good tutorial on hypertext is authored by J. Conklin and appears on pages 17-41 of the September, 1987 issue of *Computer* (published by IEEE).

Electronic Information Industry Revenue Forecast,

Peggy Fischer,

Link Resources Corp.

Revenue trends in the last few years allow us to forecast revenues for the electronic information industry through 1991. The industry is made up of several market segments: vertical markets such as transportation, insurance, etc.; credit information for both business and consumers; financial and economic information (a global market); news seekers (they have the biggest volume of usage but don't pay much); and libraries and information specialists who account for about 7% of the total market. Several new technologies are having an impact: CD-ROM is emerging and will take revenues from online and magnetic tape storage. Gateways continue to grow; there are now over 150 of them from 69 vendors.

The recent decision by Judge Greene clarifying the restrictions on the Regulated Bell Operating Companies (RBOC's) is significant. Under the ruling, the RBOC's cannot provide information content, but they are permitted to operate an infrastructure needed to transmit information services to the user. Greene likens their place to the Minitel service in France (he devoted 12 pages of his decision to praise of that service). Examples of services the RBOC's could provide are:

- Data transmission to users,
- Address translation,
- Protocol conversion between systems,
- Billing management, and

- Introductory information on database content (welcome pages, etc.).

It would appear that the RBOC's cannot provide gateways. Electronic white pages are allowed, but yellow page information is prohibited. These changes will have a further impact on the telecommunications arena, in addition to those that have already occurred.

Regarding revenue forecasts, some representative data are:

- The financial and economic information market will grow to become the largest segment—27.4% of the \$11.2 billion total by 1991.
- Vertical markets will produce the largest revenues, followed by credit and securities information.
- Product information will become prominent; it will grow from \$65 million revenues in 1986 to \$386.1 million in 1991—a 42% cumulated annual growth rate.
- News information will rank first for individuals, followed by product and corporate information.
- Credit managers, marketers, and librarians/information specialists will be the largest consumers of electronic information.
- Among the top 25 electronic information providers are large airline reservations systems, Dun & Bradstreet, TRW for credit information, and Mead, Dialog, and OCLC in the library area.

BRS's Use of New Technology

Mary Lou Flynn,

BRS Information Technologies.

BRS's goal is a user-oriented service; they now have 140 databases online covering all subject areas. Their major markets are the U.S., Canada, and Europe. The next advance for BRS is local access to databases; work is in progress on a CD-ROM version of the Medline database. Local databases are advantageous for librarians because:

- They educate library users about services by allowing them to try the databases themselves and hence have a public relations value,
- They stimulate requests for online searches, and
- They allow wider dissemination of databases.

New products recently developed by BRS are BRS/Colleague Disk and BRS Onsite. BRS/Colleague Disk will run on PC's under MS-DOS using a version of the BRS searching software. It will be a CD-ROM product containing medical information. Abstracts will be included; there will be one year's worth of information on a disk. Disks for 1985, 1986, and the first half of 1987 are now available; an update in December will complete the 1987 disk. In 1988, there will be three updates per year. The product has been well received. It features tutorials, global searching, field qualification, nesting, etc. A connection to the Colleague online system is available.

BRS Onsite was developed because local systems are becoming affordable, and there is a growing interest in mounting databases in-house. Onsite provides the user with database tapes and all the software necessary to load, maintain, and search them on the user's mainframe. It will be a turnkey system; BRS will take care of all negotiations with database producers and will help users get Onsite up and running. Pricing will consist of a software service fee, database loading fee, and producer royalty fee. BRS Onsite is scheduled to be available before the end of 1987.

These products show that BRS is broadening its outlook; it is not just an online searching service any more.

New Information Delivery Methods to IBM Employees.

Scott Kostenbauder,
IBM.

The IBM Technical Information Retrieval Center (ITIRC) provides information to IBM employees worldwide. ITIRC has 28 databases in-house searchable by the STAIRS system, with hardwired connections through gateways to the major online searching systems.

ITIRC offers a quick alerting service delivering tables of contents of new journals from the ISI databases to users at periodic intervals. Output from the alerting service is delivered electronically. Each user's interest profile is stored; batch downloading is done each night on new material added to the databases, and the results are sent to the users' electronic mailboxes. Users are prevented from storing items received from this system in their own electronic files, so they cannot build their own databases; copyright problems are therefore avoided.

Orders for the full text of documents received at ITIRC are scanned by an OCR method to enter the item numbers into the system. OCR wandling has proven to be extremely accurate; even with no checking, the error rate is only about 1%. 250 orders can be wanded in 20 minutes. The citations are then printed from the databases automatically on order forms, and the appropriate vendor is selected from tables maintained by the system. Orders and system-generated mailing labels are sent to the vendor who returns labeled photocopies to ITIRC. Copies are logged in using the OCR system (700 copies can be wanded in 45 minutes), and delivered to requesters. Vendor status reports are maintained by the system so that performance can be monitored and selection tables kept current.

ITIRC users also have access to a gateway that will connect them to any machine in the IBM network. There are 12 screens of machine addresses; material can be downloaded from any machine to the user's local machine and sent to a local printer. Costs of using ITIRC are charged back to users.

Dialog's Use of New Technology.

Jo Ann Mandinach,
Dialog Information Services, Inc.

Major new technologies under investigation at Dialog are hypertext and optical storage. Apple's introduction of HyperCard for MacIntosh users is seen as a way for Dialog to attract new customers; some new products using HyperCard are in the preliminary development phase.

Optical storage is a major new technology to be exploited by online retrieval services. It is both a threat and an opportunity; it will attract new users, but it also may siphon off some business from the existing online service. Dialog is well suited to enter the CD-ROM database market because it brings the following to it:

- A well qualified customer base that is used to dealing with online databases,
- Established relations with over 100 databased producers,
- Over 280 online databases,
- An established market presence and position, and
- An industry standard of excellence in searching software, training, customer support, and documentation.

Dialog's OnDisc product is positioned with a dual interface to both the disk and online versions of databases. The DialogLink communications package allows users to move from one to the other with little effort. Novice users are accommodated by an easy menu system.

Dialog does not sell the hardware as part of a bundled package, but it will help users obtain it if desired. Leasing a complete workstation is also an option. Support is provided through the 24-hour customer service toll-free hotline. Distribution of the CD-ROM product is through direct

marketing, advertising, trade shows and conferences, and telemarketing. The major point of entry into the market is through information professionals; distributors and database producers also play a part.

Lessons learned in the introduction of Dialog OnDisc are:

- The value of online information has been confirmed, especially in the areas of currency, completeness, and pricing by usage.
- The CD-ROM product can provide new revenues; little migration from the online service has been observed.
- Information professionals are important in reaching new markets.
- The CD-ROM product complements the online service; it is a good replacement for microfiche storage.

Knowledge Gateways: Building Blocks and Beyond.

Donald Hawkins, Louise Levy, and Leon Montgomery,
AT&T Bell Laboratories.

We are being overwhelmed with an avalanche of information as it pours out from laboratories, universities, publishers, and other sources and databases. Users are hard pressed to keep up with all the new sources that are appearing. Online databases seeming to be a solution are not; there are over 3,000 of them, and directories of them are approaching the size of telephone directories. The problem is similar to the proverbial needle in the haystack, but one must find the right haystack to search first before looking for the needle.

It is important to distinguish between data, information, and knowledge. Data are signals detectable by the human senses; information is the organization of data into categories; and knowledge is the assimilation, evaluation, and analysis of information.

What is needed to solve today's information explosion problem is a *knowledge gateway* to the desired data and information. We do not have any knowledge gateways yet; today's gateway systems are more properly *information gateways*. However, technology provides us with the *building blocks* of a knowledge gateway, and some fledgling steps towards a knowledge gateway have been taken.

Technologies to be employed in a knowledge gateway are:

- Artificial intelligence (AI) and expert systems. Some AI-based expert systems for information retrieval have been built, and much research work is in progress. A knowledge gateway will depend heavily on AI.
- Natural language processing (NLP). NLP has been a gleam in the eye of developers for a long time, and its incorporation into the gateway will be important. But it is also one of the most difficult technologies to implement because of the ambiguity of the English language.
- Networking. The gateway will depend on real-time access to databases wherever they may be. Networks will be important; much of the technology is already developed.
- Online databases. These are the foundation of the gateway and provide the source of the data and information to be used in it.

The proposed gateway will feature modules for critically analyzing and evaluating the retrieved information, translation of foreign language material, and postprocessing. It will easily and effortlessly guide the user to the desired data, leaving him/her free to concentrate on the intellectual aspects of the problem. Through networking technology, it will be available from any standard telephone connection.

Some fledgling gateways are the EasyNet system, accessing over 900 databases and featuring a menu-driven interface for novices, Lawrence Livermore Laboratory's TIS system running under

the UNIX™ operating system which has been adopted by the Department of Defense in its gateway system, and the AT&T Bell Laboratories information access station which provides its users with a window on a large geographically dispersed network of information sources. The National Materials Property Data Network is envisioned to be a gateway for numerical property data; it is attempting to secure funding and begin operations.

Pricing New Information Products.

Joseph Bremner,

Database Development.

Everyone is concerned about pricing, and many mistakes have been made. If prices are set too high, short term profit will result, but the market will be small. Prices too will result in OOB—out of business! High prices often result from uncertainty about the market size, so they are set high for large users. Information about the market is crucial; it is elastic for some and inelastic for others. Many segmented markets are price elastic and react to changes; examples are marketing ABI/Inform to PsycInfo users, Investext to end users, and IAC's databases for high school students.

Competition motivates and helps to shake out new markets. Economists' models are not useful in practical pricing decisions; the market response is. Pricing is the best marketing instrument; advertising, customer service, sales calls, product design, and credit extension can all be used to achieve objectives in the market.

Alfred Oxenfelt, a Professor at Columbia University, has developed the theory of pricing as a marketing challenge. The following concepts must be considered:

- The "right price" must be set in cooperation with advertising, marketing, and finance departments in line with corporate objectives.
- Business objectives and price lead to profit, growth, and survival.
- Existing prices can be changed quickly, leading to an immediate and uniform effect on sales.
- The response to prices must be monitored and data gathered by knowledgeable people.

In the introduction of new products, subjective data (focus groups, interviews, etc.) are being used to set prices. Big companies do not set prices any more accurately than small ones; the best way is to conduct interviews with knowledgeable people and ask them what they would be willing to pay. How good are we at combining price with other properties of the product such as quality? We should take comfort that most people are wrong in early pricing decisions; it is part of the marketing process. Considerations in setting prices are:

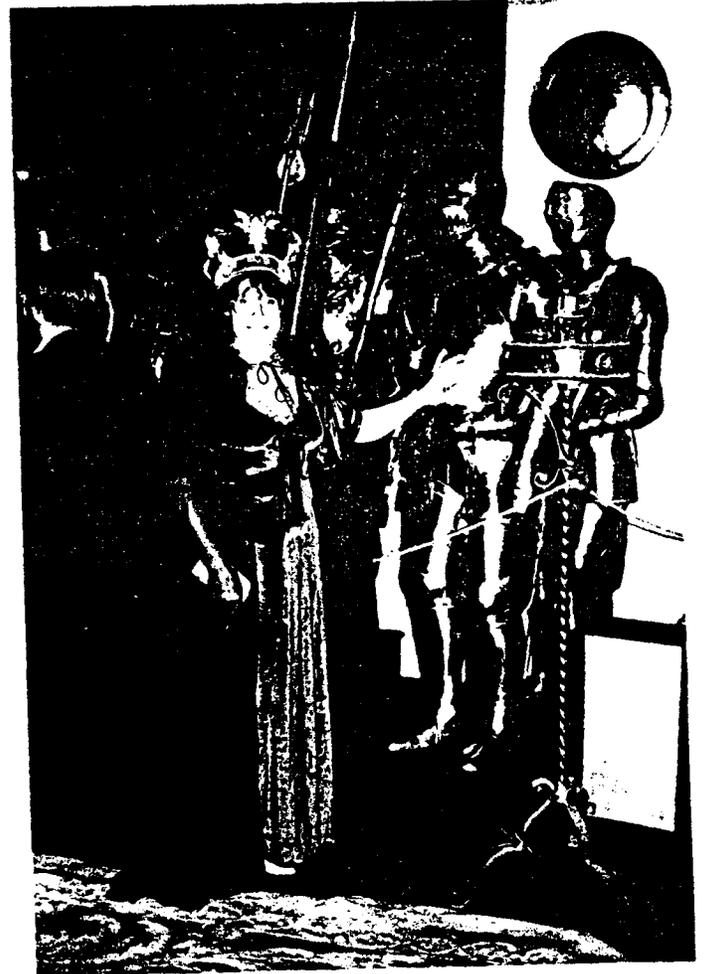
- Does the product meet a new need?
- How will it mesh with existing products? Will it cannibalize sales of another product?
- Is it protected from competition?
- Does it require training? Will everyone see its need?
- What is the effect of the failure of the product on the company? Will the company go under if the product fails?
- Will it make users dependent on it for information?

Prices have a life cycle like products do. The critical phase is customer response; we need a system to better gather information on people's reactions to prices.

ASIDIC Photo Section
(Thanks to Edward Kipp)



Dan and Helen Wilde
in medieval costume.



The Queen (Marjorie Hlava)
and some armored friends.



The Queen (Marjorie Hlava)
and the Archbishop (Art Elias)



The new King (Dennis Auld)
is crowned! Long live the King!

ASIDIC Executive Committee

	Name	Affiliation	Telephone
President	Dennis Auld	UMI/Data Courier	(502)-582-4111
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Membership	Taissa Kusma	American Mathematical Society	(401)-272-9500
Publications	Donald Hawkins	AT&T Network Systems	(201)-949-3219
Planning	David Grooms	U.S. Patent & Trademark Office	(703)-557-6154
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